Self-injury attendances in the accident

and emergency department

Clinical database study

JUDITH HORROCKS, SALLY PRICE, ALLAN HOUSE and DAVID OWENS

Background Self-injury is a neglected area of self-harm research and we know little about its epidemiology, hospital care and outcome.

Aims To provide epidemiological data on self-injury and compare hospital management of self-injury with that for self-poisoning.

Method Data were collected on all selfharm attendances to the general hospitals in Leeds over an 18-month period.

Results People attending hospital for self-injury or self-poisoning do not form mutually exclusive groups. There were higher proportions of self-injury episodes compared with self-poisoning, where a history of self-harm or contact with mental health services had been recorded. Fewer psychosocial assessments were carried out after episodes of self-injury compared with self-poisoning but, when they were, follow-up was recommended more often.

Conclusions The clinical importance of self-injury is not mirrored by the level of psychosocial assessment and after-care provided.

Declaration of interest J.H.'s salary was paid for by the mental health charity Leeds MIND from a research grant awarded by the UK National Lottery Charities Board and from a research grant awarded by Leeds Community and Mental HealthTrust. There are few thorough epidemiological studies of self-injury, and people who selfpoison and those who self-injure may have different characteristics (Taylor & Cameron, 1998; Stanley et al, 2001). Clinical patterns and population rates are difficult to ascertain because so much of the self-injury literature has been based on small and unrepresentative samples: people admitted to mental health units, those referred for psychiatric assessment or simply those admitted to medical or surgical wards in the general hospital. All of these samples disregard people who attend accident and emergency (A&E) departments after selfinjury but return home without specialist mental health assessment. Even where self-harm studies have been undertaken in A&E departments, the researchers may have opted to investigate only those who have attended hospital as a result of selfpoisoning (Owens et al, 1994) or they may have excluded some forms of selfinjury (Haw et al, 2001). In the present study we have collected data from a large consecutive series of people who attended A&E departments as a consequence of self-injury - defined to include a broad range of self-injurious behaviours - in order to determine patterns of self-harming behaviour, clinical characteristics and initial response of hospital services. In addition, these patterns are compared with those seen among people who attended A&E departments because of self-poisoning.

METHOD

The information for this study was gathered from A&E records for people aged 12 years and over who had attended two A&E departments in Leeds over an 18month period from 1 March 2000 to 31 August 2001 after self-harm. The Leeds Health Authority area covers a population of over 700 000 and was ranked 146th out of 354 districts on Indices of Deprivation (as constructed by the Department of Transport, Local Government and the Regions). The minority ethnic population made up 6.4% of residents in Leeds in March 2000 to February 2001, which compares with 6.1% in the UK (Office for National Statistics, 2002). The research project received ethical approval from the local research ethics committee of Leeds Health Authority.

We defined self-harm attendances as those in which an injury or harm of any sort was reported by the patient as being self-inflicted or in which a clinician was of the opinion that self-harm had occurred. We defined self-poisoning as cases in which a substance had been ingested in order to cause self-harm, and self-injury as any episode of self-harm that did not involve self-poisoning. When the patient had been 'rescued' from an attempt, such as when they were about to jump off a bridge or they were retrieved from the middle of a busy road, these attendances were classed as self-harm, even though no physical harm had occurred. We decided to include cases where people had punched walls or deliberately put their hand through glass, but recorded these episodes as 'probable' selfharm so that they could be eliminated from later analyses if required.

Accidental harm arising from recreational use of drugs or alcohol was not included. However, if it was clear that someone had deliberately taken an overdose of recreational drugs then we coded it as self-harm.

At each hospital we obtained computerised reports of A&E attendances by using overinclusive criteria rather than restricting our sample to those classified as 'deliberate self-harm', so as to avoid missing relevant attendances. We then checked all attendances on the reports and decided whether they resulted from selfharm or not. In addition, liaison psychiatry referrals were checked for contacts with patients who had harmed themselves but had not appeared on the A&E reports. At both hospitals even severe trauma cases that may require immediate surgical intervention are 'booked in' to the hospital via the A&E department. For example, if someone was transferred straight to the intensive care unit because she was unconscious, an A&E record would still be produced with her personal details and presenting problem. Obviously, at this stage it would be impossible to determine if this were a case of self-harm, but if it was

Table I Methods of self-injury

Method	Attendances			
	n	%		
Self-laceration	641	72.4		
Traffic-related	13	1.5		
Carbon monoxide poisoning	13	1.5		
Hanging	42	4.7		
Punching walls/banging head	76	8.6		
Swallowed object	20	2.3		
Drowning	10	1.1		
Jumping off building/out of window	18	2.0		
Stabbing self	17	1.9		
Burning self	8	0.9		
Other	27	3.1		
Total	885	100		

identified as self-harm at a later stage in her hospital admission then we would expect a referral to be sent to liaison psychiatry, where it could be identified by the researcher as an additional self-harm attendance. More details of the methods used for case detection will be presented in a subsequent paper.

