Abstract

By the year 2020, the incidence of trauma has been predicted to rise worldwide and the death rate is expected to increase from 5.1 million to 8.4 million. The most important cause of death and severe morbidity up to the age of 45 years is traumatic brain injury, with or without polytrauma. Since the early 1970s, traffic-related deaths in Germany have dropped continuously—with the exception of the early 1990s because of the German reunification—from approximately 20,000 to approximately 5300 in 2005, despite an enormously increased traffic volume. Compared with 2004, the death rate declined by 8.2% in 2005. Undoubtedly, this success results mainly from powerful prevention strategies, such as airbags, seat belts, helmets, etc. In 2006, national economic costs for traffic-related injuries were reduced to 32 billion Euros, and expenses for material damages (15.7 billion Euros) surpassed those of personal damages (15.2 billion Euros) for the first time in German history. According to the data of Germany’s Federal Statistical Office, there were 335,845 accidents resulting in personal injury in Germany in 2007. 4949 people were killed and 75,433 seriously injured in these 335,845 accidents. Following their accidents, these people require appropriate medical care. Germany has efficient hospitals that provide the various levels of care needed, but those with serious injuries should be treated in appropriate level one or level two trauma centers. Since then it has been shown that the trauma mortality rate in Germany is still falling. Despite this decline and the efficiency of the centers that provide care, it has not been clear until now how homogeneous care is, as measured by the mortality rate.

From Injury Site to Hospital: Who, How, Whereby

The treatment of patients with polytrauma, initially consisting of adequate preclinical resuscitation and management, encompasses a comprehensive package of measures. Their effective administration requires great competence and skill as well as a high level of organization and logistics among emergency physicians and preclinical rescue personnel. In particular, endotracheal intubation, usually regarded as necessary to counteract...