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THE IMPORTANCE OF COOPERATION BETWEEN GENDARMERIE HEALTH SERVICE AND MEDICAL TEAMS IN THE FIELD WHILE PROVIDING HELP IN EMERGENCY SITUATIONS

VAŽNOST SARADNJE ZDRAVSTVENE SLUŽBE ŽANDARMERIJE I MEDICINSKIH TIMOVA NA TERENU U PRUŽANJU POMOĆI U VANREDNIM SITUACIJAMA

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Introduction:Accidents happen suddenly, unexpectedly, abruptly and it is mostly very difficult to predict them. Natural disasters happen to the whole society or its majority, causing enormous emotional suffering, casualties and material costs, medical and social problems, massive destruction and devastation. Rehabilitation of the consequences implies involvement of the whole society, in material and psychological terms.

Goal:The aim of this paper is to point out the necessity of cooperation and the importance of coordinated practise of the Gendarmerie Health Service and medical teams in the field in emergency situations.

Key words: emergency situation, calling, treatment.

The Republic of Serbia (RS) faced catastrophic floods in May, 2014 caused by abundant rainfall. Emergency situation was provoked by a natural disaster and it was initially proclaimed in five towns and fourteen municipalities and from May the

fifteenth it was effective in the entire territory of Serbia. After the effusion of the river Kolubara on 15th of May, 2014, 90% of Obrenovac municipality was under water.



Geographic map of Serbia and geographical position of Obrenovac in Serbia

In the beginning, most citizens were confused, startled and didn't know what to do. Rescue and Fire Fighting Services, police (Gendarmerie, Special Anti-Terrorist Unit, and helicopter unit), Serbian Armed Forces, Red Cross and Mountain Rescue Service took part in the rescue operation of the endangered and their belongings. Police officers of Gendarmerie, the second and the third squad of the command unit, participated from the beginning; came among the first rescue teams, around six o'clock on the same day. Along with them, the first medical teams from the unit of Gendarmerie were summoned, which, unlike Emergency Medical Services (EMS), operate in so called **red zone** – the

zone of immediate danger. After reaching the scene, together with the citizens, officers of Ministry of Interior Affairs (MUP), Gendarmerie and Serbian Armed Forces, organized the evacuation centre in Nemanjina Street, collected the boats and other watercrafts, rescued "trapped" people from houses and buildings. In the very centre, there were two teams of Gendarmerie medical service and other teams evacuated the rescued citizens from nearby houses and buildings, while the large number of citizens waited to be evacuated. The organization of the centre was known for order and priorities, and the citizens, as well as the officers were given orders.



The scheme of evacuation

Since the Health Centre was flooded, evacuation took place in two directions. One towards the primary school "Jefimija" and the other towards the hotel "Obrenovac", where the medical teams of the Health Centre were located initially, and later that day, around five p.m. other teams of Emergency Medical Services from Belgrade came along. In the beginning there were two hundred requests for evacuation from different parts of the municipality. The most difficult situation was in the settlement "Gaj" where the police officers of Gendarmerie were continuously with the endangered citizens. During the rescue of a child, truck of Gendarmerie was flooded and the driver and a child were evacuated by boat of the Rescue and Fire Fighting Services. Retreating from the water flow, police officers came to Primary school "Jefimija" where evacuation was only possible by helicopter. During the night, rescuing continued, and help was provided to those who were at the centre and then they were evacuated further on. A variety of patients asked our teams for help; people with hypertension, patients with a heart diseases, asthma sufferers and psychiatric patients among others. One of the problems we faced was that medical teams in the field were often referred to wrong addresses, since

