0332 MAPPING OF INJURIES FROM INTERPERSONAL VIOLENCE USING GEOGRAPHICAL INFORMATION SYSTEM (GIS) IN AN EMERGENCY DEPARTMENT

C Faergemann*, K H Rasmussen, J M Lauritsen *Correspondence: Accident Analysis Group, Odense University Hospital, Sdr. Boulevard 29 DK-5000 Odense C, DK-5000, Denmark*

10.1136/ip.2010.029215.332

Background Emergency departments (ED's) in Denmark are now on the verge of routinely using Geographical Information System (GIS) for mapping of traffic injuries. However, GIS may also be feasible for mapping of injuries from violence.
Aim The aim of this study was to evaluate the feasibility of GIS for mapping injuries from violence for routine use in the ED's.
Material and Methods The study included 1188 inhabitants of the Odense Municipality in Denmark who consecutively contacted the ED at Odense University Hospital after being victims of interpersonal violence. The degree of precision regarding location of the violent act was compared to variables related to victim and the episode. Every episode of violence was geomapped and "black-spots" was indentified.
Results Overall 92% of the violent episodes could be mapped, 59.9% (95% CI 57.1 to 62.7) exactly, 19.0% (95% CI 16.9 to 21.4) on route, and 13.1% (95% CI 11.3 to 15.2) in known area. In children only 28.6% were mapped exactly. Violence against women was mapped exactly more common than violence against men (69.9% vs 55.6%). Domestic violence was mapped exactly in 82.8% of the episodes compared to only 56.2% of the community violence. Using the GIS it was possible to identify "black-spots".
Conclusion GIS seems feasible for routine mapping of episodes of violent victimisation in ED's. Most episodes are possible to map exactly, but some variation was found with gender, age and violence typology. GIS is a useful tool to illustrate the geography of violence.