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Homeless youth in London: I. Childhood antecedents and psychiatric disorder

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ABSTRACT

Background. There has been an increase in the numbers of homeless young people in Britain. Little is known of the health and social welfare needs of this population.

Method. This case–control study compares a random sample of homeless people aged under 22 years recruited from consecutive attenders at two of London's largest facilities for homeless young people with a contemporaneous sample of domiciled young people recruited through general practice registration lists. The homeless and domiciled groups were compared on measures of childhood care, education and psychiatric disorder.

Results. One hundred and sixty-one homeless people (88% of those approached) and 107 domiciled subjects (60% of those approached) were interviewed. Sixty-nine per cent of homeless and a third of the domiciled subjects reported a childhood lacking in affection, with indifferent and often violent carers. Psychiatric disorder was identified in 62% of homeless respondents and a quarter of the domiciled population. A fifth of homeless and 5 domiciled respondents had attempted suicide in the previous year. Multivariate analysis suggest that childhood adversity, low educational attainment and the prior presence of psychiatric disorder all independently increase the likelihood of homelessness in a youthful population.

Conclusions. The evidence presented in this paper supports the hypotheses that characterize the young homeless population as experiencing higher rates of childhood adversity and psychiatric disorder than their domiciled contemporaries. A tentative model is suggested whereby childhood experiences, educational attainment and the prior presence of psychiatric disorder all independently increase the likelihood of homelessness in a youthful population.

INTRODUCTION

While accurate counts of young homeless people in Britain are hard to come by, there is a general consensus that the numbers have grown substantially over the past two decades (Scott, 1993). In 1992, Shelter (a charity for the homeless) estimated that 58000 people under the age of 25 years were sleeping rough or were unauthorized tenants or squatters with up to another 137000 single people in lodgings and hostels (Burrows & Walentowicz, 1992). Street counts in inner London carried out on behalf of the Department of the Environment identified 741 rough sleepers in April 1991 with up to 30% under 26 years of age; the majority of these younger people found in the Strand and West End areas of London (Randall & Brown, 1993).

Relatively little is known of the health needs of this youthful population. The majority of recent studies of the mental health of homeless young people have been carried out in North America where up to two in three report broken homes, and at least half have experienced serious childhood physical abuse (Powers *et al.* 1990; Feitel *et al.* 1992; Dadds *et al.* 1993; Janus *et al.* 1995). Their educational attainment has also been shown to be substantially below that of their domiciled peers (Yates *et al.* 1988) and to have been suspended or expelled from school because of disruptive behaviour (Shaffer & Caton, 1984; Robertson *et al.* 1990).

Given the extent of this social deprivation, it

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comes as little surprise that many North American studies have also found substantial rates of mental illness. For example, in New York, Shaffer & Caton (1984) found that adolescent shelter users had psychiatric profiles largely indistinguishable from adolescents attending psychiatric clinics. Thirty per cent were depressed, 18% had antisocial personality disorder and 41% were both depressed and antisocial. A quarter of the sample had attempted suicide in the previous year.

In Britain, studies of the mental health of homeless people have tended to focus on older populations. Estimated rates of mental illness vary, but most studies have observed increased prevalence relative to domiciled populations. The recent OPCS survey of psychiatric morbidity in Great Britain, for example, reported the prevalence of neurotic disorder in the week of interview among hostel and private sector leased accommodation (PSLA) as 38% and 35% respectively – around two and a half times the prevalence among people living in private households. The prevalence of psychosis was estimated to be 2% among residents of PSLA and 8% among hostel residents (Gill *et al.* 1996).

The present study was conceived as the first attempt to ascertain rates of mental illness in a sample of homeless young people in Britain and to explore associations between homelessness, psychiatric disorder and antecedent childhood experiences. In this paper, we are concerned with three hypotheses: (a) the young homeless population will be characterized by higher rates of childhood adversity (parental neglect, indifference and abuse) than that observed among a similarly aged domiciled population; (b) the young homeless population will have higher prevalence of mental illness, and substance use disorders than that found in the domiciled population; and (c) that the high prevalence of psychiatric disorder will be explained, in part, by the higher rates of childhood adversity in the homeless population.

METHOD

Study design

The study was conducted in association with the London Connection and Centrepoint – the two main voluntary sector organizations for homeless young people in London. Centrepoint is one of the largest providers of temporary accommodation catering for young homeless people. The London Connection opened in October 1990 with the merger of three former agencies (the Soho Project, the Centre at St Martin-in-the-Fields, and the St James' Cafe). It provides a variety of practical facilities including a cafe, showers and laundry and a range of resettlement services, including street outreach, counselling and a weekly doctor's surgery. Users of these agencies range from the long-term rough sleeper to the young person leaving home for the first time.

