The Influence of the Globalization on the Georgian Medical Safety System

Otar TOIDZE
MD, PhD, Committee on Healthcare and Social Affairs, Parliament of Georgia, GEORGIA

Monika AMBRYSZEWSKA-KHECHINASHVILI

Abstract

The organization and planning of the modern healthcare system must respond promptly and adequately to the challenges accompanying by globalization processes. The increased population mobility, the risks of international terrorism, epidemics of HIV/AIDS, Tuberculosis, Natural Disasters, Drug Addiction and recently a new challenge of antimicrobial resistance must be addressed of by policy makers in the frame of national, regional and global framework. Georgia, shortly after regaining its independency faced the collapse of its soviet healthcare system and lack of necessary arrangements. During the last few years the government directed its forces to build the required infrastructure and setup the minimum standards which would raise the safety among its citizens. With the support of the international organizations and cooperation with the agencies of the foreign countries Georgia succeeded in certain fields. Some of the problems still must be addressed and its implementation requires involvement of national and regional authorities. In the same time country through its policy choices is determined to achieve the international standards set up within the Millennium Development Goals. Due to shortages, the existing resources should be allocated with the highest possible efficiency.

Definition of the globalization

During the beginning of the 1990 the term “globalization” dominated political, as well as popular and academic discourse. The public life became seriously “affected” by the references to how the “globalization” would affect our lives. It was very often blamed and credited for an incredibly wide range of phenomena. Social problems ranging from famine to floods, from pollution to poverty, and from rural depopulation to urban overcrowding are commonly cited examples of the many effects of globalization on social welfare. Indeed, globalization is now invoked in so many contexts and applied in so many ways to such a wide range of phenomena that a thought need to be given to our definition of this phenomena in the context of public health.

At the core of the globalization lay down the interconnections and interdependencies which transcend the national borders. These processes are not only more extensive in scope than in previous periods of humankind's history but also a speed at which they occur seems to be increasing. The mentioned interconnections bring together geographically distant regions around the globe; as a result we can observe that the events happening in one part of the world are able to produce effects in other parts of it. With the support of the modern mass media communications we are constantly informed and we members of societies are aware of all of these motions, although the amount of the information is so huge that the choice of top priorities becomes a serious challenge.

Historically, globalization was first used in the production management studies to describe the global

spread of production systems facilitated by technological advances in such areas like telecommunications and transport systems in order to control production sites on the other side of the world. Later on the term spread throughout economics and step by step dominated the social sciences while explaining the realities which occur as a result of increasing interconnections of economic, social, political and cultural systems around our globe. We will concentrate our attention to such aspects of the globalization which are connected directly or very often not directly to the health issues. Although, it is not an easy task to put a bottom line and to say with one hundred percent certainty that some areas have no links with the global health problems, because most of them do, although not in a straight line. In most cases a way how we highlight the problems plays a crucial role here, like for instance the case of the international capital flows, for the first glance we deal with the purely economic issues, but when we consider the problem in the context of a pharmacological sector it immediately becomes a subject of the global public health concern, powerful international companies do influence not only the cost of the public health, but also the access and quality. A globalization perspective brings new concerns and subject matter to social policy extending its field of enquiry. The following key elements of the globalization like flows of images, ideas, information and values through media and communications, the international mobility of people for leisure and work, the impact of human activity on the global ecological system and environment, the awareness by the public of global issues, events and risks, the rise of the political actions across borders and directed at supranational forums, in our opinion influence the global public health the most.

From the globalization to the global public health threats in the XXI century

Throughout the history, humanity has been challenged by devastating outbreaks of infectious diseases. Naturally the health threats were before the globalization had even started. Although we can find many examples how the diseases brought from one continent to another once influenced the people's lives and managed to change the history. In this sense the infectious diseases were first which "globalized" while considering geographical mobility of people. It gave a stimulus to develop through centuries the strategies to cope with the existing risks. The first measure was a separation of the sick from the healthy, like it was happening in case of leprosy. The practice became known as "quarantine" and it was widely used in the late middle ages. But the breakthrough came during cholera epidemic in London in the mid XIX century, when due scientific progress, a water sanitation systems were improved which followed the reduction of the risk of the disease, although the cholera remains still a major public health risk in the countries where the sanitation problems persist.

