

ORIGINAL PAPER

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Social class and suicidal behaviour: the associations between social class and the characteristics of deliberate self-harm patients and the treatment they are offered

Accepted: 27 July 2001

Abstract *Background* Rates of deliberate self-harm (DSH) in the United Kingdom are much higher in lower than upper social class groups. Previous investigations have shown differences in socio-demographic and clinical characteristics of male patients according to social class. In two studies of DSH patients in Edinburgh the extent of provision of psychiatric aftercare was inversely related to social class. These findings have not been investigated in other areas. *Method* Data collected through the Oxford Monitoring System for Attempted Suicide were used to examine the association between social class and socio-demographic and clinical characteristics in male and female DSH patients who presented to the general hospital in Oxford between mid-1988 and 1996 and to determine whether the previously reported social class differences in provision of psychiatric aftercare were replicated. *Results* Data on social class were available for 2,828 DSH patients (1,290 males, 1,538 females). In both genders, lower social class group tended to be associated with younger age. In males, the main social class differences were found in under-35-year-olds, in whom lower social class was related to criminal record, violence to others and drug misuse. In females, psychiatric disorders were diagnosed more frequently in the higher social class groups, but only in the under-35 age group. In neither gender was there a significant association between social class and the frequency of offer of psychiatric aftercare following DSH. *Conclusions* There are considerable variations in socio-demographic and clinical characteristics of both male and female DSH patients in different social classes, especially in younger patients. The reason for the absence of a marked social class gradient in psychiatric aftercare found in this study in contrast to the results from previ-

ous investigations may be related to differences in styles of service.

Key words Attempted suicide – Self harm – Social class – Psychiatric treatment – Violence – Substance abuse

Introduction

Increasing attention is being paid to the association between health issues and social disadvantage (Drever and Whitehead 1997). Studies from the USA (Kposowa 2001) and Australia (Taylor et al. 1998) have shown strong inverse associations between suicide rates and socio-economic status in males but not females.

The relationship between social class and suicidal behaviour in the United Kingdom is somewhat complex. While Bulusu and Alderson (1984) commented that there were no social class trends in suicide in England and Wales for the years around 1951–1971, subsequent studies have shown definite social class patterns, although these investigations have been restricted to males. Kreitman et al. (1991) demonstrated higher rates of suicide and undetermined deaths in the lower social class groups in both England and Wales, and Scotland. This relationship was most marked in middle-aged males. For a later period Charlton et al. (1993) found a U-shaped distribution of suicide in males, with highest rates amongst those in social classes I and V. Drever and Bunting (1997) reported an inverse social class gradient in suicide in males for an even more recent period. This was confirmed by Fitzpatrick and Dollamore (1999) using the new National Statistics Socio-economic Classification, which combines social class and socio-economic group. It has been suggested that studies of suicide and social class have been restricted to males because women tend to move in and out of occupations more frequently than men and a woman's occupation is often not recorded on her death certificate unless she had been employed for most of her life (Kreitman et al. 1991).

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The association between social class and non-fatal suicidal behaviour, or deliberate self-harm (DSH; deliberate self-poisoning or self-injury), is much clearer. Rates of DSH are greatly elevated in lower social class groups. For example, in Edinburgh in 1980–82 the relative risk of ‘parasuicide’ in social class V compared with social classes I and II in economically active males was 12.2 and the equivalent relative risk in Oxford during the same period was 8.7 (Platt et al. 1988). In Oxford during 1990–92, DSH rates were again found to be elevated in the lower social class groups of both genders, the relative risk in social classes III–V compared to I and II being 12.3 for males and 8.6 for females (Hawton et al. 1994).

Differences in the characteristics of DSH patients according to their social class were found by Buglass (1976) in Edinburgh. Lower social class was associated with a variety of social problems, including overcrowding, trouble with the law, debt, violent interpersonal relationships and a diagnosis of personality disorder. Depressive disorders were more often diagnosed in patients from higher social class groups.

