Repeat deliberate self-harm: a link with childhood sexual abuse?

H. M. YEO* & W. W. YEO*

*Accident and Emergency Department and †University Department of Medicine and Pharmacology, Royal Hallamshire Hospital, Sheffield S10 2JF, U.K.

SUMMARY

The purpose of this study was to identify whether a past history of childhood sexual abuse is a risk factor for repeated Deliberate Self-Harm (DSH). The study was a 6-month prospective study of 178 patients responsible for 190 consecutive cases of DSH seen during a 3-month censoring period. Patients were identified by review of the in-patient and accident and emergency (A&E) records of all cases of DSH at the A&E department of a major teaching hospital. Patients with a history of childhood sexual abuse showed a marked clustering of four major risk factors for repeat DSH (unemployment, past deliberate self-poisoning, self-injury and psychiatric illness) and were significantly more likely to repeat DSH within the 6-month follow-up period.

INTRODUCTION

During the last decade it has become apparent that childhood sexual abuse is common in our society and evidence is accumulating that its effects can be severe and long-lasting. Adult survivors of abuse have a higher level of psychiatric symptomatology including an increased incidence of depression (Mullen *et al.*, 1988) and recent reports suggest that survivors of abuse have a higher incidence of suicidal ideation and DSH (Shearer & Herbert, 1987; Rew, 1989; Riggs *et al.*, 1990). DSH is a major health problem which accounts for a large number of A&E attendances each year. Risk factors for DSH have been studied extensively and the repetitiveness of the phenomenon is widely recognized (Adams, 1986; Robinson & Duffy, 1989). The reports cited above (Shearer & Herbert, 1987; Mullen *et al.*, 1988; Rew, 1989; Riggs *et al.*, 1990) prompted the examination of the relationship between repeat DSH and a history of sexual abuse.

Correspondence: Mrs H. M. Yeo, Accident and Emergency Department, Royal Hallamshire Hospital, Sheffield S10 2JF, U.K.

PATIENTS AND METHODS

The department sees approximately 54 000 new patients each year and over the last 3 years, around 1000 patients each year (1.8%) attend with various forms of DSH.

We reviewed the records of 178 patients who were responsible for 190 consecutive cases of DSH seen at the department between June and September 1990 for a history of sexual abuse during childhood. The review consisted of reading through all the hospital notes, including nursing records and A&E records held at the hospital for each patient. (The hospital notes do not include psychiatric case notes.) In order to be identified as 'sexually abused during childhood', the abuse had to have occurred before the age 16, had to be attempted rape or rape or incest.

All patients were allocated to either 'non-abused' or 'abused' groups. Six patients for whom the hospital records were lost were included in the 'non-abused' group. No patient was excluded from the study. For some patients the classification of family circumstances was difficult to define as it was hard to determine whether patients were married or divorced, living alone or cohabiting. Patients chronically in transition from one to an other were grouped under 'severely disrupted interpersonal relationships'.

The abused and non-abused groups were compared with regard to age, sex, family circumstances and also six major risk factors for repeated DSH: employment status, past history of DSH, substance abuse, past psychiatric inpatient record and past self-injury behaviour. The latter was limited to documented evidence of self-inflicted wrist lacerations.

All patients were followed-up prospectively for 6 months from their index episode, which was defined as the first episode of DSH during the 3-month censoring period. The social work register, which identifies all episodes of DSH attending the hospital (A&E and direct referral to the wards via GPs), was checked weekly and cross-checked with the A&E register.

Statistical analysis was performed using X², with Yates correction where appropriate, and Fishers exact test. Previous sexual abuse and self-inflicted wrist lacerations were examined as independent risk factors for repeat DSH by calculating the attributable risk with 95% confidence intervals.

RESULTS

The review of medical records identified 14 (7.8%) patients as survivors of sexual abuse and the types of abuse disclosed are listed in Table 1. In 158 cases no mention of sexual abuse was found and these patients, together with those whose records were lost, formed the non-abused group. The comparisons between the two groups are summarized in Table 2. The two groups did not differ significantly in their age or sex distribution, but survivors of sexual abuse were significantly more likely to have severely disrupted interpersonal relationships, be unemployed, more likely to have taken overdoses in the past and more likely to have cut their wrists in the past. They were also more likely to have been admitted under psychiatric care, but the number of patients with psychotic disorders or substance

Table 1. Sexual abuse experience of 14 patients with repeat deliberate self-harm

Age	Sex	Type and duration of abuse
18	m	Attempted rape in adolescence
21	m	Attempted rape in childhood
27	m	Incest (years)
43	m	Incest (years)
17	f	Incest (reported to police)
20	f	Raped after abortion
22	f	Incest (years)
25	f	Incest (years)
28	f	Attempted stranger rape
29	f	Incest (years)
29	f	Incest and rape in adolescence
31	f	Incest (years)
37	f	Incest (years)
38	f	Incest (years)

dependence did not differ significantly. Most importantly, patients in the sexually abused group were more likely to re-attend with a further episode of DSH during the 6-month follow-up (50 vs. 12%; difference 38 95 CI 11–65%).

