Patient characteristics during rock festivals on the scene and in the hospital

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Introduction: Most studies on mass gatherings, such as Rock concerts are limited to the patients treated at the event. The purpose of this study was to analyse the numbers and type of trauma or illnesses during a Rock festival treated on the scene and in the hospital.

Methods: A retrospective analysis of the database of all cases treated on the scene between 2009 and 2011 at a 4-day Rock festival (Rock Werchter) and a one day concert was performed. In addition, all medical records of patients transferred to the hospital from these concerts were analysed to evaluate the needed technical exams, length of stay and final treatment.

Results: During those three years, 18440 and 936 patients were taken care of at the scene during respectively the 4 and one day festival. This results in a patient presentation rate of respectively 18.95 (+/- 5.62)/1000 for the 4 day festival and 10.44 (+/- 4.06)/1000 for the one day festival. The average patient age treated at the scene was 25 (+/- 8.66) and 32.45 (+/- 11.22) years and 55.05 % and 66 % was female. The majority were minor trauma and insect bites. During a warmer edition, significant more patients were taken care of.

217 patients were transported to the hospital and 63.8 % was male. The transport to hospital rate was 0.2 (+/- 0.08)/1000 and 0.15 (+/- 0.03)/1000. 71.4 % needed X-rays and 31.6 % needed lab tests. 36.2 % received additional drugs in the hospital. The average LOS was 9.53 hours.

Conclusions: At these Rock festivals, compared with other studies significantly more patients are treated at the scene. However, transport to hospital rates are comparable. Patients needing medical attention remain relative constant. During warmer days, more first aid is needed, indicating that the number of a medical staff is more predictable than the needed number of first aid helpers.

Key words: mass gathering, first aid, disaster medicine

Topic: disaster medicine

Oral presentation and Dries als spreker