It has been suggested that the social class of DSH patients may influence treatment decisions, presumably mediated by specific characteristics of patients in different social class groups. In Edinburgh, Buglass (1976) showed that during the period 1968–73 the type and intensity of psychiatric aftercare offered to DSH (‘parasuicide’) patients was inversely related to social class. Compared with patients in social classes I and II (the highest social class groups), patients in the unskilled group (social class V) were far less likely to be offered in-patient psychiatric care, and were more frequently not offered any specific aftercare. This relationship held up within diagnostic groups. On the basis of a similar study of male DSH patients admitted to hospital in Edinburgh in 1981–86, Platt (1991) also showed that psychiatric aftercare was associated with social class, in that there was a clear inverse relationship between social class and the likelihood of psychiatric aftercare being offered. Multivariate statistical analysis indicated that while the main predictor of psychiatric aftercare was psychiatric diagnosis, social class and a number of other factors (e.g. previous DSH, previous psychiatric treatment) were also relevant. The findings of the studies in Edinburgh suggest that social class (and related factors) can have an important influence on decisions about whether psychiatric care is offered to individual DSH patients.

We have undertaken a study based on data collected on DSH patients in Oxford to examine how socio-demographic and clinical factors vary with social class, and to determine whether similar findings regarding the relationship between provision of psychiatric aftercare and social class apply in a different setting. We have included both male and female DSH patients in this investigation and have also examined patterns in younger and older age groups.

Methods

■ Study population

The sample studied consisted of patients presenting to the general hospital in Oxford following DSH between July 1st 1988 and December 31st 1996. Because of gender differences in usual age of retirement, the study was restricted to males between the ages of 16 and 64 years, and females aged 16–59 years.

The data for the study were obtained through the Oxford Monitoring System for Attempted Suicide (Hawton et al. 1997). This system enables data to be collected on all DSH patients presenting to the general hospital in Oxford. Information on a range of socio-demographic and clinical variables is collected for patients assessed by members of the general hospital psychiatric service. For patients not assessed by the service, limited information is collected from the medical case records. However, as social class would usually not be known for these patients they were excluded from the study.

The general hospital in Oxford is a teaching hospital with a catchment area population of all ages of approximately 450,000. While some DSH patients living at the fringe of the catchment area might present to other hospitals outside the district, especially in an emergency, the extent of cross-boundary presentations is not great.

■ Social and clinical variables

The standard method of coding social class (summarised in the Appendix) during the study period was used. Patients were allocated to a social class on the basis of their occupation if employed, or their previous occupation if unemployed. Housewives were allocated on the basis of their husband’s occupation and students on the basis of their head of household’s occupation. For the statistical analysis, the social classes were grouped as follows: social classes I and II; III (manual and non-manual); IV and V. Those patients who could not be assigned to one of these categories, either through a lack of information or by their being unclassifiable (e.g. armed forces), were excluded from the analyses.

The subjects included in the study were all those who both received an assessment by a member of the clinical service during the study period and for whom social class was recorded. For individuals who had more than one episode resulting in an assessment during the study period, only the first of these episodes was included in the analyses.

Psychiatric aftercare was recorded as ‘yes’ for any specific type of psychiatric care which was offered to the patient (i.e. in-patient, out-patient or day patient care) and ‘no’ where the patient was simply returned to the care of the general practitioner (although they may of course have provided treatment for mental health problems).

The other social and clinical variables included in the study were: living situation (alone/with others), violence to others, violence received, alcohol misuse, drug misuse (except cannabis), previous DSH episodes, previous psychiatric treatment, psychiatric disorder and personality disorder. It should be noted that most of the assessments of patients in Oxford are conducted by psychiatrically trained nursing staff (with supervision by senior psychiatrists) and that their threshold for recording a diagnosis of psychiatric disorder is fairly high. Thus, the patients recorded as having disorder would mostly be towards the more severe end of the spectrum.

■ Statistical analyses

χ^2 analyses (with Yates’ correction) were conducted using SPSS (SPSS 1997). A Bonferroni correction was applied where multiple univariate analyses were conducted on the same sample.

Results

Subjects

A total of 5,221 individuals presented to the hospital during the study period, of whom 4,887 (88.5%; 2,114 males, 2,773 females) were assessed by a member of the general hospital psychiatric service. For these, social class was recorded in 2,828 (57.8%) cases (1,290, 61.1% males; 1,538, 55.5% females). Of these patients, 90.8% (N = 2,568) involved self-poisoning, 6.0% (N = 170) self-injury and 3.2% (N = 90) both self-poisoning and self-injury. The social class distribution of the subjects included in the study (which excludes 70 individuals in the armed forces) is shown in Table 1. More males than females were in the lowest social class group ($\chi^2 = 72.04$, 2 df, $p < 0.0005$).

