



Risk of physical assaults on health care workers in course of their work

Riziko fyzického napadnutia zdravotníckeho záchranára pri výkone jeho práce

Peter LOŠONCZI¹

¹ Ústav bezpečnostného manažérstva, Vysoká škola bezpečnostného manažérstva v Košiciach .

Slovenská republika

The manuscript was received on 16. 05. 2018 and was accepted after revision for publication on 01.06.2018.

Abstract:

The study deals with measures to eliminate safety risks in the course of paramedics and other emergency staff 's work when providing emergency healthcare to a patient. We presented recommendations based on the results of our questionnaire research. Safety of the emergency health care workers when they are trying to assist people in distress is one of the most important issues. Statistics show an increasing number of physical and verbal assaults on the health care workers, which says a lot about problems they have to face during their work. Safety of emergency rescue workers is of utmost importance and these incidents prevent them from carrying out their work in the way it should be done. Therefore, it is important to identify these risks and prevent them. Proper communication is important to properly eliminate an aggressive patient. This is sometimes more effective than medication alone. The behaviour and emotions are mutually conditioned and influence each other. From the behaviour of man we can judge not only what he experiences, but also their behaviour. This study presents what needs to be changed and where we should draw our attention. We assume, that the recommendations would be a great kick off point for changes in the area of safety and health protection of the EMS workers.

Keywords: EMS workers safety, elimination of safety risks, emergency medical service

Abstrakt:

Predkladaná štúdia pojednáva o opatreniach na elimináciu bezpečnostných rizík v praxi Záchrannej zdravotnej služby a o bezpečnosti posádky vozidiel Záchrannej zdravotnej služby pri manipulácii s agresívnym pacientom. Na základe výsledkov z prieskumov týkajúcich sa tejto



problematiky sú v štúdiu uvedené návrhy na riešenie tejto problematiky. Bezpečnosť práce záchranára je jedná z najdôležitejších prvkov zásahovej činnosti pri pomoci ľuďom v núdzi. Narastajúci počet napadnutí zdravotníckych záchranárov či už ide o verbálne alebo fyzické napadnutie pri záchranárskych prácach nás informujú o problémoch a nedostatkoch, pri výkone ich práce. Bezpečnosť práce pre zasahujúcich záchranárov je prvoradá i keď často takéto incidenty sťažujú ich činnosť. Teda je preto potrebné včas identifikovať tieto riziká a predchádzať im. Aby sme vhodne eliminovali agresívneho pacienta je veľmi dôležitá správna komunikácia. Tá je niekedy účinnejšia ako samotné lieky. Správanie a prežívanie emócií sa navzájom podmieňujú a ovplyvňujú. Zo správania človeka môžeme usúdiť nielen to, čo prežíva ale aj to, aký má charakter. Prieskumom bolo zistené čo je potrebné zmeniť a čím by sme sa mali v danej oblasti zaoberať. Môžeme predpokladať, že návrhy na odporúčania v tejto štúdiu by boli dobrým východiskovým bodom pre začatie konania zmien v problematike bezpečnosti a ochrany zdravia zamestnancov v oblasti záchranej zdravotnej služby.

Kľúčové slová: bezpečnosť posádky, eliminácia bezpečnostných rizík, záchranná zdravotná služba

Introduction

The Integrated Rescue System represents basic requirements for a systemic change in the organization, provision and coordination of activities related to providing assistance in case of a threat to the life, health, property or natural environment.

Its main goal is that a person in distress gets proper and prompt assistance in case of a threat to life, health or property and the assistance is timely, appropriate and first-class. On top of that, another of the Integrated Rescue System goals is to provide law protection for its employees.

In this study we focus on one unit of the Integrated Rescue System which is the Emergency Medical Service and its staff.

Safety of the Emergency Medical Service's workers is very important in their work, since they help people in distress. Statistics dealing with physical or verbal assaults on the emergency medical technicians and paramedics inform us about problems they have to challenge during their work. Safety of the emergency health care workers is of utmost importance however, these incidents prevent them from carrying out their work in the way it should be done. Therefore, it is important to identify these risks and prevent them.