Almost a century before a vaccine for smallpox (considered to be the oldest and deadliest disease) was discovered; the immunization campaign which was followed helped to eradicate the disease. Unfortunately the invention of vaccines and antibiotics did not mean that the battle with the diseases was over. Today's highly mobile, interdependent and interconnected world provides as many as possible opportunities for the rapid spread of infectious diseases, radio-nuclear and toxic threats. Infectious diseases are now spreading geographically even much faster than at any time in human history. According to broad estimations, every year more than 2 billion people travelled with the airlines; epidemic in any one part of the world is only a few hours away from becoming an imminent threat somewhere else. Unfortunately the infectious diseases are not only spreading faster but they additionally appear to be emerging more quickly than even before. Since the 1970s, newly emerging diseases have been identified at the unprecedented rate of one or more per year.

The international community today faces the following main health threats:

1. Epidemic-prone diseases like Cholera, yellow fever and epidemic meningococcal diseases which made a comeback in the last quarter of the 20th century, Severe Acute Respiratory Syndrome (SARS) and avian influenza in humans, Ebola, Marburg haemorrhagic fever and Nipah, drug-resistant tuberculosis (XDR-TB) virus, diarrhoeal diseases, hospital-acquired infections, malaria, meningitis, respiratory tract infections, sexually transmitted infections with leading Human Immune Virus all of these pose threats to global public

health security, and raise new scientific challenges, additionally in many areas the risks of the infectious diseases are seriously jeopardized by the spread of antimicrobial resistance.

2. Foodborne diseases. The food industry underwent considerable and rapid changes over the last 50 years, becoming highly sophisticated and international. Although the general safety of food has dramatically improved, we face food borne outbreaks from microbial contamination, chemicals and toxins. The international trading of contaminated food between countries increases the risks of spread. In addition, we can observe the emergence of new food borne diseases like of the new variant of Creutzfeldt-Jakob disease (CJD) associated with bovine spongiform encephalopathy (BSE).

3. Natural disasters. Recently we can observe how the climate change especially in the light of extreme weather events together with other environmental and social factors can change the exposure of populations to infectious diseases.

4. Radio-nuclear and toxic treats, bioterrorism. Reliance on chemical processing and nuclear energy calls for public health security measures. Facilities and their products are a potential danger to public health because there is always the possibility of chemical spills, leaks, dumping and nuclear melt-downs as a result of accidents or human and mechanical errors. Since toxic pollution of water and air knows no borders, there is an urgent need for improvement of international standards in the field of early warning systems which could be implemented when some catastrophes happen.

5. Antibacterial resistance. The discovery of antibiotics resulted in the successful treatment of the “untreatable” diseases. The technological progress allowed to minimize the costs of its production and made it accessible for everyone. Unfortunately through the decades of extensive use and over prescribing caused the development of the antibiotic resistance of all major microbial pathogens and antimicrobial drugs. Nowadays, about 70 percent of the bacteria that cause infections in hospitals are resistant to at least one of the drugs most commonly used for treatment. Everyday people's lives are at risk due to non responding treatment. Without the adequate reactions on the world wide scale very soon we can face the same problems which people faced before the discovery of Alexander Flemings in 1929.

What constitutes our security?

There are three main levels of security, a personal security is fulfilled when individual's life and health is not at risk and no objective obstacles exist for self realization, although for the last one only an individual takes responsibility. In order to achieve the first there is a great need for the national security which is one route to ensuring people's security, it is necessary condition although once again national security is no guarantee for the security of all people living in the country. On top of that we have international security which is an outcome of the national securities and greatly depends on the system of national governments and constitutes peace, order and lawfulness within the society of countries. The history showed us that these elements are crossing each other with the globalization processes at the background influencing these interactions and the lives of millions

The World Health Organization and the International Health Regulations

All of these threats require urgent actions. The awareness of the international community led to creation of today's leading health organization known as the World Health Organization which was established on 7 April 1948. For more than half of century it guides the nations toward a greater health security, by defining a human's health as a complete physical, mental and social well being and noting not only merely absence of disease and infirmity. It generates under the one organizational roof accumulated intellectual potential and draws attention to the international health security issues. It engages high-level political interest in addressing those issues. In the same time it demonstrates how health considerations are closely linked to national and foreign policy and security agendas, it guides the international community in global understanding of the

health problems. Its key messages are that threats to health have no borders; investment in health means a safer future; health leads to security; insecurity leads to poor health; being prepared and prompt response improve the international health security.

But the central and historic responsibility for the World Health Organization (WHO) has been the management of the global regime for the control of the international spread of diseases. In order to achieve these goals The International Health Regulations ("the IHR" or "Regulations") were adopted by the Health Assembly in 1969. Earlier, since 1951 the International Sanitary Regulations had been adopted. In years to come these regulations were several times adjusted. The most recent adjustment took place in 2005. The Regulations entered into force on 15 June 2007. Today, the public health security of all countries depends on the capacity of each to act effectively and contribute to the security of all. The world is rapidly changing and nothing today moves faster than information. This makes sharing of essential health data one of the most feasible routes to global public health security. Although certain conditions should be fulfilled in order to succeed. The opportunities of the fast data exchange should encourage the governments to share the information with others. The policy makers as well as the political decision makers should bear in mind that not addressed health risks can cause a potential damage of national economies through disruption in national trade, travel and tourism. Today's global health security system must be built within international trust and transparency.