There was wide variation in the extent to which information was available for the variables examined. It was missing in a substantial proportion of cases for criminal record, violence and personality disorder (Tables 2 and 4).

Subjects for whom social class was not known

Among the subjects for whom social class was not known was a substantial group of students (N = 604). The remainder of these subjects were compared with those for whom social class was known. No significant differences were found for gender, age, marital status, overall method of DSH, psychiatric aftercare and alcohol misuse. For most of the remaining variables the percentages of subjects with missing data were particularly high in the group for whom social class was not known. For previous psychiatric treatment, however, information was available in the large majority; subjects for whom social class was not known were significantly more likely to have had previous psychiatric treatment (52.6% vs 32.4%; $\chi^2 = 142.66$, $p < 0.0005$) and to be unemployed (87.7% vs 24.8%; $\chi^2 = 1444.27$, $p < 0.0001$).

Table 1 Social class distribution of DSH patients, by gender¹

Social class	Males (N=1,247)		Females (N=1,511)		Both genders (N=2,758)	
	N	(%)	N	(%)	N	(%)
I and II	138	(11.1)	187	(12.4)	325	(11.8)
III	598	(48.0)	933	(61.7)	1,531	(55.5)
IV and V	511	(41.0)	391	(25.9)	902	(32.7)

¹ Excluding 70 members of the armed forces

Males

Demographic and clinical characteristics

Comparison of the male patients in the three social class groups, using $p < 0.0015$ as the level of statistical significance after Bonferroni correction, indicated a marked inverse social class gradient for younger age, with increasing proportions being under 35 years of age from social classes I and II through social class III to social classes IV and V (Table 2). Both criminal record and violence to others showed strong inverse social class gradients, the proportions steadily increasing between social classes I and II and classes IV and V. Alcohol misuse occurred with similar high frequency in all three social class groups; drug misuse was more common in the lower social class groups but this difference was not significant. There was no difference between the social class groups in terms of the proportions of patients with a history of previous DSH or of previous psychiatric treatment.

In view of the marked difference in the age distribu-

Table 2 Comparison of socio-demographic and clinical characteristics of DSH patients by social class groups: males

Characteristic (No. where information missing; %)	Social class group			Statistic χ^2 (2 d.f), p
	I and II (N=138) % (N)	III (N=598) % (N)	IV and V (N=511) % (N)	
Age: up to 34 years (0)	44.9 (62)	65.4 (394)	76.7 (392)	52.82, $p < 0.0001$
Living alone (8; 1%)	33.6 (46)	23.5 (140)	28.1 (142)	6.94, $p = 0.03$
Criminal record (270; 21.7%)	14.3 (15)	28.4 (137)	41.6 (162)	34.62, $p < 0.0001$
Violence to others in previous 5 years (290; 23.3%)	11.5 (13)	17.0 (76)	26.2 (104)	17.01, $p < 0.0001$
Violence received in previous 5 years (321; 25.7%)	4.7 (5)	10.4 (46)	11.1 (42)	3.98, $p = 0.14$
Alcohol misuse (90; 7.2%)	14.0 (18)	13.9 (77)	15.5 (74)	0.57, $p = 0.75$
Drug misuse (116; 9.3%)	3.1 (4)	7.2 (39)	11.8 (54)	12.18, $p = 0.002$
Previous DSH (103; 8.3%)	32.8 (41)	33.4 (186)	35.5 (164)	0.62, $p = 0.74$
Previous psychiatric treatment (82; 6.6%)	34.1 (44)	28.1 (159)	33.1 (156)	3.73, $p = 0.16$
Psychiatric disorder (160; 12.8%)	33.6 (40)	22.1 (115)	22.8 (102)	7.43, $p = 0.02$
Personality disorder (274; 22.0%)	17.3 (19)	15.2 (71)	19.9 (79)	3.36, $p = 0.19$
Psychiatric aftercare (0)	53.6 (74)	53.2 (318)	52.6 (269)	0.06, $p = 0.97$

Table 3 Comparison of socio-demographic and clinical characteristics of patients by social class groups: males under 35 years and 35 years and over

