Survey of ICD-10 Coding of Hospital Admissions Due to Recreational Drug Toxicity

Anoop Shah, David Wood, Paul Dargan

Department of Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust, LONDON SE1 9RT, United Kingdom

BACKGROUND: Acute recreational drug toxicity is a common cause of hospital admission, and research in this area requires accurate case identification from admissions data (Hospital Episode Statistics) using ICD-10 codes. However, it is unclear how recreational drug presentations are currently coded, as there are no specific codes for many drugs.

METHODS: We sent a postal survey to the Clinical Coding Departments of acute hospital trusts in England and Wales, asking which primary and secondary ICD-10 codes they would usually use to code a set of discharge summaries for 12 hypothetical patients. These included 7 recreational drug-related presentations: palpitations due to mephedrone, gamma-butyrolactone (GBL) toxicity and withdrawal, methadone and heroin overdose, chest pain due to first-time use of cocaine, seizure due to ‘ecstasy’, agitation due to benzylpiperazine and chest pain in a regular user of cocaine. There was also a case of a body stuffer with possible opiate toxicity from a swallowed packet, and a case of alcohol intoxication. Three non-toxicological presentations were included as ‘controls’.

RESULTS: A total of 64 responses were received. The non-toxicological and alcohol cases had similar codes assigned by all respondents. The opiate overdose had a primary code for methadone or heroin in 95% of the responses. The body stuffer case had a wide range of primary codes (12 different codes amongst 63 responses), of which the most common were ‘Observation for suspected toxic effect from ingested subs’ (24%) and ‘Poisoning by Heroin’ (22%). For the two cases of cocaine-related chest pain, only 40% of responses assigned cocaine toxicity as the primary diagnosis; the others stated chest pain. The ecstasy case was coded as ‘Poisoning by psychostimulants with abuse potential’ by 84% of respondents. For the cases of mephedrone, GBL and benzylpiperazine, a wide range of different primary codes were suggested, but over 98% of them referred to toxicity or poisoning.

CONCLUSIONS: Hospital admissions due to acute recreational drug toxicity for which there is no specific ICD-10 code may be assigned a wide variety of primary codes. In some cases this relates to the symptom rather than the underlying recreational drug use. Future revisions of the ICD-10 coding system should include more specific codes for recreational drug toxicity.