We can define safety of citizens, society, country as a state where all risks and threats resulting from them, which can eventually lead to crisis (crisis situations), are removed or minimalized.

Finally yet importantly, we understand safety as a state, in which the subjects are not threatened in terms of their existence, interests and values, or they are perceived as objects who are not endangered. [1]

It is important to tackle this issue, because people, in this case, emergency medical technicians, physicians, paramedics or ambulance drivers, represent the Emergency Medical Service. Their physical and mental health is very often challenged by more and more difficult interventions. We can mention an aggressive patient, infectious diseases, stress,

communication barriers and physically difficult interventions in remote areas. Therefore, it is important to focus on protection and safety of the Emergency Medical Service staff, and their education. [2] From all the risks the EMS workers have to face, we describe the risk of an aggressive patients assaults, whether it is a physical or verbal assault.

1 Emergency Medical Service as a key competent the Integrated Rescue System

In the Slovak Republic, rescue units are organized into the Integrated Rescue System (IRS) of the Slovak Republic. Ministries, district authorities and rescue units represent the basic organizational structure of the IRS. The most frequent interventions and, by type of emergency, also the most cooperative components in joint interventions are the Fire and Rescue Services, the Emergency Medical Service and the Police Force. Basis of the IRS organizational infrastructure are the IRS coordinate centres created by district authorities in regional seats. Operators provide a non-stop service at the coordination centres. Those might be representatives of district authorities in the regional seat, the Ministry of Health, the Fire and Rescue Service and in case of a threat, it can be a representative of the Police Force, if requested by the district authority in the regional seat. [3]

The basic rescue components of the IZS are [4]:

- Fire and Rescue Corps
- Emergency Medical Service providers (EMS),
- chemical laboratories for civil protection,
- Mountain Rescue Service,
- Mining Rescue Service.

The other rescue units of the IRS are:

- Armed Forces SR,
- voluntary fire brigades of municipalities / towns,
- fire brigade units,
- fire brigade,
- workplaces carrying out state control or activities under special regulations,
- civil protection units,
- municipal police,
- Slovak Red Cross,
- other legal entities and natural persons whose purpose is to provide assistance in the protection of life, health and property.

As we have already mentioned earlier, we would like to concentrate on a specific unit of the IRS in this study, which is the Emergency Medical Service (EMS). The basic goal of the EMS is to guarantee an adequate quality and accessibility of out of hospital acute medical care to the residents of the Slovak Republic. The main prerequisite for fulfilling this challenging task is to provide nonstop availability of emergency telephone line, subsequent answering, emergency calls processing, their management and follow-up coordination and evaluation of the EMS responses in order to make it more efficient.

Risk of physical assaults on health care workers in course of their work

Peter LOŠONCZI

According to the legislation of the Slovak Republic, Act no. 579/2004 Coll., The Emergency Medical Service provides emergency medical care to persons in case of a sudden change of their state of health, which immediately threatens their life or some of the basic life functions and the person is dependent on such kind of assistance. Under this Act, the EMS is provided by:

- Emergency Medical Service Operations Centres,
- Rescue service providers based on a license to operate an ambulance of the EMS.

Based on the instructions of the EMS coordination centre or operation centre, the EMS ambulance intervenes in all the events that may endanger life as well as in all exceptional occurrences.

The main activities of the operating centres include [5] :

- Managing, coordinating and evaluating activities of the EMS in providing emergency health care.
- Nonstop emergency calls responding and processing .
- Providing technical support for the telecommunication connection and transmission of information with the EMS providers, relevant health care facilities and other units of the IRS.
- Archiving documentation of the emergency calls and the emergency call responses 20 years from the date of its occurrence and archiving voice records of the emergency calls and the responses to the emergency calls for three years from the date of its occurrence.
- Providing basic periodic training every 12 months for the staff.

Providers of the EMS are a basic rescue unit of the Integrated Rescue System, which carries out emergency medical services in the intervention area according to the IRS regulations. The EMS station is a stationary workplace, where the ambulance crew resides outside the intervention time and it is equipped with communication tools for permanent connection with the EMS operation centre.

