Republic of San Marino

National Bioethics Committee of Republic of San Marino

Law n° 34 of January 29, 2010

BIOETHICS OF DISASTERS

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Interpretation and Translation Service of the Department of Foreign Affairs

CONTENTS

PRESENTATION

The decision to write a document dedicated to the complex and broad theme of disaster bioethics stems from a series of reasons that have stimulated the National Bioethics Committee of Republic of San Marino (CSB) already from the beginning of its second mandate.

First of all, the awareness that in the face of increasingly frequent natural and man-made disasters, few bioethical considerations have been made in the development of political, economic and scientific strategies. Yet, the intrinsic "extraordinary" nature and the involvement of a large number of people lead to very critical decision making situations, on account of the profound ethical values at stake.

The decision to draft this document was prompted by the presence in the CSB of members and external experts who work on these issues with different professional skills. To this end, the group created in December 2014 and coordinated by the Vice President prof. Luisa Borgia cooperated with prof. Aldo Morrone external expert of the CSB. prof. Carlo Bottari, prof. Adriano Tagliabracci, prof. Verter Casali, prof. Francesco Carinci and the external experts Mr. Giampiero Griffo, Mr. Pasqualino Santori and Mr. Salvatore D'Amato also joined the group.

The following professionals offered their valuable contribution:

- Mr. Maximilian Maguire[1] and Mr. Roberto Ercolani[2], with the chapter on psychological support and related critical aspects;
- dr. Amelia Beltramini[3], with the chapter on ethical journalism;
- Mr. Massimo M. G. Di Muzio[4], with the chapter on the management of medicines and medical devices during disasters.

A special thank goes to the San Marino Information Board in the person of its President, Mr. Luca Pelliccioni, for the revision of the chapter on ethical journalism.

In consideration of the extent and heterogeneity of the issue, the difficulty of selecting some topics was immediately clear. Therefore, it was agreed to identify those issues of greatest relevance to

1 Psychiatrist; expert in psychology of emergencies.

2 Psychologist-psychotherapist.

3 Free-lance journalist; former editor-in-chief of the monthly magazine Focus; Professor in the Master of journalism at the University of Milan.

4 Head of the Operational Unit for Clinical Pharmacy INRCA-IRCCS Ancona; Member of GORES (Regional Operational Group for Health Emergency) of the Marche Region; founding member of SIFACT (Italian Society of Clinical Pharmacy and Therapy) and pro-tempore Commissioner of ANSMI (National Association of Italian Military Health) – Section of Tolentino.

bioethics on account of their sensitivity and crucial nature and to which literature on disaster medicine has paid less attention.

Bioethical reflection on these aspects is an additional element of originality of the document.

In particular, as regards the people involved in disasters, the traditional concept of "direct victims" was broadened to include "indirect victims", i.e. those who indirectly experience the trauma of the persons involved, such as family members, friends, rescuers and those who suffer, for lack of psychological support, the so-called vicarious traumatization.

It was then natural to dedicate a chapter to the management of people with disabilities in an emergency, for the particular attention that the National Bioethics Committee of Republic of San Marino has always paid to this issue, not only through a specific document (The bioethical approach to persons with disabilities, 2013), but also by taking up this issue in subsequent documents.

Equally innovative is the chapter on ethical journalism, for the decision to include communication professionals among actors involved in disasters. Indeed, they are faced with the difficult choice of respecting freedom of expression or privacy. They also have the responsibility of protecting witnesses and sources - especially in case of conflict - as well as the populations affected, while managing at the same time the complex interaction with rescuers.

The chapter devoted to the nurse rescuer emphasizes the importance of this professional, especially in the difficult triage activity and management of special clinical situations such as pain control.

This decision is the result of the special attention paid by the CSB to this role, starting with the drafting of the first Code of Ethics for Nurses, in collaboration with AIS (San Marino Nursing Association), followed by the document Nursing assistance to pain: bioethical aspects (both in 2017).

The chapter on the management of medicines and medical devices in emergencies concerns hospital health staff, in particular pharmacists. However, the chapter emphasises the medico-legal responsibilities of all health professionals in emergency situations and addresses the delicate issue of obtaining consent to clinical trials in such conditions, with the guidance of the 2014 EU Regulation on clinical trials on medicinal products for human use.

The most innovative and courageous chapter is probably the one dedicated to animal bioethics in disasters, as it proposes a reflection on the moral significance of animals, in their dual role of victims and rescuers, while maintaining a clear distinction in terms of values with human victims. This issue, deliberately dealt with at the end of the document on account of its specificity, intends to stimulate a bioethical reflection that, we hope, may be further investigated.
Like any other document of the CSB, also this one contains valuable information on the territory of San Marino: a short introduction on disasters in the Republic and a short presentation of the main bodies and institutions active in San Marino in the annexes.

The CSB is aware that the work done on each subject addressed is only an initial approach to bioethical issues which, due to their complexity, deserve to be further examined. In this perspective, it was decided to end each chapter with its conclusions and recommendations and to have them resumed in the final conclusions and recommendations.

This document has been elaborated during the whole second mandate of the CSB, not only because of the complexity and extent of the topics, but also on account of the involvement of San Marino and international institutions and bodies that have allowed a detailed analysis of each theme.

The CSB expresses its sincere thanks to the following bodies, which have been interviewed:

- SAN MARINO RED CROSS, dr. Giuliano Giardi, on behalf of the President;
- INTERNATIONAL RED CROSS, dr. M.G. Massimo Di Muzio, on behalf of the Vice President;
- CEMEC;
- SAN MARINO CIVIL POLICE - FIRE-FIGHTING SERVICE
- SAN MARINO CIVIL PROTECTION SERVICE, Mr. Fabio Berardi, Head;
- PREVENTION DEPARTMENT OF SAN MARINO SOCIAL SECURITY INSTITUTE, Mr. Renaldo Ciro Renzi, Director;
- SAN MARINO CIVIL POLICE, Ms. Albina Vicini, Commander, and Mr. Athos Gattei, Inspector;
- FIRST AID UNIT - SHORT HOSPITAL STAY San Marino Social Security Institute, dr. Antonio Morri, Director and member of the Scientific Committee of the CEMEC;
- COORDINATION GROUP FOR HEALTH EMERGENCIES, dr. Andrea Gualtieri, Coordinator.

The document was approved during the CSB's meeting of 10 July 2017 by all members present: Luisa Borgia, Carlo Bottari, Verter Casali, Carlo Daniele, Renzo Ghiotti, Don Gabriele Mangiarotti, Nicolino Monachese, Monica Tonelli, and President Virgilio Sacchini in video conference. Giorgio Cantelli Forti, Francesco Carinci and Adriano Tagliabracci did not participate in the meeting but expressed their consent.

The CSB Vice-President and
President during the meeting of 10 July 2017

Luisa Maria Borgia

INTRODUCTION

Catastrophe, Disaster, Maxi-emergency, Major Accident: the presence of multiple definitions and the extent of the scientific production immediately reveals the complexity of the subject addressed by this document.

However, irrespective of the definition used, the anthropological and social context must necessarily be considered, as it is a moment of deep crisis for the human community and entails an imbalance in the relationship between man, environment and society; between the extraordinary resources to be found and the severity of consequences in terms of damage and human victims; a sudden imbalance between care needs and available resources; ultimately, a disruption of the social fabric.

According to the conventions, a catastrophe or a disaster means a calamity, caused by nature or linked to human activity, characterized by the disruption of infrastructures and of the social fabric. These may be sudden (like an earthquake or a tsunami) or slow and gradual (like a persistent drought).

A Dire-emergency or Major Accident refers to an event affecting a specific territorial portion, characterized by the integrity of the infrastructures (for example a train accident or a terrorist attack).

Nevertheless, the characteristics of each event make it difficult to apply the right definition, because small calamities may turn into serious disasters for lack of essential support (communication means, transport, ...) or because of the features of dwellings (for example buildings without seismic criteria or constructions in poor countries). On the other hand, major disasters may have limited consequences thanks to an effective preventive action (as it is the case in Japan, one of the countries most exposed to seismic risk that is able to limit human losses and destruction considerably).

Indeed, the context of a critical event is always characterized by at least four elements, which can help define it: type, spatial dimension, temporal dimension and magnitude of the consequences.

These elements interrelate in a complex way and influence the outcome of the critical event, as well as the psycho-physical repercussions of those involved. Indeed, a natural disaster in a deserted area is different from a disaster in a densely populated one, or an act of terrorism may affect a single person or several people.

Therefore, the extent of a critical event depends on its dimensions and characteristics, while the emergency context is determined by all possible communication channels in the area of the event, by the human and institutional relations and, finally, by the social, economic, cultural and religious conditions of the territory involved.

However, despite the peculiarities of each calamity, some constants are present, such as the rapidity in rescue operations, the reduced availability of diagnostic and therapeutic resources, the difficult or dangerous access to victims, the high risk not only for the victims, but also for the rescuers.

The sudden imbalance between the resources needed to address the situation and those available makes the daily response by rescue systems on the territory and hospitals insufficient and generates a first chaotic phase, where rescue units need time to start working and find effective operative solutions with trained operators.

The difference between an organized system and a disorderly response lies in the ability to reduce or eliminate as quickly as possible the consequences caused by the imbalance between the resources needed and those available.

Disaster and major emergency medicine was developed to effectively address issues related to the consequences of the event and its management, thanks to the extraordinary rescue possibilities of science and technology.

This branch of medicine can be considered the combination of many types of traditional medicine applied to a collective emergency, with the objective of limiting the number of sequellae and deaths.

The interventions of health care professionals and rescuers in general must be carried out as soon as possible to avoid the worsening of clinical conditions, in circumstances very different from those in hospital. To this end, a hierarchy of organizational tasks and a series of behaviours must necessarily be adapted to the different situations, although starting from pre-established and tested plans.

The basic principle inspiring all rescuers and characterising disaster medicine is to save as many people as possible, as quickly as possible, and to address not only physical injuries but also other aspects, such as psychological ones, which typically affect people involved in an extraordinary event.

However, to achieve this objective, it is necessary that many people, with their own specific skills, work together before, during and after the disaster, through a vigilant coordination of forces, a clever and pragmatic use of resources and a clear understanding of priorities.

In natural or violent disasters, the primary task of the doctors within medical teams is to participate in rescue operations and to assist the dead and the injured involved in the event.

This is a moral and ethical obligation, which is recalled in the codes of conduct.

Article 11 of the Statute of the San Marino Medical Association provides that "in case of disaster, public calamity or epidemics, except in cases of force majeure, doctors shall remain in service, at

the disposal of the competent authority; in any case, doctors shall intervene to help anyone who needs assistance or medical care"[5].

In addition to typical care functions towards survivors, doctors also have the task of confirming the death of the persons found at the scene of the disaster and of those who are recovered by rescuers in the following hours, in order to stop resuscitation activities or, if the conditions of the event make it possible, to ascertain the death during recovery phases and modify rescue modalities accordingly (for example, speeding up operations in case of persons who are still alive rather than dead).

Mass disasters also pose the problem of identification and preservation of the bodies that are no longer identifiable because of traumatic events or post-mortem degradation. The identification is carried out by various specialists, including forensic physicians, who are organized into working groups to collect data from the bodies of the deceased and their personal belongings, as well as information from the relatives of the missing persons. Such persons also need adequate logistical and psychological support while they are waiting, sometimes for a long time, for the recognition of their beloved ones.

[5] The Statute is contained in Decree no. 32 of 18 March 1996, Legal recognition of the Association of Self-employed Surgeons and Dentists.

DISASTERS IN THE REPUBLIC OF SAN MARINO

Luckily, in its long history, the Republic of San Marino has never been hit by devastating and lethal natural disasters. No particular news of past disastrous floods, tragic landslides or earthquakes is known.

The territory of San Marino has experienced similar phenomena over time, but these have never been so tragic to be remembered. In the past centuries, the frequent floods of Ausa and San Marino rivers, flowing along the State borders, damaged, in the most serious cases, some plots of land and the roads connecting the country with the surrounding area.

The landslides that occasionally occurred, mainly because of the large ravine formations and of the weather conditions that favoured them, did not cause particularly severe destruction, apart from damaging some houses.

Also the earthquakes, which on some occasions shook also the ground of San Marino, did not cause the deaths and injuries recorded in so many other areas of Italy.

Documentary traces of such disasters in the Republic date back to 1741, 1875 and 1916, but only the earthquake of March 1875 caused the collapse of a house. On that occasion, two young people remained buried beneath the debris for some time, without being killed.

The most tragic disasters in San Marino were of a different nature: famines, to which recurring references are made until the late 19th century, typhus fever and cholera, which periodically caused dozens of deaths, poverty with all its consequences, which affected the population of San Marino until the first half of the 20th century.

Other humanitarian disasters, which the citizens of San Marino have always been able to face with patience and prudence, concern the refugees who, fleeing danger and threats and looking for a safe place, found a shelter in the Republic.

The most tragic of these humanitarian disasters undoubtedly concern the protection granted to Garibaldi's troops, escaping from the collapse of the Roman Republic in July 1849, and the refuge granted to 100,000 people between 1943 and 1944.

In 1849 about 1,800 Garibaldi’s followers entered the territory of San Marino. They were weak and exhausted, with little chance of survival and incessantly chased by the Austrian and Papal armies.

Despite the very limited resources available at that time, San Marino managed to feed and cure them, thus enabling most of them to return to their homes in the following days.

The flight of the 100,000 refugees was even more serious. At the end of 1943, San Marino already hosted 7,000 refugees fleeing heavy bombing along the Emilia Romagna and Marche Riviera. Such number doubled within a few months and increased dramatically with the offensive on the Gothic Line.

All closed spaces available in San Marino were confiscated for refugees, but since these couldn't accommodate so many people, most of them had to make the best use of the Rimini-San Marino train tunnels, no longer in function, of the caves, or settle in any other shelter they could find.

Obviously, this led to enormous hygiene and food problems, but San Marino people faced the unexpected invasion to the best of their possibilities, handing out bread and what necessary for the survival of so many people sparingly.

