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Characteristics of drug users who do or do not have care of their children

Petra S. Meier, Michael C. Donmall and Patrick McElduff

Abstract

Aims - To compare the relative frequency of eight indicators of problem drug use and potentially adverse social circumstances in drug using parents and non-parents and to explore whether a profile based on these characteristics differs according to whether or not dependent children live with their drug-using parent.

Design – The study utilises a 5-year national UK treatment monitoring system dataset.

Sample – 61,425 users with, and 105,473 without dependent children accessing drug treatment services in England and Wales between January 1996 and December 2000.

Measurements – Information about parenthood and children's residence was routinely collected. Drug use and social circumstance indicators were daily heroin use, daily alcohol use, regular stimulant use, sharing of injecting equipment, living with another user, living alone, unstable accommodation, and criminal justice referral.

Findings – There were clear differences between drug using parents according to where children live. Parents with children at home and non-parents showed fewer of the indicators than parents with children in care or elsewhere. Sixty-five percent of parents with none of the indicators lived with their children, compared to only 28% of those with three indicators and 9% of those with six or more indicators. Parents with children in care or living elsewhere showed the highest prevalence for each individual indicator.

Conclusions – Drug using parents demonstrate a range of potentially unfavourable drug use behaviours and social circumstances but those whose children live with them use drugs less frequently and live in more favourable conditions than those whose children live elsewhere. Protective factors may operate in family situations while severe drug use and adverse social circumstances may result in a breakdown of family structures.

Key words - Children, drug using parents, social environment, drug use patterns

Introduction

This study investigates the prevalence of several drug-use related indicators thought to put children of drug using parents at risk for poor developmental progress.

A range of studies has demonstrated the negative impact of having a drug using parent on many areas of child development (Advisory Council on the Misuse of Drugs 2003; Barnard & McKeganey 2004; Bauman & Levine 1986; Bays 1990; Hogan 1998; Johnson, Boney and Brown 1991; Kandel 1990; Kaplan-Sanoff & Leib 1995; Kolar, Brown, Haertzen and Michaelson 1994; Wilens, Biederman, Kiely, Bredin and et al. 1995). Possible pathways leading to detrimental outcome include the effects of drug use on the unborn child, on parental behaviour, on the socio-economic situation of the family, and the effects of parental drug use and criminal involvement as a behavioural role model (Hogan 1998).

Being under the influence of drugs may affect how sensitive and responsive an adult is to the child's physical and emotional needs (cf. Famularo, Kinscherff and Fenton 1992; Gawin & Ellinwood 1988). Regular users of opiates and stimulants, and those combining drug and alcohol use may be at particular risk for decreased responsiveness. Where maternal drug use is heavy, mothers have been reported to be less likely to play, to be emotionally available or to provide a stimulating environment to their children (Jeremy & Bernstein 1984; Kandel 1990; Kelley 1998). Drug using parents reported feeling more stressed, lacked social support and showed less adequate coping responses (Kelley 1998). There is evidence for a cumulative effect of drug use and socio-economic deprivation: drug use by itself did not predict the quality of parent-child interactions, whereas drug use in association with poverty, low SES, lack of psychosocial resources and being a single parent, did (Johnson & Rosen 1990; Suchman & Luthar 2000). Drug users are at an increased risk of psychosocial adversity including homelessness and involvement with the criminal justice system and such factors have been shown to negatively impact on child development (Advisory Council on the Misuse of Drugs 2003; Rubin, Erickson, San Agustin, Cleary, Allen and Cohen 1996).

Clearly there is a complex network of determinants that influence child development. Most studies have compared drug using parents to non-using parents, or children of these two groups. However, very little is known about behavioural and social environment differences between drug users with and without children. This study aims to examine whether parenthood is associated with such differences by

comparing patterns of drug use and social environment factors between a large group of parents who live with their children, a group not living with their children and a group without children.

Methods

Data source

The study examines data for drug users accessing specialist treatment services in England and Wales between January 1996 and December 2000. This 5-year data-set was derived from the Drug Misuse Database (Donmall 1999), an epidemiological treatment monitoring system.

Reports were sent to Regional Drug Misuse Database Centres whenever an individual with a recent drug-related problem presented to an agency with a new treatment episode. Anonymity was ensured by 'attributor' codes (initials, date of birth, and gender) which, through hard- and soft-matching routines, avoid the use of full names whilst minimising multiple counts of people visiting a number of agencies in the same year.

Exclusion criteria. For the purpose of the study, we imposed the following exclusion criteria: a) only the first recorded treatment episode per year for each person was selected, subsequent presentations during the same year being ignored to avoid double counting, and b) records were excluded if information on parenthood or children's residence was not available.

