

TREND OF DRUGS OF ABUSE DETECTION IN THE URINE OF PATIENTS OF THE UNIVERSITY HOSPITAL OF MODENA, DURING THE PERIOD 1997-2006

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A retrospective analysis of data from over 30.000 urinalysis screening between 1997 and 2006 has been performed. Urine samples had been analysed for the presence of opiates, cocaine, cannabinoids, and amphetamines in the Laboratory of the Clinical Pharmacology and Toxicology Section of the University Hospital of Modena by enzyme-multiplied immunoassay. All tests had been requested by the Departments of the Hospital, Emergency Department included, for their patients.

Results: as a whole, the percentage of positive samples declined over the 10-year period for all the tested drugs. However, the pattern changed: in the period 1997-1999 the drugs most often detected were opiates, followed by cannabinoids, whereas in the period 2004-2006 the drugs most often detected were cannabinoids, followed by opiates and cocaine at the same level. The detection of opiates peaked between 1997-1999 (mean 25.47%), then, over the following seven years, it steadily decreased to the level of 5.2% in 2006. The detection of cannabis also decreased from about 16% of all samples in the years 1997-1999 to 7.6% in 2006. The percentage of urine samples that were positive for amphetamines decreased from 4.6% in 2002 to 1.09% in 2006. The detection of cocaine and its metabolites peaked between 1998-2001 (mean 10.4%), then declined to a mean of 5.9% in the period 2004-2006.

Conclusions: Since 1996, implementation of harm reduction policies, mainly methadone maintenance treatment, at the drug services units of the province of Modena produced a reduction of drug addicts hospitalised for diseases associated with injection practices, as shown by the substantial and steady fall of urine samples positive for opiates from 1997 to 2006.