For a 6-month period S.P. revisited the records and collected additional data for

all self-injury cases that had been identified already by J.H. These data focused on details of the nature of the act, treatments given and, in cases of self-laceration, the instrument used, anatomical site and number of sites injured.

RESULTS

During the study period 5066 attendances for self-harm were identified. These attendances were made by 3239 people, making the ratio of people to episodes 1.6. There were 1074 attendances for self-injury (21.2%) compared with 4181 attendances for selfpoisoning (82.5%). There was an overlap of 189 episodes (3.7%) where both selfinjury and self-poisoning had occurred. We excluded these combined episodes from the following analyses.

Once the 189 combined episodes had been excluded, there were 4877 attendances made by 3167 people: 885 (18.1%) attendances for self-injury and 3992 (81.9%) for self-poisoning. Table 1 gives more detail of the types of self-injury: almost threequarters were episodes of self-laceration.

Of the 617 people who attended more than once during the study period, 186 (30.1%) altered their method of self-harm in different episodes – self-injuring for some attendances and self-poisoning for others. For those who had attended more than once during the study period, the index episode was self-laceration for 98/617 (15.9%) people. Of these, 56/98 (57%) attended later in the study period, having taken an overdose.

The age groups 25-29 and 30-34 years were overrepresented among those who injured themselves compared with people who poisoned themselves (difference =6.2%, 95% CI 3.4-9.25% and difference =3.7%, 95% CI 1.0-6.5%, respectively). In other age groups the proportions of self-injury and self-poisoning were similar, except in the 45-49 year age group where there was a higher proportion of selfpoisoning episodes (difference=3.6%, 95% CI 1.9-5.0%). Overall there was a significant gender difference, with men accounting for 54.4% of the self-injury attendances and only 45.3% of the selfpoisoning attendances (difference=9.1%, 95% CI 5.5-12.7) (see Table 2).

Table 3 shows that self-harm attendances occurred most frequently between 21.00 h and 03.00 h, with a higher proportion of these attendances due to self-injury (difference=7.4%, CI 3.8–11%). During triage, patients who had injured themselves were usually listed to be seen within 2 h, whereas those who had self-poisoned were more often listed to be seen within 1 h.

We attempted to collect information on previous self-harm, history of mental health care and current contact with mental health services (see Table 3) but this information is

Table 2 Age and gender of self-harm patients

Gender	Age group (years)									Total					
	<15	15–19	20–24	25–29	30–34	35–39	40-44	45–49	50–54	55–59	60–64	65–69	70–74	>75	
Self-injury															
Male	I	48	90	100	102	65	36	15	8	6	2	3	0	3	479
	(0.1%)	(5.4%)	(10.2%)	(11.4%)	(11.60%)	(7.4%)	(4.1%)	(1.7%)	(0.9%)	(0.7%)	(0.2%)	(0.3%)		(0.3%)	(54.4%)
Female	7	64	63	83	55	49	35	21	14	10	I.	0	0	0	402
	(0.8%)	(7.3%)	(7.2%)	(9.4%)	(6.2%)	(5.6%)	(4%)	(2.4%)	(I. 6%)	(1.1%)	(0.1%)				(45.6%)
Total	8	112	153	183	157	114	71	36	22	16	3	3	0	3	881 ¹
	(0.9%)	(12.7%)	(17.4%)	(20.8%)	(17.8%)	(12.9%)	(8.1%)	(4.1%)	(2.5%)	(1.8%)	(0.3%)	(0.3%)		(0.3%)	(100%)
Self-poisoning															
Male	15	176	294	281	278	268	175	140	66	38	24	12	3	27	1797
	(0.4%)	(4.4%)	(7.4%)	(7.1%)	(7%)	(6.7%)	(4.4%)	(3.5%)	(1.7%)	(1%)	(0.6%)	(0.3%)	(0.1%)	(0.7%)	(45.3%)
Female	39	351	320	299	284	267	210	166	89	71	17	28	10	23	2174
	(1%)	(8.8%)	(8.1%)	(7.5%)	(7.2%)	(6.7%)	(5.3%)	(4.2%)	(2.2%)	(1.8%)	(0.4%)	(0.7%)	(0.3%)	(0.6%)	(54.7%)
Total	54	527	614	580	562	535	385	306	155	109	41	40	13	50	3971 ¹
	(1.4%)	(13.3%)	(15.5%)	(14.6%)	(14.2%)	(13.5%)	(9.7%)	(7.7%)	(3.9%)	(2.7%)	(1%)	(1%)	(0.3%)	(1.3%)	(100%)