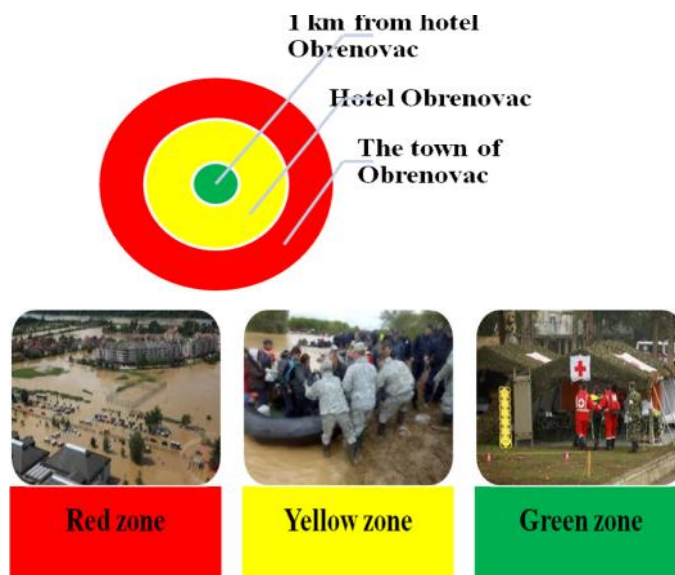
they received misleading information from certain citizens which made the operation more difficult and at the same time it provoked a problem with providing help to the people on time. All the medical teams were spread in the red zone as well as the other zones of medical treatment. In our work, according to the doctrine of Tactical Medicine (we employed these attitudes in cooperation with The National Council for Tactical Medicine and Resuscitation Council in Serbia), we used the principles of three existing zones of treatment: red, yellow and green [1, 2]. Using mentioned doctrine, we operated this time as well. We divided the area into three zones: red, yellow and green.

Red zone – is the zone where the treatment of injured and diseased is not performed, but only rescuing to the closest safe place, that is to say, the next **yellow zone**, where the medical help is provided. In this case, **red zone** was the town of Obrenovac, which was completely flooded with extremely unsafe and dangerous access to the flooded objects where the endangered citizens were located.

Yellow zone was near the hotel in Obrenovac, the place where admission and triage of the patients

were performed and then they were taken by terrain vehicles to the **green zone** which was about 1 km away from the hotel and that was completely secure and safe, and near which the improvised heliport was built.

From the green zone, after providing medical treatment according to the urgency degree, injured and diseased were transported to corresponding medical centres. Help was provided to all these people adequately and on time in extremely unfavourable conditions.



The scheme of emergency situation

On the 17th of May, police officers of Gendarmerie evacuated around 4000 people, by using the route they made, to the new bridge on the Sava river, where the people were transported by 86 buses to the private centres. During the period from the 15th of May to the 23rd of May, 2014, more than 31 thousand people were evacuated and more than 25 thousand from the most endangered Obrenovac municipality (announcement of Ministry of Internal Affairs).

Discussion: There is no standard system for the triage, and several different systems are employed in the world. Most of them have 2-5 priority categories, but, however, mostly the four of them are in use. Priority I (red), priority II (yellow), priority III (green), priority 0 (black). In primary triage, in the case of massive accidents, with a large number of injured in the small area, START (Simple Triage and Rapid Treatment) method is used, and in the large area Care Flight triage method which we used in our work. [3, 4, 5, 6, 7]. Primary triage was employed by the doctor and his duties were to organize, supervise and coordinate

the process of rescuing, triage and transport of the people to the centres.

The outcome of the mutual work by our teams, Health Centre from Obrenovac and Emergency Health Services teams proved to be very efficient, purposeful and necessary. It is important to point out the important role of the quick transport of the endangered people by helicopter which shortens the time of providing medical help and increases the possibility of survival [8], and initial triage has a priority over urgent procedures that are performed on the spot.

Upon the finished rescuing and evacuation of the people from endangered area, the emphasis is on the performing:

- Hygienic - prophylactic measures and medical surveillance (accommodation, alimentation, personal and public hygiene, supply of pure drinking-water, food)
- Anti-epidemic measures, efficient detection of infectious diseases, their prevention and combating (especially detecting the source and focal point),

- Medical measures – anti-radiologic, anti-chemical and anti-bacterial protection.

Conclusion: Floods that took many people's lives and made considerable material damage indicated that it is a necessity to train medical staff in the circumstances of natural disasters. Cooperation of all the teams in the field and following the plan of treatment in emergency situations give corresponding results. Global climate changes that happen and all of the above impose the necessity to improve our skills as the police officers of the Gendarmerie unit, in order to be readier to respond in these or similar circumstances that may happen in the future in our country or region. In the current ways of treatment during massive accidents, triage is the key point which requires vast knowledge and skills. In order to be efficient during natural disasters and massive accidents, health services need to plan potential incidents and to practise continuously. According to the international standards and according to the programme of the training, medical staff that provides help in massive accidents and emergency situations should complete following training programmes: BLS (Basic Life Support), ALS (Advanced Life Support), ATLS (Advance Trauma Life Support) and surely focus on prevention,

preparation and readiness to act and include all the society structures. In the end, I would like to ask a question: "What force exists around us?"

Maybe not strong enough to change everything we are familiar with, but still strong enough to make us believe that we are the ones that rule the world.

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