SELECTED SPECIFICS OF CRISIS AND DISASTER PSYCHOLOGY

Andrea Pastuchová Neumannová[1]

Abstract: The present study uses the terms disaster, crisis, and emergency, these situations cause threats to life, health, and property. Disasters, crisis, and crisis phenomena, trauma, PTSD are briefly characterised in the study. It also studies vulnerability of intervening rescuers, emphasising post-traumatic care, and crisis intervention as an effective psychosocial support tool for the victims and IRS professionals after the disaster. Based on the content and comparative analysis of relevant information, regulations, available literature, and other sources, the present comprehensive study is prepared for scientific research; other research methods are also used in the study.

The goal of the study was to map the trends in disaster occurrence, analyse the most common form of the disaster, and disaster management techniques relevant to Slovak Republic. In addition, the study presents selected crisis intervention techniques used by rescue professionals during a disaster.

The study mapped the disasters in Presov region in the Slovak Republic in 2020. It was found that the number of floods during the period increased from 147 to 389 compared to 2019. The Presov region in the territory of Slovakia is a disaster-prone area, frequently hit by disasters. The most common disaster affecting the region is the flood. In further studies, the authors are interested in analysing the occupational hazards of firefighters and police officers. The "Guidelines: psychosocial support for uniformed workers," the first European directive for providing effective psychosocial support to the rescuing paramedics after disasters, terrorism, and other emergencies, are considered important for the study. Psychologists from the Ministry of Interior of the Slovak Republic actively provide crisis intervention, "post-traumatic intervention teams" have been established in the Slovak Republic using CISM (Critical Incident Stress Management) baseline methodology.

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Introduction

Today, the world is witnessing many devastating and large-scale crises and disasters (e.g., the Covid-19 pandemic and the war in Ukraine). This paper uses terms such as disaster, accident, and extraordinary event (a term commonly used in Slovak's professional literature); these are the situations that poses threats to life, health, and property. The study classifies disasters into natural and anthropogenic ones.

According to Kurilovska and Mullerova (2020), special methods are used for the risk assessment of natural and anthropogenic emergency events. Major natural events with a significant psychologic impact, such as massive forest fires or floods have their specifics well described by Sinovsky and Vrablova (2020).

For every emergency, minor or major, anticipated or sudden, a system of psychosocial support and assistance has evolved, and it is the focus of the psychology of crises and disasters. It is also important to point out the significance of support and assistance aimed at intervening rescuers, who are also potentially vulnerable. Psychosocial support can be described as a set of procedures within individual rescue units to influence mental resilience. The present study aims at answering the following research questions: Is there a significant risk to the country during a major emergency? Is a traumatic experience threatening to a person? Are disasters a possible source of psychological threat to the affected people and rescuing professionals? Is psychosocial support provided by the selected rescue services at the IRS in the Slovak Republic as per the recommended methods (e.g., CISM methodology)? One of the goals of the study is to identify the most common forms of crises and disasters in Slovakia in 2020. Each country should prepare for crises and disasters individually, especially for area-specific disasters like natural disasters. Psychosocial help and support of persons affected by disasters, considering the impact and reactions of intervening rescuers, is an issue scientifically researched at the Academy of Police in Bratislava (For e.g.. 252 - "Psychosocial support of selected components of the Ministry of Interior of the Slovak Republic in an emergency"). Therefore, there is a scope to analyze and identify the strengths and weaknesses of the current practices. It is assumed that the findings of the study can be a starting point in the implementation and improvement of psychosocial support for members of rescue teams in the IRS. The conclusions from the study can be discussed further.

[1] Academy of the Police Force in Bratislava, Department of Social Sciences, Slovakia, andrea.neumannova@akademiapz.sk

The importance and current state of the crisis and disaster psychology

The psychology of crises and disasters is extensively studied in the professional literature; it is a relatively new applied psychological discipline, which has been developing intensively over the last 20 years with crisis management. One of its key areas is related to the assistance provided at times of crisis and threat. It is an interdisciplinary discipline drawing knowledge from several other fields like psychology, emergency and disaster medicine, crisis management, social and crisis communication, sociology, ethics, social work, and more.

In 2001, the European Federation of Psychologists' Associations (EFPA, n.d.) set up a working group of experts to deal with crises, traumas, and disasters. In 2005, this task force became the EFPA Standing Committee on Disaster and Crisis Psychology (EFPA SC). In 2003, after the floods in Central and Eastern Europe, questions, and requests were raised to report on models and systems used in Austria, Germany, and other countries. At the same time, the EFPA SC began networking and exchanging experiences, content, and models.

