

# **GLOBALIZATION, THE INFECTIOUS DISEASES AND CROATIAN CIVIL DEFENSE**

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## **INTRODUCTION**

Man's natural progress, including development of global science and technology increase. Republic of Croatia, like other countries in central, southern and eastern Europe, undergoing a war period, and a period of political, economic, social and the other transition. Change, however, has not been confined only to these various areas, but has affected all sectors economic, social, civil and military defense and specially, the health sector where a various infectious diseases play one of major role. One of areas where the effect of change is certainly being felt is in the global and health sector. The main feature of infectious diseases comes from their global occurrence. Infective diseases are permanent danger for population, environment and determinant of health status. In the past, infective diseases and great epidemics of infective diseases resulted in high incidence, morbidity and mortality and dominant ireverse effect. Therefore, the world community has to study these infections and try to develop efficient approaches to their diagnosis, prophylaxis and treatment. Civil defense, Health policy, the structure and organization of defense and health services and most importantly, health status have all been affected by the transition, which started in 1990 and still continuing.

## **METHODOLOGY**

Working methods imply normative, analytical, comparative and system analysis method (1).

## **DISCUSSION**

In the "global village" of the late twentieth century it is increasingly evident that the health of populations is dependent on numerous external factors which include market forces, environmental hazardous accesses to as communications and technology and cultural influences (2).

At the end twentieth century global transnational factors as macroeconomic prescription e.g. structural adjustment policies and "downsizing", trade, travel, migrations and demographic e.g. increased refugee populations growth, food security issues, environmental degradation and unsustainable world consumption patterns, global and local environmental health impact-long- term impact negative, technology, foreign policies based national self-interest, communication and media e.g. global advertising of harmful commodities such as tobacco, alcohol, psychoactive drugs - long-term impact negative marketing of health damaging behavior, erosion of cultural diversity and social cohesion, with various consequences and possible negative impact on health will be permanent danger for the Croatian population for life, environment and determinants of health status (2).

As a result of its geostrategical, general and defensive characteristic, the population and territory of Republic of Croatia can be exposed to danger from effect of natural, technological and war disasters. The effect of these disasters (including droughts, floods,

fires and chemical contamination) can manifest in increased diseases and susceptibility to epidemics. Larger epidemics can occur in wartime as well as in peace (1). A part of continuing monitoring of Croatian populations health status and quality of life, in 2000, CNIOPH registered ninety-six (96) larger epidemic of outbreaks with 2035 cases (3). In Republic of Croatia, the immunizable diseases have either totally disappeared (diphtheria, poliomyelitis) or their incidence has been drastically reduced by more than 95 % (morbili, parotitis, rubeola, pertussis, tetanus, tuberculosis) (4.3).

In recent years the incidence of diseases of low standards of hygiene or living, i.e. typhus, bacillary dysentery and hepatitis A, has clearly regressed to the levels typical of developed countries. Stagnation of the incidence of tuberculosis in the past few years (due to war and its aftermath) was succeeded in 1999 by a favorable trend of continuing decline in the incidence (3.4).

A very favorable low permanent and sporadic incidence is noted in venereal diseases syphilis and AIDS with gonorrhea also exhibiting a favorable decreases in the incidence and its maintenance too at a low sporadic level (3.4).

Very extensive diseases prevention measures through meat control taken by the Veterinary Service and antiepidemic interventions and preventive measures taken by the Health Service, have resulted in markedly fewer trichinosis cases (though still a sizable number) than in the previous time/years (4).

In Croatia, the bacteriological diagnosis of tuberculosis had continued the declining trend in the number of new cases and relapses. Compared with the previous years, the number of resistant has declined (3.4).

Today, in April 2001, in Croatia non-registered diagnosis of BSE or diagnosis of Stomatitis aphtosa infectiosa, epizootica. Assessments and Plans for protecting civilians from the consequences of larger epidemic of infectious diseases and the other diseases requires the permanent engagement of health protection services in Croatia. From the technical standpoint, all anti epidemiological measures and parameters for threat assessment and planing for protection and consequences of larger epidemics of infectious diseases (preventive, operative, technical and organizational) will become even more significant. These measures can only be drafted through coordinated utilization of medical doctrine, legislation, international agreement and conventions and modern international standards (1).