Characteristic		Social class group			Statistic χ^2 (2 d.f), p
		I and II % (N)	III % (N)	IV and V % (N)	
Living alone	Under 35 years N=843	32.3 (20)	21.9 (86)	26.0 (101)	3.85, p = 0.15 3.31, p = 0.19
	35 years plus N=396	34.7 (26)	26.5 (54)	35.0 (41)	
Criminal record	Under 35 years N=690	13.2 (7)	30.1 (97)	44.8 (141)	27.37, p < 0.0001 2.95, p = 0.23
	35 years plus N=287	15.4 (8)	24.8 (40)	28.4 (21)	
Violence to others in previous 5 years	Under 35 years N=666	7.7 (4)	17.9 (54)	28.8 (90)	17.27, p < 0.0001 0.13, p = 0.94
	35 years plus N=291	14.8 (9)	15.1 (22)	16.7 (14)	
Violence received in previous 5 years	Under 35 years N=643	4.0 (2)	13.2 (39)	11.8 (35)	3.45, p = 0.18 1.50, p = 0.47
	35 years plus N=283	5.3 (3)	4.8 (7)	8.8 (7)	
Alcohol misuse	Under 35 years N=791	40.0 (24)	43.6 (157)	43.7 (162)	0.30, p = 0.86 0.15, p = 0.93
	35 years plus N=366	53.6 (37)	51.0 (98)	52.4 (55)	
Drug misuse	Under 35 years N=731	7.1 (4)	9.0 (30)	18.5 (63)	15.42, p < 0.0001 1.83, p = 0.40
	35 years plus N=358	4.3 (3)	8.0 (15)	9.9 (10)	
Previous attempts	Under 35 years N=781	20.0 (11)	31.9 (118)	34.3 (122)	4.47, p = 0.11 0.98, p = 0.61
	35 years plus N=363	42.9 (30)	11.4 (68)	39.6 (42)	
Previous psychiatric treatment	Under 35 years N=795	29.6 (16)	23.3 (87)	30.4 (111)	4.88, p = 0.09 0.67, p = 0.71
	35 years plus N=370	38.4 (28)	37.7 (72)	42.5 (45)	
Psychiatric disorder	Under 35 years N=751	21.6 (11)	17.2 (60)	19.0 (67)	0.75, p = 0.69 2.63, p = 0.27
	35 years plus N=336	42.6 (29)	31.81 (55)	36.8 (35)	
Personality disorder	Under 35 years N=662	14.0 (7)	14.3 (44)	18.7 (57)	2.34, p = 0.31 1.97, p = 0.37
	35 years plus N=311	20.0 (12)	16.9 (27)	24.2 (22)	
Psychiatric aftercare	Under 35 years N=848	50.0 (31)	51.8 (204)	51.0 (200)	0.09, p = 0.96 0.14, p = 0.94
	35 years plus N=399	56.6 (43)	55.9 (114)	58.0 (69)	

tions across social class groups we repeated the analyses within the under-35 and 35-and-over age groups of males (Table 3). None of the factors examined had a statistically significant association with social class group in the over-35 age group. In the younger age group, lower social class was strongly associated with criminal record

(with 44.8% of those in social classes IV and V having a record), violence to others and drug misuse.

Psychiatric aftercare

The proportions offered psychiatric aftercare were virtually identical in each of the three social class groups (Table 2). This was also found in both the under-35-year-olds and those aged 35 years and over (Table 3).

To establish which factors were most likely to influence the provision of psychiatric aftercare, variables for which there were missing data in less than 20% of cases were entered into a stepwise logistic regression model. Aftercare was found to be significantly associated with psychiatric disorder (Exp(β) 7.02, 95% Confidence Interval 4.64–10.64), previous DSH (Exp(β) 1.62, 95% CI 1.20–2.19) and previous psychiatric treatment (Exp(β) 1.52, 95% CI 1.08–2.14).