I. Missing data: self-injury, n=4; self-poisoning, n=21.

Table 3 Time of attendance and clinical history of self-harm patients

	Self-injury	Self-poisoning	All
	(n=885)	(n=3992)	(n= 4877)
Time of attendance			
03.00–08.59 h	105 (11.9%)	390 (9.8%)	495 (10.1%)
09.00–14.59 h	131 (14.8%)	781 (19.6%)	912 (18.7%)
15.00–20.59 h	235 (26.6%)	1250 (31.3%)	1485 (30.4%)
21.00–02.59 h	414 (46.8%)	1571 (39.4%)	1985 (40.7%)
History of self-harm			
Yes	566 (64.0%)	2060 (51.6%)	2626 (53.8%)
No	42 (4.7%)	684 (17.1%)	726 (14.9%)
Not known	277 (31.3%)	1248 (31.3%)	1525 (31.3%)
History of contact with mental health services			
Yes	489 (55.3%)	1703 (42.7%)	2192 (44.9%)
None/treated by GP only	167 (18.9%)	1205 (30.2%)	1372 (28.1%)
Not known	229 (25.9%)	1084 (27.2%)	1313 (26.9%)
Current contact with mental health services ¹	n=509	n=2528	n=3037
Current in-patient on psychiatric ward	24 (4.7%)	80 (3.2%)	104 (3.4%)
Current contact	138 (27.1%)	572 (22.6%)	710 (23.4%)
No current contact	92 (18.1%)	492 (19.5%)	584 (19.2%)
Not known	255 (50.1%)	1384 (54.7%)	1639 (54.0%)

GP, general practitioner.

I. Data from 10-month period.

not routinely recorded in A&E notes and so in 25–50% of episodes some or all of these data were missing.

Patients who had injured themselves were more likely to report previous episodes of self-harm than patients who had poisoned themselves (difference=12.4%, 95% CI 8.8–15.8%). The majority of patients who had injured themselves had either past or current contact with mental health services (55.3%) – a higher proportion than among patients who had poisoned themselves (difference=12.6%, 95% CI 9.0–16.2%).

Information on current contact with mental health services was collected only for the final 10 months of the study. People who had injured themselves were more likely than those who had poisoned themselves to be in current contact with psychiatric services (difference=4.5%, 95% CI 0.4–8.8%).

We present findings regarding outcome after attendance for self-harm in two parts: outcome from A&E departments and follow-up arrangements after psychosocial assessment. Table 4 provides details of outcomes from A&E departments only, showing that the majority of self-injury patients (72.3%) were not admitted. Compared with self-poisoning patients, the self-injury patients were more likely to be discharged without assessment or follow-up (difference=10%, 95% CI 7.7– 12.5%), have psychiatric follow-up arranged by A&E staff (difference=3.1%, 95% CI 1.5–5.1%) or already have an appointment with a mental health worker (difference=3.9%, 95% CI 2.5–5.7%).

We were also interested in finding out what arrangements for follow-up were made for patients who had received a psychosocial assessment. Up to four aftercare options were recorded from notes of the psychosocial assessments that we were able to locate. We were able to ascertain that for 31.1% of all self-harm patients a psychosocial assessment was definitely carried out. For 42.5% of selfharm patients a psychosocial assessment was not carried out, but for 26.4% we do not know whether an assessment took place. Ignoring cases where we could not ascertain if an assessment had taken place, we found that 45.0% (347/771) of selfinjury patients received a psychosocial assessment compared with 61.3% (1727/ 2819) for self-poisoning (difference= 16.3% 95% CI 12.3-20.2%).