The Ministry of Health grants the license for the provision of the EMS to the natural or legal person, if they meet all the conditions of the equipment and financial covering for the provision of the EMS ambulance and they successfully undergo a selection procedure. The license for the provision of the EMS is granted for six years [6]. The Ministry of Health grants the license for the provision of:

- RRA – ambulance of rapid rescue aid.
- RMA – ambulance of rapid medical aid.
- RMA/MIU – ambulance of rapid medical aid/mobile intensive unit
- HEMS – helicopter emergency medical service.
- SWR - surface water rescue

The EMS regional operation centre is an organization co-financed by the State budget, established by the Mistry of Heath and besides tasks under specific rules they are under obligation to:

- ensure the emergency call number 112/155 functionality, the subsequent reception of the emergency calls, their processing and responding to these calls by sending the EMS rescuers to the address reported by the caller

Risk of physical assaults on health care workers in course of their work

Peter LOŠONCZI

- manage, coordinate and evaluate the operation of the EMS in order to ensure it is fluent and continual
- provide technical support for telecommunication connection and information transfer with providers of the EMS, relevant institutional health care facilities and other components of the Integrated Rescue System, including satellite monitoring of the EMS vehicles
- document emergency calls and emergency call responses including voice calls, provide training of its staff
- perform further other tasks according to the laws

The EMS operation centre consists of the Directorate-General and eight regional operation centres of the EMS (Bratislava, Trnava, Nitra, Trenčín, Banská Bystrica, Žilina, Prešov, Košice). The EMS providers are state or private entities that comply with statutory conditions for operating ambulances and stations.

We have 13 EMS providers in Slovakia. The Emergency Medical Service provider is required to:

- create and personally ensure the system of continuous control, management and coordination of the individual factors, as well as the EMS resources, so that the provider, based on the instruction from the regional operation centre, can ensure continuity in the provision of the EMS
- ensure the operational conditions of the stations and ambulance so that the EMS interventions can be provided without delay, no later than two minutes after receiving the instruction from the regional operation centre of the EMS
- set up the EMS station on the spot referred to in the license for the provision of the EMS ambulance
- fulfil the tasks arising from the laws

The EMS network consists of 280 stations, which are located so that the availability of emergency healthcare is adequately ensured in the SR. Currently, the following ambulances are working in operational readiness [7] :

- 86 ambulances - RMA type (some RMA ambulances are specially equipped as mobile intensive care units - "MIU")
- 186 ambulances - RRA type
- 7 ambulances - HEMS type

2 Risk related to the EMS profession in the course of their work

Nowadays, the Emergency Health Service has to deal with unnecessary interventions – patients call them because they want a preferential hospital examination, a general physician, overnight accommodation. The EMS has to cope with alcohol or drug-related conditions, emotionally and physically desiccated situations and many times family problems. All of this have moved requirements for the medical profession of the Emergency Health Service to a different level. Therefore, the safety of healthcare workers comes first, followed by the standard work procedures.

Risk of physical assaults on health care workers in course of their work

Peter LOŠONCZI

In life, every individual gets into a situation where he/she can not help himself/herself and which goes way beyond normal behaviour. It is usually a situation where pain, fear, tension and other negative feelings affect current behaviour of a person. The borderline situation is a state where the requirements of surrounding environment are greater than the ability to deal with them. In a crisis situation, everyone is subject to inner pressure which changes the behaviour significantly [8].

The EMS faces risks of harm to health on everyday basis. It starts with getting into the EMS ambulance vehicle, goes on with the treatment of the patient and the transfer of the patient to the appropriate health facility. Medical rescuers are very often at risk of verbal or physical assault.