In this context, it is important to highlight the contribution of the "EUR-OPA Major Hazards Agreement" (Council of Europe, n.d.). Its area of operations includes disaster risk reduction, knowledge, prevention, preparedness, risk management, and post-crisis analysis. The main objectives of this group are to strengthen and promote cooperation between the Member States in a multidisciplinary context to ensure better prevention, risk protection, and better preparedness in the event of major natural or technological disasters. The agreement, set up by the Committee of Ministers of the Council of Europe in 1987, is "open" because any non-member country of the Council of Europe can also apply for its membership.

In Slovakia and the Czech Republic, this issue began to evolve during great floods in 1997 and 1998. It must be acknowledged that the Czech Republic was more active in this direction; in 2006, a group for setting the standards for psychosocial crisis assistance according to Bastecka (2010) was established and it started operating by understanding the needs of people affected by large-scale disasters. The concepts of the volunteer psychosocial intervention team, as well as psychological and psychosocial assistance, were developed in the components of the integrated rescue system. The standards of direct assistance and cooperation aim to support the fulfillment of the goals and principles of psychosocial crisis assistance.

The Section for Crisis and Trauma Psychology at the Czech-Moravian Psychological Society (Psychologie pro krize, n.d.) was officially established on 18 November 2010. The Section was the initiative of the Standing Committee on Disaster and Crisis Psychology (EFPA) to address the needs of colleagues who deal with the psychology of crises, disasters, and trauma in the Czech Republic.

The rescue workers should not opt for less demanding professions or early or invalidity retirement due to mental exhaustion. If someone leaves, it is necessary to provide qualified compensation (uniform, equipment), or they must undergo additional training, which is costly. If an individual is thoroughly trained to handle a crisis and simultaneously acquires certain skills and effective procedures and masters them. In that case, he can respond correctly and effectively at the right moment (Neumannova, 2017).

In times of crisis, the Slovak Republic is governed by valid legislation. The current legislation regulates the functioning of its departments, facilities, organizations of the Ministry and district offices in preparing for and solving the crisis. The current regulation was created in order to serve the need for a unified system for the establishment and organization of specific teams that promptly respond to the solution of the situation. The applicable regulation was created to serve the need for a unified system for setting up and organizing specific teams that respond promptly to resolving the situation. The study attempts to gather sufficient information on the subject from a theoretical and practical point of view from the available documents. This information is then processed, and logical conclusions based on induction, deduction, and comparisons are drawn from it (Regulation of the Ministry of the Interior of the SR, No.86/2017, 2017).

The study attempts to map the occurrence of an emergency event, to identify the most common crisis and disaster management techniques relevant to the Slovak Republic. In further research, the authors are interested in analyzing the occupational threats of firefighters and police officers. The study presents the intervention of rescuing professionals in times of threat or during a disaster. The study is based on

content analysis of available documents, sources, data records, statistics through induction and deduction. The study is expected to be used in further scientific research in this area.

Psychosocial support after the disaster

An emergency event (disaster) can be described as a crisis happening at a specific time and place, threatening people's lives, health, and property with varying intensity. This is mostly an unpredictable situation requiring the specific intervention of rescue professionals, whose help is necessary due to a sudden accident.

Due to the high physical stress and danger during the rescue operation, it is important to answer the following questions: Is an emergency a threat to a person? Does an emergency have a possible social impact due to its possible negative impact on mental and physical health? Is there a significant risk to individuals, groups, and the rescuers themselves? Is there a significant risk of limiting the functioning of the IRS in one country, a risk of worsening international cooperation?

According to Simak (2016) a threat is a condition found in activities whose hazardous properties have not been fully analysed and pose threats humans or the environment. It activates a danger at a particular place and time. However, it is difficult to define a crisis due to a high degree of generality in its content and complexity in its scope. A crisis is generally perceived as something that has or may have a negative impact on us, threatens us, and causes material damage, disruption, human misery, and tragedy. At the same time, however, a crisis is also a source of change, a way in which reality develops dynamically in favor or against a natural, social, technical, and other phenomena.

The category of disasters is specifically precise because they bring threats of various kinds to society as they happen uncontrollably worldwide. A lot of resources and efforts are used to resolve them; the basic building block is the rescue work of professionals determined by their specific job position. Individuals, groups, and communities may find themselves in a situation where they cannot help themselves at a time of danger, and this is when the work of these rescue professionals become very important and irreplaceable. The rescuers can affect the intensity of the disturbed environment and the number of victims. Unexpected situations can cause chaos, and intervening teams enter a confusing situation where it is necessary to orient themselves quickly and effectively distribute forces. The presence of stress, tension, and suffering is considerable; all participants are exposed to psychological stress, which can have various psychosocial consequences. Communication has a specific role to play in a threatful situation, i.e., during an unexpected, extraordinary event - a crisis.

