0924 USING AUTOMATIC RECOGNITION PROCEDURE FOR DETECTING PRODUCTS FROM INJURY DATABASE OPEN TEXT RECORDS: THE CASE OF CAUSTIC SUBSTANCES

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Objective In Italy the EU Injury DataBase (IDB) reports chemical products in 0.9% of home and leisure accidents. The whole European sample reports a similar figure for injury by chemical effect and 0.2% for chemical corrosion injuries. A simplified ED registry on home accidents. The 90% of toxic exposures occur at home. The aim of study is monitoring caustic effects in Italy using automatic recognition of free-text in ED medical databases.

Methods We created a Stata software program to automatically identify caustic or corrosive injury cases. The procedure has to recognise caustic or corrosive agent within the free text using a agent specific list of keywords. In order to assess the capacity of recognition of this expert system we focused the attention on the sensibility and specificity of the procedure.

Results 10 hospitals of 6 regions participated at the study. The program identified 112 cases of injury by caustic agents. Checking the cases by quality controls we assessed 99 cases as true positive cases, as to say 0.59% (99% CI 0.45–.76) of the total sample, almost three folds greater than the expected value ($p<0.000$) from European codified information. False positives were 11.6% of the recognised cases (99% CI 5.1% to 21.5%).

Conclusion Contrary to our a priori hypothesis the automatic recognition consented a level of individuation of agents with caustic effects significantly much greater than what expected according to the values from current codifications reported in the European database.