On 8 September 1944, artillery fire destroyed power lines. This caused additional problems to the lighting system, to the machines used to grind grain and to those used for the supply of drinking water to the country.

To cope with the problem, old machinery from the beginning of the 20th century was reactivated and the amount of bread per capita was reduced to 50 grams. By so doing, it was possible to produce 70,000 daily rations and give a piece of bread to everybody. According to the estimates, approximately 100,000 people were staying in the territory at the time of the liberation.

All managed to escape and return home when the situation normalized.

The last episode worth mentioning in this list of disasters suffered by the Republic of San Marino is the aerial bombardment of 26 June 1944, when four squadrons of RAF flying fortresses dropped 263 bombs on the territory of San Marino, causing the immediate death of 63 civilians.

San Marino was a neutral country but the British aviation wrongly believed that it was at the mercy of the Germans.

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BIOETHICAL PRINCIPLES IN THE VARIOUS DISASTER PHASES

In the event of an emergency, any operator is called upon to make very difficult ethical choices.

The relationship between health professionals and patients is normally governed by a set of rules and ethical principles aimed at ensuring respect for the rights and dignity of each person assisted. In a disaster situation, the establishment of an appropriate human relationship is even more difficult, due to the dramatic nature of the facts, the frenetic events and the few resources available. In addition, some fundamental tenets of professional ethics of each operator can be called into question.

Any bioethical consideration in the field of Disasters and Dire-emergencies must be based on the respect for some founding ethical values:

- **the inviolability of human life** as a fundamental value of the person;
- **the principle of beneficence/non maleficence or therapeutic principle,** according to which any action on a person must have a positive risk–benefit ratio, in order to avoid any undue aggressive therapy;
- **the principle of autonomy, freedom/responsibility**, according to which, in case of high risk interventions, a patient can only be treated, where possible, after having obtained the consent;
- **the principle of justice, solidarity/subsidiarity,** according to which any patient is entitled to be treated equally in terms of dignity and rights, so as to enjoy equal access to the resources destined to prevention, treatment and assistance, regardless of race, gender, socio-economic status and religious belief, for a fair distribution of benefits, risks and costs.

These principles should support all stages of every critical event and contribute to outline the ethical, legal and medico-legal profiles of all those involved in the rescue operations.

THE PRE-EMERGENCY PHASE

This is a particularly delicate requiring a scrupulous approach since it encompasses prevention, planning of rescue operations, resource allocation and, above all, staff training. The higher the attention paid to this first phase, the more it will be possible to intervene with maximum efficiency and effectiveness, while respecting ethical principles.

The medico-legal and ethical responsibilities of this phase do not concern only rescue personnel but also decision makers. For example, in drafting an intra-hospital emergency plan, account must be taken of non-autonomous patients, who may be hindered by evacuation procedures that do not envisage support by the ward staff.

Similarly, an out-of-hospital emergency service not including a specific training programme for the staff involves a serious legal and ethical responsibility, because an inadequate training entails higher risks both for the victims and for the operators.

However, it must be recalled that operators have the right to act safely without risking their lives to help patients. In the absence of immediately available qualified operators (fire-fighting brigade), it is not ethically acceptable to require them to intervene risking their lives. On the other hand, it is not ethically acceptable to abandon patients who cannot escape.

It should be noted that operators are increasingly engaged in intercultural contexts, due to the different geographical locations where they could act, to the presence on the national territory of people with different ethnicity, culture and religion, and to particular characteristics of the people to assist (people with disabilities, the elderly, children, etc.).

THE EMERGENCY PHASE

This is the most critical phase, in which operators must put in place with professionalism what they have learned in the previous phase.

The prioritization of treatments and of the victims to be treated must follow the fundamental ethical principles. These need to be translated into a correct triage, in order to optimise the allocation of resources.

Staff training should also include the approach to victims whose management is difficult and ethically problematic. There are people who could be treated, cured and healed without any difficulty in an "ordinary" context, but who may be neither treated nor saved in an "extraordinary" context of emergency due to lack of equipment and personnel.

These victims force operators to make an excruciating choice, to which they must be prepared with a scrupulous and thorough training. The decision not to treat this type of victims, if in line with the guidelines of triage, cannot be considered a violation of fundamental ethical principles, because in "extraordinary "situations and in particular in the early hours of the emergency, operators can and must use the limited resources available for victims who, in that context, can be effectively treated and who, therefore, have a greater chance to survive.

The only parameter of choice is the proper application of triage. Any other selection criteria, such as age, gender, social or ethnic origin, disability is ethically unacceptable, as it would lead to a ranking of lives, which are apparently more or less worth living, thus constituting an unacceptable violation of human rights.

However, though respecting the rules of triage, there is a category of victims that poses profound ethical and deontological dilemmas to health care professionals: the so called "code blue" category or "*urgences dépassées",* which includes victims who are still alive, but whose conditions are so

compromised that there is no real hope of survival (think of patients with burns over most of their body or with extremely serious injuries).

The decision can only result from a combination of a strictly medical judgement about the victims' possibilities of survival, an assessment of readily available resources and of those rapidly obtainable, and an attitude of compassion and respect for those inevitably destined to die.

The dignity of "untreatable" victims in an emergency must be respected. They must be separated from other victims and sedated to relieve pain and suffering, with particular attention to the most vulnerable ones, such as children.

In these cases, it is very difficult to determine whether the solution found can be acceptable from an ethical point of view. However, such difficult decisions are often unavoidable in a context of catastrophe.

The ethical imperative, however, requires operators to respect the dignity of each victim in any circumstance. This can never be neglected, not even in emergency situations.

The World Medical Association[6] gave such indication and recommended physicians to act without discrimination and without waiting for the request for help. They should adapt medical care to the cultural and religious differences of the victims, obtain preliminary consensus before intervening, where possible, and ensure confidentiality in all cases.

However, since health care professionals have to intervene quickly and since their decision is in the only interest of the patient's well-being, proceeding without the consent or without the prior involvement of relatives is deemed acceptable from an ethical point of view.

At this stage, the ethical, legal and medico-legal responsibility of operators may also affect their relations with "third parties". Some examples include the information to be released to the media and its timing, as well as the respect for confidentiality in situations that could jeopardize the safety of victims (think of emergencies in war zones).

Health care professionals are obliged not to reveal to others what they learned about the persons assisted, except for professional communications with colleagues involved in clinical cases.

This is enshrined in law and in the code of conduct. However, even in the difficult context of disasters, the protection of privacy must be guaranteed by all rescue members and the release of news must be entrusted to a person responsible for public relations, to be chosen in the first phase.

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[6] World Medical Association Statement on *Medical Ethics in the event of disasters* (Stockholm, September 1994), in *Bulletin of Medical Ethics,* 1994 102.

Operators have the precise ethical responsibility to protect the rights and dignity of victims assigned to them and to respect their cultural and religious differences, of which they must be aware from the first phase.

THE POST-EMERGENCY PHASE

This phase involves a careful analysis of all the elements that characterize a disaster, for the purposes of planning and programming future operations, thus contributing to the continuous training of all actors involved in this sector.

It is precisely on the continuous training of all actors working in the field of disasters that the great legal and ethical responsibility of rescuers and decision makers is based.

Curricular or supplementary education programmes for the various professionals (primarily physicians, nurses, emergency workers, psychologists, architects, engineers, decision makers) cannot be delayed any longer and constitute the hinge between this phase and that of pre-emergency, in a *continuum* that should also involve citizens and contribute to the achievement of the key objective of saving as many lives as possible.

SPECIAL CATEGORIES OF VICTIMS

CORPSES

Precise ethical guidelines require operators to respect corpses. Indeed, they have to preserve and protect their integrity, prevent living beings from causing injury or insult to bodies before and after burial, or to ashes in case of cremation.

All legislations recognize dignity and protection to corpses by sanctioning acts and behaviours that offend the community's sentiment of piety towards the deceased.

This feeling is so much stronger when coupled with unexpected and violent deaths due to mass disasters of any origin, involving whole communities with adults and children.

The respect for the corpse, *res sacra* and *extra commercium*, derives from the dignity attributed to any living human being, which has permeated human history from the earliest known forms of social life.

In addition, handling and managing bodies without respect for the dignity of the human being could further traumatize the victims' relatives and should be avoided in any way.

The staff involved in various capacities in the management of corpses must use the utmost care, in compliance with the ethical principles and different religious and cultural sentiments of which operators must be aware from the first phase[7].

The corpses of the victims are to be recovered and returned to their families, unless a rapid burial is necessary for sanitation reasons to protect the health of the community.

Before returning the corpses to their families, each victim recovered, along with all personal items that may be useful to the identification process in case of alteration of physical traits, must be subject to the procedures necessary to determine the identity, the extent of injuries sustained, as well as the cause and time of death.

The certainty of the victim's identity fulfils the conditions for exercising family members' right to have the body or the remains of their beloved one and to be able to certify the death for inheritance purposes, recognition of the status of widow or widower, compensation of insurance policies, etc.

Besides being useful to determine the circumstances of the event, the time of death may be relevant in case of relatives involved in the same event, who died at different times, in order to establish any predecease or simultaneous death with significant repercussions on the hereditament.

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[7] Morgan O, Tidball-Binz M, Van Alphen D, *Management of Dead Bodies in Disaster Situations: A Field Manual for First Responders*, Pan American Health Org, 2006.

The examination of injuries is useful to determine the victims' cause of death and to support investigations concerning the cause of the disaster (think for example of the identification of injuries typically caused by explosives and of the recovery of deflagrating materials from wounds). The examination of injuries may also be useful to assess the responsibility of any person who contributed to cause the event and who will be criminally and civilly prosecuted.

These operations can take several days, during which the bodies are not available to the families and are preserved in refrigerated rooms, so as to delay post-mortem decomposition as much as possible.

Establishing the identity of dead bodies is the highest recognition of the dignity of the person, especially in non-natural or violent disasters, such as terrorist attacks, plane crashes and others similar events, which can result in serious injuries to bodies, such as dismemberment and other disruptive phenomena.

In such situations, investigations should be entrusted to teams with different professional skills, including forensic genetics, which plays a key role, as only DNA examination allows to give an identity to the many body fragments recovered[8].

SURVIVORS

The care of survivors is particularly delicate and requires multidisciplinary competences first by operators and then by healthcare professionals.

A traumatic death is an unexpected death. The possible disappearance or destruction of the body does not facilitate the acceptance of reality.

The depression caused by the irreversible separation may never show its symptoms because the person denies the loss, or it may become chronic.

People who ran the risk of dying together, although not knowing each other, may live a mourning process, which is accentuated by the sense of guilt for surviving.

However, before the mourning process, it is necessary to deal with the shock of having escaped death.

[8] In the Twin Towers disaster in New York several tens of thousands of body parts were recovered, even very small ones, which were attributed, through this analysis, to over 2,700 people who lost their lives in the disaster.

It is necessary that operators be prepared to provide first assistance to survivors through early psychological support, since the consequences of post-traumatic grief may be life-long and affect even the following generations[9].

Therefore, it is necessary to know and recognize mental and physical reactions that stem from these traumas.

It is not possible to prevent a trauma in a primary way, i.e. preventing it from happening. Nevertheless, it is possible to offer the population and workers adequate information, support and intervention strategies to limit damage.

The fundamental importance of this approach comes from the certainty that any person processes a trauma not only on the basis of his personality and resilience[10], but also of the support offered by the surrounding environment, according to what is defined as social "network".

For the survivors who, because of natural disasters, are forced to live with a disability, the problem is not only to deal with the trauma, but help them define a new life strategy that strengthens their skills and capabilities[11].

EMERGENCY AND PERSONS WITH DISABILITIES

The issue of emergency also concerns persons with disabilities, especially in two areas of activity: the interventions in emergency situations due to natural and human disasters and emergency interventions for health conditions.

EMERGENCY SITUATIONS DUE TO NATURAL AND HUMAN DISASTERS

WHO (World Health Organization) estimates that the population with disabilities amounts to about one billion (15% of the entire world population)[12],

[9] Bacqué M.F, *Deuils et traumatismes*, A*nnales Médico-psychologiques, revue psychiatrique,* Volume 164, Issue 4, June 2006.

[10] Resilience means "elasticity", "flexibility", rather than "resistance". Indeed, it refers to a set of moderating and protecting variables that can reduce the impact of events, thus minimizing the number of long-term negative effects. (Dèttore and Fulgini, 1999).

[11] A good experience was made in Palestine by the NGO EducAid, in collaboration with the Italian network on disability and development (RIDS), with the training of emergency peer counsellors who deal with people with disabilities in the Gaza Strip. Baba R, Ferrara V, Griffo G, Napoletano E, Spinuso G, *Peer Counselling. From victims of history to protagonists of the life).* Lamezia Terme (CZ), Comunità Edizioni, 2006.

[12] World Health Organization, World Bank. *World report on disability.* World Health Organization (2011). The vast majority of persons with disabilities (more than 80%) live in developing countries. The European Union estimates that 80 million of its citizens live with a disability.

Taking into account the data provided by the IDMC (*Internal Displacement Monitoring Centre*[13]) in 2015, 15% of 68.6 million displaced persons, equal to about 10.3 million people, have disabilities (the calculation takes into account that people with disabilities are more likely to die in the event of a disaster, but at the same time the number of people injured as a result of natural disasters and wars increases the incidence of this category on the surviving population).

This population is highly uneven, because disability depends on social, environmental and individual factors. The type of disability is also quite varied, with differences related to sensory and mobility impairments and to intellectual and relational abilities. The statistical data collected after the earthquake and tsunami in Japan in 2011 demonstrate the particular vulnerability of persons with disabilities, with a mortality rate twice higher (2.06%) than that of the general population (1.03%).[14]

The issue of the inclusion of people with disabilities in the interventions related to natural, technological and sociological disasters was highlighted at an international level only few years ago. After the war in Kosovo, the tsunami in Indonesia and the most recent emergency situations caused by earthquakes and typhoons (which tend to increase annually due to the heavy weather changes), it has become clear that in order to intervene in favour of this part of the population, it is necessary to redefine the operational modalities of emergency services and to introduce a highly specific training for operators in the sector (technical and medical rescue).