Information about after-care arrangements could be found for only 63.5% (1316/2074) of those who received a psychosocial assessment.

Fewer of the self-injury group than of the self-poisoning group were assessed as requiring no follow-up (difference=4.2%, 95% CI 0.2–6.0%). For episodes of selfinjury, staff were more likely to contact the patient's community psychiatric nurse (CPN) or refer to a CPN (difference=4.7%, 95% CI 0.5–11%). Furthermore, patients who had injured themselves declined admission more often than did those who had poisoned themselves (difference=4.6%, 95% CI 1.1–10.5%) (see Table 5). We recorded, for a 10-month period only,

Table 4 Outcomes from accident and emergency (A&E) departments in relation to method of self-harm

Outcomes	Self-injury	Self-poisoning	Total
Admitted to general ward	120 (13.6%)	1784 (44.7%)	1904 (39%)
Admitted to psychiatric ward	125 (14.1%)	214 (5.4%)	339 (7.0%)
Psychosocial assessment then home	183 (20.7%)	797 (20.0%)	980 (20.1%)
Psychiatric follow-up arranged by A&E staff	61 (6.9%)	151 (3.8%)	212 (4.3%)
Discharged but own appointment with mental health worker	51 (5.8%)	71 (1.9%)	125 (2.6%)
Letter written by A&E staff to GP or other health professional	18 (2.0%)	47 (1.2%)	65 (1.3%)
Discharged from A&E without assessment or follow-up	123 (13.9%)	157 (3.9%)	280 (5.7%)
Left before full treatment protocol	177 (20.0%)	706 (17.7%)	883 (18.1%)
Removed by security/police	17 (1.9%)	22 (0.6%)	39 (0.8%)
Not recorded	10 (1.1%)	40 (1.0%)	50 (1.0%)
Total	885 (100%)	3992 (100%)	4877 (100%)

GP, general practitioner.

Table 5 Follow-up arrangements recorded after psychosocial assessment of self-harm patients

Follow-up arrangements	Self-injury (n=133)	Self-poisoning (n=1183)	All (n=1316)
Admitted to psychiatric ward	23 (17.3%)	79 (6.7%)	102 (7.8%)
Appointment given by self-harm team or liaison mental health team	22 (16.5%)	142 (12.0%)	164 (12.5%)
Declined admission	10 (7.5%)	34 (2.9%)	44 (3.3%)
Staff contacted patient's psychiatrist or referred to sector psychiatrist	31 (23.3%)	280 (23.7%)	311 (23.6%)
Some form of mental health after-care already in place	18 (13.5%)	219 (18.5%)	237 (17.3%)
Staff contacted the patient's CPN or referred to a CPN	13 (9.8%)	60 (5.1%)	73 (5.5%)
Patient advised to contact own CPN	2 (1.5%)	4 (0.3%)	6 (0.5%)
Staff contacted addiction services involved with patient or referred to addiction services	7 (5.3%)	49 (4.1%)	56 (4.3%)
Patient advised to contact addiction services	7 (5.3%)	104 (8.8%)	111 (8.4%)
Staff contacted patient's existing social worker or referred to a social worker	6 (4.5%)	39 (3.3%)	45 (3.4%)
Patient advised to contact own social worker	l (0.8%)	8 (0.7%)	9 (0.7%)
Staff phoned GP	2 (1.5%)	66 (5.6%)	68 (5.2%)
Staff wrote to GP with suggestions for management	10 (7.5%)	103 (8.7%)	113 (8.6%)
Patient advised to contact GP	23 (17.3%)	229 (19.4%)	252 (18.0%)
Advice/telephone numbers given	43 (32.3%)	470 (39.7%)	513 (39.0%)
Other	15 (11.3%)	137 (11.6%)	152 (11.6%)
No follow-up required	2 (1.5%)	67 (5.7%)	69 (5.2%)

CPN, community psychiatric nurse; GP, general practitioner.

whether people were in-patients on a psychiatric ward at the time of their selfharm and, for the same period, we investigated the numbers who were admitted to a psychiatric ward after self-harm. This enabled us to correct for the readmission of people who were already psychiatric inpatients: 84/429 (19.6%) self-injury attendances resulted in psychiatric admission compared with 26/2198 (10.3%) selfpoisoning attendances (difference=9.3%, 95% CI 5.6-13.5%); this difference remains significant after disregarding 17 (4.0%) self-injury episodes and 75 (3.4%) self-poisoning episodes where the person was already an in-patient on a psychiatric ward at the time of their self-harm.