For the duration of the study, one member of the research team was based with the London Connection and one with Centrepoint. Sampling and interviewing took place in randomly chosen weeks between December 1993 and December 1994. A comprehensive register was taken of all young people attending either agency throughout the entire year of the study. The register included basic intake information routinely collected by the voluntary sector staff together with additional information required to identify suitable subjects for the research (see below). At random weeks throughout the year, one in every three consecutive referrals to each organization was invited to take part in the main study.

Young people were invited to take part in the study if they were between 16 and 21 years of age and had, in the past 24 h, been sleeping rough or using emergency accommodation including bed and breakfast, cheap hotels, squats, night shelters, reception centres and short-stay hostels. To avoid sampling duplication, those attending the London Connection who were currently resident at Centrepoint were excluded from the London Connection sampling frame. Subjects failing to meet selection criteria, or those who had been approached at an earlier sampling point, were replaced by inviting the next named person on the register.

The choice of an appropriate comparison group for this sample was difficult for several reasons. First, we were not aware of any existing data of general population samples that had both covered our targeted age range and utilized the same measures. Secondly, having determined the need for a new population sample, we were

faced with the prospect that many homeless young people would have origins outside Greater London and come from widely differing urban and rural settings. With available resources we would be unlikely to be able to generate a comparison group that could account for such variation in geographical origin and this, together with other uncertainties about the likely demographic and personal profiles of young homeless people effectively ruled out consideration of adopting a matched case–control design. We decided, therefore, that a reasonable compromise within resource and design limitations would be to recruit domiciled subjects from a population likely to have a high prevalence of the key social deprivations and morbidity thought to characterize homeless young people. To this end, we approached two large inner-city general practices with whom we had worked in the past and who had efficient, reasonably up-to-date computerized records.

With the exception of addresses known to be hostels, YMCA hostels and bed and breakfast accommodation, all those aged 16–21 years on the practice list were approached. Three postal reminders were sent to non-responders followed by door-to-door enquiries where the third letter had failed to elicit any response.

The interview

For both samples, prospective participants were provided with an outline of the study and were offered a payment of £10. Interviews were audiotape-recorded with the participants' permission. The interview, which took on average 3 h to complete, covered the following main areas.

Demographic characteristics, educational attainment and forensic history

Accommodation and homelessness history

This dealt with the nature of the accommodation, the length of stay at a particular address and the reasons for moving on. The total time spent sleeping rough (on the streets, in self-constructed shelters, or other temporary shelters such as the backs of cars) since becoming homeless was recorded. Any evictions from hostels, and the reasons given for eviction were noted. Episodes of leaving a parental (or parent surrogate) home for at least 24 h without permission before the subject was 16 years of age were coded as episodes of 'running away'.

Childhood care

The Childhood Experience of Care and Abuse (CECA); (Bifulco *et al*. 1994). The CECA is a semi-structured interview covering actual experiences of care in a chronological sequence before the age of 17. Ratings are based on investigator-based judgements tied to descriptions of the behaviour of parents and carers. In the hands of trained interviewers, it is of satisfactory reliability (Bifulco *et al*. 1994) and validity (Bifulco *et al*. 1997). Several qualitative dimensions are rated: (*i*) parental indifference – defined as the extent of neglect of the respondent's welfare both in material and emotional terms; (*ii*) antipathy – the amount of dislike, irritation and coldness shown by the parent to the child; (*iii*) parental control – the level of supervision and discipline; (*iv*) physical abuse – the degree of violence in the home directed to the child by household members; and (*v*) sexual abuse – defined as any unwilling sexual encounter prior to the age of 17.

Childhood conduct disorder

This was assessed by means of questions focused on respondent's behaviour at home, school and with peers. These questions covered self-reports of truanting from school, repeated lying, stealing (from the home, school or shoplifting), burglary, destruction of property, cruelty to animals, forced sexual activity, use of weapons in fights, frequent initiation of physical fights outside the home, bullying and mugging. The occurrence of these behaviours were always dated and their persistence across childhood estimated by reference to key 'anchor points' within the CECA and homelessness interviews. For the purposes of the present analysis, conduct disorder in childhood was considered present where at least four items from the list were present together, resulting in some harm to others and which had persisted for a period of at least a year prior to the age of 17.