The United Nations Convention on the rights of persons with disabilities [15] (2006), ratified by 172 countries around the world including the European Union (21 January 2011) and 27 EU Member States (San Marino ratified the Convention on 4 February 2008), has pointed out that the condition of disability is caused by environmental and social conditions (article 1)[16] and it is the responsibility of States to remove all forms of discrimination so as to guarantee equal opportunities to these people (article 5).

In particular, Article 11 (*Situations of risk and humanitarian emergencies*) reads:

"*States Parties shall take, in accordance with their obligations under international law, including international humanitarian law and international human rights law, all necessary measures to*

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[13] http://www.internal-displacement.org/. The number of people displaced by violence and conflicts is about 8.6 million and of those displaced by natural and human disasters around 19.2 million. The number of people displaced internally by conflicts and violence amounts to 40.8 million, making the total figure of about 68.6 million people needing humanitarian interventions.

[14] World Health Organization, *Guidance Note on Disability and Emergency Risk Management for Health*, 2013, p. 9.

[15] See UN website at www.un.org/disabilities http://www.un.org/disabilities/. The Italian version of the Convention is available at: http://www.governo.it/backoffice/allegati/42085-5202.pdf.

[16] See the definition of disability of the CRPD: " *Disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others*"(preamble and).

ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies and the occurrence of natural disasters".

A series of international considerations and technical tools have been defined internationally. The main reference document is the *Verona Charter on the rescue of persons with disabilities in case of disasters* (2007), which outlines the general principles to be followed in a comprehensive way[17].

Other papers developed in Europe[18] allow to address the different situations in an appropriate way. The cultural element of these new strategies is to switch from the humanitarian approach to a human rights-based approach.

The *Verona Charter* was then followed by the "*Sendai framework for disaster risk reduction*", adopted by the UN World Conference held in Japan in March 2015[19], and the *"Charter of inclusion of persons with disabilities in humanitarian action*", adopted at the World Humanitarian Summit in Istanbul (May 2016)[20].

[17] The Verona Charter can be downloaded from the website http://internazionali.ulss20.verona.it/docs/projects/rdd/cartadiverona.pdf.

[18] See bibliography annexed.

[19] http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf.

[20] https://www.worldhumanitariansummit.org/sites/default/files/keydocuments/SS02%20Disabilities.pdf .

Other European initiatives of the European Union and of the Council of Europe[21] have dealt with this issue[22].

First aid, in its various stages, is a critical issue: early warning systems often exclude the deaf or blind; triage does not consider disabilities; mapping does not respect the privacy of living conditions and the autonomy of people during evacuation; first aid is often carried out by people not properly trained; evacuation means are often hardly accessible; initial reception is not planned to be accessible neither in shelters nor in displaced people's camps; services are rarely equipped to meet the needs of people with disabilities; associations are poorly involved in the planning, intervention and management of the emergency; people with disabilities are hardly included in emergency prevention plans.

The first document drawn up by a State on humanitarian aid and disability was drafted by Italy in 2015[23].

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[21] Paragraph 19 of the European Parliament resolution of 4 September 2007 on the summer's natural disasters: *"Stresses the need to take special care in cases of natural disasters of the specific needs of people with disabilities in all actions undertaken using the Civil Protection Mechanisms."*
Paragraph 17 of the European Parliament Resolution on *European Consensus on Humanitarian Aid*, signed by the Presidents of the European Commission, Council and Parliament on 18 December 2007, also stresses the need to take into special account, in case of humanitarian needs, people with disabilities and their specific needs. Point 39 of the *European Consensus on Humanitarian Aid* also deals with such issues.
The 2010 study by DG-SANCO on international cooperation and people with disabilities (art. 32 of the CRPD), stressed the role DG-ECHO can play as the world's largest donor in the field of humanitarian and emergency aid. By working together with international agencies, NGOs and member State agencies, DG-ECHO could channel its funds, through specific guidelines, in such a way as to consider the various needs of vulnerable groups, including people with disabilities, as stated by the *European Consensus on Humanitarian Aid.*
Point 8 (external action) of the European Disability Strategy (2010-20) states the following: "*The Commission will raise awareness of the UN Convention and the needs of people with disabilities, including accessibility, in the area of emergency and humanitarian aid; consolidate the network of disability correspondents, increasing awareness of disability issues in EU delegations; ensure that candidate and potential candidate countries make progress in promoting the rights of people with disabilities and ensure that the financial instruments for pre-accession assistance are used to improve their situation."* Key actions under point 8 state that it is necessary that "*the specific needs of persons with disabilities, including those who are disabled as a consequence of natural and man-made disasters, are properly assessed and addressed in the area of emergency and humanitarian aid outside the EU*".
In 2015, under Latvian Presidency, the European Council adopted the *"Council conclusions on disability-inclusive disaster management*", a document defining the actions the European States and Commission must undertake to ensure that emergency interventions take into account the needs of people with disabilities. (See the website for details: http://www.consilium.europa.eu/register/en/content/out/?&typ=ENTRY&i=ADV&DOC_ID=ST-6450-2015-INIT.)

[22] The Council of Europe is drafting guidelines on the "*Disability Inclusive Disaster Risk Reduction*", on the basis of the EUR-OPA agreement. The latter resulted in the 2014 "*Guidelines and Recommendations on Including People with Disabilities in Disaster Preparedness and Response*", based on consultations with all relevant institutions and civil society.

[23] Ministry of Foreign Affairs and International Cooperation. *Humanitarian aid and disability. Vademecum*. Roma, Cooperazione italiana allo sviluppo-MAECI, 2015: http://www.cooperazioneallosviluppo.esteri.it/PDGCS/Documentazione/Vademecum_Definitivo_23.11.2015.pdf.

The key steps to take in this field are:

a) include persons with disabilities in the planning, organization and implementation of interventions in cases of human and natural disaster and humanitarian aid, by gathering information to help intervene in an appropriate manner and respecting human rights;
b) ensure that all interventions are accessible to all persons involved in a disaster;
c) involve associations dealing with disabilities in the planning, organization and implementation of interventions;
d) define indicators to gather and process data on the involvement of persons with disabilities in natural and human disasters;
e) provide operators of emergency services with specific skills in order to ensure that persons with disabilities in emergency situations enjoy equal opportunities and are not discriminated.

EMERGENCY HOSPITAL CARE FOR PERSONS WITH DISABILITIES

Emergency hospital care also presents problematic situations for persons with disabilities.

According to Article 25 ("Health") of the 2006 UN Convention on the Rights of Persons with Disabilities, States should *"provide persons with disabilities with the same range, quality and standard of free or affordable health care and programmes as provided to other persons (...), provide those health services needed by persons with disabilities specifically because of their disabilities, including early identification and intervention as appropriate, and services designed to minimize and prevent further disabilities", "require health professionals to provide care of the same quality to persons with disabilities as to others, including on the basis of free and informed consent of persons with disabilities".*

Unfortunately, very often patients are transferred to specialists when the first symptoms of a disability appear; this leads to a widespread lack of knowledge on the health of such persons both in local healthcare services [24] and hospital emergency services. Indeed, certain diseases often imply particular risk conditions. Being informed of such risk conditions is essential in health emergency situations: for instance, general anaesthesia is contraindicated in patients with muscular dystrophy. Very often, patients with multiple pathologies (respiratory problems associated with heart problems or metabolic disorders) require additional care, which is not necessary with other patients. Even healthcare emergency codes are insufficient to address many of these complex situations.

[24] Indeed, primary health physicians (such as pediatricians, etc.) lack specific training on the correlation between physical and mental disabilities and emergency procedures. The habit of transferring patients to specialists when the first symptoms of a disability appear entails that only specialists are responsible for intervening. As a result, local healthcare services do not acquire the competence necessary for ordinary interventions.

The treatment of people with mental disabilities involves additional problems, since particular attention is necessary when communicating with patients. This is why certain hospitals have staff that is specifically trained to treat patients with such characteristics[25].

The Charter on the Rights of Persons with Disabilities in Hospitals [26] is an additional guidance on a hospital behaviour that respects the human rights of such individuals.

It should also be noted that diagnostic tools (X-ray instruments, CT scanners, etc.) are often hardly accessible to people in wheelchairs, thus complicating their use.

The key steps to take in this field are:

a) grant the same quality of services and treatments provided to all citizens

b) establish an emergency code for patients with disabilities who need a special treatment;

c) establish, for ER staff, university courses and ongoing training on pathologies causing disability;

d) form hospital teams adequately trained to deal both with patients with mental disability and with single or multiple pathologies connected with various conditions of disability;

e) raise the awareness of diagnostic tool manufacturers on making medical equipment accessible to people with physical disability.

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[25] Details concerning the DAMA project of the S. Paolo hospital in Milan can be found at the following link: http://www.progettodama.it/DAMA/Home_Page.html . The project was then moved to Mantua and Varese. For further information, please visit the following website: http://www.ledha.it/page.asp?menu1=5&menu2=17.

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PSYCHOLOGICAL SUPPORT AND ITS WEAKNESSES

In case of situations of emergency/disaster, the fundamental principle of every rescue operation is to protect the lives of people involved in the disaster and those who bring relief (before, during and after the emergency).

The second most important principle is to avoid psychological consequences and/or address the damage that the event may have already caused.

People have always been aware that disruptive events also affect individuals psychologically, but specific reactions to trauma - regardless of culture and country of origin - were only identified through broad studies on veterans of the Vietnam War, and following the First and Second World War and the Holocaust.

In neighbouring Italy, the psychological consequences of disasters were first given scientific attention after the 1980 Irpinia earthquake. However, the importance of Emergency Psychology in the so-called "public calamities" was stated in the Decree of 13 February 2001[27].

Emergency Psychology can therefore be defined as the theoretical and practical psychological science that helps rebalance social systems affected by the disaster and recover the sense of security and identity of the people involved.

Four categories of victims are involved in disasters: people directly involved; their relatives and persons closely connected with the victims; rescuers, and those who are sensitized by the large flow of information.

VICTIMS INVOLVED

All disaster survivors, even if not physically damaged or impaired by the event, suffer more or less severe damages, which, although not visible, are as profound and painful as injuries. Such damages, called "psychic insults", cause psychological trauma ("*psychotraumatisms*") and result from the fear generated by the event and from the fear that it might occur again, perhaps even with greater impact.

It should also be noted that each person reacts to the same emergency situation differently, according to his/her own experiences, to the social support received and to the resources developed through experience.

[27] Presidency of the Council of Ministers Civil Protection Department, Decree of 13 February 2001. Adoption of *"Criteri di massima per l'organizzazione dei soccorsi sanitari nelle catastrofi"*: http://www.protezionecivile.gov.it/jcms/it/view_prov.wp?contentId=LEG13412

INDIRECT VICTIMS

These victims are those indirectly affected by the trauma of people involved (family members and people emotionally close to victims). Due to lack of psychological resources, such victims suffer from vicarious traumatisation because they are unable to face the emotional stress of the situation.

Rescuers

Rescuers are deeply involved in crisis events.

Although they usually develop a fairly high tolerance for situations that may occasionally or chronically threaten their psychological balance, there always risk being deeply involved in the traumatic experiences of victims (*vicarious traumatisation*).

The involvement of rescuers is related to the characteristics of the rescue operation, which may consist of various phases, commonly referred to as: Alarm, Mobilization, Action and Let Down[28]. During each phase rescuers show specific reactions, which, however strong, should be considered normal reactions to exceptional situations.

Exposure to and experience of stressful and traumatic events can destabilize or influence the everyday and future life of the individuals involved. Responses to such stressful conditions differ from person to person and depend on individual experiences and adaptive strategies related to the way people interpret situations, think and behave[29].

When the consequences of a critical event exceed the response capacity of individuals and their resilience ability, such consequences can pose significant risks to mental health, triggering psychological and psychiatric alterations, with serious overt clinical or subclinical conditions, in the most severe cases[30].

SENSITIZED VICTIMS

These victims are those sensitized by the large flow of information, who are often erroneously included in the category of victims directly affected by the disaster.

The CSB has deemed it necessary to highlight the issues affecting this category, which is rarely an object of reflection.

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[28] Hartsougt D M, *Disaster Work and Mental Health. Prevention and Control of Stress Among Workers.* National Institute of Mental Health, DHHS Publication, 1985.

[29] Nonetheless, there are a number of signs and symptoms, included in Hans Selye's 1936 *General adaptation syndrome*, which describes the three phases of stress response: alarm, resistance and exhaustion.

[30] The spectrum of dysfunctional reactions to a critical event can range from simple reactive symptoms such as apathy, anxiety, sadness, feelings of guilt, to the most striking behavioural symptoms such as aggressiveness, psychological and physical hyperactivity or overt psychomotor agitation, up to more structured symptoms such as *Acute Stress Disorder*, *Adjustment Disorder*, *Post Traumatic Stress Disorder*, as well as psychotic conditions. In certain cases, rescuers and staff generally involved in rescue operations may suffer from the *Burn-out syndrome*.

Over the years, a great cultural evolution has led to the inclusion of psychologists in the emergency staff. It is undeniable that emergencies pose the risk of psychological trauma and that a prompt action is necessary to respect the victims. However, emergency staff must also consider those who might experience the presence of a service, such as a psychologist, as an induced need.

As previously underlined, each person has a certain amount of psychic energy and resources depending on individual features (experiences, development, attachment...) and on environmental - social features (reference people, environment, society, culture...).

It is this inner energy that allows a person to face psychological trauma in a different way.

Those with a good energy level are more likely to overcome distress; on the other hand, those who do not have sufficient energy are incapable of overcoming critical situations on their own and therefore need psycho-social support.

There is a third category of people who, having barely enough energy, are able to overcome the catastrophe, yet risk being traumatised by what happens in the period following the event.

The difference between traumatised and non-traumatised people is given by their individual level of resilience: non-traumatised people are able to face life events, whereas traumatised people continue feeling the emotional burden in everything they do. These people risk channelling their remaining energy on a need/thought (for example, citizens of central Italy who experienced the 2009 and 2016 earthquakes during the night, are unable to sleep after sundown in their homes, because they fear it may strike again).

