



## **The Opportunities of Crises and Emergency Risk Communication in Activities of Serbian Public Health Workforce in Emergencies**

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### **Abstract**

**Background:** The aim of the study was a recommendation and establishment the concept of the appropriate communication between public health, other competent services and population in emergency as the corner stone which guarantee that all goals which are important for community life will be achieved.

**Methods:** We used methodology appropriate for social science: analyses of documents, historical approach and comparative analysis.

**Results:** The finding shows the urgent need for accepting of crises and emergency risk communication principles, or some similar concepts, in Serbia, and implementing effective two way communication especially in multiethnic region. The pragmatic value of the paper lays in information about the recent improvement of health workforce and emergency services in emergencies using new concept of communication and as source of numerous useful documents published in USA and few recent Serbian examples.

**Conclusion:** Health workforce has significant role in the process of protection of population in emergencies. Policy makers should work on finding a way to improve their coordination and communication, creating new academic programs, providing of adequate training, and financial means in order to give them different role in society and provide visibility. From other side health workforce should build back to the citizen trust in what they are doing for society welfare using all their skills and abilities.

**Keywords:** Health workforce, Emergency, Communication, Crises, Serbia

### **Introduction**

The communication issues in history of civilizations always attract the attention of researchers. In this paper authors analyses the modern role of public health workforce in communication processes in emergencies and present the experiences from international community. Serbian health system is faced with a lot of expectation in society. The situation is more complicated when additional role is taken into consideration in society within which health system has in different situation (like emergency). The public health has irreplaceable role in all phases of disaster management.

In 2009, law on emergency situations in Serbia was passed, along with sub-laws and it was a start of new age in integral protection and safety system. The Sector for Emergency Management was established (Sector) within the Ministry of Interior. The Sector integrated the existing resources within protection, rescuing and reacting in emergency situations. The activities of the Sector in regional and international cooperation in the field of cooperation and mitigation of consequences of natural disasters are encouraging (1).

Effective response of public health workforce depends on continual upgrading of knowledge about emergency impacts on population. Serbia still did

not accept the experiences from developed countries like United State of America (USA) as well as similar from European country. USA is a leader in the scientific field regarding the disaster management, risk and crisis communication. In Serbia, at the first place, policy makers has to understand the necessity of moving forward to a clearer common vision of public health emergency preparedness, similar to those accepted in developed country (2).

The numerous science researches were published about the health workforce activities in disasters (since in ancient history, through New Orleans hurricane Katrina and earthquake and tsunami disasters in Fukushima Daici, Japan). Therefore, M Zaré, and S Ghaychi Afrouz explained in their paper in months after the vent (earthquake in Fukushima Daici), Japanese Red Cross concentrated on mental health issues (3).

During the last decade Serbia was exposed to different hazards in which the role of public health workforce was visible. The hypothesis of this paper is: 'If policy makers are aware of the paramount role of health workforce in emergencies, the current weakness in their work will be removed by:

- a) Institutional definition of the role of the health workforce in disaster;
- b) By creation and implementation appropriate scientific and academic programs; and
- c) Recognition and acceptance of new concepts of disaster management and crises and emergency communication in practice.

The primary objective of the paper is to initiate wider public discussion in which way new risk communication techniques offer a real opportunity in achieving adequate level of risk communication (among health workforce and first responders from one, and jeopardized population from the other side). The second objective is explanation of current obstacles in activities of health workforce who are primarily involved in disasters (a need for better coordination with employees of the emergency sector). The third objective is to engage the Ministry of Education to incorporate preparedness and emergency response material into the curricula of every health profes-

sional's school and Medical faculty in the country, in a current process of creating New National Education Strategy.

Many efforts have to be done in future but it would be a way to convert weaknesses to the strengths, and avoid numerous consequences in emergencies, and providing condition for achieving welfare of Serbian population and a society at whole. The proposal for a new concept of effective and efficient communication in Serbian society in emergencies was the aim of the study. It is urgent among public health, other competent services and population as the corner stone which guarantee that all goals for safety and security important of community life will be achieved.