Badiru and Racz (2014) define a crisis as a situation that can endanger human health or cause property damage.

According to Vymetal (2009), the unpredictable or difficult to predict the course of events and activities after the disruption of the state of natural, social, production, and technological systems that threaten the life of the population, living and working environment, economic and intellectual property of the country and its inhabitants is called a crisis.

The most common crises in the Slovak Republic include floods, landslides, windstorms, fires, snow disasters, leakage of hazardous substances. Crisis communication has an irreplaceable place in crisis management; with appropriately chosen procedures, the risks of loss of healthy lives and damage to property can be eliminated. A pragmatic approach based on empathy is expected of all those involved, especially those in direct contact with people showing signs of trauma.

According Sin et al. (2017), traumatic events are characterized by intensity, suddenness, unpredictability, and uncontrollability. In general, psychological trauma can be explained as:

- What is happening – the type of event;
- How the individual reacts to events – the type of reaction.

After surviving a traumatic event, a person starts responding to many things more sensitively than before. In acute stress disorder, negative symptoms usually appear within four days. In some cases, after some time, disturbing manifestations reappear, indicating that something is happening to the person.

Post-traumatic stress disorder (PTSD) is a prolonged or delayed response, respective manifestation of insufficient processing of serious tragic experiences, manifested by the persistence of mental and somatic problems (Vagnerova, 2008).

The psychological research on coping with traumatic crises situations has proved that dangerous situations beyond the ordinary and subjectively comprehensible experience can severely traumatize all those at the heart of the story. Subsequent physical or mental problems may arise among members of professional teams. Although they are professionally and mentally trained for these situations, a specific syndrome called PTSD may develop (Matouskova, 2012).

Sin et.al (2017) identified the triggers of PTSD as presence at the place of origin of extraordinary event, natural and anthropogenic disasters, combat conflicts, torture, rape, robbery, car accident, etc. It may not always be a direct experience; sometimes, the witnesses and rescuers are also affected by PTSD. The severity of the traumatic event, its immediate effect, close contact with death and dead bodies, loneliness, grief, activity or passivity during the event, and degree of self-control in recurrence of trauma.

When dealing with cases of violent attack (armed attack, etc.) in theory or practice, the ability to use crisis communication, first aid, institutes of necessary defense, and extreme emergency becomes crucial (Spatenkova, 2017). further states that subsequent care has an irreplaceable place for managing the consequences of the attack; it is possible to recommend psychological assistance or debriefing first. Psychological assistance can be provided at the place origin of extraordinary event during and immediately after the attack. Crisis intervention is an effective tool for psychosocial support. If crisis intervention teams or "peers" of the Integrated Rescue System (IRS) are deployed directly in the field, it is appropriate to divide the tasks and involve people who are not impacted from the site of attack.

Flood statistics, Slovak Republic 2020

Flood is the most frequent disaster in the Slovak Republic. Based on the analysis of data on the disastrous events in 2020 published by The Central Monitoring and Control Center - Statistics of extraordinary event for 2020, the major findings are discussed as follows:

In 2020, floods were the primary cause behind most of the crises in the Slovak Republic; there were 389 flood incidents, accounting for the 72.6% of the total disasters in that year. The Presov Region was the most affected area with 145 flood incidents; Trencin and Zilina regions were impacted by same number of floods i.e., 56, there were 49 flood incidents in Banska Bystrica, 44 in the Kosice Region, while a significantly lower number of floods were reported in the Nitra Region; 20 and the Trnava Region; 19, and there was no flood in the Bratislava Region. The second most frequent disaster was the leakage of a dangerous substance. Most cases i.e., 10 occurred in the Trnava region, followed by 5 in the Presov region and 4 in the Nitra region this crisis occurred thrice in Bratislava and Trencin and twice in the Banska Bystrica region and only once in the Kosice region. Together, such leakage incidents accounted for 5.2% of the total number of disastrous incidents in 2020. Approximately the same percentage of incidents of alarm messages (4.9%), fire (4.7%), and from an unknown substance (4.5%) occurred in 2020. There were 4 alarm messages recorded in the Bratislava, Kosice and Trnava regions, 3 times in the Presov Region, and only once in the Trnava Region. The fire incidents were recorded 25 times, mostly in the Presov region, 8 times, four times each in the Bratislava and Nitra regions, 3 times in theTrnava regions and twice in the Trencin and only once in Banska Bystrica regions. The most frequent incidents from an unknown substance were reported in the Trnava; 7, 5 in Nitra regions, then 4 in the Trencin region, 2 each in the Bratislava, Banska Bystrica, and Kosice regions and only once in the Presov and Zilina regions. Landslides as an incident were most often recorded in the Zilina Region;10 times, followed by 4 times in the Presov Region, thrice in the Trencin Region, twice in the Banska Bystrica Region and only once in the Trnava Region, in total landslides were recorded 20 times, constituting 3.7% of the total number of disasters in 2020. 8 incidents, under the category of others were recorded, 3 incidents were recorded in Presov, 2 in Kosice region, and only once in the Banska Bystrica, Trencin, and Zilina regions. Bridge emergencies were recorded twice in the Kosice and Zilina regions, once in the Banska Bystrica, Presov and Trnava regions. Total 5 traffic accidents were recorded in 2020, ie 0.9% of the total number of disasters. Two accidents were recorded in the Presov region and one each in the Bratislava, Kosice and Zilina regions. Two windstorms were recorded in Presov region and one in the Banska Bystrica region; lack of drinking water was recorded in 2020 only once in the Presov region. KCHL (Chemical Control Laboratories) under other activities and snow disaster were not recorded in 2020 (Ministry of Interior of the Slovak Republic, 2020).

Due to so many crisis reported in the study, the most frequent disaster i.e., flood is analysed in detail. The study further investigates the occupational threats of firefighters and police officers working as the frontline workers during the intervention of the Integrated Rescue System. Based on a detailed examination of the possible forms and factors that influence a disaster, the study analysed the possible level of risk and threat that rescue workers experience while performing their job. For this reason, the study penetrates deep into this issue.

Specific psychological aspects of emergency events

In a study on "Psychosocial aspects of CBRN emergencies", Vymetal & Riha (2015) point out the importance of understanding aspects of emergencies caused by chemical, biological, radiation, or nuclear hazards (CBRN) for their targeted and successful management. In this context, affected people, intervening staff, and the general public have specific psychosocial needs that need to be met to manage the crisis and reduce its consequences. Furthermore, the study claims that crisis preparedness is the precondition for managing such a challenging crisis, which includes awareness of specific support and stress factors that impacts both the rescuers and rescuers.

The present study is an extension of a previous scientific research from 2013, where the focus was on the views of rescue team members on IRS intervention after surviving intense work stress; the study analysed the attitudes of the rescue team members towards the employer's responsibility for post-traumatic care and preparation for critical situations. Additionally, the study tried to map the issue of psychosocial support, which was a contemporary issue in the country, but the findings indicated that in some countries, this issue is already receiving considerable attention.

The findings of the study revealed that crisis intervention is an effective tool, but it is not carried out regularly after a demanding IRS intervention for rescuers. Furthermore, it examined the attitude of the respondents towards the post-traumatic support, which is perceived as a set of preventive measures that are required to maintain the stable mental condition of members of rescue teams and emergency services. The behavior of rescuers and police officers is not the same, and just as there are individuals who know how to help themselves, there are those who need it from others. For this reason, it is expected that it would be interesting to study the opinions of firefighters and police officers on this issue. The results of the research show that psychosocial support, as a set of measures to help rescuers and members of the Police Force to maintain optimal mental health and promote psychological resilience, is considered insufficient and needs further improvement.

The person, the rescuer, trusts after a stressful experience is most often a colleague. Counseling a colleague before and after the intervention will sometimes help alleviate the impact of stress. This suggests that peer help according to the "Guidelines - psychosocial support for uniformed workers" is justifiable.

The interviews focused on the whole range of work activities of intervening teams members and the professional and personal problems of the respondents (rescuers, policemen, IRS intervention members) during an emergency are covered in detail.

The study is based on the "Guidelines - psychosocial support for uniformed personnel" (Burger, 2012), the first European directive to provide effective psychosocial support to rescuing paramedics in the context of disasters, terrorism, and other emergencies, to be important. It was supported by the Dutch IMPACT Foundation and funded by European sources. These guidelines emphasis on the resilience of intervening workers and their support, the supportive context consisting of practical assistance, information, and empathy. Furthermore, organized peer-support and on the timely detection of people requiring further professional care are emphasized.