■ Females

Demographic and clinical characteristics

Again using $p < 0.0015$ as the level of statistical significance, a difference in age distribution within the three social class groups was also found in females, with the proportion of under-35-year-olds being much lower in social classes I and II than in either of the other groups (Table 4). Far fewer of the females than males had a criminal record, but, as in the males, criminal record was inversely related to social class, although the difference did not attain statistical significance. While violence to others was also far less frequent in the females, more of the females had been the victims of violence, but neither factor was significantly associated with social class. Nor was either alcohol misuse or drug misuse associated with particular social class groups. As in males, there was no difference between the social class groups in terms of the proportions of patients with a history of previous DSH episodes. There were also no major differences between the social class groups in the proportions of patients who had had previous psychiatric treatment. The proportion of patients receiving a psychiatric diagnosis was far greater in social classes I and II, but there was no difference in terms of personality disorder.

Again, because of the difference in age distribution across the social class groups, we repeated the analyses within the under-35 and 35-and-over age groups (Table 5). The greater frequency of psychiatric diagnosis in the higher social class groups was entirely restricted to the under-35 age group.

Psychiatric aftercare

There was a trend for psychiatric aftercare to be offered to more females in social classes I and II (Table 4), this trend being only in the patients under 35 years of age (Table 5). However, neither difference was statistically

Table 4 Comparison of socio-demographic and clinical characteristics of DSH patients by social class groups: females

Characteristic (No. where information missing; %)	Social class group			Statistic χ^2 (2 d.f), p
	I and II (N=187) % (N)	III (N=933) % (N)	IV and V (N=391) % (N)	
Age: up to 34 years (0)	49.7 (93)	70.5 (658)	67.0 (262)	30.48, p < 0.0001
Living alone (18; 1.2 %)	21.2 (39)	17.9 (166)	13.5 (52)	6.03, p = 0.05
Criminal record (249; 16.4 %)	1.9 (3)	4.5 (35)	7.6 (25)	8.43, p = 0.02
Violence to others in previous 5 years (287; 19.0 %)	3.4 (5)	4.4 (33)	5.6 (18)	1.40, p = 0.50
Violence received in previous 5 years (317; 21.0 %)	18.6 (27)	17.5 (128)	24.7 (78)	7.42, p = 0.03
Alcohol misuse (121; 8.0 %)	3.7 (7)	5.9 (55)	5.4 (23)	1.31, p = 0.52
Drug misuse (123; 8.1 %)	2.7 (5)	3.0 (28)	2.6 (10)	0.21, p = 0.90
Previous DSH (116; 7.7 %)	41.0 (68)	37.5 (314)	41.7 (150)	1.99, p = 0.37
Previous psychiatric treatment (86; 5.7 %)	40.9 (72)	33.7 (296)	30.5 (113)	5.74, p = 0.06
Psychiatric disorder (189; 12.5 %)	39.4 (63)	26.8 (219)	22.1 (76)	16.62, p < 0.0001
Personality disorder (283; 18.7 %)	11.6 (18)	10.4 (78)	10.0 (32)	0.31, p = 0.86
Psychiatric aftercare (0)	62.0 (116)	54.1 (505)	51.7 (202)	5.60, p = 0.06

significant. When variables for which there were missing data in less than 20 % of cases were entered into a step-wise logistic regression model, psychiatric aftercare was found to be significantly associated with psychiatric disorder (Exp(β) 4.04, 95 % CI 2.99–5.46) and previous psychiatric treatment (Exp(β) 1.83, 95 % CI 1.38–2.44).

Discussion

This study has demonstrated that there are some major differences between the characteristics of DSH patients from different social class groups.

Demographic and clinical characteristics

Age was strongly associated with social class, with greater proportions of younger patients of both genders being in the middle and lower social class groups. Such data do not of course inform one about the relative risks of DSH by social class, but, as noted earlier, it has been well documented that the risk of DSH is inversely related

Table 5 Comparison of socio-demographic and clinical characteristics of patients by social class groups: females under 35 years and 35 years and over