### *Methods*

We used methodology suitable for social sciences and objectives of the paper. As this paper is a result of the 'desktop study' authors used all kind of reliable and available data in analyses of documents, historical approach and comparative analyses. A document analysis is used in a form of content analyses to make inferences about the effects of a communication (4), because of its fundamental connection to the development of mass media and international politics. Literatures from different disciplines that inform about crises communications are reviewed: risk communication, disaster management, health system development and media reports. The documents were collected from electronic sources: EBSCOHost, Academic OneFile, e Library, and National Serbian academic database KOBSON, printing material (books, journals, official documents, and numerous syllabuses from the USA universities (Columbia, Tulane, Emory and St Luis) as well as Serbian Universities. Historical approach shows the development of risk communication principles during the last decade. The paper provides chronology of remarkable events within was significant role of health workforce in risk communication. Comparative method is used to make a conclusion of current state in of existing documents about that important issue and response of health workforce in those events in Serbia and abroad. One

part of literature has been used from the courses of risk communication and disaster management, which Dr Radovic attended at the Tulane School of Public Health and Tropical Medicine at Tulane University in New Orleans, Louisiana and lectures from the experts from the Center of the Disease control and distinguished professors who were the founders of the CERC (Barbara Reynolds, LuAnn White, and Maureen Lichtveld).

This research is related to the events happened in Serbia during the period 2000-2012.

### ***What is Crisis and emergency risk communication?***

Crises and emergency risk communication (CERC) is a new scientific concept of communication which has to explain the psychology of a crisis and its impact, provide tools to prepare for and respond to the communication challenges that occur in times of emergency. It is a recognized field of communication study that differs from health-risk and risk communication. It has emerged as a new field of communication recognized by academia and broader scientific community, and has first successful practical implications in the United States of America (USA) of different actors.

CERC is recognized as conceptual overview, synchronization of basic principles accepted from crises communication, management communication, risk communication and crisis and emergency risk communication. CERC has irreplaceable role in the disaster management area in contemporary world. Crises and emergency risk communication is taught in 22 universities in the USA and is being diffused internationally. The most influent international organizations have adopted CERC principles like The Pan American Health Organization (PAHO), the World Health Organization (WHO), and NATO. General principles and tools are valuable to many emergency response officials: hospital/medical environments, non-government organizations, civic leaders, first response officials, and all other stakeholders involved in the field of protection and safety of population in emergencies.

Peter Sandman, the "father of modern risk management" delineates different types of risk communication on the basis of public perceptions of the hazard caused by the risk on the degree to which the public is outraged about risk (5). Using his explanation, crises risk communication is recognized in situations where the hazard is high as are people's emotional response or outrage about it. CERC has a goal to help people cope, empower decision-making, and begin to rebuild a sense of normalcy in lives of population in endangered community.

Some important documents about CERC are published in USA and are easily accessible and useful for stakeholders at the field. The most important are:

- Crises and emergency risk communication (CERC) launched in 2002 for public health communicators (6);
- A primer on health risk communication principles and practices, of the Agency for Toxic Substances and Disease Registry (7);
- Communication in crises: risk communication guidelines for public officials, by the Substance Abuse and Mental Health Services Administration (8) and
- Risk communication with media during public health crises, from St. Luis University (9).

The CERC is especially valuable for public health workforce and their specific tasks in crises. It describes the role of public health workforce, Sector and their partners in emergency response. The need for crises risk communication strategies for public health preparedness and risk communication represents an exchange of information about the likelihood and consequences of adverse events. CERC is vital because it helps the public respond to crises, reduces the likelihood of rumors and misinformation and demonstrates a good leadership. It uses processes and information flow familiar to public health workforce, helping them recognize how their daily work fits within the emergency preparedness. The level of received knowledge is also useful in planning, training system development, quality improvement, and ex-

plaining public health role in joint efforts with other emergency response partners.

However, crises and emergency risk communication is essential for saving lives, assisting in search and rescue efforts, and ultimately plays a major role in disaster and crisis mitigation efforts (10).

*A brief analysis of efficiency of risk communication of health workforce in last decade in Serbia-few colorful examples*

Republic of Serbia is a country exposed to different kind of disasters. The effects of any kind of disaster are amplified in the health sector. Situation in Serbian health system is serious due to political circumstances and financial constraints. In emergencies many stakeholders speak about the need of appropriate communication among the all parties. Serbian public use term "risk communication," but it is just a phase of wider concept of "risk management". Results of few scientific researchers from recent past showed that in Serbia risk management is in infancy (11).