Psychiatric disorder

The Composite International Diagnostic In-

terview (CIDI) (WHO, 1990) was used to gather data on the current and lifetime mental health of respondents. The CIDI has been widely used and has satisfactory inter-rater reliability (Wittchen, 1994; Wittchen *et al*. 1991) and validity (Janca *et al*. 1992).

Statistical analysis

Data were analysed using non-parametric univariate and multivariate methods. Comparisons between homeless and domiciled subjects on categorical variables were assessed using chi-squared and odds ratio statistics as appropriate; multivariate associations of these variables were explored using logistic regression and associations reported in terms of weighted odds ratios and their confidence intervals.

RESULTS

Sample characteristics

One hundred and eighty-two homeless young people met the inclusion criteria outlined earlier and were approached for interview. One person refused to take part and a further 20 left the centre before the interview could take place and could not subsequently be traced. Of the 161 completed interviews 79 were recruited through the London Connection and 82 from Centrepoint. The modal age of the 161 young people was 17 years; they were predominantly white (63%) and male (63%). Almost half (45%) had been living in inner London prior to becoming homeless for the first time. There were no statistically significant differences in these characteristics between the interviewed sample and the wider population of attendees registered at the two organizations during the year of the study (Craig *et al*. 1996).

For the domiciled comparison sample, 287 names of young people aged 16–21 were identified from the two general practice lists. Of these, 114 did not reside at the recorded address and could not be traced. Of the remaining 173 young people, 104 agreed to be interviewed (60% of those available for study). The modal age of this sample was also 17 years; half were male and just under half were white (48%). Seven respondents had spent their childhood outside the UK. There were no statistically significant differences in the age, sex or reported ethnicity of the 104 interviewed subjects and the 69 who refused.

There were significantly more white people in the homeless sample than in the domiciled group (63% *v*. 48%; $\chi^2 = 6{\cdot}028$, df = 1, $P < 0{\cdot}01$) and more men (63% *v*. 50%, $\chi^2 = 4{\cdot}629$, df = 1, $P < 0{\cdot}05$) but the samples were similar in terms of age, social class and marital status (over 90% of both samples were single).

Runaway and homelessness history

Running away was defined as leaving a formal care arrangement for at least one night, before the age of 16, without the consent of the carer. Eighty-five (53%) homeless young people had previously run away, of whom 72 had run away more than once. This compares with just 11 (10%) of the comparison sample, only four of whom had repeated the behaviour. Females were just as likely as males to have run away, and there were also no differences in runaway behaviour according to social class or ethnicity. Most of the homeless sample runaways (61/85) and all but one from the comparison group stayed away from care for less than 1 month. The most frequently cited reason for running away across both samples was 'conflict with parents'; 19 of the homeless sample and one of the domiciled young people reported running away from physical violence or sexual abuse ($\chi^2 = 19{\cdot}141$, df = 1, $P < 0{\cdot}001$). The most common place to run to was a friend (homeless 36%, comparison 64%) but 23 (14%) young homeless people had slept rough at that time. Respondents who had run away 10 times or more from any care arrangement were identified as persistent absconders. Thirty-three homeless and one domiciled young person were persistent absconders ($\chi^2 = 21{\cdot}56$, df = 1, $P < 0{\cdot}0001$). Persistent absconders were more commonly of white ethnic origin ($\chi^2 = 6{\cdot}054$, df = 1, $P < 0{\cdot}01$).

While it was possible to distinguish running away and homelessness in the majority of young people, 25 homeless respondents (15%) had run away from care and had subsequently been entirely without supervision or stable accommodation. For these young people, we dated the onset of 'homelessness' at the point when they left their last care arrangement. With these adjustments, homelessness first occurred at an early age for most subjects. Eighty-five per cent

were aged under 18 and a third were aged 16 or younger at their first experience of homelessness. The most common reported precipitant of first homelessness was a relationship crisis with one or both parents (60%). Only 15 (9%) gave housing or employment-related problems as a precipitant. Six respondents were unable to give any reason for their homelessness. Five of these were suffering from a psychotic disorder at the time (q.v.).

The length of time since first becoming homeless in the sample as a whole ranged from just a few days to 8 years. For 53% (85) respondents, the current episode of homelessness was also their first. Fifty-six per cent (48) of these were 'newly' homeless with duration less than 3 months, 26% (22) had been continuously homeless for up to 1 year and 18% (15) between 1 and 4 years. Of the 76 respondents in whom the current episode represented a return to homelessness after at least one period of stability, almost half had been homeless on this occasion for 3 months or less. The commonest reported reason for the failure of the period of stability were housing and financial problems, including difficulties in money management, rent arrears and evictions.