Cohabitation among psychologically traumatised evacuees in assistance centres - if not identified and duly coordinated and supported by operators - might be the main cause of distress for people who are at the limit of their resilience capacity and who surrender to psychological trauma, overwhelmed by other people's pain and needs.

It is important to underline that, for such people, even the presence of an emergency psychologist could be the reason to surrender to an induced need. Yet, it is equally true that the very presence of assistance services helps heal not only overt traumas, but also those that might develop. This is why it is crucial - in an ideal emergency intervention - to separate health prevention and promotion interventions from those addressing overt trauma.

With this in mind, the allocation of resources to staff training and to supporting operators becomes fundamental.

TRAINING

With regard to the **Pre-Emergency phase**, last years' events (especially terrorist attacks and environmental catastrophes) contributed to raise public awareness on the procedures to follow in case of catastrophes. However, in order for this awareness to translate into actions and procedures,

adequate information and training activities are fundamental. Otherwise, the constant awareness raising may result in an increase of people traumatised by the immense flow of information.

The CSB deems it necessary to identify and train staff and operators who work during emergencies. This way, they will be able to directly and indirectly train citizens by raising their awareness on the risks and strategies of intervention.

The specific training of rescue personnel, at various levels, and the emergency drills involving the population are an integral part of training activities.

With regard to the **Emergency phase**, particular attention should be paid to the management of communication, which should be effective and efficient, in order to ensure:

- that promptness of operation, precision and safety be granted for and among operators;
- that the public be duly informed, develop the adequate risk perception[31] without causing panic, and acquire competence on the correct procedures.

The CSB insists that any form of assistance to victims, including psychosocial assistance, should be tailored to the needs of those involved in the emergency. Such needs must prevail over vested interests (e.g. interests of the press, authorities or organizations, which might be conflicting or competitive), over dominant ideologies and over communication strategies that must be effective and not manipulative.

Therefore, an adequate management of communication is guaranteed only if operators/rescuers are fully trained and possess the best stress management techniques. This is achieved by adequately selecting staff properly trained based on protocols; by a hierarchical (military) organization - in order

[31] Over time, the concept and perception of risk have greatly changed due to news events and changes in our lifestyle and social relations. In a real or potentially dangerous situation, it is very important to adequately inform the people involved (or who might become involved) of the risk. "Risk communication" is a dynamic relational process, which includes both the evaluation of the presence of a risk and its management. Therefore, it is an essential part of safety management and aims at:

- ensuring the right to information about the risks the population is exposed to in a given context;
- enhancing knowledge and understanding of such risks (awareness);
- properly describing the right actions to take in risky and/or dangerous situations, in order to reduce related anxiety and worries, and to take adequate self-protection measures;
- reducing the risks of wrong behaviours by adopting correct behavioural measures and rules, both in terms of prevention in everyday life and in the social and economic organisation, especially when the emergency is taking place;
- favouring and increasing the willingness and the ability to collaborate with the rescue network;
- building and maintaining a strong trust relationship among experts (who are responsible for important decisions on risk management), operators intervening actively and the population.

Based on these objectives, the communication process, and not the mere communication, is not the simple transfer of information, but rather the implementation of a psycho-social relationship within the environment where people live and work.

to minimise social and communication tensions within the organisation addressing the emergency - and, finally, through procedures of defusing[32], debriefing[33] and psychotherapy focused on trauma[34].

During the **Post-Emergency Phase**, it is crucial to take into account the needs of the population that was a "victim of the event" and of the rescuers who were “victims of the intervention", thus allowing them to return to normal life as soon as possible[35].

CONCLUSION

The CSB is aware that an effective mass response to emergency requires a special approach, which should be essentially of a preventive and collective nature, to be subsequently tailored on the basis of individual needs.

Especially immediately after the emergency, both injured and not injured persons, including relatives and friends, may require information and practical social, emotional and psychological support. Such assistance, of a proactive nature and prepared in advance, should be provided by a well-coordinated, multidisciplinary support system.

These circumstances call for a combination of interventions, assistance measures and counselling.

Critical issues arise only if institutions are not organised, if they lack procedures or a proper selection and training of operators.

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[32] *Defusing*: emergency operators share emotional tensions related to the intervention in specific discussion groups of 6/8 persons, coordinated by an expert in emergency management. This activity helps reduce the emotional impact of the operator’s experiences. The activity is carried out immediately after the event and does not last longer than 40 minutes.

[33] *Debriefing*: a more systematic and structured intervention aimed at helping rescuers (even in case they have avoided danger) to make sense of their experiences and prevent the development of psychological issues. Debriefing is to be considered a post-emergency rescue technique, which takes place 24-76 hours after the event, lasts about 2-3 hours and can involve up to 15 people.

[34] P*sychotherapy focused on trauma:* specific psychotherapeutic intervention strategies have been developed to help operators dangerously affected by stressful events and/or in case emergency experiences have destabilized an already uncertain emotional balance. Since 2013, the WHO has recognized EMDR (Eyes Movement Desensitization and Reprocessing) as a reference method for healing post traumatic stress disorders. This method focuses on the memory of the traumatic experience or experiences that have contributed to cause the person’s disease or discomfort. This technique relies on eye movement or other forms of bilateral stimulation to treat disorders related to past experiences or existing discomfort.

[35] Addressing priorities based on Maslow's hierarchy of needs - represented as a pyramid - is fundamental. The lowest level consists of the physiological needs (life), followed by safety (physical and moral), belonging (family-affection, social-friendship), esteem (self-esteem and respect) and for self-actualisation.

Stress management interventions for operators (except *defusing*, which is unpredictable) can also be used to treat people affected by the emergency, paying special attention not to cause needs, so as to avoid discomfort.

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ETHICAL JOURNALISM IN DISASTERS

In situations of emergency or disaster, a group of professionals is entrusted with the difficult task of describing events: especially journalists and photo reporters must find a balance between often conflicting values and principles, in order to provide correct information.

The so-called "ethical journalism" refers to the balance between freedom of speech and the protection of the privacy and integrity of people involved. It concerns the way reporters and publishers comment on the events that determine people's lives; it is deeply rooted in moral values and has evolved along with the protection of human rights in Europe for more than 150 years.

In the mid-19th century, when Jean-Henri Dunant expressed his vision of humanity in times of war through the Red Cross and the Geneva Convention, the main European publishers were drafting ethical principles for their newspapers.

One hundred years later, when the European Convention on Human Rights[36](ECHR) was adopted, the International Federation of Journalists[37] agreed on the first Declaration of Principles on the Conduct of Journalists.

The very respect of these international documents makes it hard to reconcile the rights contained therein, in particular, as regards the ECHR, Article 10 on freedom of expression with Article 8 on the respect for private and family life.

Ethical journalism requires professionals to use self-control, in order to respect others and adhere to ethical principles.

The founding principle of journalism is the pursuit of truth through an unbiased, impartial and comprehensive account of events and issues, in a delicate balance between independence and accountability. This becomes even more complex when journalists work in disaster-stricken areas[38]. Indeed, reporters in territories plagued by war, natural and/or man-made disasters or affected by epidemics are responsible for raising awareness on the suffering and the needs of the populations concerned, as well as for searching the causes of natural or man-made disasters.

The CSB recognizes the extremely important role of the media in the protection of human rights, to the extent they ensure the right to information and search for the truth. However, in certain circumstances, particularly in emergencies and disasters, they risk going beyond a code of ethics which, albeit established by the competent bodies, should be based on common sense and compassion towards the victims and their families.

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[36] http://www.echr.coe.int/Documents/Convention_ITA.pdf

[37] http://www.ifj.org/

[38] Pulitzer Center for Crisis Reporting and Boston University Reporting on disasters April 14, 2011, Boston University.

Words, but especially images, are likely to damage the dignity of the persons involved and violate their right to privacy.

Stories about victims of catastrophes or natural disasters, whose families have not yet been informed about, cannot and must not be published, nor can the identification of individuals be allowed in areas of conflict, if this poses a threat to their safety or that of their family members.

In non-emergency situations, journalists are ethically required to ask for people's consent before publishing images portraying them or part of their body. This approach should also apply to emergencies, especially because disaster victims have no negotiating power and are likely to be deprived even of their own dignity.

Like other professionals involved in emergencies, journalists are also faced with the ethical choice of deciding which information to publish when referring to human beings, be they victims, survivors or rescuers. Furthermore, the speed required in collecting and publishing news makes it more difficult to verify accuracy, with the risk of causing misunderstandings or panic.

This is even truer today, when information is increasingly disseminated in a single stream of content, simultaneously available on different formats: video, audio, online and print.

Such amount of news and information comes from a converging multimedia environment, but much of it is governed by obsolete laws and arrangements.

SPECIFIC TRAINING

The CSB points out that journalists working in disaster areas become part of the event they are dealing with, and are therefore subject to the physical and psychological risks shared by everyone involved, despite the different characteristics of each category.

In these particularly complex situations, reporters must rely on a specific training on disasters and emergencies. Moreover, because disasters are usually unpredictable, journalists must be trained in advance[39], in order to ensure that they are self-sufficient and do not burden affected populations or rescuers.

Such training may prove to be difficult, considering that international journalism increasingly relies on freelancers, who sometimes lack the structural, financial and insurance guarantees provided by newspapers or broadcasters, which are able to support their reporters when needed.

Freelancers working independently and in poor safety conditions may be particularly exposed to health and mental risks.

[39] Henshall P, Ingram D, *The news Manual,* published with the assistance from the UNESCO (United Nations Educational, Scientific and Cultural Organization) revised by Ingram David, 2012 online version, volume 2. Advanced reporting chapter 42

Like all other emergency and disaster operators, journalists must receive adequate support and training on stress management[40], in order to minimize the risk of developing a post-traumatic stress disorder.

The first, crucial element of media operators' training is their knowledge of the geopolitical, social, religious and cultural features of the areas in which they must work. This ensures the respect for local populations and the protection of operators themselves.

RESPECT FOR VICTIMS AND FOR POPULATIONS INVOLVED

Ethical journalism in disaster situations is based on the fundamental principle of respect for the victims and populations involved.

A correct approach towards the populations involved must take into account their severe emotional or physical situation. Consequently, journalists should avoid interviewing or involving people without their consent[41].

Special attention must be paid to the disclosure of the names of injured or killed people, before their closest relatives are informed, in compliance with the embargoes of those responsible for the lists.

The choice of images and sounds is equally complex, for these should portray facts, without violating people's privacy and the suffering of relatives, while taking local culture into account[42].

In such contexts, journalists inevitably encounter people with urgent survival needs[43]. Thus, the solidarity that drives them to help and comfort victims should always be reconciled with the principle of *"resisting any self-interest or peer pressure that might erode journalistic duty and service to the public"*[44].

People in need who receive help from journalists might feel obliged to help them in their work[45].

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[40] The specific courses organized by journalism schools are useful to this end. An example thereof is *The Dart Center for Journalism & Trauma* of the *Columbia Journalism School* (https://dartcenter.org/).

[41] The news Manual volume 2 Advanced reporting chapter 43 https://www.thenewsmanual.net/Manuals%20Volume%202/volume2_43.htm

[42] In certain societies, such as the Australian Aborigines, publishing pictures of the dead during mourning is considered inhumane.

[43] Christensen, Pia Aiding those in distress. Association of Health Care Journalists http://healthjournalism.org/secondarypage-details.php?id=898

[44] Code of Ethics of the **Radio-Television Digital News Association** https://www.rtdna.org/content/rtdna_code_of_ethics

[45] *"Advocacy, self promotion, offering favors for news and interviews, injecting oneself into the story or creating news events for coverage is not objective reporting, and it ultimately calls into question the ability of a journalist to be*

Even in difficult working conditions, journalists must ensure that people portrayed in news, photos, audio and video material have expressed their consent in a genuinely free way.

In cases where journalists have offered rescue or help, it is desirable that other individuals tell the stories of people involved. Similarly, in cases where journalists are also doctors or nurses, they are obliged to respect confidentiality on the information collected while carrying out their profession.

PARTICULAR ATTENTION TO MINORS

The *Convention on the Rights of the Child*[46], as well as the ethical guidelines of many professional journalism societies, sanction the publication of children's names and require that special care be taken in preserving their privacy, while also complying with the law.

The possibility of being identified might impact the minor's development and growth, with consequences that might last for years and, in many cases, a lifetime.

Therefore, any operation involving children must be carried out in their exclusive interest and the responsibility of assessing exceptions falls entirely on the reporter[47].

Respect for minors may be guaranteed through images, which can be as evocative as a face, while safeguarding the minor's privacy[48].

PROTECTION OF HEALTH DATA

When gathering news in field hospitals, clinics and similar medical institutions, journalists must reveal their identity and obtain permission from patients to collect news and stories.

Health data require special protection and the sick or injured deserve that their dignity and

independent, which can damage credibility": Society of Professional Journalists, *Statement* by Kevin Smith, President, 22 January 2010.

46 UN General Assembly, 20 November 1989. http://www.unicef.it/Allegati/Convenzione_diritti_infanzia_1.pdf

47 "*Recognize that gathering and reporting information may cause harm or discomfort. Use special sensitivity and understand legal limits when dealing with children, mentally handicapped people and inexperienced sources or subjects. Always consider alternatives that minimize harm while making accurate reporting possible. Show respect. Illness, disability and other health challenges facing individuals must not be exploited merely for dramatic effect*". AHCJ Statement of Principles http://healthjournalism.org/secondarypage-details.php?id=56

48 One of the most famous war photographs shows a little Vietnamese girl who runs screaming in pain for the burns caused by napalm bombs. Similarly, the lifeless body of a three-year old child on the shore of Bodrum, Turkey, has become a symbol of the plight of Syrian asylum seekers. However, in similar situations, other photographers have chosen equally evocative images that do not harm the minor's privacy: one of the most famous plane crash photographs shows only a doll in the mud beside a crumpled plane seat. Protecting Journalism Sources in the Digital Age UNESCO Series on Internet Freedom https://www.thenewsmanual.net/Manuals%20Volume%202/volume2_43.htm

reputation be respected and that their privacy be safeguarded.