If managing these challenging situations, such as coping with an aggressive patient, should be successful, it is necessary to adopt certain procedures to minimize the risk of an assault from the patient and the surrounding. Safety principles for coping with an aggressive patient are [9]:

- always think about your own safety,
- do not walk too close to the patient (keep a personal distance of at least 2-3 meters)
- in the case of pre-hospital care, RPA is assisted by the police or the Fire and Rescue Service according to the situation described by the regional operation centre (attempt to jump out of the window from the apartment, closed garage with the car started, etc.)
- psychotherapy and symptom-based approach,
- remove all dangerous objects (sharp objects, knives, glass),
- secure the area (close windows and escape routes),
- reject the somatic cause of the acute state,
- find out if the patient is in right mind and if he / she wants to be cured,
- after communication failure, physically restrict the patients and give them pharmacological treatment with the police assistance.
- obtain the relatives' phone number who can provide necessary information for medical history
- transport the patient to the psychiatric clinic for psychiatric examination and subsequently assess his / her state of health.

If the EMS crew knows it will encounter an aggressive patient and the likelihood of the aggressiveness is high, it is advisable to proceed as follows:

- arrive with sirens turned on because they have the impression of a prompt intervention,
- inform the patient and the surrounding that inappropriate behaviour will not be tolerated,
- wait for police assistance,
- keep a sufficient distance from the patient and the surrounding,
- remember the way back to the vehicle,
- it is appropriate for paramedics to warn everybody that everything will be recorded on the mobile telephone and will be used in case of lawsuit,
- each form of aggression should be documented,

Risk of physical assaults on health care workers in course of their work

Peter LOŠONCZI

- in the case of a physical attack on the EMS crew, post the address and report the entire situation via operations centre (additional voice record for legal purposes),
- do not initiate disagreements or aggression, the irrational behaviour of the patient and the surrounding may be pardoned, but not inappropriate behaviour of paramedics who come to address as professionals.

In case of an assault or attack by a pet or domestic animal, it is advisable to leave the premises, finish the patient's treatment, document the entire situation and notify it via the operations centre. First, it is important to focus on your own safety as the EMS crew, only after that you can focus on the safety of the patient and others. As the number of the assaults grows, the government adopted a law according to which, since January 1, 2017, a health care worker is considered a protected person during the performance of their profession which is aimed at saving people's lives or health protection, that means higher penalties for the assailants.

Proper communication is important to properly eliminate an aggressive patient. This is sometimes more effective than medication alone. The behaviour and emotions are mutually conditioned and influence each other. From the behaviour of man we can judge not only what he experiences, but also their behaviour.

3 Methods

Sample

We used a questionnaire as a form of quantitative research in order to obtain research data related to the problem. We conducted our research at the USM in Košice in 2017. The sample consisted of 126 health care workers who filled in the questionnaire. In terms of personal information the most common individual was – a woman (n=66, 52,4 %), between 31-40 years of age (n=44, 34,9 %), graduated with the bachelor's degree from the USM. (n=56, 44,4 %), working more than 10 years (n=62, 49,2 %), member of the RRA crew (n=82, 65,1), working as a paramedic or registered nurse (n=88, 69,8 %).

Research method

As mentioned above, we used the questionnaire to obtain the research data. The questionnaire consisted of 22 questions. For this study purposes we evaluated only questions no. 17,18,19,20 22, which directly covered the issue of a possible assault on the EMS worker and dealt with physical safety.

Question number 17: Have you had any experience with an aggressive patient of aggressive behaviour?

Question number 18: Who can communicate better with an aggressive patient?

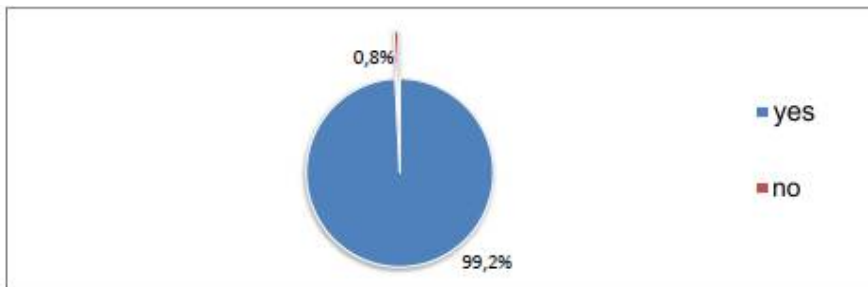
Question number 19: Have you been forced to use self-defence during an intervention?

