Validation of a regional drug misuse database: implications for policy and surveillance of problem drug use in the UK

Matthew Hickman, Heather Sutcliffe, Arun Sondhi, Gerry V Stimson

The eight regional drug misuse databases constitute the largest investment (about £100 000 each annually) in drugs surveillance in England. Along with databases in Scotland and Wales, they provide the main intelligence on problem drug takers, including monitoring government targets.¹ They were established because of the lack of information on clients of drug agencies² but have attracted criticism for not properly informing policymakers of the extent of drug use and not accurately assessing client volume.³ We performed a study in North Thames to assess the level of underreporting of "episodes" (new clients or clients who reattend after an absence of six months⁴) to the regional database and the relation between episodes and the number of clients and prevalent drug takers attending agencies in a year.

Methods and results

Over 80% of reports to the North Thames database come from 62 specialist drug agencies. These were categorised according to type, and a sample selected using random number tables: 3 from 8 drug dependency units, 9 from 27 statutory community based drug services, 5 from 16 non-statutory community services, 2 from 9 residential rehabilitation units, and 1 of 2 needle exchanges. Two statutory community services refused and were not replaced. A further six agencies which did not participate in the database were identified. Two were selected randomly (both non-statutory community services) and agreed to participate, making a final sample of 20 agencies (29%). A researcher visited the agencies (April-December 1995) to collect a standard dataset on everyone who attended during 1994. These were matched with individual agency reports for 1994 and then against the whole dataset in the database using initials, date of birth, sex, and, in uncertain matches, postcode, ethnic group, drug problem, and date of report.

Altogether 5673 clients, 4543 episodes, and 5136 prevalent problem drug takers were collected from the 20 agencies. There were fewer episodes and drug takers than clients because only new clients and those who reattend after a six month gap generate a new episode and drug takers may attend more than one agency. The table summarises the under-reporting. The level of reporting differed by type of agency: 9% of episodes at drug dependency units were unreported compared with 20% for non-statutory community services, 31% for statutory community services, 40% for residential rehabilitation units, and 63% for the needle exchange. About half the 40% shortfall between database reports and agency records of clients (excluding the two agencies which did not report) was due to under-reporting (998) with the remainder due to the "episode" definition excluding continuing clients who have not had six months between attendances (1037).

Table 1 Summary findings of underreporting among all agencies and those that participate in the database and correction factors for North Thames regional drug misuse database

Measure and scope	No (%)	Correction multiplier
Under-reporting of episodes		
All drug agencies	4543 (32)	1.47
Participating drug agencies	4105 (25)	1.33
Under counting of volume of clients		
All drug agencies	5673 (46)	1.85
Participating drug agencies	5082 (40)	1.67
Underestimation of prevalent drug takers		
All drug agencies	5136 (30)	1.43
Participating drug agencies	4600 (22)	1.28

Comment

This study is the first to assess systematically the coverage and validity of the drug misuse database. Our estimates, generalisable to North Thames, also represent the best available for adjusting national figures. Though an earlier study estimated underreporting at less than 3%, the sample was self selected from agencies with the largest number of reports and biased towards high levels of reporting.⁵ Most specialist drug agencies in North Thames participate in the regional database, and in terms of coverage (including completeness of reporting) it compares favourably with other surveillance systems in the UK. Nevertheless, the database does not measure the prevalence of known problem drug takers, which means it is inadequate for planning services and provides a false picture of trends of visible drug use. The database needs to be changed rather than abandoned since policymakers and health services need information on drug users in contact with services.

We thank staff of the agencies who participated in this exercise.

Funding: North Thames Regional Health Authority. The Centre for Research on Drugs and Health Behaviour is core funded by the research and development directorate of North Thames regional office of NHS Executive.

Conflict of interest: None.

- 1 Tackling drugs together. A strategy for England 1995-1998. HMSO: London, 1995.
- 2 Stimson GV. AIDS and injecting drug use in the United Kingdom, 1987-1993: the policy response and the prevention of the epidemic. *Soc Sci Med* 1995; 41:699-716.
- 3 Sutton M, Maynard M. Are drug policies based on fake statistics? *Addiction* 1993; 88:455-8.
- 4 Donmall MC. *The drug misuse database: local monitoring of presenting drug use*. London: Department of Health 1990.
- 5 Crabbe T. Drug workers and the drug misuse database. *International Journal of Drug Policy* 1995; 6:31-8.

(Accepted 8 April 1997)

See editorial by Farrell and pp 601, 613

Centre for Research on Drugs and Health Behaviour, Department of Social Sciences and Medicine, Imperial College School of Medicine, London SW6 1RQ

Matthew Hickman, *Epidemiologist*
Heather Sutcliffe, *researcher, regional drug misuse database*
Arun Sondhi, *researcher, regional drug misuse database*
Gerry V Stimson, *director*

Correspondence to: Mr Hickman (m.hickman@ic.ac.uk)

BMJ 1997;315:581