tricyclic or tetracyclic, do not seem to be a first-line treatment for steroid-induced depression. Alternatively, the present second case suggests that lithium can be a candidate for first-line treatment.

In conclusion, lithium can be useful as an antidepressant agent in patients with SLE and cerebral infarction, who are treated with corticosteroid. Since the present study is open and the number of the patients is small, further studies are needed.

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Debt and Deliberate Self-poisoning

SIMON HATCHER

This study is a descriptive survey of financial difficulties in a consecutive series of patients who deliberately poisoned themselves. Over three months 160 such patients presented to the liaison psychiatry service at Leeds General Infirmary. Information was available on 147 of these patients, of whom 54 (37%) had problem debts. Patients in debt were more likely to harm themselves with greater suicidal intent and, after the episode, to report more symptoms of depression and hopelessness. Psychiatrists were more likely to diagnose mental illness in those in debt.

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Debt is an increasingly important social problem. The National Consumer Council (1990) found that households having difficulty paying their debts had risen from 1.3 million in 1981 to 2 million in 1987. Banks and finance houses now take out four times more court actions against defaulters than a decade ago, and local authority rent arrears have nearly doubled over the same time. A recent survey of 1785 households by the Policy Studies Institute (Berthoud & Kempson, 1990) discovered that 11% had problem debts over the previous year. This included only those arrears which people worried about and had difficulty paying. It did not include mortgages or other consumer credit which were not causing problems. Those in debt were more likely to be young and poor – a quarter of those under 30 years had problem debts – and of those households with a net weekly income under £100, 28% were in debt.

There are two reasons for thinking that debt and deliberate self-harm may be linked in some way. Firstly, many self-harm patients have chronic financial problems, with up to 62% experiencing financial difficulties and 28% incurring debts in the year preceding an episode of self-harm (Morgan *et al*, 1975). Secondly, debt is more common where there have been household changes, especially the breakdown of a relationship, redundancy, illness, or a death in the family (National Consumer Council,

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1990; Berthoud & Kempson, 1990). Such changes are also associated with deliberate self-harm. There is some indirect evidence that debt is associated with more serious episodes. Bancroft *et al* (1976) found a positive association between wanting to die and needing help with money or material goods.

Previous work which has recorded the financial affairs of self-harm patients has suffered from several problems. Firstly, authors rarely define or quantify financial difficulties. However, where this has been defined, workers use crude measures such as current court action. Secondly, there is usually no description of how the authors acquired the information: did they record only one cause of self-harm or many? Was information recorded verbatim from the patient or did the assessors somehow form their own opinion? Finally, authors rarely describe the characteristics of self-harm patients in debt compared with those not in debt.

This study aims to describe: (a) the characteristics of self-harm patients in debt; and (b) any link between debt and the seriousness of the episode.

Method

The setting for the study was Leeds General Infirmary, a teaching hospital with a catchment area population of about 360 000. It is hospital policy to refer all patients who have deliberately harmed themselves to the liaison psychiatry service, including those seen in the accident and emergency department for whom admission is not thought appropriate. Patients receive psychiatric assessment as soon as they are medically fit.

The study sample consisted of all patients who deliberately poisoned themselves referred to the liaison psychiatry service between 1 April 1989 and 30 June 1989. Patients were excluded if they were under the age of 16 years, age 16 and still at school, or were over the age of 65 years.

Data collection took place in two ways. Firstly, the psychiatrist assessing the patient completed a standard record form including demographic data, past and present psychiatric treatment, follow-up arrangements, and diagnosis. The psychiatrist also completed three other assessment scales. Ratings were made of the severity of financial difficulties on a 4-point scale: 1 = no problem; 2 = short of money; 3 = somewhat in debt; and 4 = heavily in debt. The Beck Suicide Intent Scale (BSIS; Beck *et al*, 1974*a*) was used to measure the intensity of a patient's wish to end his/her life; a higher score suggests a suicidal intent. The risk of repetition was assessed using the Risk of Repetition (RRS) Scale of Buglass & Horton (1974) – a six-item, observer-completed scale – a higher score on which indicates greater risk of repetition.