Communicable diseases or infectious diseases unknown in Europe for decades have re-emerged (Diphtheria) or imported cases (cholera, malaria) and whereas in the past epidemics were rare and confined mainly to other regions, they now contribute significantly to the overall incidence of such diseases worldwide.

At the same time, new diseases have been spreading, and microbial resistance to some drugs makes the control of infectious diseases difficult. New diseases in animals also pose increased risks, one example being BSE (bovine spongiform encephalitis).

In many countries, the incidence of tuberculosis is increasing and drug-resistant strains of the disease are spreading. AIDS incidence appears to have stabilized in most countries in western Europe, but an epidemic related to injecting drug use stills one the rise in some of these

countries. In the NIS (newly independent states), HIV infection has been spreading rapidly to countries that was barely affected a few years ago.

The incidence of syphilis and other STDs has also increased dramatically in almost all the NIS. Hepatitis B continues to have a large health and economic impact on all countries in the European Region. Overall mortality from infectious and parasitic diseases demonstrates a typical east-west gap.

Medical segment is a constituent part of the civil protection of the Republic of Croatia (1). The scope of work and field of competence of the civil defense is legally regulated by the Law on Internal Affairs, II A Civil Protection and those tasks stand in agreement with the II Additional Protocol of the Geneva Conventions from August 12th 1949. (Protocol II, 1977) (5) and they implicitly include giving first aid, mitigation of the ground or epidemiological protection etc. Apart from those tasks, Civil defense had especially in peacetime and wartime the task to protect and rescue civilians during natural disasters and catastrophes in cases when the usual defense forces are not sufficient. The protection in those cases includes various activities in range from epidemiological protection to protection and rescuing in the case of contaminated ecosystem etc. Apart from medical contents of the civil defense implying first aid and terrain rehabilitation, the civil defense also includes protection of civilian's outbreaks (1).

## **CONCLUSION**

Infectious diseases will be a lingering transnational problem. Numerous recent trends favor the spread of communicable diseases. These include: new and re-emerging infectious agents, new drug resistant strains, pharmaceutical research not keeping pace with microbial resistance, erosion of disease surveillance systems, increased urban population density and number of persons living in poverty, increased susceptible populations e.g. the aged, wider distribution of communicable disease vectors due to global warming (6).

Health implications of Global and Local trend require the own national level an action cooperation and partnerships.

The information in this paper is drawn from results and discussions with services in the health and defense sectors in Croatia, during in post wartime in 2000/2001.

Today in Croatia, especially after the War (1991-1995), war crisis with secondary war effect such as epidemic diseases have proven to us that the epidemic factor is important and permanent risk for life and environment specially in period of various transition. The epidemiological protection with health services will have to include in usual protection.

Therefore, a protection plan needs to be developed, based on a high-quality assessment. The assessment, as a warning on the onset, development and consequences of a disease; the assessment of the probability of the onset of the disease, as well as the definition of the scope of a possible danger, need to include the presumption on the development of the disease in its acute, developmental and final stages, as well as the degree of its impact on people, material means and environment.

The Republic of Croatia must is to establish the new emergency management organization for various nature and man-made disasters because the present organization of the Civil

Protection in Republic of Croatia is not modern and efficiency.

## **SUMMARY**

Infective diseases are permanent danger for population environment and determinant of health status. In the past, infective diseases and great epidemics of infective diseases resulted in high incidence, morbidity and mortality and dominant irreversible effect. Civil defense, Health policy, the structure and organization of defense and health services and most importantly, health status have all been affected by the transition, which started in 1990 and is still continuing. Assessments and Plans for protecting civilians from the consequences of larger epidemic of infectious diseases and the other diseases requires the permanent engagement of health protection services in Croatia.

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## **CROATIAN POPULATION; MEDICAL CARE AND HEALTH FACTORS**

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### **INTRODUCTION**

The population and territory of the Republic of Croatia are exposed to the dangers resulting from natural, industrial disasters, as well as crises caused by the war. In the period between 1991 and 1995, Croatia and its population were affected by war.

Apart from the Croatian Army, at the battlefields, frontlines and in the rear, some segments of medical services and civil defense (1,2,3,4,5) actively participated in the defense and protection of the population.

The war, which was imposed to Croatia, put many services, institutions, defense and civil protection systems (6,7,8,9) on test. The experience has shown that a positive level of safety and health status of the population should be a priority task of the organized forces of the Croatian society.