PROTECTION OF WITNESSES AND SOURCES

Journalists are obliged to pay particular attention to the protection of confidential sources, especially in armed conflicts.

During wars boundaries may change, thus exposing confidential sources to considerable danger.

Reporters must thus commit to making sources unrecognisable and avoid revealing their identity even under pressure or threat.

In this case, the journalist has the right to appeal to the declarations on freedom of expression, to the rulings of international institutions such as the European Court of Human Rights[49], the Organization for Security and Cooperation in Europe (OSCE) and UNESCO[50].

RELATIONS WITH RESCUERS

Two categories of professionals are usually the first to reach the disaster area: rescuers, to provide all kinds of aid, and journalists, to record facts as they unfold.

These two categories sometimes depend on one another: the work of journalists is fundamental to witness events and to convey the entity of the disaster in all the corners of the globe; at the same time, the amount of information on a catastrophe can affect both the quantity and quality of aid.

Moreover, journalists maintain the flow of information between separate families or groups; they broadcast news about logistics and ask for the provision of essential items.

On their part, journalists rely on healthcare professionals to receive information and make stories more effective.

However, their activities may overlap, especially in the hours immediately after the emergency. This is also due to the time constraints of journalists: live radio or television and daily newspapers impose strict timetables leading communication professionals to act in inappropriate moments, especially in the absence of a communications manager.

Interdependency among all actors in disaster areas is often very complex, in particular in the early

[49] http://www.echr.coe.int/Documents/FS_Journalistic_sources_ENG.pdf

[50] http://www.unesco.org/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/protecting_journalism_sources_in_digital_age.pdf

hours[51], and it can be managed only if all stakeholders carry out proper training and planning[52].

CONCLUSIONS

Due to their importance for democracy and the respect for human rights, the media have been extensively regulated by the Council of Europe, with a view to ensuring maximum protection of freedom of expression and providing information on their tasks and responsibilities[53]. Special attention is required to preserve the dignity of vulnerable people, including the victims.

The CSB hopes that the media community be encouraged to develop a self-regulatory system based on a common Code of Ethics to guarantee that journalism be based on quality and ethical principles and values.

Codes of Ethics are also useful to distinguish professionals from all other subjects involved in the complex world of information.

More and more countries around the world have developed codes of conduct for journalists[54]. However, the CSB is aware that a code is only a starting point that must be followed by an ongoing

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[51] The complexity of the mutual respect of roles is testified by Mr. Luca Salvatori, who reported for the "San Marino RTV" broadcaster from earthquake areas in central Italy in 2017: *"As a journalist of San Marino RTV, I reported on the 2017 earthquake in central Italy. The long seismic swarm began on 24 August, when the first 6-magnitude quake caused about 300 deaths and destroyed some towns, especially in the municipalities of Arquata del Tronto and Amatrice. The cameraman Giuseppe Marzi and I reached the area shortly after the tragedy: rescuers - the Fire-fighting Service in particular - were searching for survivors in the rubble, while the earth continued to shake unceasingly. The places affected by the earthquake were difficult to reach: narrow roads where emergency vehicles barely managed to pass through. We quickly realized that our first duty was not to obstruct those who were heroically struggling to save lives, risking their own: the freedom and duty of the press are of second importance. Keeping this concept in mind, we sought to cooperate with rescue workers, in mutual respect, to document what had happened. When journalists find themselves in such situations - and also generally - they should always remember that people come before news. They should never create sensationalism or insist on finding a scoop when the survival of people is at stake. Journalists must convey the tragedy's gravity without making journalistic speculations at the expense of human dignity. At the same, I believe we must portray the seriousness of the situation, because it is necessary to make viewers and readers understand that the news is an account of the truth and not a TV fiction or a literary genre."* San Marino RTV newscast. The full account of the experience of San Marino journalists in the earthquake areas is available at: http://www.smtvsanmarino.sm/cronaca/2016/08/24/terremoto-centro-italia-devastato-protezione-civile-evitiamo-fare-bilanci.

[52] Kalcsics M, *A disaster reporting? Interdipendence of media and aid agencies in a competitive compassion market.* Reuters institute Fellowship Paper, University of Oxford, 2011 http://reutersinstitute.politics.ox.ac.uk/news/reporting-disaster-interdependence-media-and-aid-agencies-competitive-compassion-market

[53] For reference: Recommendation CM/Rec(2011)7 of the Committee of Ministers to member States on a new notion of media: https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805cc2c0

[54] The worldwide collection of ethical codes of conduct of media organizations is available on the *Accountable Journalism* website: https://accountablejournalism.org/ethics-codes

training on the principles and rights connected to new technologies, which are increasingly complex and globalising.

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CONSENT TO CLINICAL TRIAL IN EMERGENCY SITUATIONS

Clinical trial is a key element in the evolution of medical science because it allows to only use drugs, devices and surgical techniques whose safety and effectiveness have been assessed through careful experimental verifications *in vitro, in vivo* and on humans.

Therefore, clinical trial is not only lawful but also ethically and scientifically due, as long as it complies with the many international standards governing the methods of obtaining reliable and well documented information, thus safeguarding the rights and integrity of those involved.

Since the publication of the Nuremberg Code in 1947, clinical trials are considered lawful provided they are not obligatory: participation in a trial must be a free choice of the individual involved, who must have received complete and accurate information and provided his conscious and documented informed consent.

However, situations of urgency and emergency do not always allow to obtain informed consent in compliance with the requirements above. On the other hand, it should be noted that each clinical trial (not involving healthy volunteers) is always, first of all, a therapy aimed at improving the health of the person recruited and, consequently, that of all possible patients who may benefit from this treatment if marketed.

During an emergency, the effectiveness of such therapy is directly related to its timeliness and waiting for consent may cause a delay that could put the patient's life at risk. This situation occurs when it is deemed necessary to use new treatments which, although still under experimentation, are considered potentially more effective than treatments already tested that are considered, on the contrary, to be poorly effective.

The lack of a specific legislation on this particularly complex subject has brought to conflicting positions among countries, particularly among EU Members, some of which allow the participation of partially conscious patients, while others have a more conservative stance.

The recent 2014 EU Regulation has put an end to this gap and has harmonised member States' methodology in clinical research, even in emergency conditions: despite their inability to provide conscious informed consent, patients in emergency or urgency situations may be recruited, provided that a Protocol has been approved by the Ethics Committee and that the decision cannot be postponed due to the emergency conditions[55].

[55] These, in short, are the directions of EU Regulation, Art. 35 *"Clinical trials in emergency situations"*:
- the decision to include the subject in the clinical trial must be taken at the time of the first intervention on the subject, in accordance with the protocol for that clinical trial and all of the following conditions must be fulfilled;
- due to the urgency of the situation, caused by a sudden life-threatening or other sudden serious medical condition, the subject is unable to provide prior informed consent and to receive prior information on the clinical trial; b) there are scientific grounds to expect that participation of the subject in the clinical trial will have the potential to produce a direct clinically relevant benefit for the subject resulting in a measurable health-related improvement alleviating the suffering and/or improving the health of the subject, or in the diagnosis of its

The responsibility of the most appropriate decision is thus entrusted to the clinical expert and the Ethics Committee. The consent on whether to continue participating in the clinical trial will have to be subsequently confirmed by the patient (*deferred consent*), as soon as he/she is able to take decisions again. If the subject or, where applicable, his or her legally designated representative does not give consent, he or she shall be informed of the right to object to the use of data obtained from the clinical trial.

It is clearly difficult to reconcile the principle of personal autonomy, which entails the right to be informed and to give conscious consent, with the principles of beneficence and justice, which entail the right to fair access to the most appropriate therapies.

CONCLUSIONS AND RECOMMENDATIONS

Therefore, in the light of the fundamental international bioethical principles and regulations, the CSB considers it ethically acceptable for doctors or for the medical team to undertake clinical trials in emergency situations, even when it is impossible for the patient to validly give his/her informed consent and in the absence of a legal representative, provided that the following conditions protecting the rights, safety and well-being of the subjects are met:

- timeliness is the crucial element for protecting the patient's life;
- clinical trial is based on a protocol founded on strong experimental evidence, and the protocol is assessed and approved by an independent ethics committee;
- recruitment fully meets the conditions of the protocol approved by the Ethics Committee;
- clinical trial is directly related to the patient's pathology;
- a minimum risk is taken into account as part of the benefit/risk ratio;
- the patient has never clearly expressed his/her objection to participate in clinical trials;
- the patient or his/her legal representative gives the deferred consent to continue the trial or to use the data obtained, if the patient becomes able to take decisions again.
- the results of the publication are published, in order to avoid the unnecessary involvement of other subjects in similar emergency conditions.

condition; c) it is not possible within the therapeutic window to supply all prior information to and obtain prior informed consent from his or her legally designated representative; d) the investigator certifies that he or she is not aware of any objections to participate in the clinical trial previously expressed by the subject; e) the clinical trial relates directly to the subject's medical condition because of which it is not possible within the therapeutic window to obtain prior informed consent from the subject or from his or her legally designated representative and to supply prior information, and the clinical trial is of such a nature that it may be conducted exclusively in emergency situations; f) the clinical trial poses a minimal risk to, and imposes a minimal burden on, the subject in comparison with the standard treatment of the subject's condition.

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MANAGEMENT OF MEDICINES AND MEDICAL DEVICES IN DISASTER SITUATIONS

As known, natural disasters entail a number of pharmaceutical and pharmacological difficulties, especially when adequate legislative provisions are partly or fully absent.

When a disaster has a strong impact on the population and the environment, tent compounds must not only be promptly delivered and installed but also function autonomously in the period immediately following the disaster, so as to allow the recovery and treatment of the critically injured.

Epidemiological investigations[56,57] on disasters show that the majority of victims die within 72 hours due to injuries, most of them during the first 12 hours. It is therefore reasonable to assume that, in the event of major disasters or maxi-emergencies, more tent compounds should be installed within the first few hours, in order to medically stabilise disaster victims.

Therefore, in principle, the first stage of the emergency rarely exceeds the first few days, after which the situation gradually returns to normal and medical facilities regain their functionality. This mostly applies to Advanced Development Countries (ADC).

During the major national and international emergencies of the past few decades, it became necessary to rationally organise the supply of medicines and medical devices (MD) for disaster victims, in order to improve the effectiveness, efficiency and suitability of operations.

The delivery of not strictly necessary items or of items not meeting the real needs of the population, which cannot be quickly catalogued because they are individually packaged or which are expired or expiring soon or not suitably preserved, has a negative impact on the rescue operation, making assistance less effective and causing inevitable economic loss due to waste of goods and to the disposal of products that cannot be used[58]. This also causes damage to the environment.

The military definition of Major Health Emergencies is the following: Sudden, critical medical situations affecting a large number of people in need of urgent care, which cannot be postponed. *In practice, resource requests increase so sharply that the requirements for medical staff and equipment of a* ***normal health day*** *is largely exceeded.*[59]

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[56] Cuzzolaro M, Frighi L, *Reazioni umane alle catastrofi*, Fondazione Adriano Olivetti (1991)

[57] http://www.epiprev.it/l%E2%80%99epidemiologia-delle-catastrofi-naturali-impariamo-dal-terremoto-dell%E2%80%99aquila

[58] An example thereof were the problems of the 1999 Operation Rainbow in Albania. (http://archivio.panorama.it/archivio/Travolti-dall-Arcobaleno)

[59] Within the military sector, a Health Day means the amount of medicines, blood products, medications and medical devices (MD) needed for the care of an injured/ill person for one day and is expressed in gr/person/day.

It is clear that in the context of disaster management two other keywords should be taken into account: Medicines[60] and Medical Devices.

The CSB is aware that, without proper planning, regulation, logistics and training that consider these two "health variables", even the most carefully planned disaster management may prove inadequate.

Therefore, the CSB recognizes the bioethical importance of proper planning of stocks of medicines and medical devices in view of possible emergencies, so that such stocks are:

- readily available in standardized inventories;
- adaptable to every type of emergency;
- easily renewable.

Following the 1999 Kosovo emergency, the first Country to define general criteria and the rational management of medicines and medical devices in maxi-emergencies was Italy. To this end, in year 2000 the Italian Civil Protection Department established a working group to define guidelines on the stockpiling, management and distribution of medicines and medical devices in maxi-emergency situations for different types of tent compounds[61]. The document, also based on experiences in other European countries, addressed this issue to regulate even the aspects that had proven problematic in the past, but which had not yet been addressed in Europe.

Medicines	gr 23
Medications	gr 26
Plasma	gr 8
Various items	gr 5
TOTAL	**gr 62**

[60] This category also includes antiseptics, disinfectants and antidotes.

[61] Decree of 13 February 2001 by the Presidency of the Council of Ministers of the Italian Republic, *Adoption of general criteria for organizing rescue health service in disasters*, drafted by a group of experts from the Ministry of Health, the Ministry of Foreign Affairs, the Italian Red Cross and civilian and military specialists in hospital pharmacy, upon initiative of the Italian Civil Protection Department, following the 1999 Kosovo emergency. The document begins with a list of the criteria for organising an emergency plan at various levels (national, regional, provincial and municipal). The authors describe possible scenarios and define general criteria of the health rescue chain, both in disasters having a limited impact and in those that cannot be dealt with at the local level. The authors suggest that every region, after having established its territory's features and risks, equip itself with one or more mobile Advanced Medical Posts (AMP) that can be mobilised immediately. In case of a disaster, such posts offer a concrete point of reference for the rescue chain, with advanced support techniques and other life-saving interventions. The WHO has recently established a new EMM (*Emergency Medical Module*) classification, to which the European Commission will align by 31 December 2017. AMPs (*Advanced Medical Posts*) will be replaced by *EMT1 Fixed and Mobile*; AMPS (*Advanced Medical Post Surgery*) will be replaced by EMT 2 and FH (*Field Hospital*) will be replaced by EMT3.