Characteristic		Social class group			Statistic χ^2 (2 d.f), p
		I and II (N)	III (N)	IV and V (N)	
Living alone	Under 35 years N=1000	22.0 (20)	18.3 (119)	15.9 (41)	1.79, p = 0.41 6.67, p = 0.04
	35 years plus N=493	20.4 (19)	17.2 (47)	8.7 (11)	
Criminal record	Under 35 years N=865	3.7 (3)	4.2 (23)	8.7 (20)	7.14, p = 0.03 4.21, p = 0.12
	35 years plus N=397	0 (0)	5.4 (12)	5.2 (5)	
Violence to others in previous 5 years	Under 35 years N=838	3.8 (3)	4.8 (26)	6.0 (13)	0.77, p = 0.68 0.60, p = 0.74
	35 years plus N=386	2.9 (2)	3.3 (7)	4.8 (5)	
Violence received in previous 5 years	Under 35 years N=820	24.7 (19)	17.4 (92)	23.8 (51)	5.28, p = 0.07 6.26, p = 0.04
	35 years plus N=374	11.8 (8)	17.6 (36)	26.5 (27)	
Alcohol misuse	Under 35 years N=935	15.3 (13)	22.2 (134)	21.1 (52)	2.12, p = 0.35 0.53, p = 0.77
	35 years plus N=455	30.1 (25)	31.2 (79)	34.5 (41)	
Drug misuse	Under 35 years N=918	6.9 (6)	4.0 (24)	3.4 (8)	1.99, p = 0.37 0.20, p = 0.90
	35 years plus N=458	2.3 (2)	3.2 (8)	3.4 (4)	
Previous attempts	Under 35 years N=938	36.0 (31)	34.7 (210)	38.9 (96)	1.32, p = 0.52 0.38, p = 0.83
	35 years plus N=457	42.5 (37)	41.6 (104)	45.0 (54)	
Previous psychiatric treatment	Under 35 years N=953	31.5 (28)	27.7 (170)	26.0 (65)	0.99, p = 0.61 2.72, p = 0.26
	35 years plus N=472	50.6 (44)	47.5 (126)	40.0 (48)	
Psychiatric disorder	Under 35 years N=888	42.0 (34)	21.3 (122)	16.2 (38)	23.75, p < 0.0001 0.72, p = 0.70
	35 years plus N=434	36.7 (29)	39.4 (97)	34.9 (38)	
Personality disorder	Under 35 years N=815	12.8 (10)	9.1 (48)	11.3 (24)	1.52, p = 0.47 2.62, p = 0.27
	35 years plus N=413	10.4 (8)	13.2 (30)	7.3 (8)	
Psychiatric aftercare	Under 35 years N=1013	63.4 (59)	50.8 (334)	49.6 (130)	5.82, p = 0.055 1.49, p = 0.47
	35 years plus N=498	60.6 (57)	62.2 (171)	55.8 (72)	

to social class (Platt et al. 1988; Hawton et al. 1994). However, the association of younger age and social class is relevant to interpretation of some of the findings. Therefore, we have conducted analyses for the patients grouped by age (under 35 years and 35 years and over), as well as within each gender overall.

The most striking variations by social class in males were in relation to criminal record and a history of violence, in keeping with the earlier findings of Buglass (1976) in Edinburgh. The greater frequency of a criminal record in patients in the middle and, especially, lower social class groups was found for both genders but was only significant in males, in whom a criminal record was also far more common than in females. The association between lower social class and criminal record was particularly marked in males under 35 years of age. In the young males in social classes IV and V, 44.8% had a criminal record. A marked inverse association between history of violence to others and social class group was only found in males in the younger age group, with 28.8% of those in social classes IV and V having such a history. On the other hand, in females there was a trend towards social class being associated with being a victim of violence from others.

In males, drug misuse was also inversely related to social class group in younger males. Drug misuse is recognised as being associated with increased risk of DSH (Murphy 2000). Perhaps surprisingly, however, alcohol misuse showed no association with particular social class groups in either gender.

It is also perhaps surprising that social class was not related to personality disorder, as was found in Edinburgh by Buglass (1976), as this tends to be associated with aggression (Hawton and Van Heeringen 2000).

History of psychiatric treatment differed little between the social classes. However, more females in social classes I and II were recorded as having current psychiatric disorders, as found by Buglass (1976), and there was a trend in this direction in males. In females this pattern was restricted solely to the under-35-year-olds: 42% of the under-35-year-olds in social classes I and II had been given a diagnosis, compared with just 16.2% in social classes IV and V. As noted earlier, the prevalence of psychiatric and personality disorders would have been underestimated because the majority of the assessments of DSH patients are conducted by nursing staff who tend to formulate patients' problems mainly in terms of their psychosocial problems, unless the level of psychiatric disorder is relatively severe. There is a possibility that psychiatric disorder may be less often recorded in people from lower social class groups due to the greater prevalence of psychosocial problems in patients from these groups and the greater ability of some people in upper social class groups to describe psychiatric symptoms. We were unable to investigate these factors in this study.