Three-quarters of the homeless sample had slept rough at some time, a third for 2 months or more at a time. Males were more likely to have slept rough than females ($\chi^2 = 4{\cdot}36$, df = 1, $P < 0{\cdot}05$) and white respondents of both sexes were more likely to have slept rough than non-whites ($\chi^2 = 25.69$, df = 1, $P < 0{\cdot}00001$). Despite efforts to avoid homelessness in the recruitment of the domiciled comparison sample, nine reported having been homeless at some point in their lives. Eight of the nine were women.

Education and employment

The general educational attainment of the homeless respondents was poor. Two-thirds of homeless compared with a fifth of the domiciled group were 'non-achievers' having left school before age 16 or had failed to obtain any school-leaving qualifications ($\chi^2 = 43{\cdot}919$, df = 1, $P < 0{\cdot}0001$). Four times as many of the homeless respondents than domiciled subjects were unemployed at the time of interview (85% *v.* 20%, $\chi^2 = 107{\cdot}81$, df = 1, $P < 0{\cdot}0001$) and only a fifth of those eligible for employment (i.e. not in full-time education) had ever worked.

Table 1. *Percentage of subjects reporting adverse experience in childhood*

Adversity	Homeless %(*N*)	Domiciled %(*N*)	Unadjusted odds ratios (95% CI)
Parental indifference	35 (56)	14 (15)	3·2 (1·7–5·9)
Lack of control	20 (32)	9 (9)	2·4 (1·3–5·0)
Parental antipathy	57 (91)	12 (12)	10 (5·0–20·0)
Physical abuse	69 (111)	32 (33)	4·8 (2·8–8·1)
Sexual abuse	27 (43)	11 (12)	2·7 (1·4–5·6)

Childhood experience

The homeless sample experienced more changes in who looked after them during childhood, with only a quarter reporting the same two parents throughout compared with 46% of the domiciled sample ($\chi^2 = 9{\cdot}966$, df = 1, $P < 0{\cdot}01$). Homeless young people were twice as likely as domiciled respondents to report a separation from one or both parents for at least a year during their childhood (63% *v.* 33%, $\chi^2 = 27{\cdot}584$, df = 1, $P < 0{\cdot}001$) and these separations were more likely to involve the loss of both parents (41% *v.* 5%). Homeless young people were also far more likely to have spent time in statutory institutional care during childhood (40% *v.* 4%, $\chi^2 = 40{\cdot}81$, df = 1, $P < 0{\cdot}001$).

Table 1 shows the differences between the two groups of young people on the main qualitative CECA scales. The homeless sample reported more adverse parental care on all these subscales. There was a clear and statistically significant difference between the physical abuse inflicted upon the homeless as compared to the domiciled sample. This difference lay not only in the severity of the abuse but in the frequency and duration of its occurrence. It was not uncommon for homeless respondents to report abuse from multiple perpetrators throughout childhood. Two-thirds of the homeless young people met CECA criteria for physical abuse compared with a third of the comparison group. This excess is even more marked if extreme levels of abuse are considered: 54 homeless respondents and five from the domiciled group reported harsh abuse that had occurred at least weekly and had resulted in physical injury.

Sexual abuse was reported by 43 (27%) of the homeless respondents and 12 (11%) of the domiciled sample ($\chi^2 = 7{\cdot}94$, df = 1, $P < 0{\cdot}01$). The type of abuse ranged from isolated incidents

with a stranger to penetrative abuse from a parent figure in the home and occurring on repeated occasions over a number of years. The experience of physical and sexual abuse were significantly associated with over three-quarters of those who were sexually abused also having been physically abused.

To summarize at this point, the majority of the homeless young people reported childhoods that were lacking in affection, with indifferent and often violent parent figures. 'Childhood adversity', a global rating reflecting the presence of parental indifference and/or physical or sexual abuse was present in 69% of homeless young people and 32% of comparison subjects ($\chi^2 = 35{\cdot}266$, df = 1, $P < 0{\cdot}0001$).

Childhood conduct disorder

Sixty-nine (43%) homeless respondents and 10 comparison subjects met our criteria for probable conduct disorder in childhood ($\chi^2 = 33{\cdot}368$, df = 1, $P < 0{\cdot}0001$). For both groups, conduct disorder was associated with being male ($\chi^2 = 16{\cdot}871$, df = 1, $P < 0{\cdot}001$) and with poor educational achievement ($\chi^2 = 50{\cdot}277$, df = 1, $P < 0{\cdot}0001$). Among homeless respondents, conduct disorder was more common in whites than non-whites ($\chi^2 = 5{\cdot}79$, df = 1, $P < 0{\cdot}05$). Conduct disorder was also more common among those who had slept rough ($\chi^2 = 13{\cdot}153$, df = 1, $P < 0{\cdot}01$) and in those with longer homeless histories ($\leqslant 2$ years ago *v.* > 2 years, $\chi^2 = 13{\cdot}528$, df = 1, $P < 0{\cdot}001$).