The definition of public health as an international concern allows for the inclusion in International Health Regulations of threats beyond only the infectious diseases, but also those caused by the accidental or intentional release of pathogens, chemical or radio-nuclear materials. This extends the scope of the Regulations to protect global public health security in a comprehensive way. Regulations focus on rapid response at the source of an outbreak. They introduce a set of "core capacity requirements" that all countries must meet in order to detect, assess, notify and report the events covered by them. They aim to strengthen collaboration on a global scale through capacity improvement.

Today the global cooperation needs

A creation and adjustment of national and international legislation is needed. On national levels an adequate legal framework is needed to proceed with the international recommendations. Additionally within some domestic jurisdiction and national laws there is a need for the relevant authorities to adopt implementing legislation. The main interest areas include environment, public health, international ports, airports, ground crossings, customs, and food safety, agriculture including animal health, radiation safety, chemical safety, transportation, collection, use and disclosure of public health information. Additionally any attempts of improving the situation will fail if we do not develop the organisational structures responsible for the exchange of information, creation of data base. The strengthening the early warning systems must take place and coordination of scientific research on international level. All of these must be accompanied by rising of public awareness with the respect of democratic values and recognition of human rights.

Georgia, where we are?

The region of present day Georgia contained the ancient kingdoms of Colchis and Kartli-Iberia. One of the republic of the former USSR until its collapse in 1991. Population is around 4 500 000 people, 53% of whom live in urbanized areas. Georgia shares its borders with Azerbaijan, Armenia, Turkey and Russia, and it is considered to play an important crossroad function in the region. During the last 2 decades country experienced 2 armed conflicts which caused the internal displacement of almost 250 000 people. At the moment two breaking regions Abkhazia and South Ossetia are occupied by Russian Federation and are out of control of the central government.

The present and future health challenges of Georgia in a global world

Today, among the main social challenges of Georgian policy makers we find setting up the bases for a modern health protection system which would provide high quality, easily accessible, affordable health services for the whole population. It would be based on the improvement of health system performance and it would manifest in the better health outcomes of Georgian population; increased access of the poorest layers of the society to health services, an improved access of old people (those who in the present conditions would have the problems with the insuring their risks) to health care facilities; financing the health services for the prenatal care, children vaccination, epidemiologically dangerous diseases like TB and AIDS and a guarantee to a health provision for children below 18. By the end of 2010 almost one fourth of Georgia population enjoyed a health insurance.

In the same time, among many problems a one of accessibility emerged in the recent years. After regaining its independency during the first years the old, soviet medical infrastructure without the necessary technical update was completely devastated and did not correspond to the standards of a modern health system. In most cases the costs of renovation of old buildings would be much higher than building from the scratch the new ones. That is why the government elaborated and approved a master plan known as a "100 new hospitals in Georgia" in the framework of which the infrastructure is being built with high standards and taking into account the geographical and demographical characteristics of the country.

Naturally Georgia is exposed to the same risks as the rest of the world. In order to accomplish its tasks the Georgian health system needs to respond quickly to the changing circumstances and react promptly to new risks for instance in the filed of infectious diseases. The Country Coordinating Mechanism plays a critical role in fulfilling these tasks. The positive and negative effects of the globalization influence the Georgian reality. As relatively small country, Georgia has a unique chance to have an access to the international know how in the field of medicine and health, meaning free access to information and trainings, medical education.

Existing Local Risks and Threats

Tuberculosis (TB) is the most specific disease among all other public health problems, although it is a curable disease but it kills more than 2 million people worldwide, annually. Into the characteristics of this disease we shall include that it is an airborne infection; most of the untreated cases are fatal; untreated TB patient is a source of infection and transmits disease to at least 10-15 people a year. Treatment of drug-susceptible TB is long-term, and requires 6-9 months. An inadequate treatment causes development of the most severe (often incurable) form of TB as MDR-TB (Multi Drug Resistance-TB) demanding a treatment for an approximately 24 months,.

Early detection and proper treatment ensures successful treatment outcome for almost all drug susceptible TB cases and prevention of resistant TB. Early case detection, treatment, education and other public health interventions are so closely interconnected in TB control, that their separation is impossible. Since 1990s TB control approaches have been standardized under the guidance of the WHO. DOT (directly observed therapy) strategy has been developed and implemented in more than 180 countries.