The second part of data collection consisted of five self-report scales completed by the patient. A research nurse administered them at a time close to the duty psychiatrist's interview. The scales were: (a) the Beck Depression Inventory (BDI; Beck *et al*, 1961); (b) the Beck Hopelessness Scale (BHS; Beck *et al*, 1974*b*); (c) the Locus of Control of Behaviour Scale (LCBS; Craig *et al*, 1984), where a high score represents a tendency to have an external locus of control; (d) the 30-item General Health Questionnaire (GHQ; Goldberg, 1978); and (e) a debt questionnaire (available from the author) designed for this study which asked about weekly income, problem debts, how long in debt, threats of court action for non-payment of debts, help sought for money problems, and to what extent worry about money had contributed to the episode of self-harm (from 1 = 'none at all' to 10 = 'it was the main reason').

The variables in this study are either categorical or ordinal and were not normally distributed so non-parametric statistics are used throughout. Analysis was carried out using the Statistical Package for the Social Sciences (PC + 3.01). Preliminary two-way analysis of variance on transformed data with sex and debt as the independent variables showed no significant interaction between them. The results are, therefore, presented for both sexes together.

The 160 patients who entered the study accounted for 175 deliberate self-poisoning episodes during the three months. All results refer to individuals rather than episodes. There were 86 women, mean age 29.4 years, and 74 men, mean age 30.5 years.

The psychiatrists completed 138 (86%) record forms. Non-completion was either because patients discharged themselves before the psychiatrist could see them or because of administrative errors. Patient non-responders either refused to fill in the scales or completed the measures incorrectly. Some patients correctly completed only some of the self-rating scales. Therefore, the number of correctly completed responses is stated for individual rating scales where appropriate.

Debt status was assessed in the following way. Firstly, all those who had completed the question on problem debts (101 patients) were allocated to a 'no-debt' or 'debt' group based on their own response. Secondly, the remaining 59 patients were assigned where possible to the 'no debt' or 'debt' group from the psychiatrists' assessments of their debt status. Those rated as 'money no problem' or 'short of money' were classed as 'no debt', while those rated as 'somewhat in debt' or 'heavily in debt' were allocated to the 'debt' group. This procedure resulted in a further 46 patients being classified, producing 147 patients (92%) for whom the presence or absence of debt was established. The five men and eight women who were impossible to designate were those who had discharged themselves before they could be seen and for whom no data on their debt status was available. They are not included in further analysis.

The extent of agreement between the psychiatrists' assessments and the self-report of debt was calculated using the 92 patients for whom both ratings were available (kappa = 0.49). Most disagreement was caused by the psychiatrists underestimating self-reported debt.

Results

Of the 147 patients, 54 (37%) were in debt. The prevalence of debt was evenly spread among the different age groups, with 31 of the 82 patients aged under 30 years (38%) in debt. Eighty-three patients completed the question on

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Table 1
Assessment of self-poisoning patients with respect to debt

	No-debt group ($n=93$)			Debt group ($n=54$)			*P* value	*U* value
	n[1]	Median score	Interquartile range (25–75%)	n[1]	Median score	Interquartile range (25–75%)		
BSIS, objective scale	91	3	1–4	54	4	1–6	<0.05	1861
BSIS, subjective scale	91	6	3–8	54	8	6–11	<0.01	1620
BDI	64	23	14–32	48	30	22–37	<0.01	1083
GHQ	53	16	10–25	47	23	17–27	<0.05	925
BHS	64	9	4–14	49	12	7–17	<0.05	1230
LCBS	62	35	29–45	50	42	33–51	<0.05	1146
RRS	92	1	1–3	54	2	1–4	0.12	2113

1. Number of correctly completed rating scales.

weekly income and 60 reported an income below £100 a week, of whom 28 (47%) were in debt.

The median age of the debt group ($n=54$) was 25 years (interquartile range 21–40), and the no-debt group ($n=93$) was 28 years (range 22–35). The difference was not significant (Mann–Whitney test, $U=2266$, $P=0.32$).

Unemployment for less than a year was more prevalent in the debt group (22/54; 41%) than in the no-debt group (19/93; 20%) – a difference of 21% (95% CI 5–36%; $\chi^2=5.66$, $P=0.02$). About 30% of both groups were in full-time employment.

The prevalence of psychiatric contact was similar in the two groups, and just over a third of each group had a history of deliberate self-harm. Of the no-debt group, 22 (24%) were currently in psychiatric treatment compared with nine (17%) of the debt group. Thirty-seven (40%) of the no-debt group and 25 (46%) of the debt group had a history of psychiatric contact.