Question number 20: Were there any legal consequences related to the threat to your safety?

Question number 22: Are you interested in courses which would increase your safety?

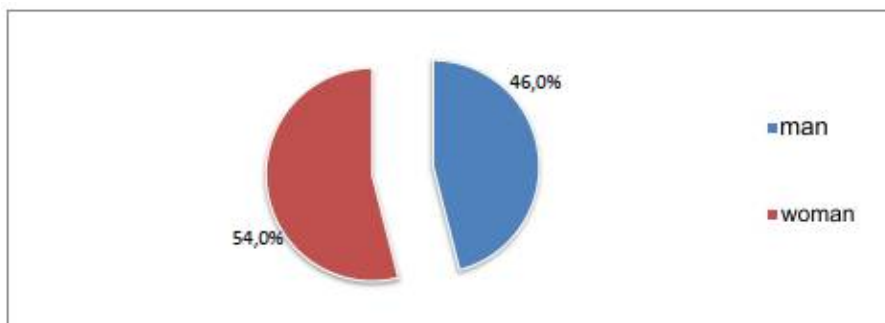
4 Results

We present our results in the following graphs.



Graph 1 - Experience with an aggressive patient

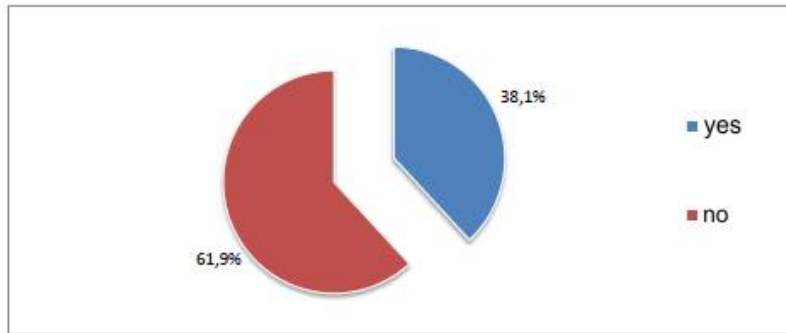
We found that, up to 99.2% (n = 125) of respondents had experiences with an aggressive patient or aggressive behaviour, whereas only 0.8% (n = 1) of respondents said they had no experience so far (Graph 1).



Graph 2 – Communication with an aggressive patient

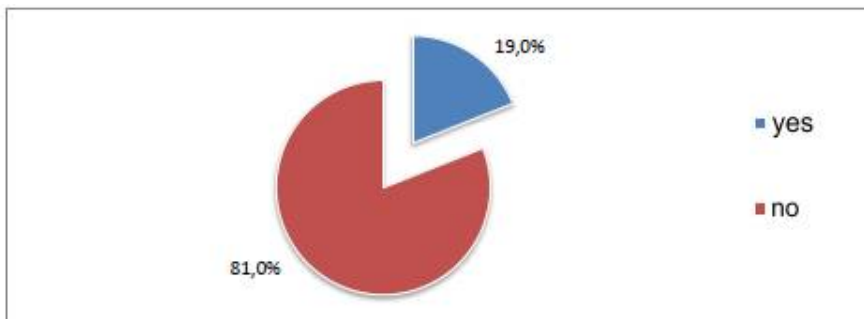
By evaluating the questionnaire we found that out of the 126 respondents, 46% (n = 58) believed that communication with an aggressive patient is better managed by a man and 54% (n = 68) is of the opinion that communication with an aggressive patient is better managed by a woman (Graph 2).