The work led to the Resolution on *"General criteria on the delivery of Medicines and Medical Devices of a II level Advanced Medical Post that can be used in case of catastrophe"*[62]. The document, which has regulated this matter for the first time, establishes that a proper emergency planning in the pharmacological and medical device industry must be based on the following criteria:

- provide a list of medicines and medical devices (Emergency Handbook)[63] that are necessary for the operation of the II level Advanced Medical Post (AMP);
- simplify and facilitate the supply of medicines and medical products at the time of an emergency;
- allow, through the standard supply of material, the rotation of medical teams with different backgrounds, while providing continued quality and quantity of assistance;
- promote the planning of stocks of medicines and medical devices also for out-of-hospital emergencies[64].

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[62] published on the Ordinary Supplement to the Official Gazette no. 196 of August 25, 2003 and available at: http://www.protezionecivile.gov.it/jcms/it/view_prov.wp?contentId=LEG13397

[63] The document contains the medicines and medical devices necessary for the functioning of an AMP to be used in c) type emergencies, namely in situations that cannot be dealt with by local structures. To this end, the Essential Medicines List contained in the WHO Guidelines and the lists of medicines and medical devices drafted by stakeholders of the sector have been taken into account. The AMP must: be ready for operation in the shortest possible time after the alarm (3-4 hours); be able to treat 50 patients with red-yellow severity code within 24 hours and for three days; have 72 hours of operating autonomy. The final selection of medicines to be included in the Emergency Handbook has been carried out on the basis of evidence available in scientific literature. In order to facilitate the supply of medicines, the ATC code (Anatomical, Therapeutic, Chemical) was used. It is a univocal, international code identifying each medicine. A descriptive list of medical devices and disinfectants was also developed. The Emergency Handbook is divided into three annexes.

- Annex 1 includes the medicines divided by therapeutic class and contains information on: active ingredients marketed in Italy; dosages and formulations in Italy; routes of administration; general information on dosage; conservation mode, when necessary; phase in which the medicine must be immediately available; amount to be set aside. The Annex also contains a list of antidotes divided into the following categories: toxic; route of administration; dosage; notes and quantity.
- Annex 2 includes disinfectants and antiseptics divided into the following categories: active ingredient; products available; indications and applications; characteristics, rules on conservation and stability; warnings; amount to be set aside.
- Annex 3 includes medical devices and the minimum requirement of logistics equipment necessary for the functional management of the II level AMP.

The document will be revised once a year to allow the update of products according to therapeutic evolution and may be subject to preliminary changes if the experience in emergencies suggests corrections/changes.

[64] In order to ascertain the suitability of products, in terms of conservation and effectiveness, as well as economic considerations, it was considered necessary to entrust the supply of the II level AMP to a hospital pharmacy, taking into account the technical and logistic aspects and the territorial and predictive elements of risk. For international interventions, the AMP will have to be organised differently and in collaboration with the Ministry of Foreign Affairs, taking into account the WHO guidelines. No mention is made of the management of emergencies resulting from CBRN (Chemical, Biological, Radiological and Nuclear) terrorist attacks, major industrial accidents or release of radioactive substances, because these emergencies are mainly handled by the Civil Defense.

CONCLUSIONS AND RECOMMENDATIONS

The CSB is aware that, in order to respect bioethical principles in complex disaster situations, immediately available health resources must also be adequately planned and managed. Such resources often prove to be deeply inadequate, in the first moments of a disaster, to meet the needs of people involved.

The detailed planning of an Advanced Medical Post, run by qualified and immediately available staff, guarantees the rescue and care of victims in the first hours following the disaster, when the risk of injury-related deaths is the highest.

It is therefore necessary to intervene immediately with medicines and medical devices in the so-called golden hour[65], in order to implement the principles of beneficence and justice by guaranteeing immediate rescue to as many people as possible.

Furthermore, the proper management of medicines and medical devices provided to AMPs and, subsequently, the selection of appropriate medicines and medical devices received through donations and deliveries, allows to allocate resources properly, thus avoiding unnecessary waste.

Therefore, the CSB recommends that particular emphasis be placed on training in this field.

To ensure effective emergency management, it is necessary to recruit specialized medical teams to deal with out-of-hospital emergencies, as well as to guarantee that all professionals involved in the AMP receive proper and ongoing training, including pharmacists (who will have to manage the supply of medicines) and the whole hospital staff.

In addition, training programmes should be accompanied by drills and simulations in order to allow an interdisciplinary functional integration.

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[65] In emergency surgery, the golden hour refers to the time period ranging from a few minutes to many hours after a traumatic injury caused by an accident, during which there is the highest probability that a prompt medical treatment avoids death (American College of Surgeons (2008). Atls, Advanced Trauma Life Support Program for Doctors. Amer College of Surgeons. ISBN 978-1-880696-31-6.)

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MEDICO-LEGAL LIABILITY OF HEALTH WORKERS IN EMERGENCY SITUATIONS

Professional liability arises when health professionals, through an inappropriate behaviour, i.e. performing or not performing acts, may damage the life or health of a person. This determines criminal sanctions and the obligation to pay compensation for damage through civil proceedings.

Even if the medical intervention takes place in seriously difficult and complex conditions due to the dimensions of the disaster, to the number of people simultaneously requiring care and assistance, to the hostility of the environment, to the lack of equipment, devices and medicines, the medical staff cannot be exempted from checks on the adequacy and correctness of their actions.

However, the CSB believes that the uniqueness of each event should be taken into account in evaluating mistakes, due to possible repercussions in terms of diagnosis and therapy.

The specific problem of medical intervention during natural disasters is that the available health care resources are insufficient to meet the requests related to extremely serious situations, with a high risk of death if assistance is not given immediately.

Prioritisation of requests for assistance, one of the crucial elements in ordinary situations, is not applicable or is less important in situations where many injured persons reach rescue areas simultaneously.

These situations raise the problem of selecting patients to be treated and establishing those who have to be treated first. This is due to the lack of means available (i.e. blood units, surgery stations, artificial ventilation systems),

The selection can only be based on a balanced assessment of the seriousness and type of injury, the severity of the clinical situation, the effectiveness of the intervention and the resources available.

This essential preliminary triage operation, however, can lead to disputes regarding professional liability.

The correctness of the intervention can be demonstrated through the adoption of protocols shared by the community and suggested by qualified scientific and medical authorities, which eliminate the risk of an arbitrary choice by operators and automatically assign a priority for action.

Concerning any possible diagnostic-therapeutic errors by healthcare professionals, both in the triage and during the later stages of treatment, it is necessary to establish whether the damage results from a negligent conduct, which is always a reprehensible behaviour, or from errors of judgement or care due to inexperience/imprudence. With regard to the latter, from a criminal standpoint, the judgement would be much more tolerant, in consideration of the effective difficulties in which the health intervention was carried out.

In civil proceedings, it is assumed that operators carrying out their activities within institutions responsible for such tasks (e.g. the staff of the Red Cross, of the National Health Service and other entities) are covered by specific insurance policies for damages related to charitable actions performed without sufficient diligence and which gave rise to damage that could have been avoided.

It is not excluded that, in the first phase of the emergency, also volunteer doctors or other professionals reach the disaster area to voluntarily offer their work, without being part of the structured groups responsible for dealing with the emergency. It is necessary to check whether the insurance of rescue institutions also covers their activity and, if this is not the case, such volunteers should take out personal insurance policies.

RESCUER NURSES

During emergencies, the presence of a healthcare team specifically trained for emergency rescue is essential.

The rescuer doctor is always assisted by a rescuer nurse, who is trained and qualified to operate in emergency situations. Regulations on the executive autonomy of rescuer nurses are being discussed and reviewed in many countries.

The CSB, aware of the ethical implications of the work of rescuer nurses, has deemed it necessary to provide bioethical considerations on intervention priorities and on the autonomy of nurses working in emergency situations.

Nurses are required to have particular organizational [66] and behavioural[67] features, which ensure safety during the event, both for victims and for rescuers[68].

NURSES AND TRIAGE

Even more than in normal emergencies, in these circumstances the triage must be done by trained personnel, especially at the level of Advanced Medical Post[69]. The most suitable professionals are

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[66] a) Ability to observe the area of intervention by carrying out risk assessments. This is the first phase of the rescue operation that aims to protect both rescuers and victims, preventing further accidents;
b) knowledge and prevention of hazards that might result from a sometimes complex accident scenario, within their own competences and without taking on tasks that are not suited to their abilities;
c) ability to collaborate with other rescue professionals and, in case they are not present, to assess the need for their intervention.

[67] a) emotional stability to be able to face and overcome all aspects of an emergency situation;
b) ability to organise and collaborate with other emergency services in order to ensure proper coordination of the various stages of the rescue;
c) versatility and ability to adapt to unforeseen situations;
d) sense of initiative in performing required procedures, with respect for their role and with decision-making autonomy.

[68] From a psychological point of view, catastrophic events are a severe test for rescuer nurses. There are indeed many risks, typical of this situation, which can dramatically increase the chances that rescuers suffer injuries while carrying out their task. Situations that hamper alertness are particularly hazardous:
a) The "rescuer's trance", which occurs when a rescuer shows hero-like behaviours without any consideration for the danger.
b) "Machismo", overestimation of one's own abilities;
c) physical exhaustion;
d) emotional instability of the rescuer, who feels "inadequate";
e) psychological pressure caused by victims and the situation.

[69] In order to perform a proper triage, it is essential to apply the Triage protocol, i.e. the set of criteria that health care professionals must apply in order to classify priority treatment. A perfect triage protocol should be:
1. easy to remember;
2. fast to apply;
3. hardly subject to variations due to individual interpretations;
4. accessible for various workers with different professional backgrounds;
5. reliable in assessing treatment priorities.

health professionals (doctors or nurses depending on available resources) who are experts in Disaster Medicine and have been trained according to the *Medical Disaster Management* criteria.

Triage is a continuous process, which takes place at all levels of the rescue chain: in the area where victims are found, in the Advanced Medical Post, during evacuation, upon arrival at the hospital, and in all the situations in which it is deemed necessary to do so. However, each triage area has its own characteristics and requirements, which can impact heavily on its implementation.

All triage systems, at all levels, require to drastically limit the number of therapeutic actions while the triage is being carried out. Those who deal with this aspect of the rescue chain are aware that the medicalization of patients is not one of their tasks.

During the triage, no action is taken on the patient: on the contrary, it is the staff's duty to perform fast and simple therapeutic actions, which can save the life of the victim or prevent his/her conditions from worsening[70].

A properly performed triage is the basis for ensuring an effective assistance to the victims of a catastrophe. For this reason, its importance should be greatly emphasized at all levels of the rescue chain.

NURSES AND THE MANAGEMENT OF SPECIFIC CLINICAL SITUATIONS: PAIN CONTROL

Prehospital pain control and sedation are often insufficiently managed even in a context of ordinary emergency. This is often due to cultural characteristics, lack of equipment, skills and reasons concerning the "concealment" of symptoms resulting in diagnostic delays, even when the body parts treated are a cause of great pain following severe trauma.

At a legislative and medico-legal level, the analgesic action is not always considered an emergency requirement. Thus, the presence of medical staff in the disaster area is essential; this applies even more in extremely severe emergencies. Hence the need, in the pre-emergency phase, to arrange specific protocols and operating procedures for pain control and sedation, to be shared among a multidisciplinary team of professionals. Competent and properly trained nurses can, in compliance with very strict shared procedures, treat pain by minimising as much as possible the perception by the victim, in order to alleviate physical suffering. It is unthinkable to imagine that a large number of disaster victims cannot be given immediate antalgic treatment due to the small number of medical staff working in the early stages of the emergency. According to previous onsite experiences, analgesia facilitates the extraction and transport of the injured, but it especially makes

An organization with a large number of well-prepared and properly trained operators can choose a more "complex" protocol.

70 The unblocking of airways, stopping massive external hemorrhage, the correct positioning of the patient and thermal protection are quick and simple measures that may significantly impact on the patient's life.

them calmer and more relaxed. The treatment of pain is therefore a major issue; the methods used depend on localisation, intensity, mechanism, and on the presence of experienced personnel and appropriate medicine supply[71].

TRAINING OF NURSES IN DISASTER MEDICINE

Disaster medicine is only occasionally part of the training of doctors, nurses and emergency workers. It is therefore essential that this lack of training be taken into consideration when the response to large-scale emergency is planned during pre-emergency. It is necessary to envisage and provide for supplementary training, pending a specific legislation that establishes mandatory training for doctors and nurses[72].

This has crucial consequences:

- It is necessary to train professionals who actively participate in the planning, verification and implementation of the response to dire emergency;
- training programmes must be differentiated depending on the roles that rescuers play in the response to disaster.
- training should include moments in which the conditions of work that actually occur during major events are recreated;
- the population must be educated on how to behave in case of disaster and on emergency plans.

The training process should also take into account the need to actively involve learners. Sessions of well-conducted drills and simulations can show participants the complexity of managing health relief in case of disasters. Understanding such difficulty often becomes a critical step to recognise the need for proper training.

In this context, the "*Medical Disaster Management*" and "*Hospital Disaster Management*" training programmes are the answer to the above-mentioned need to create professionals who participate

[71] Those drafting an analgesic strategy should:
- be able to identify the source of pain;
- have knowledge of sedative drugs, painkillers, anaesthetics and their side-effects in order to prevent and treat them;
- avoid excessive sedation;
- administer the less powerful analgesic as a first choice.

[72] However, some factors may prevent the implementation of such training projects:
- the fallibility or inadequacy of any emergency plan - even if excellently designed - due to unpredictable or particularly violent events, makes it dangerous to limit training to the mere implementation of emergency plans;
- the diversity of staff dealing with dire emergency makes it difficult to develop a common training program;
- the limited amount of emergencies prevents operators from gaining on site experience, and especially from facing issues that are wrongly considered unimportant, such as the chaos and emotional impact that disasters inevitably trigger;
- Mass involvement, which is inevitable during disasters, complicates prevention or rescue operations, if individuals lack basic knowledge on appropriate conduct.

in the phase of planning, verification and implementation of the response to dire emergency, both on site and in hospital, with real coordination skills.