During the last decade great number of health facilities in Serbia was endangered due to extreme weather events like floods, rose of level of underground water, heavy rains and etc. Additional example is the health center "Studenica" in Kraljevo which suffered huge damage in earthquake, which hit central Serbia in 2010 (12). There were a lot of different information about reopening and reconstruction process of the hospital building. One part of hospital (surgical block) was closed and patient did not know what is going on with previously scheduled surgical operations. Numerous information from different sources suggested that communications could be better.

Hospitals and health facilities in every country are extremely important part of "critical infrastructure". Hospitals and primary care centers have central role in health driven development processes, taking key roles in surveillance to prevent outbreaks, public health campaigns and acting as focal points for community organizations. That is a reason that health workforce and volunteers has to be trained to communicate efficiently with population. During all kind of different

events, evaluation of risk communication in Serbia could be marked as acceptable, but it was far from concept of CERC. In this paper, just a few cases of inadequate communications in different parts of country, are presented. One of them is recorded in Novi Sad. The Institute for public health of Vojvodina has done the assessment and monitoring of food safety and drinking water from public water in the city of Novi Sad. The inhabitants should obligatorily be informed about the quality of water through the public media. The Institute performed biological analysis of drinking water and confirmed the presence of nematodes taken from the water tank of the water factory from Novi Sad during summer 2010. WHO does not give any norms for the presence of nematodes in drinking water but according to the present regulations in Serbia, the presence of nematodes is not allowed (13).

Having in mind the presence of significant number of cases of viral meningitis (55 within only one month according to data provided from the Health Secretariat of APV available at web- site <http://www.zdravstvo.vojvodina.gov.rs>) panic increased. It is usual that if officials do not release information to the public quickly enough, the public might conjecture as officials are trying to figure out what is happening. This is an important reason for emergency managers to be integrated into these channels of communication so they are providing accurate information as quickly as possible preventing the start of rumors. One among given explanations to the public is that the analysis is used in "order to attack the managing structure" of the company by the opposition (14). This is a great example how the lack of trust and credibility doom risk communication efforts. Population has misinterpreted messages, false rumors have been generated, multiple sources have given inconsistent information and population has not been reassured. Researchers suggest people's responses to events that threaten their health and safety evoke a diverse array of emotional, cognitive, and behavioral responses (15). When people are upset they often do not trust authority they are more likely to listen to negative rather than positive reports.

The consequences of inappropriate communications could lead to the loss of credibility. The case is about citizen's protests against building plants for processing of hazardous waste, first in settlement named Cicevac, and after that again with same purpose in Banat settlement Kovacica. Those protests caused delay in implementation of accepted obligations in environmental policy based on signed contract in IPA project<sup>1</sup> from 2009 named: Technical assistance for hazardous waste management facility. European Union after all suspended project for a six months. The question for policy makers could be: "is anybody from public health community was involved in the communication with local community from the beginning". Why competent institutions did not recognize the important rule that people respond to hazards depends of the perception of risk not actual risk? It looks after all that in those two cases there were not any kind of communication between population exposed to "risk" and other involved party, representatives of their own community. This is a confirmation that in Serbia we still lack in-depth evaluation of the effectiveness of event-specific basis "risk communication efforts".

It is well known from real life when people are upset, angry, under high stress, involved in conflict or highly concerned, they often have difficulty processing information, which is particularly important to consider when they receive crises risk communication. The fundamental goal of CERC is to provide meaningful, relevant and accurate information, in clear and understandable terms targeted to a specific audience. It may not resolve all differences among all parties involved in it, but may lead to a better understanding of numerous differences. It may also lead to more widely understood and accepted risk management decisions in poor and minority communities, and undeveloped region because it could be a question of environmental justice if hazardous plants will be settled in minority and undeveloped region.

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<sup>1</sup> IPA projects have been EU funded under the Instrument for Pre-Accession Assistance (IPA) since 2007.

