1. Center For Disaster Medicine And Traumatology And Dept. Of Surgery, Linköping University Hospital, Linköping/Sweden
2. Surgery, Vrinnevi County Hospital, Norrköping/Sweden
3. International Committee of the Red Cross, Geneva/Switzerland
4. Department Of Public Health Sciences, Karolinska Institutet Centre for Research on Health Care in Disasters, Stockholm/Sweden

Study/Objective: To assess whether there is a difference in hospital workload for treating weapon-wounded females compared to males.
Background: Civilians constitute 33-51% of victims in armed conflict. Several reports on civilian injuries exist but few are focusing on injuries afflicting females. We analyzed routinely collected data on weapon-related injuries from the International Committee of the Red Cross (ICRC) hospital in northwestern Pakistan, in order to define injury-patterns and type of surgical treatment for admitted females.
Methods: A total of 3,028 patient-files (376 adult females) from consecutively admitted patients to the ICRC-hospital in Peshawar, from February 2009 to May 2012 constitutes the study. Information regarding injury-mechanism, time since injury, vital parameters at admission, type of injury, treatment and basic outcome were extracted from the files, and prospectively registered and retrospectively analyzed. Comparisons between gender and age-groups were done by cross-table analyzes or non-parametric tests when appropriate.
Results: Females were younger than males (20 vs 25 years, $p < 0.001$), arrived sooner after injury (24 vs 48 hours, $p < 0.001$) and were victims of bombs and missiles more frequently (64% vs 57%, $p < 0.001$). Vital parameters such as systolic blood-pressure (110 vs 112 mmHg, $p < 0.001$) and pulse-rate (100 vs 90, $p < 0.001$) were more affected at admission. Females were subjected to surgery (83% vs 77%, $p < 0.05$) and given blood transfusions more often (19 vs 14%, $p < 0.01$). No differences in amputations or inhospital mortality were noticed.
Conclusion: Females treated at the ICRC-hospital in northwestern Pakistan are markedly affected by indiscriminate weapons such as bombs and missiles. Their consumption of surgery is greater than indicated by their numbers, which might have an impact on planning for staffing, and premises in similar contexts.

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War Surgical Treatment of Comminute Fractures Requires more Resources than Isolated Life Threatening Wounds

Måns Muhrbeck[1], Zaher Osman[2], Dell Saulnier[3], Johan Von Schreeb[3], Harald Veen[2], Peter Andersson[4]
1. Surgery, Vrinnevi County Hospital, Norrköping/Sweden
2. International Committee of the Red Cross, Geneva/Switzerland
3. Department Of Public Health Sciences, Karolinska Institutet Centre for Research on Health Care in Disasters, Stockholm/Sweden
4. Center For Disaster Medicine And Traumatology And Dept. Of Surgery, Linköping University Hospital, Linköping/Sweden

Study/Objective: To assess whether war wound severity corresponds to consumption of resources in a limited resource setting.
Background: The International Committee of the Red Cross (ICRC) has developed a Wound Classification system (RCWC) for assessing war wound severity. The RCWC score is based on wound size, tissue involved, existence of fracture and if there is threat to limb and/or life. Whether or not the RCWC score corresponds to consumption of resources has not previously been studied.
Methods: Data from 1,573 patients was analyzed from a prospectively created database containing information from patients treated at ICRC's hospital for war wounded in Peshawar, Pakistan, between 2009-2012. High resource consumption was defined as ≥3 operations, amputation, ≥3 blood transfusions or ≥15 days of hospital stay. The relationship between RCWC and high resource consumption was assessed with logistic regression analysis.
Results: Age (median) was 24 years (0,5-84). Patients were 87% male, and 18% were <16 years. 55% were treated within 24 hrs of injury. The main causes of injury were blast/fragment (56%) and gunshot (37%). Only 32% had soft tissue injury, 43% had a fracture and 25% had wounds threatening limb and/or life. Treatment of extensive soft tissue injury required more resources than simple fractures (odds ratio 12,11, 95% CI: 5,50-26,68 vs. 2,35, 95% CI:1,61-3,43). Comminute fractures consumed more resources (OR 8,44, 95% CI: 5,93-12,00), than isolated life threatening wounds (OR 3,70, 95% CI: 2,42-5,65). There was 15% of the patients with life threatening wounds, and 5% of all patients died during treatment.
Conclusion: Treatment of comminute fractures required, somewhat unexpectedly, more resources than isolated life threatening wounds. A potential relationship between certain RCWC groups and high resource consumption could be seen. However, this requires further analysis to establish.

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Medical Formations of EMERCOM of Russia and their Experience in Providing Emergency Medical Assistance to Emergency-Affected in Russia and Foreign Countries

Sergei Aleksanin
Director, Federal State Budgetary Institute "The Nikiforov Russian Center of Emergency and Radiation Medicine" EMERCOM of Russia, Saint-Petersburg/Russian Federation

Study/Objective: Ministry of Russian Federation for Civil Defense, Emergencies and Elimination of Consequences of Natural Disasters (EMERCOM) of Russia includes medical formations for providing Emergency Medical Services (EMS). At mass casualties disasters EMS is provided directly in the disaster zone, or in specialized medical institutions using Air-mobile Hospital (AH) or air medical evacuation correspondingly. The objective is to assess and analyze the efficiency of the formations at emergencies and verify sufficiency of their personnel and material-technical supply.