The Human Resources Management Section of the Ministry of the Interior of the Slovak Republic, Human Resources Development Department, carried out research titled "Changes in the psyche of police officers under the influence of psychological stress and the need for preventive psychological care". Krivosudska and Marek (2008) conceptually provide key findings on changes in the psyche of police officers under the influence of excessive psychological stress during their service in the Police Force. Practically, the study recommends the management of the ministry to consider the possibility of periodically strengthening preventive psychological examinations of police officers. It is recommended that examinations be carried out every five years, focusing preventing of undesirable forms and behaviors and preventing professional failure. When diagnosing post-traumatic stress disorder, health

care should be provided, or the procedure recommended by the Ministry No. 103/2005, Art. 9, par. 4 and 5 should be applied, and a clinical psychologist of a hospital with a polyclinic of the Ministry for a control psychological examination should be requested.

In a study on PTSD, Hofmann (2006) pointed to the research findings of Kessler the frequency of burdensome experiences and the incidence of PTSD in the American population. The most frequent burdensome events are testimony (some events where others suffer) and accidents. Two categories of interpersonal violence and two categories of sexual violence are less common. A comparison of the frequency of PTSD in these different events shows that there is a clear increase in the incidence of PTSD after interpersonal violence. There is significant increase in the number of people with PTSD after sexual violence.

Other findings from the Kessler study, according to Hasto & Vojtova (2012) suggest that few subthreshold PTSDs i.e. symptoms do not reach the syndrome diagnostic threshold and partial PTSDs (after psychotrauma have symptoms other than those typical of PTSDs) may cause disability that significantly disrupts the functioning in different areas of life. E.g. in a study of 185 car or fire accidents, 22.7% of the survivors were diagnosed with PTSD and 16.7% with the partial PTSD with clinically significant impairment.

Kohoutek and Cermak (2009) describe that the disasters or crises disturb the security. Order is lost, the structures fall apart. The knowledge about how the world and people work is limited, the world is losing orientation, it is unpredictable, hostile, and the people in it may seem the same. Human beings are in the midst of material, social and psychological chaos, close to death, futility and destruction, close to human suffering and injury. The indescribable and unrepeatable experience of disruption and threat unprecedentedly exceeds what is expected and possible. More than expected people are exposed to natural and technological disasters, wars, accidents, violent crime and other such events each year, which leave a deep mark on human experience and can lead to psychological trauma.

To develop a well-functioning and organised network of crisis interventions, for providing psychological assistance, psychosocial support, and post-traumatic care, it is important to answer few other questions: What is psychosocial support, what is its significance? When and how to provide it? Which crisis intervention methods are effective, what preventive measures are needed? Crisis and disaster psychology experts are constantly looking for answers, and scope is widening for further research.

Vodackova (2020) states that crisis intervention should primarily work with what is at a given moment current, most vulnerable, most needed, and most visible.

The analysis and mutual comparison of the collection of relevant information, regulations, ordinances, available literature and other sources forms the basis of the study. After creating a sufficient information base, other research methods like qualitative content analysis, exploratory method using a non-standardized questionnaire, guided interview and qualitative analysis by the expert evaluation were used. The findings in this study will be a part of Scientific Research Project 252.

In general, there are several key concepts that express the EFPA SCs vision for post-disaster psychosocial support (PS) (European Federation of Psychologists' Associations, n.d.):

- PS should be an integral part of disaster planning and preparation;
- The PS should play a key role in disaster relief (duties, responsibilities);
- PS aspects should be taken into account from the outset;
- PS should be provided at a high level and based on scientific evidence and best practices.

Service psychologists and psychologists of the Ministry of the Interior of the Slovak Republic are actively involved in PS and crisis intervention. They actively provide crisis intervention if necessary and organize special courses for police officers and members of the Fire & Rescue Services for the provision of crisis intervention and post-traumatic care. Post-traumatic intervention teams have been set up throughout the Slovak Republic asper the CISM methodology.

Conclusion

The issue of psychosocial support in a disaster is constantly developing, it is the subject of interest for several s disciplines, interdisciplinary communication is important, at the theoretical (academic) level and at the practical level (at the site of intervention), as well as interstate, non-conflicting and apolitical

cooperation is also crucial. It must be acknowledged that, despite of full preparedness and security, the negative consequences after the event cannot be eliminated. The disasters, both natural and anthropogenic are unpredictable, and human error or intent cannot be identified. There is always a scope for psychosocial support for the members of the rescue teams in the intervention of the IRS, based on the needs of the country. The study highlights the importance of psychosocial support after the rescue operations for the members of rescue teams, as it is assumed that the recommended procedures can prevent the emergence of psychosocial disorders due to the experience of traumatic situations during the rescue operation.

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