The knowledge of the factors defined of the whole health status should help the persons assessing and planning the health situations to make their assessments and plans of the defense and protection health segment convincing and realistic.

### **METHODOLOGY**

Normative, analytical and comparative methods were used in this work.

### **DISCUSSION**

No society is safe and protected against crises and their consequences. Many people, material goods and the environmental itself may be affected by a crisis.

In Croatia, in the period between 1991 and 1999, the responsibility for the defense and protection of citizens, their lives and health was taken on by the medical segments of the ordinary medical services, with 44,000 employees, as well as unspecified number of organized medical segments of the civil defense of the Republic of Croatia.

In 1993, at the national level, the responsibility for the activities of the Protection and Rescue System was taken on by the Government of the Republic of Croatia with its competent Ministries. At the local level, the responsibility for these activities was taken on by local crisis management authorities or, directly, by medical segments responsible

for satisfying medical needs of citizens in peace or war times, as well as in the crisis conditions and the consequences of a crisis.

In the early 1994, the program and operational model of defense and protection of citizens against all kind of crises and consequences has been groundlessly given up. Therefore, in normative and practical terms, the activities were reduced to improvisations. A large scope of defense and protection activities was being solved through sub-legal acts and discretion rights of the competent minister, Minister of the Interior. Therefore, the needs for medical segments were neither met nor sufficiently coordinated by the Minister of Health and his referral centres.

In spite of, in modern terms, undefined conditions of defense and protection of citizens against crisis and their consequences, and before including those institutions and authorities, which are responsible and trained for medical care of citizens during crisis, crisis problem or manifest crisis, these actors should, in peace time and non-crisis period, form an initial team of professionals coming from competent organizations, institutions and other actors. They would, intra-, and interdisciplinarily, on the basis of law, regulations, standards, conventions, treaties, abilities and needs, be able to create preconditions for determining the real status of the health level of the population of Croatia, its needs and abilities. Also, the status, abilities and qualification would be established of the medical segment of protection in the society, which should be the main actors of the protection of population against crises and their consequences, based on assessments, proposals, solutions and plans. The initial core team would lead the responsible civil defense and protection actors towards the formation of command and executive bodies of a designed system of defense and protection of the population against crises and their consequences, as its basic part and medical segment. This would prevent improvisation, disorientation, unresourcefulness, or credits to all participants in a crisis or a consequence of a crisis. What was achieved so far in this field was a result of engagement of individual enthusiasts, rather than organized and legally regulated activities.

Therefore, there is need to organize a body in charge for management and coordination in crises and their consequences. This body would also serve all justified activities and demands in society. All services in the country should be engaged, which are in various manners included in and connected with the medical segment of the defense and protection of the Croatian population.

Good organization of medical defense and protection, of goods and environment, is a primary security and economic issue of Croatia. Therefore, activities should be organized more efficiently in order to achieve safety with minimum resources and expenses. This especially applies to economically underdeveloped countries and the Croatian population impoverished by the war.

A comprehensive approach to the protection of the population's lives and health should be observed within the frameworks of definitions and actors, whose components are well-defined situation and health status of the Croatian population.

A positive level of health state of the country should be maintained with expert support, with appropriately set legal regulations, which certainly need to be improved. Crises and their consequences can be reduced by maximal coordinated use of the existing material and human resources. Positive results could be achieved in the medical segment of defense and protection of population because many peacetime resources of the regular medical services exist functionally and are compatible. They can rather quickly fit into the protection against crises and their consequences, with minor reinforcements of human factor recruited from their regular activities or civil defense

The efficiency of the medical segment of the protection in a crisis would be achieved if the anti-crisis elements were satisfied, such as constant and uninterrupted supplies, reparation, resources supplement, as well as education of donors and acceptors of general security and protection.

Following the typological, organizational and internationally accepted criteria, it is necessary to accept the definitions, contents, relations and factors of the health status, as well as their categories and levels. Not only isolated medical subjects are the ones who are responsible for the factors of individual»s or society»s health status, but also various governmental and intergovernmental organizations, which bear the responsibility and participate in improving the level and safety of individual»s or society»s health status; these organizations are also responsible for the definition and contents of those factors, which define the health status.