In parallel with this excess rate of probable conduct disorder, almost half (48%) of the homeless young people reported having been charged with an offence at some time in their lives compared to only seven individuals in the comparison group ($\chi^2 = 49{\cdot}28$, df = 1, $P < 0{\cdot}0001$). Just over a fifth of the homeless sample had received custodial sentences compared to two of the domiciled population ($\chi^2 = 18{\cdot}229$, df = 1 $P < 0{\cdot}001$).

Psychiatric disorder

Table 2 reports cross-sectional diagnoses (month of interview) for homeless and domiciled subjects. Three-quarters of all psychiatric disorders in homeless subjects and just under half of those in domiciled subjects were chronic in the sense of having persisted for at least a year by the date of interview. Among homeless respondents, most disorders (70%) were reported as having begun before the first episode of homelessness. At first sight, it appears (Table 2) that the excess rates of psychiatric disorder in homeless respondents is largely confined to mental illness as rates of substance abuse or dependency in the absence of mental illness are broadly similar between the two groups. However, detailed consideration of CIDI responses revealed that the homeless young people reported using a wider range of substances (i.e. in addition to those qualifying for an abuse/dependency rating), at greater frequency and more often in combination than did the domiciled population.

Table 2. *One-month prevalence of psychiatric disorder (DSM-III-R)*

	Homeless % (*N*)	Domiciled % (*N*)
None/minor/drug use only	38 (61)	75 (78)
Substance abuse only	8 (12)	7 (7)
Alcohol	(2)	(2)
Cannabis	(1)	(2)
Hallucinogens	(2)	(1)
Amphetamines	(1)	(2)
Cocaine	(1)	—
Opiate	(1)	—
$\geqslant 2$ of above	(4)	—
Substance dependency only	14 (23/161)	9 (9/104)
Alcohol	(11)	(4)
Cannabis	(3)	(4)
Amphetamines	(1)	(1)
Cocaine	(3)	—
Hallucinogens	(1)	—
$\geqslant 2$ of above	(4)	—
Mental illness only	22 (36/161)	8 (8/104)
Major depression	(26)	(3)
Panic disorder	(3)	(5)
Bulimia	(5)	—
Schizophrenia/schizophreniform disorder	(2)	—
Mental illness and subst. abuse	6 (10/161)	0 (0/194)
Major dep. and alcohol	(4)	—
Major dep. and cannabis	(2)	—
GAD and hallucinogen	(1)	—
GAD and amphetamine	(1)	—
Schiz. and alcohol	(1)	—
Bipolar and alcohol	(1)	—
Mental illness and subst. dependency	12 (19/161)	2 (2/104)
Major dep. and alcohol	(4)	(1)
Major dep. and cocaine	(2)	—
Anx. and alcohol	(1)	—
Anx. and hallucin.	(1)	—
Dep./anx. and alc.	(3)	—
Dep./anx. and c'bis.	(2)	—
Schiz. and alcohol	(2)	—
Schiz. and hallucin.	(1)	—
Bipolar and alcohol	(1)	—
Bulimia/dep./alcol.	(2)	(1)

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Table 3. *Adjusted odds-ratios of demographic, childhood and psychiatric disorder correlates of homelessness*

Factor	Adjusted OR	CI	χ^2	*P*
Sex (male)	1·5	0·77–2·8	1·654	NS
Ethnicity (white)	1·2	0·65–2·2	0·3	NS
Non-achiever	3·2	1·6–6·1	12·3	< 0·001
Ch. adversity	2·9	1·6–5·3	11·72	< 0·001
Cond. disorder	2·6	1·2–6·1	5·58	< 0·01
Psych. disorder	2·9	1·5–5·5	10·99	< 0·001

Over a third of the homeless (59/161) and 9% (9/104) of the domiciled subjects reported at least one suicide attempt at some point in their life ($\chi^2 = 25{\cdot}954$, df = 1, $P < 0{\cdot}001$) with a fifth of the homeless but only five domiciled subjects reporting one such attempt in the 12 months before interview ($\chi^2 = 19{\cdot}035$, df = 1, $P < 0{\cdot}001$). Self-poisoning was the most commonly described method in both groups but only the homeless sample reported more serious attempts including attempted hanging. Suicide attempts were highly correlated with psychiatric diagnosis ($\chi^2 = 24{\cdot}021$, df = 1, $P < 0{\cdot}001$) and childhood adversity ($\chi^2 = 25{\cdot}973$, df = 1, $P < 0{\cdot}0001$) but were unrelated to a past history of conduct disorder.

