Estimates of the number of children who live with opiate users, England 2011/12

Introduction

Information from the National Drug Treatment Monitoring System (NDTMS) has been combined with estimates of the number of opiate users in England (in 2011/12)[1] to provide estimates of the number of children who may be considered as 'affected by parental opiate use' in England. Specifically, estimates of the number of children who live with female opiate users and the number of children who live with male opiate users have been produced, along with the number of opiate users who live with children.

The estimates refer to children under 18 that live in the same household as an adult opiate user at least one night a week and the adult does not necessarily need to have parental responsibility for the child. As an individual child could be living with more than one opiate user (e.g. their opiate using mother and a male opiate user) it is not possible to combine the numbers who live with a female opiate user and the numbers who live with a male opiate user to give an overall total estimate of the number of children who live with at least one opiate user.

Methods

The estimates in this paper combined estimates of the number of opiate users with information on whether opiate users in treatment according to NDTMS lived with children and, if so, how many children they lived with. This is carried out through several steps.

Step 1: Estimates of the number of opiate users, including by age and gender distinctly, have been derived by previous projects for 2011/12 and earlier years, using two related statistical methods[2] known as the capture-recapture method and the multiple indicator method. Additional analyses using the capture-recapture method have been carried out for 2011/12 to estimate the age group (15-24, 25-34 and 35-64) and gender breakdown of the previously published opiate prevalence estimates, and were carried out at regional level (e.g. males aged 25-34 in London).

Step 2: These three broad age groups may be too wide to provide detailed information on parental opiate use therefore an estimated 'distribution' of opiate users by age and gender has been constructed as follows:

The number of opiate users in drug treatment for each individual year of age/gender/region (e.g. males aged 27 in London) in 2011/12 is calculated from NDTMS. The breakdown by individual year is then fitted to each estimate by age group/gender/region calculated in Step 1.

Step 3: For each individual age and gender estimate resulting from Step 2, the proportion of opiate users who live with children and the average number of children living with an opiate user are obtained from NDTMS. The estimates can be aggregated to provide estimates at the age group or gender level, and specific analyses can be carried out for each Government Region.

Step 4: Final estimates were produced at local authority level by applying the regional estimates from Step 3 to the existing age group estimates for the local authority.

Producing the estimates at a lower level and then aggregating implicitly controls for differences in the likelihood of an opiate user being a parent and the likelihood of being in treatment by age, gender and region.

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[1]Hay, G, Rael dos Santos, A and Worsley, J (2014) Estimates of the prevalence of opiate use and/or crack cocaine use 2011/12: Sweep 8 report. London, National Treatment Agency for Substance Misuse. Available at http://www.nta.nhs.uk/uploads/estimates-of-the-prevalence-of-opiate-use-and-or-crack-cocaine-use-2011-12.pdf

[2]Hay, G, Gannon, M, MacDougall, J, Millar, T, Eastwood, C and McKeganey, N. (2006) Local and national estimates of the prevalence of opiate use and / or crack cocaine use (2004/05) in Singleton, N, Murray, R and Tinsley, L. Measuring different aspects of problem drug use: methodological developments. Home Office Online Report 16/06, Available: https://www.gov.uk/government/publications/measuring-different-aspects-of-problem-drug-use-methodological-developments

Assumptions

In generating these estimates, it is assumed that:

1. the underlying opiate prevalence estimates are correct;

2. the parenting information found in NDTMS is representative of all opiate users in England; in other words those who are in treatment are not more or less likely to be parents or have more or less children than those not in treatment. The validity of this assumption is difficult to test. However, an examination of the parenting information within NDTMS did not find that any particular group (such as those entering treatment for the first time) were more or less likely to be parents than the whole NDTMS treatment data set. Factors that could influence the representativeness of treatment data such as gender or age group are accounted for by constructing an estimate 'total' age and gender distribution;

3. the parenting information in NDTMS is accurate, i.e. that those completing assessments correctly report the children they are living with;

4. the information derived at the Government Region level can be applied to the relevant Local Authorities.

Results

Table 1 presents the estimated number of children who live with adult opiate users and the estimated number of adult opiate users who live with children. Separate estimates are provided by the gender of the adult opiate users and in the table the estimates are provide by Government Region. Local Authority Estimates will be released by PHE later in 2017.

Table 1. Estimated number of children who live with adult opiate users by gender of the opiate user and estimated number of adult opiate users who live with children by Government Region, England 2011/12

Government Region	Estimated number of children who live with opiate users		Estimated number opiate users who live with children	
	Female Opiate Users	Male Opiate Users	Females	Males
East of England	4,138	6,164	2,299	3,329
East Midlands	4,763	8,215	2,606	4,316
London	7,436	17,072	3,895	8,847
North East	3,528	6,832	1,903	3,581
North West	11,458	23,825	5,146	10,754
South East	3,843	7,306	2,268	4,199
South West	4,852	8,297	2,668	4,408
West Midlands	6,661	13,344	3,341	6,491
Yorkshire and the Humber	7,089	17,070	3,616	8,670
ENGLAND	53,769	108,125	27,743	54,596

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