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# Quantifying Problematic Drug Use Within Liverpool and Sefton Drug [and Alcohol] Action Teams (2000/1 and 2001/2)

Capture-Recapture Analysis

## Executive Summary

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## Executive Summary

The North West of England is a densely populated, mainly urban area where inhabitants generally have poor health overall. In 2001/2 a total of 2,350 residents of Liverpool Drug and Alcohol Action Team (DAAT) and 882 residents of Sefton Drug Action Team (DAT) made demands for structured drug treatment. Monitoring the drug use pattern in Liverpool (and indeed other urban areas) is useful as there tends to be a diffusion of drug use trends from urban to rural settings and therefore provides D[A]ATs in rural areas with advanced warning of changing trends. Liverpool, and to a certain degree Sefton, therefore act as a barometer of drug use issues for Cheshire and Merseyside in general.

Capture-recapture analysis provides a means of determining the size of the drug using population within a particular area where individuals are recorded on multiple independent databases. Here, capture-recapture estimates are reported for all problematic drug users resident in Liverpool and Sefton D[A]ATs in 2000/1 and 2001/2, and comparisons with estimates from previous years are provided. Estimates presented throughout this report represent problematic drug use and do not include those individuals that may use the drugs in question (opiates, crack and cocaine) with no health or legislative problems. Estimates are therefore not a quantification of *everyone* that uses these drugs.

It is envisaged that this report will provide Liverpool and Sefton D[A]ATs with intelligence to supplement regional and national monitoring data and therefore assist in providing a greater understanding of problematic drug use within various population sub-groups within each area.

### Estimated Problematic Drug Use in Liverpool DAAT: Key Findings

#### Summary of Key Findings: Liverpool DAAT

		Capture-recapture estimates					
		1998			2001/2		
		N	Per 1,000 population	% contacting treatment	N	Per 1,000 population	% contacting treatment
	Total	7121	34.5	26.6	6170	31.6	34.4
Sex	Male	5471	52.2	22.1	4775	51.2	30.2
	Female	1702	16.8	40.1	1339	13.1	50.7
Age (Years)	15-24	1344	19.1	21.0	1563	22.1	11.6
	25-44	5805	42.7	27.8	4753	38.2	40.8

Liverpool DAAT experienced a reduction in the estimated number of problematic drug users between 1998 and 2001/2 (7,121 and 6,170 respectively). This represented a fall in problematic drug use prevalence from 34.5 to 31.6 per 1,000 of population during this timeframe. Despite this fall, treatment data show an increase in the number of problematic drug users that made demands for structured drug treatment. The estimated proportion of problematic drug users seeking assistance therefore correspondingly rose from 26.6% in 1998 to 34.4% in 2001/2. Liverpool DAAT can therefore demonstrate that they have not only increased the number of individuals

demanding treatment (an aim of the National Treatment Agency) but in addition, and equally important, the proportion.

Falls in the estimated number of problematic drug users in Liverpool DAAT between 1998 and 2001/2 have occurred in both sexes. The estimated number of male problematic drug users fell from 5,471 to 4,775 and females fell from 1,702 to 1,339 during this period. When expressed as a proportion of the whole population in Liverpool DAAT (ages 15 to 44 years), male problematic drug use fell slightly (52.2 to 51.2 per 1,000 of population) and female problematic drug use fell more comprehensively (16.8 to 13.1 per 1,000 of population).

It was estimated that the majority of problematic drug users in Liverpool DAAT in 2001/2 were aged between 25 and 44 years with approximately one quarter (24.7%) aged between 15 and 24 years. This compares to 1998, when 18.8% of the estimated total number of problematic drug users were in the younger age category. Estimates for those aged 15 to 24 years have risen from 1,344 in 1998 to 1,563 in 2001/2 with a corresponding increase in prevalence from 19.1 to 22.1 per 1,000 of population. The reverse is true for those in the older age category with estimates declining from 5,805 in 1998 to 4,753 in 2001/2 and the prevalence falling accordingly from 42.7 to 38.2 per 1,000 of population. Dissuading young individuals from starting drug use, or preventing this drug use from becoming problematic is a challenge for Liverpool DAAT.

Calculating the number of individuals having contacted a treatment agency as a proportion of the estimated total number of problematic drug users provides a measure of service penetration. Overall in Liverpool DAAT in 2001/2, an estimated 34.4% of individuals had contact with drug services compared, to 26.6% in 1998. As in 1998, females were more likely to engage in dialogue with treatment services in 2001/2 than their male counterparts. Whilst 50.7% of females had sought structured assistance in 2001/2, only 30.2% of males had done likewise. Liverpool DAAT has been successful in increasing service uptake by older problematic drug users with 27.8% of those aged 25 to 44 years contacting drug services in 1998 compared to 40.8% in 2001/2. However, the increase in the estimated prevalence of problematic drug use of those aged 15 to 24 years between 1998 and 2001/2 was not mirrored by an increase in the number receiving treatment. In 1998, 21.0% of those in this age group had been seen by drug treatment agencies, compared to just 11.6% in 2001/2. Thus, Liverpool DAAT must work hard to attract young drug users and in particular young male drug users into treatment.