After all the misunderstandings the news announced that the hazardous waste facility will be built in one of the poorest municipality in Vojvodina, named Medja which suffered from consequences of the great flood happened in 2005, named "Banat's tsunami".

The next remarkable example case is slightly different, and concerns about different kind of communication. When the flood happened in 2006 in Slankamen, a village located in the Indjija municipality, the special hospital for neurological diseases and posttraumatic conditions "Dr. Borivoje Gnjatic" was flooded also. In that moment in hospital were 260 patients. Danube flooded the hospital again in June 2010. In both case it was clear that communication depended mostly from external factors than from hospital management itself. According to the current laws on power the whole village is out of the defensive line, and it shows inconsistency in plans for protection of critical infrastructure.

Health workforce has an integral role in responding to any emergency, like expected influenza pandemic. The experience after all affairs connected to "swine flu" left a great consequences on relations between public health professionals and population. After all there is need for additional efforts to build back lost trust between them.

In emergency the cardinal rule of appropriate communication is the same as that for emergency medicine: first does no harm (8). In emergencies inappropriate approach leads to delay in mitigation, consequences could be enormous but nobody accepted the responsibility for it. Policy makers in Serbia mostly applied linear-one way communications, which lead to non effective implementation of some decisions, and from that fact rise urgent need to adapt it in future. Also, it is questionable how public health workforce understands communicating issues related to various phases of disaster planning: prevention, preparedness, response, and recovery.

Some of the facts which support this statement could be found in results from The Preparedness, Planning and Economic Security Program (PPES). It was a five-year effort funded by the United States Agency for International Development and



implemented in Serbia. Program started in 2006, and activities of its Component oriented towards strengthening capacities in disaster management at the local level performed in 80 municipalities up to early 2011. Program participants are highly satisfied with the introduction into the phases of emergency situation management, concepts of vulnerability and capacity at the local level as well as the template proposed for developing of Plan for emergency situation. The lowest level of satisfaction was shown in identifying the role of public in emergency situations management at the local level – the modern and not yet developed concept in the country, and therefore still obviously either not attractive or understood by the participants (16).

It is also well known that public health professionals were involved in emergency activities by temporary work in local or regional emergency headquarters. Their role is performed only during emergencies and it is not continual work. In Serbia there are only sporadic efforts to prepare health professionals for disasters, and especially prepare them for communication in disasters. The Red Cross of Serbia has an exceptional role with its universal program for training of volunteers for emergency cases (17) but it should be continual action. Decision makers has to play a vital role in realizing the vision “Healthy people in healthy community,” even in emergencies.

## **Result and Discussion**

Results presented in the paper, based on review of literature, as well as an actual state, and few examples in the emergency area in the Republic of Serbia, have confirmed the basic need for the future: Implementation of CERC, or similar concept of risk communication by Serbian public health workforce in emergencies. Since now this need was only partially recognized by competent institutions and in official documents.

The Parliament of the Republic of Serbia adopted the National Strategy for Protection and Rescue in Emergency Situations. The five strategic areas of the National Strategy are:

1. Ensure that disaster risk reductions becomes a national and local priority with a strong institutional basis for implementation;
2. Identify, assess and monitor disaster risk and enhance early warning;
3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels;
4. Reduce the underlying risk factors and
5. Strengthen disaster preparedness or disaster response at all levels.

At any level, local, regional and national preparedness plans require engagement of public health workforce. The cornerstone of any effective health program, even in peaceful time is to deliver its message in a competent manner. Results from paper show that health workforce has to know how to communicate in emergencies. They have to do it simply, timely, accurately, repeatedly, credibly and consistently.

CERC emphasizes internal and external risk communication planning and management, creating a crisis communication plan, developing messages and message maps and creating necessary media materials. In Serbia we do not have research about factors that may influence the ability and willingness of public health personnel to report on duty in emergency. Results from research performed in USA could be a cause for serious concern. In USA results showed that nearly half of the local health department workers are likely not to report to duty during a pandemic. If there is any knowledge gaps it could be a barrier to pandemic influenza response and has to be addressed to enable local public response in emergency. Perceived knowledge and training identified lay in evidence needed to guide future preparedness and curriculum planning for hospital employees and to identify critical incentives for the hospital workforce during emergencies.

