

# Iranian casualties during the eight years of Iraq-Iran conflict

## Vítimas iranianas durante os oito anos do conflito Iran-Iraque

Tehran, August 2nd 2007.

Dear Editors,

War is one of the critical determinants of health status of populations in many parts of the world. Armed conflict has been a major cause of deaths and morbidity throughout the history.<sup>3</sup> In the 25 conflicts during the 20<sup>th</sup> century, 72 million deaths were conflict-related and civilians were included in nearly half of the deaths during the armed conflicts from 1987 to 1997. Two million children were killed and an additional four to five million children were seriously injured.<sup>2</sup> In terms of losses of disability-adjusted life years (DALYs), war was ranked the 16<sup>th</sup> by World Health Organization (WHO) in the global burden of disease in 1990 and it is expected to be ranked in the eighth position by the year 2020.<sup>5</sup> War has a great impact on populations both directly and indirectly, and sometimes indirect consequences of war may occur several years after a conflict has ended. The indirect consequences of wars which may increase susceptibility to illness include: refugees, internally displaced individuals, communicable diseases, psychological distress, food insecurity, crowding, poor access to water and the last but not the least sanitation. Injuries from firearms, anti-personnel land mines, interpersonal violence, and disabilities are likely to require long-term health care and may be costly.<sup>6</sup> The imposed Iraq-Iran war which began in 1980 and lasted until 1988 was one of the longest military conflicts in the 20th century and extended beyond 1,200 km of the western and south-western Iranian borders. The war caused hundreds of thousands deaths, injured and displaced millions, and caused billions of dollars in destruction.

In Iran, two organizations – The Foundation of Martyrs Affairs (FMA) and The Janbazan Affairs Organization (JAO) – have been the sole responsible for providing facilities to the victims of the war in Iran and war victims are categorized into four groups: killed, injured, prisoner of war and missing individuals.

The exact number of injured persons during the eight years of Iraq-Iran conflict is not available, but according to JAO report, 398,587 individuals sustained injuries that required prolonged medical and health care fol-

lowing primary treatment. Of them, 52,195 (13%) were injured due to the exposure to chemical warfare agents such as mustard gas or nerve agents. Due to delayed manifestation of symptoms in chemical agent exposure, the number of Iranian chemical warfare victims will increase in the future. In addition, 218,867 Iranians died due to war injuries and it number included 56,575 army forces personnel (25.8%), 41,040 Islamic Revolutionary Guards Corps (IRGC) (18.8%), and 87,822 volunteers (40.1%). Meanwhile, civilians (mostly women and children) account for 15.3% (N=33,430) of total deaths. The mean age of martyrs was 23 years old. A major consequence of these deaths was that it left more than 144,000 children orphaned. Prisoners of war comprise 42,875 Iranian victims. They were captured and kept in Iraqi detention centers for many years after the war was over (from 2.5 to more than 15 years). Finally, we should point out that the number of untraceable individuals is not precisely known.

In addition to direct deaths and injuries, the indirect consequences of war are also considerable. It has been suggested that there is a positive association of stress posttraumatic stress disorder (PTSD) or combat stress exposure with later mortality and morbidity. These include circulatory, nervous system, digestive, musculoskeletal, and respiratory diseases, which are reported not only in war veterans but also in their family.<sup>4</sup>

We strongly recommend further epidemiological investigations for better understand the impact of these serious problems and their consequences on our social and public health, helping to improve health care services targeted to war victims.

We, at The Janbazan Medical and Engineering Research Center (JMERC) and Sina Trauma and Surgery Research Center (STSRC), have conducted studies to investigate war injuries and their consequences in victims of the conflict. Over the past years, the pattern of injuries and the outcome of land mine victims have been investigated in five Iranian western provinces and its first report has been presented at the 4th European Congress on Emergency Medicine.<sup>1</sup> In another project, long-term health problems in Iranian prisoners of war will be investigated.

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