## Estimated Problematic Drug Use in Sefton DAT: Key Findings

### Summary of Key Findings: Sefton DAT

		Capture-recapture estimates					
		1999			2001/2		
		N	Per 1,000 population	% contacting treatment	N	Per 1,000 population	% contacting treatment
	Total	2395	21.6	30.6	1968	18.6	40.5
Sex	Male	1821	32.6	25.8	1319	25.8	39.3
	Female	550	10.0	48.0	706	13.0	39.5
Age (Years)	15-24	603	19.6	14.1	262	8.5	25.2
	25-44	1793	22.4	36.1	1751	23.5	41.8

Estimated levels of problematic drug use in Sefton DAT have declined between 1999 and 2001/2 (2,395 and 1,968 respectively) despite a small increase between 2000/1 and 2001/2. This relates to an overall fall in estimated prevalence from 21.6 per 1,000 of population in 1999 to 18.6 per 1,000 of population in 2001/2 (16.2 in 2000/1). Sefton DAT should be encouraged by treatment penetration figures for this time period, with an estimated 30.6% of all problematic drug users contacting treatment agencies in 1999, compared to 35.7% in 2000/1 and 40.5% in 2001/2. This increase was despite a fall in the number of individuals contacting drug services between 2000/1 and 2001/2 and illustrates the benefits of capture-recapture analysis in providing improved intelligence of local drug use patterns.

Consideration of stratified estimates show that the fall in number and prevalence of problematic drug use in Sefton DAT was confined to males only. Estimated levels of male problematic drug use fell from 1821 in 1999 (32.6 per 1,000 of population) to 1319 (25.8 per 1,000 of population) in 2001/2. Conversely, estimated female problematic drug use has risen between 1999 and 2001/2. Initially, female rates fell from 10.0 per 1,000 of population in 1999 (or 550 estimated female problematic drug users) to 8.3 per 1,000 of population in 2000/1 (or 450 estimated female problematic drug users). However the estimated number of female drug users increased dramatically the following year to 706 or 13.0 per 1,000 of population.

Falls in the estimated male drug using population has resulted in increased male treatment penetration levels with Sefton DAT being successful in increasing the estimated proportion of males in contact with drug treatment agencies from 25.8% in 1999 to 32.1% in 2000/1 to 39.3% in 2001/2. Increasing estimated levels of female problematic drug use have not been mirrored by increasing service contact, with the estimated proportion of female drug users falling from 48.0% in 1999 to 46.7% in 2000/1 and 39.5% in 2001/2. Sefton DAT must therefore work hard to attract these 'new' female drug users into treatment but should be encouraged by rising male penetration levels as males have traditionally been more reluctant to seek assistance for their drug use.

In 2001/2, the estimated prevalence of problematic drug use among those aged 15 to 24 years remains lower than the estimated prevalence of those aged 25 to 44 years (8.5 and 23.5 per 1,000 of population respectively). The estimated number of problematic drug users aged 15 to 24 years has fallen between 1999 and 2001/2 despite a small rise between 2000/1 and 2001/2 (1999; 603, 2000/1; 216 and 2001/2;

262). Prevalence rates have fallen accordingly. Treatment penetration estimates, however, show that the fall in the number of problematic drug users aged 15 to 24 years has not been mirrored by a fall in those contacting treatment agencies. Therefore, whilst only 14.1% of those aged 15 to 24 years had contacted a drug service in 1999, 25.2% had done likewise in 2001/2.

Estimated rates of problematic drug use in the older age category have fluctuated from 1,793 in 1999 (22.4 per 1,000 of population) to 1,426 in 2000/1 (19.1 per 1,000 of population) and 1,751 in 2001/2 (23.5 per 1,000 of population). However treatment penetration levels for this age group have steadily increased indicating a rise in the proportion of problematic drug users contacting drug services. In 1999, 36.1% of individuals aged between 25 and 44 years had contacted treatment, rising to 38.4% in 2000/1 and 41.8% in 2001/2. Sefton DAT should be pleased with rising treatment penetration levels in both age categories whilst acknowledging the continuing challenges of attracting younger problematic drug users into treatment.

### **Future Developments in Capture-Recapture Analysis and Drug Related Intelligence**

The Drug Monitoring Unit is currently implementing a comprehensive audit of all treatment data and is involved with collaborative work to develop improved capture-recapture data analysis techniques. It is the intention of the authors of this report to conduct enhanced capture-recapture estimates for 1998 onwards during 2004. This will include estimates for both all problematic drug use and injecting drug use for each year for each D[A]AT. Capture-recapture results will then be utilised to provide prevalence estimates over time. Analyses will be stratified to allow gender and age specific estimates to be generated and treatment penetration levels for each group will be given.