The education of future health workers depends on quality of programs provided in Serbia and competent institutions have to think about it. Public professionals in charge for public communication in crises have to accept six basic principles of CERC:

**Be First:** You have to provide information from authority as soon as it is possible. If you are not able to have it immediately you have to explain clear how you are working to get it.

**Be Right:** Give facts in increments. Tell people what you know when you know it, tell them what you don't know, and tell them if you will know relevant information later.

**Be Credible:** Tell the truth. Do not withhold to avoid embarrassment or the possible "panic" that seldom happens. Uncertainty is worse than not knowing—rumors are more damaging than hard truths.

**Express Empathy:** Acknowledge in words what people are feeling—it builds trust.

**Promote Action:** Give people things to do. It calms anxiety and helps restore order.

**Show Respect:** Treat people the way you want to be treated—the way you want your loved ones

treated—always—even when hard decisions must be communicated.

In Serbia additional task in future for policymakers and academic community should also be what activities society could perform preparing health professions students for emergencies, and what a core competencies they should have. At medical faculties, faculties for occupational safety, security studies and political sciences are a lot of courses regarding communication skills, but no one of them includes the world 'risk' or 'crises.' It is obvious that this practice has to be changed in the future.

The paper shows that learning and knowledge application is crucial for social development. As sir Winston Churchill stated 'the empires of the future will be the empires of the mind. A list of current courses connected with 'communication' is presented in Table 1.

**Table 1:** A review of Serbian universities and faculties which provide courses about communication skills at medical faculties and others involved in risk management activities

University	Faculty	The name and level of study program (Basic professional studies Bachelor Academic Studies Graduate Academic Studies Master Academic Studies Doctoral Studies)		Course
Niš	Faculty of Medicine	Basic professional studies	Professional sanitary and environmental engineering	Communication skills
	Faculty of Occupational Safety	Emergency Management - Master studies		Information-communicational networks
Novi Sad	Faculty of Medicine	Basic professional studies of health care	Bachelor studies of health care	Communication skills
	Faculty of Medicine	Doctoral studies of public health		Communication in medicine
Belgrade		Integrated studies MD		Media and Communications
	Faculty of Security Studies	Security Management Studies - Bachelor Academic Studies	Doctor of Philosophy in the Field of Security - Doctoral Studies	Communicational Aspects of Security
	Faculty of Political Sciences	Journalism and Communication - Bachelor Academic Studies	Communication Studies – MA in Communication Studies	Communication Studies
Kragujevac	Faculty of Medical Sciences	Master Academic Studies	Basic professional studies	Communication with Publics
		The professional nurse/technicians	Integrated studies MD	Communication skills with patients
				Communication skills

The person who is in charge to communicate has to know how to translate technical and scientific concept into understandable messages. In general the recipient of threat information must receive information, understand information, understand that the message is directed to them, understand that they are at risk if they do not take protective action, decide that they need to act on the information, understand which actions need to be taken and be able to take action (18).

The results show the urgent need for accepting of crises and emergency risk communication principles, or some similar concepts, in Serbia, and implementing effective two way communication especially in multiethnic region. These are challenges that need to be met by public health workforce, emergency services, businesses, policy makers, and population.

## Conclusion

In Serbia the concept of CERC communication does not exist. In the area of crisis communication we can notice the significant activities of private sector which offers different services, and among them communication in crises. The first public impression about risk communication, rise thoughts about simple ``public relations`` activities or ``spokesperson`` who is in charge to present some daily or occasional information about institution, current activities, some special events and so on. The public health workforce has to provide appropriate communicator who should be in charge for health communication issues in emergency.

The main task for public health workforce is to provide enough knowledge to develop crises communication plans and deliver public health messages by working with media. Public health personnel has to understand that success can be reached through learning process about specific communicating issues, introducing new tools for successful communication, sharing personal knowledge and professional experience. Constant training of the health workforce and staff from related sectors to improve the response capacity of health facilities is needed, along with volunta-

ries, not only from national Red Cross, but from various levels of civil society and NGO groups. All the community stakeholders should be involved in mitigating processes according to their capacity in regarding to the serve the public `s health.

## Ethical considerations

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc) have been completely observed by the authors.

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The authors declare that there is no conflict of interest.

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