In 2000 Partnership "STOP-TB" was established. It is a global movement that should accelerate social and political actions to stop spreading TB in the world. The first step made by partnership STOP-TB was the elaboration of STOP-TB Global plan for 2001-2005. Based on the achievements of that period a new version of STOP-TB Global Plan for 2006-2015 was developed. Its purpose is to reduce the TB burden by 2015 through reaching the Millennium Development Goals and targets of STOP-TB partnership. Political commitment and adequate financing are essential for successful implementation of a high-quality DOTS and TB control in Georgia.

TB control is one of the most cost-effective public health interventions. The currently used recording

and reporting system in Georgia is based on the WHO recommendations. Its Improvement requires a unified recording and reporting system in the country (for civil and penitentiary sectors); development of a unified national database for all notified TB cases; integration of laboratory results in the overall TB recording-reporting system.

The absence of Tuberculosis (TB) control in 1991- 1995, as well as, factors, like civil war, regional conflicts, low quality of life, and low TB awareness of the society played a critical role that TB became the major public health challenge for Georgia. TB is most prevalent in population at age 15-44 (males aged 25-44 years and females aged 15-34 years). On average 6000 cases of TB are registered annually in Georgia among which about 4000 is case with no previous history of TB disease. Between 1998 and 2009, the total number of reported TB cases has been gradually decreasing (from 6695 cases in 1998 to 5978 cases in 2009). A decrease of all TB case notification rate is mainly due to decrease of re-treatment TB case notification and can be attributed to an improvement TB case management. Number of never treated TB case notified remains stable, since the reservoir of infected population stays the same. Although new TB cases notification rate remains rather stable for the civil sector, Georgia faced almost doubling in number of new TB cases in prison in 2009. Although the prevalence of multidrug resistance is low compared to other Eastern European countries in Georgia it still proves high burden of drug resistance and represents a key challenge for TB control in the country.

HIV/AIDS. In 1980 the first cases of unusual immune deficiency were found in gay men in the USA; in 1982 Acquired Immune Deficiency Syndrome (AIDS) was defined for the first time (thousands people affected), in 1983 The Human Immunodeficiency Virus was identified as the cause of AIDS (thousands people affected); in 1985 The first HIV antibody test became available (2 millions people affected); in 1987 WHO launches the Global Program on AIDS (4 millions people affected); in 1988 AZT therapy was introduced (4 millions people affected), in 1994 followed Antiretroviral therapy (17 millions people affected); in 2003 The Georgian National Strategic Plan of Action was elaborated (35 millions people affected).

Georgia has identified AIDS and HIV as a priority field back in 1990s, but the progress is commendable over the last 5 years. In the frame of the Country Coordination Mechanism the prevention and monitoring activities take place. The National Strategic Plan of Action serves as the basis for the four successful Global Fund applications. In 2006, the revised National Strategic Plan of Action for 2006-2010 was developed, as a comprehensive and evidence-based roadmap to achieve the universal access to HIV prevention, treatment, care and support. Currently, the new National Strategic Plan of Action for the next 6 years is being developed. The most unique about the Georgian approach towards AIDS/HIV is that, Georgia has become and remains the only nation among the post-Soviet countries to attain universal access to antiretroviral therapy (ART) with the Global Fund support since 2004. Through further expanding a free ART program to the conflict region of Abkhazia enabled a universal access to lifesaving treatment throughout the Georgia's internationally recognized borders. In the same time the country has ensured universal access to voluntary counselling and testing for all pregnant women, and prophylactic ARV therapy for HIV positive pregnant women and their newborns. As a result there were no cases of mother to child transmission of HIV over the last several years. One of the success key of Georgian HIV/AIDS program is the innovative approaches towards implementing effective interventions, including recent establishment of palliative care for chronically ill patients, implementation of home-based ART adherence support program through operation of mobile units, forthcoming launch of HCV treatment program for HIV/HCV dually infected patients, that contribute to improving outcomes and quality of life among people living with HIV. To increase social protection framework for people living with HIV new Law on HIV infection was developed in 1996 and revised in 2000 and 2009.