Homelessness, psychiatric disorder and background risk factors

A number of statistically significant univariate associations that are generally in line with our hypotheses have been reported to this point. However, many of these variables are interrelated (for example, conduct disorder was more common in males and in those with poor educational achievement) and the analysis so far does not take account of possible confounding effects of sex and ethnicity. Table 3 reports the results of a logistic regression analysis with 'homelessness' as the dependent variable. Confidence intervals for adjusted odds ratios and approximate χ^2 statistic are reported. From this analysis, childhood adversity, conduct disorder, poor educational achievement and the presence of psychiatric disorder remain significant factors in distinguishing homeless and domiciled subjects while sex and ethnicity appear to play no independent part.

It seems likely that part of the increased prevalence of psychiatric disorder can be attributed to the high rates of childhood adversity and conduct disorder as these are widely credited with a causal role in a broad spectrum of adult mental illness (e.g. Robins & McEvoy, 1990; Bifulco *et al.* 1991). The associations in our homeless sample between the two measures of childhood deprivation, mental illness and substance use disorder were further explored by means of loglinear analysis (Table 4).

Without taking the association of mental illness with substance use disorder into account at this stage, the best fit is provided by model 4 which includes associations between childhood adversity and mental illness (estimated odds ratio of 5·9) and of conduct disorder with substance use disorder (estimated odds 4·4). This fit was not significantly improved by the inclusion of terms for associations of childhood adversity with substance use disorder or of conduct disorder and mental illness separately or together (a table showing all models and calculation of estimated odds ratios is available from authors). The addition of terms representing the association between mental illness and substance use disorder further improves the fit

Table 4. *Loglinear analysis of associations between childhood risk factors, mental illness and substance use disorder*

	Goodness of fit			Improvement of fit			
Model fitted	LRχ^2	df	*P*	Change	χ^2	df	*P*
1 AdCd	81·41	10	< 0·001	—	—	—	—
2 AdCd AdMI	46·05	9	< 0·001	1–2	35·36	1	< 0·001
3 AdCd CdSub	50·55	9	< 0·001	1–3	30·86	1	< 0·001
4 AdCd CdSub AdMI	15·19	8	< 0·05	2–4	30·86	1	< 0·001
5 AdCd CdSub AdMI SubMI	7·85	7	NS	4–5	7·34	1	< 0·01

Ad, childhood adversity; Cd, childhood conduct disorder; MI, mental illness; Sub, substance use disorder.

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($\chi^2 = 7{\cdot}85$, df = 7, NS). This final model shows a residual association between both psychiatric conditions (estimated odds ratio = 2·04).

DISCUSSION

The findings we have reported largely echo those of North American studies of homeless youth and paint a picture of the young and homeless in London as being poorly educated, originating from families where abuse and neglect are common and suffering from chronic mental health disorders that largely antedate the first homeless episode.

Methodological considerations

There are several threats to the validity of these findings. Although we adopted procedures to limit bias in sampling, it is clear that our sample is unlikely to be representative of all homeless youth in London, let alone the UK. However, while not claiming to be representative of the global young homeless population of London, we can be more confident about the representativeness of our sample with reference to the users of the two agencies concerned. We used random sampling methods to recruit subjects across all the months of the year, thus reflecting any seasonal variations in the characteristics of the users of these services, and covered night and weekend admissions. Using this approach we generated a sample that closely reflected the demographic characteristics of the users of these agencies during our study period (Craig *et al.* 1996). Response rates were very satisfactory – only one person refused to take part and over 80% of those identified by screening completed the full interview.

The domiciled comparison group is more seriously compromised. This sample, drawn solely from a couple of inner city areas falls far short of the ideal, being unlikely to provide a good match for the breadth of urban and rural backgrounds that characterize homeless young people in London. It is even unlikely that these two areas are representative of London as a whole. Our failure to achieve sufficient recruitment to allow pairwise matching on key demographic variables (such as sex and ethnicity) may also weaken the study. However, we would argue that by focusing on a deprived inner city sample and through careful use of multivariate analyses that include potential confounders, we can make an initial albeit provisional stab at testing the main hypotheses. It is also apparent that our sample does not just include the most settled respondents as despite excluding currently homeless subjects from the domiciled sample, 27% reported a history of past homelessness (with or without other family members) and of the 114 young people could not be traced at initial recruitment, not all may have moved away: several had addresses for properties that had been 'redeveloped' while for others the recorded address appeared to be incorrect. Finally, despite these limitations, the findings from this sample strengthen the overall study by controlling for biases in the standardized instruments as they are applied to youthful populations and by highlighting possible disparities between the two groups in key areas of educational attainment, childhood experiences and mental health.