What has been said so far mainly concerns the pre-emergency and emergency phases. In the post-emergency phase, the most critical issue is the provision of psychological support not only for the affected population but also for volunteer and professional rescuers.

In particular, the most affected rescuers are triage nurses and those who, despite their efforts, are unable to save a human life because of the exceptional nature of the situation. Among the main causes of psychological distress are: the feeling of guilt for having personally decided which victims to treat; frustration/sense of helplessness of those who, after having tried in vain to rescue a survivor and having bonded with him/her, find that the victim has not survived.

In the post-emergency phase, quite a few nurses take psychiatric medications without prescription by a specialist; others go to the psychologist with delay and on their own initiative only when the disorder becomes intolerable and invalidating. Others hide their psychological distress for fear of professional repercussions. The result is that these rescuers remain *prisoners of their traumatic experience.* It is therefore imperative to anticipate this problem as early as the pre-emergency phase, in order to resort to all channels and tools necessary to *"also help rescuers who do not ask for help".*

Even for health professionals, the post-emergency phase requires a careful analysis of all the elements and critical issues that have characterized the disaster. Indeed, this stage is crucial for the continuous training of all persons involved in emergencies in various ways, and allows to identify training needs and to analyse, evaluate and reformulate a new pre-emergency phase.

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BIOETHICS OF ANIMALS IN DISASTERS

In this document, the CSB decided to devote a specific chapter to animals and their relationship with humans.

The reason for this choice is based on the widespread consideration that pets are fully part of human families. In case of income-generating animals, especially where there are no extremely intensive or industrial farms, economic, cultural, affective reasons and ecological ties with the territory may convince the owners not to leave the stricken area, so as not to abandon their animals and to continue looking after them.

The management of animals in emergencies and disasters is a complex issue from an ethical point of view and has significant implications of sanitary and socio-economic nature.

Animals and humans are simultaneously hit by disasters and from this moment on, both start to suffer.

THE IMPORTANCE OF ANIMALS IN THE HUMAN SOCIAL CONTEXT

The domestication of some animal species has radically changed the living conditions of such animals compared to their wild ancestors, particularly in terms of their dependence on man.

The same phenomenon has simultaneously changed human society and individuals, by allowing the stockpiling of food, which, in turn, has enabled the creation of complex social organizations.

Besides the material aspects of zootechnical productions, equally important are the psychological aspects of the coexistence of humans and animals, on which today's assumptions on the effectiveness of pet therapy are based.

THE MORAL SIGNIFICANCE OF ANIMALS

From a legal point of view, animals are considered as property, with a special status deriving from their sentient nature.

In the Lisbon Treaty, the European Union acknowledges the condition of "sentient beings"73.

[73] *Treaty of Lisbon* amending the Treaty on European Union and the Treaty establishing the European Community (2007/C 306/01), art. 13: *"In formulating and implementing the Union's agriculture, fisheries, transport, internal market, research and technological development and space policies, the Union and the Member States shall, since animals are sentient beings, pay full regard to the welfare requirements of animals, while respecting the legislative or administrative provisions and customs of the Member States relating in particular to religious rites, cultural traditions and regional heritage".*

In an increasing number of countries, a deep concern about "animal welfare" has led to the adoption of an appropriate legislation.

In recent decades, thorough moral considerations have determined a constant social pressure, which resulted into the legal developments presently under way: cause and effect of the widespread awareness on this subject.

ANIMAL VICTIMS: CHAIN ORGANISATION IN ZOOTECHNICS AND PETS

Animals that are victims of emergencies and disasters can be of different species, both domestic and wild. They may be tied to humans especially for emotional or economic reasons. In any case, they deserve attention for their suffering, if not for their intrinsic moral value.

At the same time, they can be a danger to rescuers, a sanitary problem in the aftermath of the event, as well as a risk for the integrity of corpses.

In case of animals tied to human beings for affective reasons, their safety and reintegration in the social context is essential to re-establish the living conditions prior to the event.

In case of animals used especially in economic activities, return to normal life in the community also depends on the survival of animals and their reintroduction in work activities, in livestock production, management and preservation of the territory, gastronomic products etc.

Particularly significant is the case of Fukushima, where a large part of the evacuated population tried to enter the contaminated area to retrieve their animals, risking their lives[74].

ANIMALS PARTICIPATING IN RESCUE OPERATIONS

Rescue operations involve groups of rescuers with dogs that are specifically trained to search for missing victims.

These animals are subject to dangers and stress from overwork, given the difficult conditions in which they operate.

[74] In the Japanese-American *Workshop* held in Japan, on 2-3 May 2011, the IFAW (*International Fund for Animal Welfare*) issued a recommendation entitled "*Nuclear accidents and the impact on Animals*" (http ://www.ifaw .org/sites/default/files/nuclear _accidents _impact _on _animals.pdf), which states that human safety must come first. However, it also recommends that every effort be made to ensure animal safety as well. The document identifies four primary components associated with the re-location of animals: rescue, decontamination, transport, and sheltering.

ANIMALS AND RESTORATION OF THE SOCIAL FABRIC

The presence of a relationship with animals in the later stages of the emergency should be considered highly positive, both in case of pets, which many consider as part of the family, and of farm animals which, besides being an element of the economic activity for the farmer and the livestock chain, are also a sign of the restored local production that is linked to the territory. It is necessary to intervene in favour of the general housing and living conditions of those breeders who remain close to animals in their farms. Moreover, it is important to encourage the consumption of local production to facilitate economic recovery in the shortest time possible.

Given the general aspects of emergencies and catastrophes, the CSB believes that the organisational requirements relative to animals in all phases of emergencies must be considered.

The **pre-emergency phase** includes the planning of the interventions and activities and the arrangement of the facilities that will be used, when needed, for the benefit of animals and of their emotional, social and economic relationship with humans, both in case of pets and farm animals. Prevention, emergency planning, resource allocation and personnel training in the various areas of intervention should include animals. An efficient preparation of this phase will help reduce operational difficulties at the time of intervention, even as regards the ethical choices arising in an urgency situation. In an emergency context, staff training is fundamental to address both the management of any injured and frightened animals, and the different attitudes and needs of people towards animals in the areas hit by the disaster.

In the **emergency phase,** the structural organization and training of operators, according to the principle of multi-sectoral approach, will be put to the test. Crucial points are: prioritisation of interventions, choice of treatments, the need for and the practical arrangement of any euthanasia, the maintenance of informed relationship with animal owners, the respectful disposal of carcasses, the risk of discouraged owners selling their animals. An appropriate triage must be applied, especially in the extraordinary context of an emergency or disaster, in which animals are involved together with suffering humans, with limited time and resources available. It is crucial that operators and public opinion perceive the correctness of operations and of the individual and collective ethical choices. The veterinarian is essential at this stage. Assessments should be made with respect to pets, farm animals, wild or harmful animals.

The **post-emergency phase** should also cover the activities carried out in favour and with the help of animals in the affected areas. All wild animals, including those that are less evolved than mammals, deserve attention for the ecological balance they help establish and maintain.

In this connection, worth considering is also the importance of all involved plant species and the soil composition and structure.

The collection of data is important to improve staff organization, planning and training for future events and to identify the ethical issues to be analysed for the purpose of defining more advanced and shared balances.

CONCLUSIONS AND RECOMMENDATIONS

Given the importance of the animal world, of its members and their relationship with humans, as demonstrated by the widespread social feeling and the legislative developments, the CSB suggests the following ad-hoc recommendations in respect of animals:

- Recognition of the specific need to care for animals and their well-being: an adequate preparation of the pre-emergency phase may allow a rapid and wide intervention in favour of the animals involved in the event, without causing damage to other sectors.
- Value of the relationship between man and animal: promoting the preservation of what is left and recovering the relationship between humans and their animals in the shortest time possible, compatibly with the needs of the situation.
- Animals and different religions and cultures: the human attitude towards animals in general and towards the various species, both pets and farm animals, depends on the different religions and cultures. It is necessary to address this issue in the training of rescuers.
- Multi-sectoral approach in interventions and managing conflicts of interests between humans and animals: having reaffirmed that humans have the priority, the inclusion of an ad-hoc organisation and structure for any actions related to animals in the pre-emergency phase, among the various intervention sectors, minimizes potential conflicts of interest or their potential identification among the rescuers' behaviours.
- Specific training of personnel, with special attention to veterinarians and their training in bioethics. Indeed, all staff participating in operations involving animals and especially veterinarians may face special stress conditions, due to their specific responsibilities towards animals and human beings.

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FINAL CONCLUSIONS AND RECOMMENDATIONS

The uniqueness and unpredictability of catastrophic events, the complexity of the various components and the difficulty in standardizing situations make it difficult to optimally manage every single major emergency, as it is impossible to identify a professional "expert" in the broadest sense of the term.

To govern this type of events in the best way possible, the CSB believes that information and ongoing specific training according to type of events and professionals involved are essential to the protection of health, life and dignity of the highest number of people affected, in the respect for human rights and the fundamental principles of bioethics.

Ongoing training, in particular, must be carried out through drills and simulations[75].

Information and training, therefore, must not be directed only to a limited group of experts, but extended to the entire community, since they form the basis of the valuable preventive activities, which are necessary to protect the individual human being and society.

In the light of the foregoing, the CSB makes the following recommendations:

- **Training should concern all stakeholders in the health, civil, military and voluntary sectors. In addition, training programmes must be differentiated depending on the roles that professionals will play in the response to the disaster.**
- **The training of health teams should be the result of international experiences, of the Evidence-Based Medicine and of integration between population and rescue systems (technical, medical, law enforcement, civil protection, military, etc. ...).**
- **The training of all operators must be accompanied by a careful and targeted information and education activity destined to citizens, in order to make people active and responsible for their own care and protection.**
- **The training of each operator must envisage a correct approach and management of the various categories of victims, both in terms of age and abilities, as well as cultural and religious specificities.**
- **Decision makers have the task of implementing a responsible policy in the proper allocation of resources devoted to prevention, planning and training.**

[75] Drills play a key role, but require enormous financial, human and professional resources, as well as a lot of time. Simulations are a more flexible and affordable, adaptable to any type of event and possible at any time and situation. They allow to measure performance and make a final assessment of processes, which eventually "generate" mistakes.

- **The priority of the treatments to be carried out and of the victims to be treated must be established on the basis of a correct application of triage, with respect for every human life, regardless of age, gender, ethnic or social affiliation, and abilities.**
- **Respect for the dignity of every person involved, including victims who cannot be treated, must be guaranteed through care and possible pain subsides.**
- **The privacy of victims must be protected through the control of news and images concerning them.**
- **Communication professionals should receive adequate training on the principles and the rights that are to be observed to respect affected populations and other actors on the site of the event. To this end, the CSB hopes that all media develop a self-regulatory system based on shared ethical codes.**
- **Corpses must be managed in such a way as to respect their dignity, on the basis of the different religious and cultural sentiments.**
- **An early psychological support to survivors and indirect victims, along with a constant psychological support to rescuers must be ensured.**
- **The planning of rescue operations must include persons with disabilities in all phases of emergency, by ensuring non-discrimination, equal opportunities and accessibility and usability of spaces and services through specific staff training, with the involvement of associations dealing with people with disabilities.**
- **Therapeutic interventions in emergency situations, including experimental ones, must be aimed at the preservation of life and management of pain, despite the difficulty of the patient to provide a conscious informed consent.**
- **Appropriate training in disaster medicine must be arranged for pharmacists who will be involved directly or indirectly in a disaster, especially for the hospital pharmacist, institutionally responsible for the selection and management of hospital health resources such as drugs, medical devices, antiseptics and disinfectants.**
- **In the assessment of the professional responsibilities of health workers, the exceptional nature of the situation in which they carry out their activities must be taken into account.**
- **Adequate training for veterinarians and all subjects participating in operations involving all animals (pets, farm, wild or harmful animals) must be arranged. (The recommendations on the relationship with the animal world can be found in the specific chapter).**

ATTACHMENT 1: SAN MARINO BODIES

SAN MARINO RED CROSS

Already in 1912 the Italian Red Cross had set up a delegation in the Republic of San Marino, with the objective of directing solidarity efforts towards the war in Libya and then to the First and Second World Wars.

However, the first Provisional Committee was appointed only on 8 October 1949. Such Committee established the San Marino Red Cross (SMRC), which was recognized by the Great and General Council on 29 November of that year and, finally, by the International Committee of the Red Cross on 19 October 1950.

The decision to found the San Marino Red Cross immediately after World War II, while populations, marked by unspeakable suffering and horrors, were trying to resume the path of reconstruction and hope in the name of peace, is an important proof of San Marino generosity towards the peoples of the world. However, despite being neutral and having sheltered and saved over one hundred thousand refugees on its tiny territory, San Marino was bombed on 26 June 1944[76].

In 1952, the SMRC acceded to the League of Red Cross Societies and in 1953, with the law passed on 10 March 1953, the Republic of San Marino acceded to the four Geneva Conventions of 12 August 1949 on the protection of victims of war.

In 1956, San Marino ratified the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict.

In 1998, the rescue volunteer team of the SMRC was established.

The current President is Raimondo Fattori[77].

[76] Morri A. (a cura di), *1912-1999, La Croce Rossa a S. Marino. 1949-1999, cinquanta anni di vita della Croce Rossa Sammarinese.* Studiostampa, San Marino 1999.

[77] From the date of its foundation, the Presidents of the SMRC have been: Clemente Berti, Clemente Luigi Reffi, Ferdinando Fattori, Raimondo Fattori.

CIVIL PROTECTION SERVICE

Law no. 21 of 27 January 2006 established the Civil Protection Service[78], which, however, started operating only in October 2012, also as a result of the extraordinary snowfall during the previous winter, when snow accumulation reached up to 3m in two weeks. The situation caused great inconvenience to people for the closure of services, schools, offices, interruption of traffic flow and segments of network services.

The Service also operates in the following areas:

1. **Fire Safety**

Checks and inspections for the issuance of the fire clearance certificate for all building procedures and related authorisations.