Missing data. Drug use and parenthood is a very sensitive area. Not all drug services discuss parenthood at assessment and not all users may be prepared to give information about their children. The proportion of clients for whom parenthood status was not provided was 29%.

Measures

Parenthood. The Drug Misuse Databases recorded information about parenthood by asking for the number of dependent children living "at home", "elsewhere", "in care" or at an "unspecified" location; cases in the latter category were excluded. The category "elsewhere" was very broad and no further information was available on where these children live.

Indicators of problem drug use and social environment. Following a review of the current literature and being pragmatic with regard to the data available, we created a profile using eight indicators for circumstances that might adversely affect parents' ability to provide a stable child rearing environment.

Four drug-related indicators relating to the past 30 days were selected as indicators of severe drug use: a) daily heroin use; b) daily problematic alcohol use, c) regular stimulant use and d) sharing of injecting equipment. Four social environment indicators were chosen: a) unstable accommodation, b) living alone, c) living with another user, and d) criminal justice (CJS) referral into treatment.

At the time of presentation for treatment, assessment staff were asked to indicate the main drug, and up to four additional drugs used by the client in the past 30 days and decide whether the typical use was "daily" (defined as most days per week), "weekly", "monthly", or "occasionally". "Regular stimulant use" included all forms of amphetamine and cocaine, "regular use" was defined as either "daily" or "weekly". "Sharing of injecting equipment" (including paraphernalia) was chosen over "injecting" as being associated with greater health risks and indicating possible lack of awareness/concern. Whether alcohol use was problematic was determined by drug treatment professionals. "Unstable accommodation" included homelessness and short-term stays in B&Bs (bed and breakfast) or hostels. "Living alone" was used as an indicator that no other adult, whether partner or family, lived with the user to share the responsibilities of child care and to offer support in difficult times. "Living with another drug user" indicated that a child lived with at least two drug using adults providing a potential double jeopardy for the child where no non-using adult is available to ameliorate drug use effects. "CJS referral" suggests at least minimal criminal involvement.

Analysis

Each indicator was coded "1" if present and "0" if not present. The indicators were examined separately and as a cumulative score.

Odds ratios and 95% confidence intervals were calculated after adjusting for age. Initially, each individual indicator was treated as the dependent variable. The odds ratios calculated from these models were an estimate of the odds of having the indicator among parents with children living elsewhere, among parents with children living in care and among non-parents, each compared with the odds among parents with children at home, which served as the reference category. In further models, parental status was treated as the dependent variable. As parental status had four levels, "clients with children at home" was selected as the reference category and compared, in separate analyses, against the following outcomes of interest: clients with children elsewhere, clients with

children in care and non-parents. In each of these analyses the odds ratio of the outcome of interest was estimated for those with the indicator compared to those without the indicator after adjusting for age and all other indicators.

Approximately 14% of clients accessed treatment services in more than one year and therefore standard logistic regression, which assumes independent observations, was inappropriate. To take account of repeat measurements on individuals and ensure that correct standard errors for the coefficients in the model were estimated, generalised estimating equations (GEEs) with a logit link function and binomial error term were used.

Sample

Parenthood information was available for 180,867 drug users of which 31,775 had treatment in two or more years. 75,394 (42%) reported having dependent children. For 61,425 parents the residence of children was recorded. Just over half the users (53%) did not live with their children. Of those with children elsewhere, 9% had children in care. Approximately half of all women (47%) reported having dependent children, compared to 33% of men. Table 1 gives details of sample characteristics.

(insert Table 1 about here)

Results

Prevalence of indicators

Table 2 shows the prevalence of eight indicators amongst parents with children at home, parents with children elsewhere, parents with children in care, and drug users without children; separately for men and women. Among men and women, users with children in care and users with children elsewhere tended to have a higher prevalence of each indicator than users with children at home or non-parents, an effect that persisted after adjusting for age. Users with children at home were the least likely to share injecting equipment, use stimulants regularly or have unstable accommodation. In contrast, users whose children were taken into care were the most likely to share equipment, use stimulants regularly, have unstable accommodation, live with another user or have been referred into treatment by the CJS. The

results were similar for men and women except in relation to living with other users. Women were more likely to live with another user than men were; except in the "parents with children in care" category. More mothers than fathers lived alone with their children.

(Insert Table 2 about here)

Table 3 shows that the odds of being a parent with children elsewhere and of being a parent with children in care were significantly higher for clients with any one indicator compared to those without that indicator. This was particularly true for clients with unstable accommodation and for men living alone. The odds of having children in care were higher amongst CJS referred clients. In the analysis comparing parents with children at home and non-parents, the odds of *not* being a parent were higher among those sharing, daily alcohol users and clients in unstable accommodation than among those without these indicators. The odds of *not* being a parent were lower for daily heroin users, clients living with other users, clients living alone or being criminal justice referred. For men the odds of not being a parent were higher among those living alone, the opposite was true for women.