■ Psychiatric aftercare

The previously reported finding from Edinburgh that fewer DSH patients in the lowest social class group were offered psychiatric aftercare following DSH (Buglass 1976; Platt 1991) was not confirmed in this study. The only trend between social class and aftercare that we ob-

served was in young females – this was non-significant. No such trend was observed in male patients. One possible explanation for the difference is that the service model in Edinburgh at the time of the above studies was a fairly traditional psychiatric one; in Oxford, a multi-disciplinary team works to a psychosocial and problem-orientated model in which psychiatric disorder is viewed as just one of a range of problems that need to be addressed in treatment (Hawton and Catalan 1987). Thus, treatment is often offered in the absence of marked psychiatric disorder as well as when it is present. This may also explain why psychiatric aftercare was offered to a higher proportion of male patients in this study than in those of Buglass (1976) and Platt (1991). Psychiatric aftercare was, however, associated in both genders with a history of previous psychiatric treatment and current psychiatric disorder, and, in males, with a history of previous DSH. The findings for males are in accord with those of Platt's (1991) study of male DSH patients in Edinburgh.

■ Methodological limitations

There are several problems inherent in using social class as a classificatory dimension. It is based solely on occupation (see Appendix), and not on broader measures of economic or social advantage or disadvantage. Indices of socio-economic deprivation or social fragmentation are more valuable when trying to establish causal relationships with suicidal behaviour. Thus, several studies in the UK have shown associations between rates of both DSH and suicide and such factors (Gunnell et al. 1995; Congdon 1996; Hawton et al. 2001). However, whereas social class is a characteristic of an individual (or of their family), measures of socio-economic deprivation and fragmentation usually relate to the characteristics of the environment in which an individual lives.

Another methodological limitation of the present study is the relatively large number of individuals for whom social class was not known. A substantial number of those without information on social class were students. There were no marked differences between those with and without information on social class for gender, age, marital status, overall method of DSH, alcohol misuse and psychiatric aftercare. Previous psychiatric treatment was associated with lack of information on social class. This is probably because among individuals who have had treatment there is likely to be a substantial proportion who have not been working for many years, including some who are long-term sick or disabled because of chronic psychiatric disorders. There was a big discrepancy between those with and without information on social class with regard to unemployment. This would have been because previous occupation would often not have been recorded, especially in those who were long-term unemployed. The extent of missing information on social class clearly indicates the necessity for caution in interpreting some of the findings.

Conclusions

There are considerable differences between the characteristics of DSH patients in different social class groups. This applies to both genders and is most marked in younger patients. The pattern differs by gender and age for some factors, such as a history of criminal record and violence to others. The earlier findings from Edinburgh that the frequency with which psychiatric aftercare was offered to male DSH patients varied according to their social class was not replicated. There was a trend in younger females for more patients in the higher social class groups to be offered psychiatric aftercare, but this was not statistically significant. This trend reflected the far higher prevalence of psychiatric disorder which was recorded in these groups. The difference in the findings regarding provision of aftercare compared with the earlier studies may be related to differences in models of clinical service employed in the general hospital management of DSH patients.

■ **Acknowledgements** This study was supported by a grant from Anglia and Oxford and South East Region NHSE Research and Development Committees. Keith Hawton is also supported by Oxfordshire Mental Healthcare Trust. We thank the staff of the Department of Psychological Medicine at the John Radcliffe Hospital for their ongoing support of the Monitoring System for Attempted Suicide.

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Appendix

Registrar General's Social Class Classification (based on occupation)¹

Class	Occupation type
I	Professional (e. g. accountants, electronic engineers)
II	Managerial and technical/intermediate (e. g. proprietors and managers – sales, production, works and maintenance managers)
IIINM	Skilled non-manual (e. g. clerks and cashiers – not retail)
IIIM	Skilled manual (e. g. drivers of road goods vehicles, metal working production fitters)
IV	Partly skilled (e. g. storekeepers and warehousemen, machine tool operators)
V	Unskilled (e. g. building and civil engineering labourers, cleaners etc.)

¹ From: Drever F, Whitehead M (eds) (1997) *Health Inequalities*. The Stationery Office, London