Subsequent checks and audits in cooperation and with the help of the Fire Fighting Service of the Civil Police[79].

2. **Building Control Service**

Albeit with some delay, in 2011 also San Marino adopts a seismic legislation that becomes fully operational in 2012, whereby all construction projects for new buildings or major interventions on existing ones are subject to the authorization issued by the service that performs checks and inspections at building sites, also for sanctioning purposes[80].

3. **Prevention and Protection Service**

As a result of merging, the Service also carries out activities related to safety and health at work for the entire public administration. It is responsible for the risk assessment documents for the

[78] The activity of the Service, in addition to the above-mentioned law, is governed by the following provisions: Art. 92 of Law no. 194 of 22 December 2010 (Amendments to Law no. 21 of 27 January 2006); Law no. 188 of 5 December 2011 "Reform of the Structure and Organizational Model of Public Administration"; Decree Law no. 4 of 26 January 2015 "Granting to the Head of the Civil Protection Service of the power to give orders under Art. 42 of Law no. 87 of 19 July 1995"; Delegated Decree no. 44 of 27 April 2012 "Environmental Code"

[79] Decree no. 122 of 22 October 1985 "Fire safety standards for the building industry and installations"; Delegated Decree no. 146 of 6 August 2010 "Intervention dossier for high fire risk activities"; "Delegated Decree no. 155 of 3 October 2011 "Extension of time limits for the submission of the intervention dossier and amendments to the disciplinary system of Delegated Decree no. 146 of 6 August 2010"; Delegated Decree no. 66 of 28 June 2012 "Review of the disciplinary system of Delegated Decree no. 146 of 6 August 2010"; Delegated Decree no. 63 of 19 June 2013 "Amendments to Article 6, paragraph 5, of Delegated Decree no. 146 of 6 August 2010" Intervention dossier for high fire risk activities".

[80] Law no. 5 of 25 January 2011 "Law on structural design"; Delegated Decree no. 18 of 24 February 2016 "Rules implementing Law no. 5 of 25 January 2011 "Law on structural design".

various organizational units, for the training of workers and for evacuation drills for all schools of all levels[81].

The specific **civil protection activities** are carried out in accordance with the guidelines and decisions of the Coordination referred to in Art. 2 of Law 21/2006, chaired by the Minister of Territory and Environment, in charge of Civil Protection, and composed of:

- the Minister of Internal Affairs and Justice;
- the Minister of Health and Social Security;
- the Minister of Industry, Handicraft and Trade;
- the Head of the Civil Protection Service.

In practice, the Civil Protection Service, both in times of peace and in emergency coordinates the bodies referred to in Art. 7 of Law 21/2006[82].

If the civil protection interventions become extraordinary and the individual bodies alone are not able to solve the crisis, the Head of the Civil Protection is granted extraordinary powers to manage the emergency and convenes the Crisis Unit, organises the Operations Centre, Functions and Control Units.

As regards the recruitment of volunteers, a Delegated Decree for the promotion and discipline of Civil Protection Volunteers is being approved.

In recent years, the most frequent interventions, carried out in close cooperation with the Fire-fighting Section of the Civil Police and the AASLP and AASS staff, concerned: fire risk (in forest and urban/rural areas, in industrial or civil environments), hydrogeological and hydraulic risks, and risks caused by wind, snow, pollution and damaged buildings.

The numerous landslides from 2013 to 2015 were particularly serious, both in terms of interventions by the Civil Protection bodies and for their the economic repercussions.

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[81] Law no. 40 of 2 July 1969 "Law for the prevention of occupational accidents and occupational hygiene"; Law no. 31 of 18 February 1998 “Framework Law on health and safety at work”; Delegated Decree no. 28 of 11 March 2014 "Provisions relating to the Prevention and Protection Service".

[82] The Civil Police and especially the staff of the Fire-fighting Section and Civil Protection Section and the Operations Centre of the Corps; the Gendarmerie; the Fortress Guard Uniformed Unit; the Public Works Autonomous State Corporation (AASLP); the Public Utilities Autonomous State Corporation (AASS); the Health Department Services; the Environmental and Agricultural Resources Management Office (UGRAA); the Planning Office; the Territorial Information System (SIT); the Prevention and Protection Service (SPP); the Red Cross of San Marino; volunteers available in the Township Councils; voluntary associations affiliated with the Civil Protection; institutions that, although serving different purposes, have a civil protection internal organization which is potentially useful.

The Civil Protection Service may also rely on the collaboration of various Italian institutions by virtue of the following bilateral agreements, which also envisage mutual assistance in case of need or emergency[83].

In January 2014 the Civil Protection Service joined the early warning system of the Emilia Romagna Region for hydrogeological and hydraulic risks and since then receives alerts regarding regional macro-areas A and B bordering San Marino.

The Service has set up a specific system to transmit such alerts to all San Marino bodies involved in the monitoring, pre-alarm and alarm phases.

Besides emergency management, the Service is also responsible for the elaboration of emergency plans to be implemented in the various risk scenarios concerning our region.

[83] Bilateral agreement for fire emergencies and other disasters of May 2006; Collaboration Agreement between San Marino and Emilia Romagna Region of June 2013 (ref. Art. 7); Memorandum of Understanding between San Marino and the Sovereign Military Order of Malta-CISOM of April 2015; Memorandum of Understanding between San Marino and the National Department of Civil Protection of July 2015.

PREVENTION DEPARTMENT

In 1978, the WHO defined health as "a state of complete physical, mental, and social well-being".

This is an ambitious and somewhat idealistic statement. Nevertheless, it is a fundamental pillar of the developed States' approach to health, the relevant policies and the structuring of technical and administrative services.

At that time, San Marino national healthcare system was structured in binary form, with a Public Health Inspector's Office and its Health Officer directly depending from the State and the Government - from an administrative point of view - and a Social Security Institute. The Institute enjoys administrative and financial autonomy, since the financial resources necessary for its operation and the payment of health services and social security benefits are allocated annually by the State.

Based on this new concept of health, according to which prevention, therapy and rehabilitation have to be coordinated and unified, a long and thorough debate was initiated to envisage a unitary health system with the necessary, integrated services.

This cultural, political and institutional process led to the adoption of Law no. 36 of 16 May 1981 "Implementation of public offices and services", with which the Environmental Hygiene Service was established. This Service is responsible for addressing all aspects of primary prevention that in the past were partially dealt with by the Public Health Inspector's Office. The competences entrusted to the Health Officer were distributed among the Environmental Hygiene Services, Primary Care and Hospital Specialist Services.

Regency Decree no. 175 of 5 December 2005 "Reorganization of the competences and functions of the Social Security Institute staff" gave to the Environmental Hygiene Service the structure of a department, in line with the general guidelines of the Health and Social-Health Plan. Subsequently, Delegated Decree no. 1 of 11 January 2010 "Organisation of the Social Security Institute" established the Prevention Department.

Today more than ever, the organizational-technical model of a prevention department fulfils the new criteria of health, considering the crosscutting nature of interventions and targets of Entities, Trade Associations, Township Councils, Public Offices and Services, which are envisaged in most health plans.

The new scientific frontiers and some extraordinary events have further raised the population's and administrators' awareness of the impact of environmental factors on people's health in the places where they live and work. At the same time, new environmental factors influencing public sensitivity require developments in research and knowledge and affect the activities and choices of the public administration:

- new work organisation problems;

- market globalization;
- emerging infectious diseases of humans and animals;
- new environmental pollutants;
- climate change;
- land use;
- new local and international social tensions.

In addition, there is a growing awareness that new ''lifestyles'' related to most current diseases - generally considered as a result of individual choices and, as such, to be addressed by the private sector, - are influenced and generated, in everyday life, by social, cultural and economic factors. Therefore, similarly to environmental factors, they may vary in type and frequency. Acknowledging the new factors above and the damage these have caused or may cause to future generations allows us to define, in an indisputable way, the importance of “public health” for the citizens of today and tomorrow.

EUROPEAN CENTRE FOR DISASTER MEDICINE (CEMEC)[84]

At the beginning of the '70s, the World Health Organization established the Emergency Relief Operations Office and, a few years later, the United Nations created the United Nations Disaster Relief Organization (UNDRO).

In October 1979, in collaboration with these organizations, the Ministry of Foreign Affairs of the Republic of San Marino organized an International Conference on "The defence of society from natural disasters in the Mediterranean".

In February 1986, San Marino hosted a European Workshop on "Educational Aspects of Health in Disasters" and, on that occasion, the project of setting up a Centre for Disaster Medicine in San Marino was presented.

The Ministers of Foreign Affairs and Internal Affairs accepted the invitation and, following the accession of the Republic of San Marino to the Open Partial Agreement (on the prevention and mitigation of the effects of disasters, with a view to paying special attention to emergencies caused by natural and technological disasters), CEMEC was officially set up in San Marino on 27 November under the Presidency of prof. Corrado Manni and dr. Giancarlo Ghironzi as Secretary General. Current President is prof. Alessandro Barelli.

In total, 8 European Specialized Centres were founded, each specialised in a different area: research, study of earthquake phenomena, prevention of cultural heritage.

The aim of CEMEC was the training of medical and healthcare staff, rescue volunteers, journalists and psychologists, so that these, already in the early stages of rescue operations, could be prepared to face the many potential challenges.

Today, that "vision" is very topical, considering the increasing problems of the migration flows generated by conflicts, drought, climate change and the resurgence of famine in some areas of the world.

The triage, the psychological aspects of the victims to be rescued and of relief workers, emergency services, the role of the media in disseminating information and the toxicological aspects are just some of the issues that internationally renowned speakers have addressed in the courses organised by CEMEC, in collaboration with some universities. In 2016, CEMEC celebrated its 30th anniversary.

How can we help people struck by disasters, unaccompanied minors or women who have experienced violence? The International Scientific Committee and the rapporteurs, who have contributed over the years, have focused their scientific programmes on the cultural, religious and

[84] http://www.cemec-sanmarino.eu/

integration challenges that terrorist attacks and poverty cause in terms of illiteracy and globalization. These are the very challenges rescuers are faced with in emergencies.

THE COUNCIL FOR INFORMATION

The Council For Information was established with Law no. 211 of 14 December 2014 and gathers all San Marino information operators: professional and non-professional journalists, foreign correspondents or reporters.

During a first stage, a Provisional Committee made a survey of the information operators working in the Republic of San Marino and organised the voting of the first Steering Committee by the Assembly of the Council for Information. At present, the Committee is composed of: Luca Pelliccioni (President), Paolo Crescentini (General Secretary), Roberto Chiesa, Antonio Fabbri, Valentina Antonioli, Emanuela Rossi, Marco Cardinali, Barbara Tabarini and Roberto Boccalatte (Treasurer). These represent the journalism and publishing sectors in San Marino.

The Council for Information has drafted and approved the Code of Conduct in June 2016[85] and established internal rules of procedure. Among the main objectives of the Council for Information are protection of freedom of expression, respect for the professional criteria laid down in the Code of Conduct and ongoing training. In the light of this last fundamental objective, the Council has collaborated since the beginning with the Association of Journalists of the Emilia Romagna and Marche Regions, organizing several training courses for journalists in the Republic.

The relevant legislation can be found at the following address:

http://www.consultainformazione.sm/on-line/home/norme.html

85 CODICE DEONTOLOGICO GIORNALISTI RSM.pdf

SAN MARINO ASSOCIATION FOR THE PROTECTION OF ANIMALS (APAS)

The San Marino Association for the Protection of Animals[86], founded in the Republic of San Marino in September 1986, is a non-profit organisation that runs a shelter where abandoned dogs and cats and some small courtyard animals are housed.

APAS strives to help improve the condition of animals thanks to its volunteers, by promoting animal protection laws, carrying out educational and awareness raising activities and working with public and private institutions on specific projects aimed at facilitating a harmonious relationship between man and other animals.

APAS' commitment led to the adoption of important laws, such as that on the prevention of stray dogs (Law no. 54 of 23 April 1991), on the prohibition of abandonment and mistreatment of animals (Law no. 101 of 25 July 2003), on the prohibition of animal testing (Law no. 108 of 3 October 2007), and on the protection of pets (Law no. 101 of 30 July 2012).

[86] http://www.apasrsm.org/

APPENDIX 2: REFERENCE DOCUMENTS

REPUBLIC OF SAN MARINO[87]

Law no. 5 of 25 January 2011 on Structural Design

Delegated Decree no. 28 of 26 March 2012 implementing the rules of Law no. 5 of 25 January 2011 on Structural Design

Law no. 21 of 27 January 2006 on the organization of Civil Protection

Decree no.32 of 18 March 1996 on the legal recognition of the Association of Self-employed Surgeons and Dentists.

Law no. 211 of 5 December 2014 on publishing issues and the profession of media operators.

EUROPEAN UNION

Decision no. 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism (OJ L 347, 20 December 2013).

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Community approach on the prevention of natural and manmade disasters, Brussels, 23 February 2009 COM (2009) 82

Communication from the Commission to the European Parliament and the Council - Towards a stronger European disaster response: the role of civil protection and humanitarian assistance (COM (2010) 600 def., 26 October 2010)

Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community (2007/C 306/01)

World Medical Association Statement on Medical Ethics in the Event of Disasters (Stockholm, September 1994), Bulletin of Medical Ethics, 1994, 102.

Commission of the European Communities, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions. A Community approach on the prevention of natural and man-made disaster. COM (2009)82.

[87] Legislative provisions can be downloaded from the website of the Great and General Council: http://www.consigliograndeegenerale.sm/on-line/home/archivio-leggi-decreti-e-regolamenti.html

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Japan Society for Natural Disaster Science: http://www.jsnds.org/index.en.html

Journal of Natural Disaster Science Editorial Committee: https://www.jstage.jst.go.jp/browse/jnds

Journal of Geography & Natural Disaster: https://www.omicsgroup.org/journals/geography-natural-disasters.php

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The websites mentioned in the document were consulted on 10 July 2017
Luisa M. Borgia
CSB – Republic of San Marino