Wrist-cutting, as a form of self-injury behaviour and sexual abuse may not be independent variables. This was accounted for by calculating χ^2 using a 4×2 contingency table. This showed, that even allowing for the excess of self-injuries in the sexual-abuse group, repeated DSH during the 6-month follow-up period remained significantly more common in the abused group ($\chi^2 = 8.5$, $P < 0.05$). When considering independent risk factors, the attributable risk of wrist-cutting for repeat DSH was 35% (95% CI 9–53%) and that for sexual abuse was 23% (95% CI 3–39%).

DISCUSSION

Research into sexual abuse is fraught with difficulties and before discussing the findings, some shortcomings of this type of study must be discussed. Patients were identified from a review of medical records. Reading through individual case records, it was found that no one, not even psychiatrists elicited a past history of physical, let alone sexual abuse in a systematic fashion. No written record of any patient gave an indication that the question 'were you abused?' was ever asked. Considering its relevance to psychiatric practice this was unexpected and unfortunately limits the results of this study. Patients are reluctant to disclose sexual abuse (Jacobson *et al.*, 1987; Mullen *et al.*, 1989; Arnold *et al.*, 1990) and it is therefore not surprising that the apparent prevalence of sexual abuse history in the sample population of 7.8% (9.1% of women and 6% of men) is slightly lower than that of the general population found by Baker & Duncan (1985). In their

Table 2. Comparison of sexually abused and non-abused DSH patients attending A&E June – September 1990

	Survivors of sexual abuse	Non-abused	χ^2	P
Number of patients	14	164		
Average age in years (range)				
male	27.5 (18–43)	31.5 (15–70)		n.s.
female	27.6 (17–38)	33.4 (14–81)		n.s.
male/female ratio	0.4	0.65		n.s.
Living circumstances				
alone	3 (21.5%)	34 (20.7%)		n.s.
with partner/friends	4 (28.5%)	90 (54.8%)		n.s.
chaotic	7 (50.0%)	17 (10.3%)	17	<0.001
not specified	–	23 (14.2%)		
Employment				
employed	1 (7.0%)	44 (26.8%)		n.s.
unemployed	12 (85.7%)	49 (29.8%)	15	<0.001
housewife/student	1 (7.0%)	44 (26.8%)		n.s.
not specified	–	27 (16.4%)		
Psychiatric history				
psych. admission	9 (64%)	38 (21%)	11	<0.001
psychotic illness	1 (7%)	9 (5%)		n.s.
substance abuse	5 (36%)	34 (21%)		n.s.
DSH at index episode				
self-injury	1 (7%)	5 (3.0%)		n.s.
DSH at (first) repeat episode				
self-injury	–	2 (10.0%)*		n.s.
Past DSH behaviour				
overdose	13 (93%)	80 (49%)	8	<0.01
wrist-cutting	7 (50%)	21 (12%)	13	<0.001
Repeat DSH in 6 months				
	7 (50%)	20 (12%)	14	<0.001

* One death

population, the incidence of sexual abuse was 12% for women and 8% for men. However, they included non-contact experiences, which accounted for 51% in their sample. In our study, non-contact experiences were not included and only the most severe forms of abuse were recorded (Table 1). For the reasons stated above, the prevalence of sexual abuse of 7.8% among patients with DSH must be regarded as the tip of the iceberg.

Patients who disclosed childhood sexual abuse were significantly more likely to be unemployed, have severely disrupted interpersonal relationships and have a past history of psychiatric inpatient care. For comparison, the number of patients with psychotic illness and substance abuse, which could have explained the higher admission to psychiatric units, did not differ significantly. It was also found that survivors of abuse were more likely to have taken overdoses in the past and were significantly more likely to be 'self-injurers' as evidenced by the number

of patients who had attempted to cut their wrists. The excess prevalence of these known risk factors (Platt, 1986; Hawton & Fagg, 1988; Robinson & Duffy, 1989; Arnold *et al.*, 1990) for DSH in this group may explain why survivors of abuse are 4.2 times more likely than non-abused patients to repeat DSH within 6 months.

The association between wrist-cutting and sexual abuse has been observed before (Malone & Berardi, 1987; Shapiro, 1987; Greenspan & Samuel, 1989). The attributable risk of self-injury for repeat DSH was 35% (95 CI 9–53%) compared with 23% for sexual abuse (3–39%). When the excess of 'self-injurers' in the abused group was corrected for, repeat behaviour still remained significantly more common in the sexually abused group ($\chi^2_{3df} = 8.5$, $P < 0.05$). This suggests that sexual abuse is in itself a risk factor for repeat DSH. It is interesting to note that in the non-abused group there was no significant difference in repeat behaviour between self-injurers and self-poisoners.

In summary, in our sample, patients with a past history of sexual abuse were 4.2 times more likely to repeat DSH within 6 months.

These findings are preliminary and were obtained retrospectively, but nevertheless probably important. There is a significant risk of self-harm in any patient disclosing sexual abuse and intensive psychological and social support should be offered.

Further studies, particularly where the history of sexual abuse is systematically elicited are needed to provide a clearer picture of the scale of the problem, so that appropriate and more effective resources can be allocated to deal with it.

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