Risk of physical assaults on health care workers in course of their work
Peter LOŠONCZI



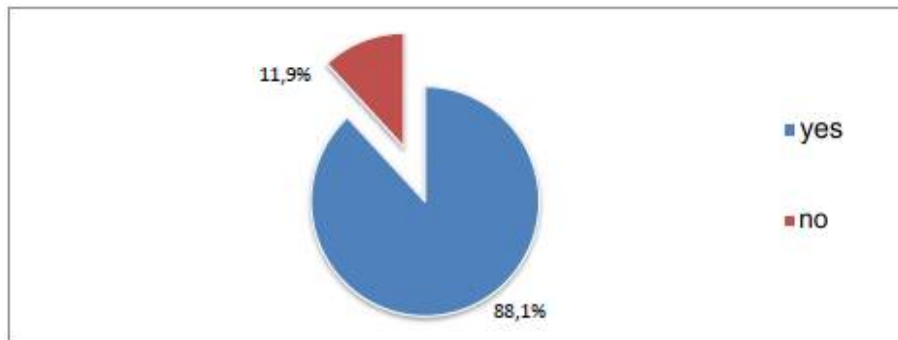
Graph 3 – Self-defence during an intervention

In the survey we found that out of the 126 respondents, 38.1% (n = 48) were forced to use self-defence during an intervention and 61.9% (n = 78) of the respondents were not forced to use self-defence (Graph 3).



Graph 4 – Legal proceedings

We found out that 19% (n = 24) of the respondents took part in the legal proceedings related to the safety threats to the EMS crew and 81% (n = 102) of the respondents had no experience with the legal proceedings related to the safety threats to the EMS crew (Graph 4).



Graph 5 - Interest in courses

By evaluating the questionnaire, we found out that 88.1% (n = 111) of the respondents would be interested in courses that would increase their safety and 11.9% (n = 15) of the respondents stated they were not interested in these courses (Graph 5).

Discussion

We live in times where people are no longer able to cope with their problems, therefore there is high probability that the EMS crew encounter an aggressive patient. We could see that in the question no. 17. Have you had any experience with an aggressive patient of aggressive behaviour? 99,2 % (n=125) of the respondents confirmed that, which implies that almost every EMS worker has met with some kind of aggressiveness during the intervention. This number is alarming and bewildering and therefore it is very important to focus on the EMS crew safety on the part of the EMS workers themselves but also their employers. Despite the fact that the ambulance crew is visible, hearable, wearing reflexive vests what can encourage respect in aggressive people and their surroundings, communication with them might pose a serious problem as well, which is not handled well by everybody. This can lead to the worsening of a critical situation and the intervention might go in a very different direction as planned.

Women handle communication much better. This was confirmed in our research where we found 54 % (n=68) of responses in favour of women in comparison to 46 % (n=58) of responses for men. We can state that that femininity, defencelessness and empathetic communication make the intervention more effective than intimidation by the men's crew. Based on the proper communication, first impression and possible police assistance, we assume that this are the reasons why 61,9 % (n=78) of the respondents did not have to use self-defence for their protection treating aggressive patients and their surrounding which is a very good result. We assume that the rest of the respondents 38,1 % (n=48) were forced to use self-defence for protection of their health, life or property (the EMS vehicle and its equipment).

In case the police, which can intervene in the case of an assault, is absent at the place of the EMS intervention, it is useful for the EMS crew to learn the self-defence

basics. It might help in a critical situation without using any self-defence equipment (paralyser, handcuffs, pepper spray and so on), because these might be as well used against them.

Although almost every paramedic or any other EMS crew has met with an aggressive patient, legal proceedings related to the safety threats are relatively rare, 19 % (n=24) of the respondents confirmed that what is quite a small number. The incentives for this proceeding are usually the damage on the EMS vehicle and its equipment, so that the guilty part has to pay financial compensation to the EMS provider. However, let's not forget, that the EMS workers are people as well, who should be compensated in the event of an assault, because although not carrying any physical damage, the mental damage (verbal insults, threats and so on) can have a lifelong effects.

