

## The Battle for Bosnia's Health

*The following excerpts from "Health Reform and Reconstruction Program of the Federation of Bosnia and Herzegovina," Ministry of Health, Federation of Bosnia and Herzegovina (1996), provide a glimpse of the current health status of the Bosnian people, and the effects of war on health care delivery in that nation.*

With the end of the war in Bosnia and Herzegovina, the Ministry of Health is committed to establishing a health sector that fosters the full health potential of the people, based on the principles of equity, universality and partnership.

The war has had a tremendous impact on our country and our people. Within the Federation borders, it is estimated that approximately 200,000 people were killed, and an even greater number of people have been injured. The number of disabled persons is around 25,000 and a significant number of people suffer from mental problems. About one and a half million people were expelled from their homes, experiencing the horrors of life as a refugee. All parameters, used by the World Health Organization (WHO) to determine the health status of a population, are showing significant deteriorating trends.

### **Impact of the War on the Health of the Population**

Armed conflict has put an enormous direct toll on the population. It is important to emphasize that a substantial share of this burden is borne by the youngest and most productive segments of the population. The deterioration in living conditions, malnutrition in certain population groups, intense psychological stress and loss of access to adequate health services have caused a decline in the overall health status of the population.

War-related injuries, mental health problems and communicable diseases have appeared as major causes of morbidity. Overall, 60 percent of surgical cases from July 1992 through August 1993 were war-related injuries. For example, in the Zenica Regional Hospital, the proportion of surgical cases associated with trauma increased from 22 percent in April 1992 (the month the war began) to a peak of 78 percent in December 1992.

The health status of some groups of refugees from cities under siege has been alarming. For example, medical examination of 4,200 refugees from Srebrenica (upon arrival in Tuzla) revealed the following: 72 percent of the children had questionable nutritional status, 42 percent had anemia, 40 percent had upper respiratory tract infections, 31 percent had a skin disease and 17 percent suffered from diarrhea. Among adults, 60 percent showed psychological disorders, 18 percent had a chronic rheumatic disorder or cardiovascular disease, and 15 percent had hypertension.

Several communicable diseases increased during the war as well. Tuberculosis may have increased by as much as 50 percent nationwide, and in Sarajevo and Zenica, cases of tuberculosis increased by over 100 percent. Recent data on mortality and morbidity rates of common non-communicable diseases, such as cardiovascular and cerebrovascular diseases, stroke and cancer, are not available. Hepatitis A and diarrheal diseases emerged as major problems among the Bosnian population, particularly in crowded collective centers. Rodent-associated diseases and hemorrhagic fever were epidemic in 1995, and an epidemic of leptospirosis (a waterborne bacterial infection) was also reported. In 1994, there were 875 cases of measles reported — a 250 percent increase from 1993 — and 947 cases of mumps — a nearly six-fold increase from 1993.

*Nutrition and lifestyle factors.* Food intake in Bosnia and Herzegovina just before the war included a high consumption of meat, fatty food and alcoholic drinks in some population groups (particularly among men). During the first years of the war, the nutritional status of the Bosnian population, especially among vulnerable groups such as young children, pregnant and lactating women and the elderly, declined. Trends in various indicators (weight loss, decline of household food stocks, rising

food prices, reduction in food aid distribution) underscore this. Food quality and the nutritional status of the populations of some cities under siege and refugees/displaced persons from those cities was found to be worse than for the rest of the country. During and after the cease-fire of 1994, nutritional status improved. No reliable data are available on the war's effect on tobacco and alcohol use, but conditions may well have worsened with respect to both.

*Environmental factors.* During the war, massive population movements and the concentration of people in those parts of the country considered safer than others resulted in major problems in the delivery of basic water and sanitation services to the Bosnian people. Water supplies in many urban centers are grossly insufficient. Apart from the dramatic example of Sarajevo, in many other areas of the country water service is intermittent, water quality has deteriorated and waterborne diseases are becoming more common. Sewage collection systems have become clogged, and pumping and treatment stations do not operate. Solid waste collection and disposal has practically collapsed, and waste disposal in health care institutions is particularly problematic. As a result, cities formerly under siege, river banks and forests have become dumping sites, bringing new health hazards to citizens.

*Mental health concerns.* As a direct consequence of the war, mental health problems in Bosnia and Herzegovina are enormous, especially among refugees and displaced persons. Psychological trauma is thought to be widespread and accompanies physical, social and economic destruction of people and the environment. The major consequences of untreated traumas are reflected in increased cases of chronic mental illness, self-medication (drug and alcohol abuse), increased domestic and criminal violence, as well as increased homicide and suicide rates. In this emergency situation, the number of local mental health professionals is sufficient to cover only a fraction of the estimated needs.

### **Impact of the War on Health Personnel and Infrastructure**

Prior to the war, the Bosnian health care system was well-staffed with 7,032 medical doctors, 1,408 dentists, and 18,257 nurses and other paramedical staff. Currently, it is estimated that, as a result of migration and casualties, there are only about 15,000 active staff left in the health sector. This represents a nearly 40 percent drop. The sharpest decline compared to pre-war numbers has been in dentists (60 percent) and pharmacists (50 percent). Around 35 percent of physicians and nurses have fled the country or have been killed.

The physical infrastructure of the health sector has been severely affected by the war as well. The direct (damage or destruction due to bombing) and indirect (absence of maintenance and repair due to lack of resources) effects of the war have led to a collapse or loss of functionality of a significant number of hospitals and health centers. Government sources estimate that more than one-third of the health infrastructure has been destroyed or heavily damaged. For example, there were approximately 80 ambulatory clinics in Sarajevo before the war — now there are 47. In addition, one general and one regional hospital have become totally dysfunctional.

### **Goals of the Reform Program**

Reconstruction is our priority now, but, as we build, we must build a health care system that is of high quality, efficient, affordable and sustainable. Because of the magnitude of our task, the program has been divided into five separate but interrelated components: health system design, human resources development, infrastructure development, public health programs and rehabilitation. While analyzing, planning and implementing reforms, we need to maintain the existing level of health care, and improve it during the transition period as much as possible. At this moment, we have the support and goodwill of the international community to help us, and we cannot afford to lose momentum.