(insert Table 3 about here)

Cumulative number of indicators and where children live

This section investigates the association between children's residence and the cumulative number of indicators for each parent. Parents with children in care showed the highest cumulative score, with 30.7% having more than two indicators. Parents with children elsewhere also showed high scores, with 24.6% having more than two indicators. Amongst those with no children, 13.7% had more than two indicators, and amongst those with children living at home only 9.8% had more than two indicators.

There were notable gender differences: 80% of mothers and 60% of fathers with no indicator had their children living with them, this reduced to 46% of mothers and only 19% of fathers when three indicators were present and to roughly a tenth of mothers and fathers if six or more indicators were present.

Discussion

We describe the findings of a novel investigation into differential profiles that can be attributed to drug using parents in treatment in England & Wales. Although almost half of all drug users accessing treatment were reported to have dependent children, the majority did not live with their children. Those not living with their children, independent of whether children were taken into care or lived elsewhere, showed more drug related problem behaviours and social adversity than either non-parents or those with children living at home.

Parents with children at home showed a similar profile to users without children, apart from a much lower percentage with children at home who were living in unstable accommodation and a higher percentage living with another user. This might suggest that caring for dependent children at home may prompt drug using parents to access appropriate help systems so as to provide a safer and more stable environment for their children. There was, however, no evidence that patterns of drug use were different among non-parents and parents whose children were cared for at home.

We found that users whose children live elsewhere or in care reported more regular drug use and more adverse social circumstances, even when controlling for gender effects. Whether these were users whose children live elsewhere because of uncontrolled drug use and/or adverse living conditions, or whether having children elsewhere has an effect in encouraging heavier use and worse living conditions, remains unknown. It is possible that the presence of children living at home may be a protective factor, but it is also possible that having children living away may be associated with greater stress and greater risk. The present results are consistent with Pilowsky et al. (2001), who found that parents whose children lived with other family members or in care showed higher risk drug taking behaviour, more recent drug use and were less likely to be in treatment compared to parents who retained their children.

The fact that many higher risk users do not live with their children may remove some of the direct negative effects of parental use. However, parental absence may contribute to new problems, for example when associated with frequent changes of primary care giver, the complete absence of one of the parents in the child's life, or the irregular presence of the high-risk drug using parent(s). Children

living in a drug using home are developmentally at risk and disadvantaged (Hogan, 1998), but the large number of children not living with their drug using parent(s) may be at a different and hitherto unrecognised disadvantage.

There is a marked paucity of systematic information about the children of drug using parents. The current study of 61,500 such parents is the first large scale UK study, but it is limited by the cross-sectional nature of data available from national treatment monitoring, and by the fact that the dataset consists of problem drug users who have presented for treatment, rather than necessarily representing the drug-using population as a whole. In this opportunistic study not all potentially relevant indicators (eg parental health, socio-economic status) could be included. Where appropriate, proxy indicators such as CJS referral (for CJS involvement) were used. A significant limitation of the available data concerns the definition of "children living elsewhere", which unfortunately does not provide information about the circumstances in which these children live. However, it is clear that, at the time of treatment entry, the drug using parent was not available to the child as a primary care giver.

An important area of further investigation would be to understand better what constitutes living arrangements for those said to be "living elsewhere", and to examine the impact of these arrangements on children's' lives.

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Table 1. Sample characteristics at presentation for treatment

Characteristics	Parents		Non-parents
	Children at home (N=28,985)	Children elsewhere (N=32,440)	(N=105,473)
Parents with children in care		2,985	
Parents with children elsewhere		29,455	
% Male	54.4	79.2	78.5
% White	89.9	89.4	90.8
Mean age years (SD)	30.9 (7.5)	31.4 (7.9)	27.4 (9.6)
% employed	32.3	40.1	27.8

Table 2. Prevalence of risk indicators among men and women and odds ratios for risk indicators by parenting status