Based on the research we recommend:

- Provide training on the topic of effective communication with an aggressive patient, led by a psychologist.
- Develop a legal procedure or expert guidance on how to proceed in case of an assault on the EMS crew in the Slovak Republic.
- Develop a procedure or guideline for more effective cooperation with members of the Police for the need of physical protection in terms of organization of the EMS intervention.
- Provide a self-defence course for the EMS crew and also provide a course on defence against aggressive dogs (because the dog is the most common attacking animal).
- More frequent reporting of assaults to the Police.
- Ensure regular tactical exercises within the IRS.
- Enhance cooperation with regional operation centre of the EMS, in the communication with the operation centres, do not forget to report all the facts about the situation because the call is recorded and will be used in the case of lawsuits if there are safety threats to the EMS crew.

Conclusion

No one can deny difficulty of the EMS profession, however, the EMS workers perceive their job with humility, love and enthusiasm. They have learnt all of this throughout the years in terrain. The EMS in the Slovak republic fulfils difficult tasks, which lead to the most important goal – timely, appropriate and effective assistance to patients in distress.

The presented problem is very topical, since number of assaults on the EMS workers has increased and therefore it is important to protect them physically. In the same time, it is very important how the EMS workers perceive safety.

Rescue security is a dynamic reality that deserves scientific research. Every dynamic vision requires application of a diachronic approach. This kind of researches

on society during constituting, require a focus on the historical factors which shapes the reality. [10]

The EMS workers are exposed to new situations within their profession and interventions on everyday basis. This study presents what needs to be changed and where we should draw our attention. We assume, that the recommendations would be a great kick off point for changes in the area of safety and health protection of the EMS workers.

Referencie

[1] ŠIMÁK, L. 2004. *Krízový manažment vo verejnej správe*. FŠI ŽU v Žiline. Detašované pracovisko Košice. Žilina 2004. ISBN 80-88829-13-5

[2] KOVÁČOVÁ, L.; VACKOVÁ, M. 2015. Applying Innovative Trends in the Process of Higher Education Security Personnel in Order to Increase Efficiency, In: *Procedia-Social and Behavioral Sciences*. - Oxford: Elsevier, 2015. - ISSN 1877-0428. - S.120-125.

[3] Act n. 129/2002 Coll. Act on the Integrated Rescue System

[4] BOGUSKÁ, D., MAJLINGOVÁ, A., MONOŠI, M. 2016. *Kritické miesta v súčinnosti záchranných zložiek integrovaného záchranného systému Slovenskej republiky*. Prešovská univerzita v Prešove. 2016. 1. vyd. 188. s. ISBN 978-80-555-1603-5

[5] Annual report of the Emergency Medical Service Operation Centre in the Slovak Republic 2017. [online].
http://www.155.sk/subory/dokumenty/vyroczne_spravy/Vyroчна_sprava_OSZZSSR_2017.pdf

[6] Act n. 579/2004 Coll. Act on the Emergency Medical Service as amended

[7] *Provision of the Emergency Medical Service in Slovakia* [online] 2017:
<http://www.emergency-slovakia.sk/index.php/pre-verejnost/ako-funguje-155>

[8] LOŠONCZI, P., KOVÁČOVÁ, L. 2017. Bezpečnosť a ochrana zdravia zamestnancov pri práci v oblasti záchrannej zdravotnej služby. In: *Zborník z konferencie Quo vadis zdravotníctvo III Medzinárodná vedecká konferencia*. Prešov, 2017. s.170-182. ISSN 9788055518688.

[9] ŠTĚTINA J., a kol. 2014. *Zdravotníctví a integrovaný záchranný systém při hromadných neštěstích a katastrofách*. 1. vyd. Grada Publishing, a. s., Praha. 2014. s. 560. ISBN 978-80-247-4578-7

[10] PIWOWARSKI J. 2013. Wide Comprehension of Securitology in Studies on Culture of National Security, In: *Security Dimensions*, Scientific Journal, No. 10, 2/2013, Cracow, Wyższa Szkoła Bezpieczeństwa Publicznego i Indywidualnego APEIRON w Krakowie, ISSN 2299-4041

Author:

Ing. Peter Lošonczy, PhD. MBA MSc. Vysoká škola bezpečnostného manažérstva v Košiciach, Kukučínova 17, 040 01 Košice, mail: peter.losonczy@vsbm.sk