Having respect for all kinds of achievements of human activities and a wide range of contents of the health status factors, WHO has proposed a structure of interconnected relations, relations, related to the connections between various medical partners/actors responsible, at the beginning of the 21st century, for the level and the health status itself of individuals or society.

Following its own presumptions, WHO, as an important factor, has presented its own values and the relations, which will be important in future for intergovernmental and governmental cooperation in many countries across the world, and whose task will be to take care of population»s life and health.

WHO and all other similar international associations will require general co-ordination, tolerance and openness to all common problems, which are important for the security of a society and its citizens. These associations shall require coordination and relations with ACC Task Forces and Inter-Secretariat Committees, such as IACSD, etc.(10).

The factors, which influence and will continue to influence the health status, vary in their contents and will affect many fields of human activities. They will be observed as aimed factors or macro-factors, biological or/and proximate factors and/or general factors influencing the population»s health status.

Pursuant to their definitions and contents, macro-factors will be of political nature, with characteristics affecting human rights, stock, social affiliation, social security, peace and

wars. Economic macro-factor will be related to resources, production, consumption, level of production factors, statuses and relations.

Educational factor will be related to the level and status of knowledge and education. The environmental factor will define all the activities and relations related to the local and global living milieu.

Technological factor will be related to the status and level of technological processes and productivity, but also to the level of sources and distribution of exhaust or stored hazardous substances in the environment or wider. It affects safe life and the living and health standards of the population, living in and exposed to a technical and technological environment.

Demographic factor will have significant contents in its definition of health status of an individual or a group of people, which is organized in a certain time and area, in order to satisfy their needs, to survive and rise future generations.

Croatia has approximately 4.5 million inhabitants. In this geo-strategic area, in average, there are 84.7 inhabitants per km<sup>2</sup>. The life expectancy is 68.6 years for men, and 77.5 for women. As for the age structure, the Croatian young population is decreasing; 27 %, according to 1951 census, was reduced to 19 %, according to 1991 census. The increase tendency has been recorded as refers to the old population.

The registered unemployment rate in the post-war period, in 1999 and 2000, has increased. In 1999, it was 19.1 %. Over a million of pensions users live in Croatia. The number of actively employed population is the equal (11)

The migration and tourist factors will also be important for the assessment of the health status of the Croatian population. During tourist season, there will be an increased danger of imported contagious and other unhealthy states (drugs, alcohol, prostitution, physical and mental violence, traffic injuries, etc). There will be increased danger and the number of fires outdoor and in buildings. The number of traffic accidents will increase. More hazardous substances will be emitted due to the combustion of larger quantities of fuel, from motor vehicles exhaust systems.

Due to strengthened traffic connections between the East and the West, open and soft borders, public and secret tourist and economic immigration will flow from the undeveloped East towards Western Europe, which will also affect the quality, contents and the level of security, as well as health status of the Croatian population.

Global trade and communication factors will also interact and influence the health status in Croatia.

Biological factor, especially increased import of, in medical terms, insufficiently adequate seeds and food, genetically modified goods, as well as liberalized import, will affect the health status ( transglobal contagious diseases, BSE, gonorrhoea, syphilis,

measles, diphtheria, AIDS, malaria, cholera, stomatitis aphthosa, anthrax, tularaemia, brucella, trichinosis, rabies, tuberculosis, poliomyelitis, phytozoonoses, toxical infections, parasitoses, etc.). Healthy air, food, water, absence of noise and vibrations will be important positive factors of population's health status (10).

Demolitions and terrorism will be estimated negative factors for security and health status of Croatian population.

The so called, proximate factors will have to be observed from the point of view of security and protection of population, control and surveillance over traffic, production and distribution of food, water and sanitation measures. Industrial factors will be observed from the point of view of industrial production possible accidents, or hazards.

Social network, social work and capital will have to be developed and perfected. Social and cultural behaviour, with respect for and maintenance of tradition, culture, customs and the level of self-awareness, language, script, religion and rituals, nations and other social groups (10).

Medical actors in narrower sense will have to be developed through intergovernmental .intra- and intergovernmental cooperation of countries of origin and other countries. They will also have to harmonize their work and other activities through international associations, such as WHO, World Bank, OUN, UNICEF, UNDP, UNAIDS, UNESCO, UNIDO, UNHCR, FAO, UNEP and other UNS with wider attributes (10). Scientific services and servicing, defense and protection, together with politics, economy, education, environment protection, life, and health status of population, will be terms of reference of one or several definitions of health status, significant for the safety and life of individuals or organized society in general.