	Parents with children…					Non-parents	
	…at home	…elsewhere		…in care			
	%	%	Odds ratio[a] (95% CI)	%	Odds ratio[a] (95% CI)	%	Odds ratio[a] (95% CI)
Men	(n=15,774)	(n=24,612)		(n=1,072)		(n=82,770)	
Sharing	4.9	7.7	1.61 (1.49, 1.75)	11.3	2.37 (1.96, 2.87)	6.0	1.09 (1.01, 1.17)
Daily heroin users	51.7	56.1	1.18 (1.14, 1.22)	54.8	1.12 (1.01, 1.25)	49.9	0.80 (0.78, 0.83)
Daily alcohol users	15.5	17.6	1.15 (1.10, 1.21)	16.8	1.12 (0.98, 1.29)	12.5	0.95 (0.91, 0.99)
Stimulant users	27.0	34.1	1.38 (1.32, 1.42)	37.6	1.57 (1.41, 1.75)	27.9	0.98 (0.95, 1.02)
Unstable accommodation	2.2	14.8	7.27 (6.58, 8.02)	15.6	7.67 (6.44, 9.13)	8.9	4.04 (3.66, 4.45)
Living with other users	15.7	16.3	1.05 (1.00, 1.11)	32.6	2.53 (2.25, 2.85)	11.6	0.68 (0.65, 0.71)
Living alone/with strangers	6.2	36.1	8.51 (7.99, 9.07)	27.1	5.58 (4.88, 6.38)	21.3	4.87 (4.58, 5.18)
CJS referral	2.7	3.0	1.14 (1.02, 1.27)	7.1	2.80 (2.25, 3.49)	2.8	0.98 (0.89, 1.07)
Women	(n=13,211)	(n=4,843)		(n=1,913)		(n=22,703)	
Sharing	5.3	9.7	1.97 (1.76, 2.20)	11.7	2.23 (1.93, 2.58)	7.0	1.10 (1.01, 1.21)
Daily heroin users	48.3	56.9	1.48 (1.39, 1.56)	55.1	1.23 (1.13, 1.34)	47.2	0.78 (0.75, 0.81)
Daily alcohol users	13.1	16.7	1.16 (1.07, 1.26)	12.9	1.10 (0.98, 1.25)	13.8	1.09 (1.02, 1.16)
Stimulant users	24.0	33.4	1.56 (1.47, 1.66)	36.8	1.69 (1.55, 1.85)	26.2	1.02 (0.97, 1.06)
Unstable accommodation	2.1	13.7	7.58 (6.67, 8.63)	19.2	10.5 (9.1, 12.2)	6.6	2.95 (2.62, 3.32)
Living with other users	23.7	27.3	1.23 (1.15, 1.32)	32.1	1.45 (1.32, 1.59)	19.5	0.70 (0.67, 0.74)
Living alone/with strangers	29.8	35.2	1.24 (1.17, 1.32)	32.3	1.18 (1.08, 1.29)	20.7	0.65 (0.62, 0.68)
CJS referral	3.5	3.7	1.07 (0.91, 1.25)	9.4	2.67 (2.28, 3.14)	2.7	0.69 (0.62, 0.77)

[a] the reference category was parents with children at home

Table 3. Risk indicators for parents with children at home (baseline) compared with those for parents with children elsewhere, parents with children in care and non-parents: odds ratios

	Parent with children elsewhere		Parent with children in care		Non-parent	
	Men	Women	Men	Women	Men	Women
Sharing	1.21 (1.12, 1.32)	1.51 (1.35, 1.70)	1.47 (1.19, 1.82)	1.64 (1.41, 1.91)	1.08 (1.01, 1.16)	1.19 (1.11, 1.28)
Daily heroin users	1.26 (1.21, 1.32)	1.65 (1.54, 1.77)	0.97 (0.85, 1.10)	1.18 (1.07, 1.30)	0.76 (0.74, 0.79)	0.87 (0.84, 0.91)
Daily alcohol users	1.15 (1.08, 1.21)	1.42 (1.30, 1.55)	1.12 (0.95, 1.32)	1.24 (1.07, 1.42)	0.86 (0.82, 0.91)	1.22 (1.15, 1.31)
Stimulant users	1.38 (1.33, 1.45)	1.61 (1.50, 1.72)	1.45 (1.29, 1.64)	1.62 (1.47, 1.78)	0.91 (0.88, 0.95)	1.00 (0.96, 1.05)
Unstable accommodation	6.00 (5.42, 6.63)	6.21 (5.46, 7.07)	4.19 (3.40, 5.16)	7.61 (6.57, 8.82)	3.63 (3.31, 3.98)	2.37 (2.16, 2.61)
Living with other users	1.24 (1.18, 1.31)	1.19 (1.10, 1.28)	2.81 (2.46, 3.21)	1.36 (1.23, 1.51)	0.76 (0.72, 0.79)	0.64 (0.61, 0.67)
Living alone/with strangers	8.44 (7.91, 9.00)	1.38 (1.29, 1.48)	5.55 (4.76, 3.47)	1.20 (1.09, 1.33)	4.49 (4.22, 4.77)	0.62 (0.59, 0.64)
CJS referral	1.04 (0.92, 1.17)	1.05 (0.89, 1.24)	2.35 (1.84, 3.02)	2.49 (2.09, 2.96)	0.91 (0.82, 1.00)	0.76 (0.68, 0.84)
Age	0.99 (0.99, 0.99)	1.03 (1.03, 1.04)	0.99 (0.99, 1.00)	0.98 (0.98, 0.99)	0.95 (0.94, 0.95)	0.97 (0.97, 0.98)