The nature of self-injury

The following data refer to the subsample for which we collected more-detailed information on self-injury during a 6-month period. There were 368 episodes of selfinjury, attributed to 272 people, during this time. Cutting was the most common form of self-injury, accounting for 61.7% (n=227) of self-injury episodes recorded (or 74.7%, n=275, if we included episodes where both self-poisoning and self-injury had occurred). Information on what implement was used for self-cutting was available for only 196 episodes. A razor was used in 95/196 episodes (48.5%), a knife in 64 episodes (32.7%) and glass in 28 episodes (14.3%); other implements were used in the remaining episodes.

The site of cut was available for 269 episodes: of these, one body site had been cut in 227 episodes (84.4%), two sites in 35 episodes (13.0%) and three sites in 7

episodes (2.6%). Taking into account multiple sites, the forearm was the most common site for cutting (118 episodes), followed by the wrist (100 episodes). Of the 242 episodes in which the number of cuts made was recorded, a single cut was made in 81 episodes (33.5%) and multiple cuts in 161 (66.5%). Table 6 provides details of the level of treatment required for self-cutting compared with all other forms of self-injury.

The nature of the acts was similar for males and females: for self-cutting there were 117 female episodes and 110 male episodes; for a combination of poisoning and cutting there were 30 episodes in females and 18 episodes in males. A razor or razor blade was the most common instrument used for self-cutting in both men and women. Men had hit things, such as walls or windows, significantly more frequently than women had (10.7% v. 3.7%, 95% CI 0.7–11.4%). Cases were few for other forms of self-injury but no other gender differences were apparent.

DISCUSSION

In common with other studies, we found that about one-fifth of all attendances at A&E departments for self-harm were for self-injury. However, this is not reflected in either clinical writing or research studies, where self-poisoning is the main focus, almost to the exclusion of self-injury.

Gender, age and site of injury

The high proportion in our sample of men who had injured themselves goes against the common perception of self-injury or self-laceration being carried out predominantly by women. Self-injury was particularly high in the mid-20- to 30-year age groups, which is slightly older than that

Table 6 Level of accident and emergency treatment required, according to the method of self-injury

Treatment	Cutting	Other self- injury	All self-injury ^ı
No treatment	70 (30.8%)	58 (62.4%)	128 (40.0%)
Dressing, glue or skin-closure strip	73 (32.2%)	14 (15.1%)	87 (27.2%)
Suturing or X-ray	63 (27.8%)	4 (4.3%)	67 (20.9%)
Specialist referral	13 (5.8%)	8 (8.6%)	21 (6.6%)
Resuscitation	8 (3.5%)	9 (9.7%)	17 (5.3%)
Total	227 (100%)	93 (100%)	320 (100%)

I. Excludes episodes where self-poisoning occurred at the same time.

reported elsewhere (Robinson & Duffy, 1989; Taylor & Cameron, 1998).

We collected information on site of injury, number of sites and the implement used. As in previous studies, the upper limb was the most common part of the body injured (Taylor & Cameron, 1998). What would be interesting for future research is to examine whether the site and implement used to injure are merely reflections of practicalities, such as ease of cutting and access to implements, or whether these choices have some meaning in terms of the function of self-harm for the individual patient.

Overlap of self-harm methods used

The results of our study show that people attending hospital after self-injury and self-poisoning do not form mutually exclusive groups. Some episodes of self-harm involve both methods, and patients who returned to hospital after self-injury often reattended with self-poisoning rather than with self-injury. The tendency to categorise people's intent and motivation based on their behaviour does not reflect the overlap in behaviours that we found. As we have shown, the behaviour may change over time. Assessment and intervention that targets the individual is therefore much more important than assessment and intervention based solely on the behaviour.

Missing data

We had problems with missing data, particularly concerning the psychiatric and selfharm history of patients attending after self-harm. This is a familiar dilemma for those who work clinically or carry out research in this area. We relied on A&E records for our information and could have supplemented this with information from psychosocial assessments, but only for those attendances where an assessment had been carried out. Although missing data did not vary according to the method of self-harm used, this problem with our study may, none the less, have introduced bias. The results in this respect emphasise the need for better prospective record-keeping.