Although Georgia remains low HIV prevalence country (estimated prevalence <0.1%), set of problems and issues, such as raising drug use and geographic proximity to fastest growing epidemics in Eastern Europe, make Georgia ripe for the spread of HIV. Nowadays Georgia exceeds EU average rate on HIV incidence. The reasons of increase numbers of HIV cases are the high number of drug users in the country (estimated number

of injecting drug users in the country is 40 000); high prevalence of Hepatitis B and C and sexually transmitted infections and high level of migration and immigration in the country. According to the AIDS Centre data, almost half of HIV positives male population was infected out of Georgia and about one fifth of HIV positive women infected in the country were sexual partners of immigrants. Despite the universal availability of ART, outcomes of patients on therapy are not as good as one would have predicted. On average only 80% of patients survive 12 months after commencing ART, with 36-month survival averaging 75%. One of the major underlying causes of the poor treatment outcomes is the late HIV diagnosis. About 45% of newly diagnosed HIV patients have the symptoms of AIDS.

Projects which were implemented in Georgia had prominent effect on achieving progress in control of HIV/AIDS. Because increase in the number of new HIV cases in the country there is a risk of worsening the epidemic indicators. As well as in case of TB increased drug resistance is notified. In order to combat it the early diagnostic and immediate treatment of HIV positives is needed. To achieve this there is a need for a greater cooperation on the different levels of the healthcare system as well as better information of Georgian citizens.

Drug Addiction. In Soviet Georgia, similarly to the rest of the Soviet Union, drug addiction was qualified as a crime and a fight against it was carried out mainly by law enforcement tools, though this by no way ruled out treatment. Customs and border control in the soviet period were strong, opium was produced in certain regions under strict supervision by police and armed forces, and hence the level of drug accessibility and its availability in the black market was low. The situation began to change in the 60-ies (post- Stalin's period): changes in ideology and liberalisation of the law enforcement system in a certain sense “softened” measures taken by the state to control drug supply and thus paved the way for the spread of drug addiction in the Soviet Union, including Georgia. Despite of the growing problem, it was strictly forbidden to openly acknowledge its existence and respond to the problem engaging the public. That considerably limited a potential for its prevention. In this context, the state initiated adoption of the “Resolution of the Supreme Council of the Georgian Soviet Socialist Republic” defining legal liability for the in-take of drugs without doctor's prescription, as well as for the purchase and distribution of drugs. This statutory regulation resulted in a significant reduction in the spread of drugs in the country, and Georgia in fact set a model for other republics of the Soviet Union to follow.

Following independence, Georgia faced difficulties of the transition period: weaken state borders and uncontrolled territories, civil war, high rate of crime, corruption, and crisis of values followed by pessimism in the society, long-lasting socio-economic and political crisis attended with unemployment. All these influenced the rise of an illegitimate circulation of drugs and drug addiction. Today, Georgia is situated on a transit road of heroine from Afghanistan and Iran to Europe (through Turkey and uncontrolled Abkhazia) it seriously affects the level of the availability of drugs in the country, in the same time creates a potential risk in a context of developing tourism and cross border movement of people in the country. The growing domestic demand has a serious impact on the international drug prices and affects the balance of supply and demand. Persisting problems create the risks to the neighbor countries and the international community.

According to the broad estimations and assessment made in 2007 there are 40 000 drug addicted persons in Georgia (Europe 0,5-0,6% of population, 1,5% in Estonia). Among the drug users we can observe a high coefficient of Marihuana usage, according to the results of the European School Survey Project on Alcohol and other Drugs which took place in 2008, 20% of surveyed youth made a drug try. On top of that Georgia is the country of an extensive use of psychoactive drugs. The introduced bill “On Drug Addicted Substances,Psychoactive and Precursors Substances and Aid to Drug Addicted Persons” allowed for a treatment of drug addicted persons, to some extend limited the list of drug addiction substances and finally recognized the drug addicts as vulnerable and ill which is very critical when it goes about the therapeutic activities of drug addicted persons. Earlier the country adopted and recognized of the International Conventions (WHO) Single Convention on Narcotic Drugs, 1961, Single Convention on Psychotropic Drugs,

1971. With a support of the international donor organizations (Global Fund) 14 state programs was established for the drug addicted patients willing to treat themselves (2 programs are fully for free, 12 programs patients pay 10%). Within The Eastern Partnership program frame a performance of customs and border control improved in order to increase the rate of detection of suspicious drug precursors consignments in particular those that can be misused for illicit manufacture of synthetic drugs. When the future challenges are concerned the following steps should be made creation of epidemiologic data base, improvement of information system, cooperation with the European Monitoring Centre for Drug and Drug Addiction and creation of Early Warning System.

The problems described are not the only one, although they express the existence of the global problems in the country, and like the rest of the world are challenges for the Georgian medical safety system. A well defined political course of Georgia like integration with the NATO and EU structures defines top priorities for the coming years. From one side puts the responsibility of the highest standards but in the same time is a chance for a greater integrity with the other countries. The most important message for us is that the globalization processes are constant and demand a prompt reaction.