Therefore, with a good reason, in crises management, in the very process of facing crises and crisis situation, and during crises situations, solving of the crisis problem will be manifested through standard management phases, from its outburst to the final phase of its removal. All will be defined through the so-called crises management phases and the functions of the activities in crisis situation. The phases follow one another or go simultaneously. Phases will be recorded, i.e. alleviation, preparedness, response to incident, accident, phenomenon, recovery after a crisis and consequences, as well as improvement of conditions, socialization and restoration of the pre-crisis general security situation as well as living and working conditions.

Preparedness is one of the most important segments of functional activities of actors in the defense and protection in crises. Preparedness includes all the activities, which follow the alleviation phase, and which is provided with anything necessary for immediate reaction to alarm for crisis or critical phenomenon. In some crises, we cannot act preventively. But the hazards and consequences of a crisis are unavoidable. Therefore, in the preparation phase, organized societies (Government, state, organizations, services and individuals) design and develop plans of defense and

protection of citizens, their lives, health and environment, and all that with the aim of reducing losses, damages and consequences.

Preparedness is to improve and promote all activities with the aim of efficient and timely response to crisis situation, or in the state of developed crisis with consequences in a certain area, time and population.

Response is defined as the activities related to a certain manifest crisis phenomenon, situation, developed crisis, affected and non-standard situation or accident, whose actors are empowered organized and trained administrative and executive forces and actors, in charge of response, who react to a crisis through actions, immediately or in its course, during its manifest crisis situation. Response will reduce the probability of new and further secondary hazards, consequences and damages, with the aim of accelerating the sanitation process and restoring the peacetime living conditions and security status. .

The activities aiming at restoring the normal situation or situation better than the previous one are defined as renovation or reconstruction. The aim of renovation is to restore all of the important functions that have to satisfy the minimum standards/norms of life in the short /shorter period of time. The renovation or reconstruction in the long/longer period will perform all of the activities and procedures that develop the restoration of the previous agreeable situation in the longer period of the time, and this can last even a few years after the crisis/accident, i.e. toxic or nuclear accidents etc.

The purposefulness of protection and defense of population from the crises is linked to the engagement of many factors of the society on all of its levels in protection of lives and health of the population and of the environment. The system of protection and rescue of the population would become more humane, logical, convincing and nationally affirmative factor of health in Croatia in the case of high level of care and protection and developed social and economical relations.

Social categories, together with economic categories, are contained in definitions of better social and economic exploitation of all resources in Croatia. All this is with the aim of maximum exploitation of the system man. resource- environment This might ensure rather good health protection of the Croatia population from various threats

The older schools of economics considered humanism and efficiency to be the opposite goals. However, the recent researches show that these goals are mostly complementing each other. there are numerous interdependencies between defense, protection, economy, and vice versa. The general security at the same time influences personal security and vice versa. Individual security is a part of general security. This makes general security more qualitative, more important in social and safety aspect, and more humane

## **CONCLUSION**

The population and the territory of the Republic Croatia are exposed to threats that can be caused by natural, industrial and ecological accidents as well as war crises.

It has been recognized that feasible positive level of security and health situation of the population has to be the priority task for all of the organized forces in the Croatian society, especially in those subjects whose basic activity is health defense and protection of the population. The knowledge of defined factors responsible for general health situation might be of assistance to the persons charged with assessment and planning health situation, so that the assessments and plans health segment of defense might be applicable and realistic.

This the reason why it is necessary to organize a body for management and coordination in crisis situation and in case of crisis consequences. This body would provide services to the activities and requirements of the society. All the services and the country that in various ways include and are linked to the segment of defense and protection of the population of the Republic of Croatia (12) should be engaged and harmonized.

The general approach in the protection of lives and health of the population should be viewed also within the framework of definitions and factors, whose component is the health situation of the Croatian population. The general level of health situation in the country should be protected.

The organization of the health defense and protection of the population, goods, and environment is the priority safety and economy issue for Croatia or any other state.

WHO and all similar organizations request absolute coordination, tolerance and openness towards all the problems that are common and of the interest for the security of any society and its population.

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