The second possible limitation of our study concerns the risk that the homeless sample are more likely to report childhood adversity in an effort to justify their decision to leave home. However, we believe this is an improbable explanation. First, the assessment of childhood experiences was made using a standardized research tool, the CECA, which relies on investigator-based ratings of factual accounts of parental behaviour rather than the subject's own interpretations of these behaviours (e.g. being disliked, picked-on or ignored). Secondly, we were able to obtain independent confirmation of all reports of statutory care and in no instances was the young person found to be fabricating these reports. If anything, downplaying and denial of problems were more frequently encountered than exaggerated claims. For example, one young women described being 'grounded' as a discipline for some minor misdemeanour, initially implying that there was nothing untoward in this experience, but on closer questioning this 'grounding' turned out to be a regime of complete isolation for several weeks, being locked in her room after being escorted home from school and only allowed out at set times for meals and use of the toilet. Thirdly, the base rates of key CECA variables among women in our domiciled sample were similar to those reported in a separate study of women living in the London borough of Islington (Bifulco *et al.* 1994) – e.g. parental indif-

ference was rated in 17% of domiciled women in our series and in 17% of the Islington women; physical abuse in 23% and 18% respectively and childhood adversity in 33% and 29% respectively. Finally, the findings of excessive rates of childhood adversity are broadly in line with those obtained in other studies of homeless young people (Powers *et al.* 1990; Feitel *et al.* 1992; Dadds *et al.* 1993; Janus *et al.* 1995).

Our study has documented rates of mental illness that are approximately three times that seen in the domiciled population. These illnesses are not trivial or transient. The majority involve depression and anxiety though small numbers of more serious conditions were encountered. These findings are broadly in line with similar investigations carried out in North America (Shaffer & Caton, 1984; Mundy *et al.* 1990; Feitel *et al.* 1992; Victor, 1992).

Risk factors and homelessness

Three candidate risk factors for homelessness stand out in the international literature and were identified as important in the present study – childhood adversity and/or conduct disorder; poor educational attainment and psychiatric disorder. Our analysis suggests that each factor has a significant independent association with the risk of becoming homeless. The mechanism of these links is not clear and likely to involve multiple causal pathways. For example, Susser *et al.* (1993) speculate that childhood adversity may predispose individuals to homelessness because effective kin support is less often present in families in which such adversity occurs and since the family of origin is an important source of assistance to young people in trouble, it follows that if this resource is less available, the risk of homelessness would be increased. Poor educational attainment is closely tied to subsequent employment opportunities, the lack of which have a clear impact on a young person's ability to obtain and maintain independent accommodation. Finally, psychiatric disorder may contribute to adult homelessness through its impact on the individual's ability to earn adequate income or effectively engage in a rehousing programme. In the current study, psychiatric disorder largely preceded homelessness and may well have played a part in precipitating a decision to leave home or abandon stable accommodation. However, it also seems likely that homelessness exacerbates disorder as this was both more severe and more persistent among the homeless population and the majority of reported suicide attempts occurred while the young person was homeless.

Complex subsidiary pathways linking these factors are certain to exist. For example, it is known that childhood adversity is causally associated with adult psychiatric disorder, the link being mediated both through damaging effects on the young persons psychological functioning as well as indirectly through downstream impact on a broad range of interpersonal difficulties including social isolation or developing unstable relationships with undependable support figures (Brown & Moran, 1994).

In conclusion, the evidence presented in this paper supports the hypotheses which characterise the youth homeless population as experiencing higher rates of childhood adversity and psychiatric disorder than their domiciled contemporaries. A tentative model is suggested whereby childhood experiences, educational attainment and the prior presence of psychiatric disorder all independently increase the likelihood of homelessness in a youthful population. The extent to which this model is a useful basis for predicting the longer-term course and outcome of homelessness is an important but open question to which we will turn in future reports.

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REFERENCES

Bifulco, A. (1994). *The First Steps on the Road to Depression. MRC News*. MRC: London.

Bifulco, A., Brown, G. & Adler, Z. (1991). Early sexual abuse and clinical depression in adult life. *British Journal of Psychiatry* **159**, 115–122.