Self-injury: medical and psychiatric status

We found that, compared with those who poisoned themselves, patients who injured themselves were more likely to have current contact with mental health services at the time of their self-harm, more likely to have a history of self-harm and, if they received a psychosocial assessment, were more likely to be admitted to a psychiatric ward. About one-third of self-injury episodes in our study required suturing or X-ray, specialist referral for physical treatment or resuscitation. These observations lend no support to the idea that those who cut themselves represent medically and psychiatrically trivial cases. In the face of uncertainty about prognosis it is unwise, therefore, to suggest that people who injure themselves, particularly by cutting, are at low risk of suicide and use self-harm purely as a coping strategy or even as a manipulative act.

Outcome after self-injury

Despite the publicity surrounding the prevention of suicide and the guidelines developed for the management of self-harm in A&E departments (Royal College of Psychiatrists, 1994), we still found that patients who injured themselves were less likely to receive a psychosocial assessment than patients who poisoned themselves. We already know that repetition of selfharm is higher among people who have not received a psychosocial assessment (Crawford & Wessely, 1998; Hickey et al, 2001). We have very little information about outcome after self-injury because cohort studies of outcome after self-harm have been based either on patients who poison themselves or on specific psychiatric subgroups (Owens et al, 2002). However, a follow-up study of a mixed cohort of selfpoisoning and self-injury patients did find that self-laceration was the method used for the index episode in half of all the suicides identified at follow-up (Cullberg et al, 1988); this study was limited to patients who had been referred to the psychiatry service but it gives some indication that outcomes after self-injury cannot be safely ignored.

Do staff attitudes affect care?

Why then did we find such a high proportion of self-injury patients leaving A&E departments without receiving a psychosocial assessment? Possible reasons include the fact that higher numbers of patients who had injured themselves left before their treatment was complete, or because such patients attended during more unsocial hours. The latter should not be relevant here because there is a 24-h liaison psychiatry service at both of the hospitals in this study. Some patients were referred to receive psychiatric follow-up, provided by the designated mental health liaison nurses. This follow-up would normally occur within a few days of their presentation at hospital, but we do not know how many patients accepted these appointments.

An alternative explanation relates to staff attitude towards self-injury. We suspect that violent methods of self-injury, for example hanging or jumping off buildings, may be qualitatively different from other forms of self-harm. We also know that there are people who cut themselves repeatedly in order to deal with difficult emotions. Our data suggest that self-injury is not just a combination of 'violent' methods and 'cutting-to-cope' episodes, but that it encompasses a wide range of behaviours and intents. Despite this diversity, or perhaps because of it, a number of widely held assumptions still exist for which there is little current evidence. Studies that have examined attitudes to self-harm among health professionals have highlighted that negative and ambivalent attitudes to selfharm exist among medical staff (Sidley, 1996; Hemmings, 1999). We could find only one study that focused specifically on attitudes to self-injury (Huband & Tantam, 2000) but it focused on repetitive self-cutting so could not tell us much about attitude to a wide range of self-injurious behaviours.

Ironically, user-led information on selfinjury may contribute to maintaining myths about self-injury. User-led web pages, for example, are almost exclusively about self-cutting and its function as a coping strategy, rather than as an indication of suicidal feelings (Prasad & Owens, 2001). If hospital staff also hold these beliefs, then this would help to explain the lower proportion of self-injury patients receiving assessment and gaining access to specialist follow-up.

Implications

Our study shows that people who injure or poison themselves cannot be considered mutually exclusive groups. We suspect that classifying people's motivation and intent according to the method of self-harm used may be detrimental to the patient and contribute to some of the disparities that we found in the treatment and management of patients who attended hospital.

Our research highlights the fact that people who had injured themselves did not receive the same level of care or access to specialist follow-up as those who had poisoned themselves. This may make those who injure themselves a particularly vulnerable group in two ways: because people who do not receive or accept follow-up may require more help than those who do (Runeson, 2001); and because we know very little about outcome after self-injury. It is essential, therefore, that guidelines for the management of self-harm in hospitals are not ignored and that psychosocial assessments are carried out whenever practically possible.

ACKNOWLEDGEMENTS

We thank A&E staff at Leeds General Infirmary and St James' University Hospital, Leeds, for their help and cooperation with the study. Thanks are also due to the self-harm teams and mental health liaison nurses at both hospitals, for their interest in the project and advice on information-gathering.

From the academic unit we thank Jenny Hughes and Helen Fry for their help with collecting data.