Bifulco, A., Brown, G. W. & Harris, T. O. (1994). Childhood Experience of Care and Abuse (CECA): a retrospective interview measure. *Child Psychology and Psychiatry*, **35**, 1419–1435.

Bifulco, A., Brown, G. W., Lillie, A. & Jarvis, J. (1997). Memories of childhood neglect and abuse: corroboration in a series of sisters. *Journal of Child Psychology and Psychiatry* **38**, 365–374.

Brown, G. W. & Moran, P. (1994). Clinical and psychological origins of chronic depressive episodes: I a community survey. *British Journal of Psychiatry* **165**, 447–456.

Burrows, L. & Walentowicz, P. (1992). *Homes Cost Less Than Homelessness*. Shelter: London.

Craig, T. K. J., Hodson, S., Woodward, S. & Richardson, S. (1996).

Off to a Bad Start: A Longitudinal Study of Homeless Young People in London. Final Report to the Mental Health Foundation. Mental Health Foundation: London.

Dadds, M. R., Braddock, D., Cuers, S., Elliot, A. & Kelly, A. (1993). Personal and family distress in homeless adolescents. *Community Mental Health Journal* **29**, 413–422.

Feitel, B., Margetson, N., Chamas, J. & Lipman, C. (1992). Psychosocial background and behavioral and emotional disorders of homeless and runaway youth. *Hospital and Community Psychiatry* **43**, 155–159.

Gill, B., Meltzer, H., Hinds, K. & Petticrew, M. (1996). *OPCS Surveys of Psychiatric Morbidity in Great Britain. 7: Psychiatric Morbidity among Homeless People*, (*7*). HMSO: London.

Janca, A., Robins, L. N., Cottler, L. B. & Early, T. S. (1992). Clinical observation of assessment using the Composite International Diagnostic Interview (CIDI). An analysis of the CIDI field trials – Wave II at the St Louis Site. *British Journal of Psychiatry* **160**, 815–818.

Janus, M. D., Archambault, F. X., Brown, S. W. & Welsh, L. A. (1995). Physical abuse in Canadian runaway adolescents. *Child Abuse and Neglect*. **19**, 433–447.

Mundy, P., Robertson, M., Robertson, J. & Greenblatt, M. (1990). The prevalence of psychotic symptoms in homeless adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry* **29**, 724–731.

Powers, J. L., Eckenrode, J. & Jakutsch, T. (1990). Maltreatment among runaway and homeless youth. *Child Abuse and Neglect* **14**, 87–89.

Robertson, M. J., Koegel, P. & Ferguson, L. (1990). Alcohol use and abuse among homeless adolescents in Hollywood. *Contemporary Drug Problems* Fall 1989, 415–452.

Randall, G. & Brown, S. (1993). *The Rough Sleepers Initiative: An Evaluation*. HMSO: London.

Robins, L. N. & McEvoy, L. (1990). Conduct problems as predictors of substance abuse. In *Straight and Devious Pathways from Childhood to Adulthood* (ed. L. Robins and M. Rutter), pp. 182–204. Cambridge University Press: Cambridge.

Scott, J. (1993). Homelessness and mental illness. *British Journal of Psychiatry* **162**, 314–324.

Shaffer, D. & Caton, C. L. M. (1984). *Runaway and Homeless Youth in New York City: A Report to the Ittleston Foundation*. New York State Psychiatric Institute & Columbia University College of Physicians and Surgeons: New York.

Susser, E., Moore, R. & Link, B. (1993). Risk factors for homelessness. *American Journal of Epidemiology* **15**, 546–556.

Victor, C. (1992). Health status of the temporarily homeless population and residents of North West Thames region. *British Medical Journal* **305**, 387–391.

WHO (1990). *Composite International Diagnostic Interview* (*CIDI*). World Health Organization: Geneva.

Wittchen, H.-U. (1994). Reliability and validity of the WHO-Composite International Diagnostic Interview (CIDI): a critical review. *Journal of Psychiatric Research* **28**, 57–84.

Wittchen, H. U., Robins, L. N., Cottler, L., Sartorius, N., Burke, J. & Regier, D. (1991). Cross-cultural feasibility, reliability and sources of variance of the Composite International Diagnostic Interview (CIDI) – results of multicentre WHO/ADAMHA Field Trials (Wave I). *British Journal of Psychiatry* **159**, 645–653.

Yates, G. L., MacKenzie, R., Pennbridge, J. & Cohen, E. (1988). A risk profile comparison of runaway and non-runaway youth. *American Journal of Public Health* **78**, 820–821.