REFERENCES

Crawford, M. J. & Wessely, S. (1998) Does initial management affect the rate of repetition of deliberate self harm? Cohort study. *BMJ*, **317**, 985.

Cullberg, J., Wasserman, D. & Stefansson, C. G. (1988) Who commits suicide after a suicide attempt? An 8 to 10 year follow up in a suburban catchment area. *Acta Psychiatrica Scandinavica*, **77**, 598–603.

Haw, C., Hawton, K., Houston, K., et al (2001) Psychiatric and personality disorders in deliberate selfharm patients. *British Journal of Psychiatry*, **178**, 48–54.

Hemmings, A. (1999) Attitudes to deliberate self harm among staff in an accident and emergency team. *Mental Health Care*, **21**, 300–302.

Hickey, L., Hawton, K., Fagg, J., et al (2001) Deliberate self-harm patients who leave the accident and emergency department without a psychiatric assessment. A neglected population at risk of suicide. *Journal of Psychosomatic Research*, **50**, 87–93.

Huband, N. & Tantam, D. (2000) Attitudes to selfinjury within a group of mental health staff. *British Journal of Medical Psychology*, **73**, 495–504.

Office for National Statistics (2002) Retrieved on 2 August 2002, from http://www.statistics.gov.uk

Owens, D., Dennis, M., Read, S., et al (1994) Outcome of deliberate self-poisoning. An examination of

CLINICAL IMPLICATIONS

Those who injure themselves may be a particularly vulnerable group because they often do not receive follow-up and because we know little about outcome after selfinjury.

Categorising people's motivation and intent according to the method of self-harm may contribute to differences in the treatment and management of patients who attend hospital.

■ Further exploration of the attitudes of medical and psychiatric staff towards selfinjury is needed to clarify whether they are detrimental to the care and provision of suitable services for people who injure themselves.

LIMITATIONS

We could have obtained more information from notes kept by the hospital selfharm or liaison psychiatry teams. This would have reduced the amount of missing data.

We did not collect information on follow-up arrangements made by liaison psychiatric nurses who carried out specialised assessments after discharge, in the few days following attendance at the accident and emergency department.

In a larger sample, more-detailed subgroup analyses comparing the characteristics of patients who cut themselves with those who used other methods of self-injury might improve our understanding of self-injury.

JUDITH HORROCKS, MPhil, Academic Unit of Psychiatry and Behavioural Services, University of Leeds, Leeds; SALLY PRICE, MBChB, Department of Anaesthesia, Hull Royal Infirmary, Hull; ALLAN HOUSE, DM, DAVID OWENS, MD, Academic Unit of Psychiatry and Behavioural Sciences, University of Leeds, Leeds, UK

Correspondence: Allan House, Academic Unit of Psychiatry and Behavioural Sciences, University of Leeds, 15 HydeTerrace, Leeds LS2 9LT, UK

(First received 7 October 2002, final revision 5 March 2003, accepted 9 April 2003)

risk factors for repetition. British Journal of Psychiatry, 165, 797–801.

____, Horrocks, J. & House, A. (2002) Fatal and nonfatal repetition of self-harm. Systematic review. *British Journal of Psychiatry*, **181**, 193–199.

Prasad, V. & Owens, D. (2001) Using the internet as a source of self-help for people who self-harm. *Psychiatric Bulletin*, **25**, 222–225.

Robinson, A. & Duffy, J. (1989) A comparison of selfinjury and self-poisoning from the Regional Poisoning Treatment Centre, Edinburgh. Acta Psychiatrica Scandinavica. 80, 272–279.

Royal College of Psychiatrists (1994) The General Hospital Management of Adult Deliberate Self-Harm. A Consensus Statement for Service Provision. Council Report CR31, pp. 1–21. London: Royal College of Psychiatrists.

Runeson, B. (2001) Parasuicides without follow-up. Nordic Journal of Psychiatry, 55, 319–323.

Sidley, G. (1996) General nurses attitudes to patients who self-harm. *Nursing Standard*, 10, 32–36.

Stanley, B., Gameroff, M. J., Michalsen, V., et al (2001) Are suicide attempters who self-mutilate a unique population? American Journal of Psychiatry, **158**, 427–432.

Taylor, D. M. & Cameron, P. A. (1998) Deliberate selfinflicted trauma: population demographics, the nature of injury and a comparison with patients who overdose. *Australian and New Zealand Journal of Public Health*, **22**, 120–125.