Compared with the no-debt group, patients in debt had significantly higher scores on the BSIS, the BDI, the GHQ, the BHS, and the CBS (Table 1). Of the 70 patients who scored greater than the median score (8) on the BSIS, 33 were in debt. Seventy-five patients scored 8 or less, of whom 21 were in debt. This produces an odds ratio of 2.29 (95% CI 1.15–4.56). That is, those people who scored higher than the median score on the BSIS were more than twice as likely to be in debt than those with lower scores. The scores on the RRS were not significantly different.

Self-poisoning patients in debt reported a mean weekly income of £68.18 ($n=41$) while, as might be expected, those not in debt reported a higher mean weekly income of £77.66 ($n=42$). The debts consisted of large sums of money – a mean of £1496 over 16.5 months. However, less than a quarter of those in debt had sought help for their financial problems. Court action had been threatened to 21 of the 48 patients in debt, and an additional 12 were currently being sued. These patients rated financial worry as a major contributing factor to the self-harm episode: nine patients rated it at 8 or more; the mean score was 4.4.

Compared with those not in debt, patients in debt were more likely to receive a psychiatric diagnosis: 48 (91%) of the debt group compared with 64 (71%) of the no-debt group (95% CI 8–32%; $\chi^2=6.33$, $P<0.05$). There were no significant differences in diagnoses. A diagnosis of personality disorder accounted for seven (8%) of the no-debt group and eight (15%) of the debt group, and alcohol dependence for four (4%) of the no-debt group and four (8%) of the debt group. There were no significant differences in the management decisions made between the two groups.

Discussion

This study is a descriptive account of the financial problems of a consecutive series of patients who had deliberately poisoned themselves. There are several findings. Firstly, there was a high prevalence of debt – affecting over one-third of patients. In addition, those in debt had a greater suicidal intent, judged by higher scores on the BSIS. After the episode, patients in debt also report more psychiatric symptoms, are more hopeless, feel less in control of events, and receive more psychiatric diagnoses. How firm are these findings?

More than 70% of the sample of 160 completed the study measures. (For the GHQ the proportion was only 63%.) However, the proportion completing self-rating scales in this study is similar to or higher than other reports in the literature. There is also some value in characterising a group of compliant patients who may be more willing to accept treatment.

If self-ratings were not available, debt was classified using psychiatrists' assessments. The psychiatrists underestimated the number of people in debt, probably resulting in a falsely low number in the debt group. Those misclassified are likely to be in single figures and, therefore, unlikely to affect the conclusions of this study.

The study is restricted to hospital patients who agreed to be seen by a psychiatrist. It is known that a significant proportion of people who harm themselves are not admitted to hospital and are not seen

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by a psychiatrist. This latter group are more likely to be young men. As debt is more of a problem in the young, this study is likely to underestimate the prevalence of debt.

Only a minority of patients thought the presence of financial worries contributed to the episode of self-harm in a major way. Of those in debt only one in five scored 8 or more on a subjective appraisal of its importance. This finding is not surprising given the multifactorial nature of deliberate self-harm, nor does it indicate that money worries are unimportant. Financial worries may make individuals more vulnerable to other stressors.

This study supports the suggestion made by Bancroft *et al* (1976) that people in debt poison themselves with greater suicidal intent. Why should this be so? Deliberate self-harm may result from patients feeling that they have exhausted all their normal ways of solving problems. Having no money might make this more likely. Further, the prospects of paying off debts over several years may increase the sense of hopelessness and powerlessness. The former is directly related to greater suicidal intent. The finding that hopelessness and an externalised locus of control were significantly greater in the debt group supports this argument.

Psychiatrists were more likely to diagnose those in debt as suffering from a psychiatric illness. However, because this study is a case series, it cannot answer the question of whether mental illness causes debt or vice versa. Such a question can only be answered by future analytical studies.

The combination of hopelessness, higher scores on the BDI and greater suicidal intent suggests that patients in debt fall into a high-risk group for repetition. On the other hand, the risk of repetition scores are similar in both groups. Follow-up studies of large numbers of self-harm patients in debt would help to solve this problem.

It is difficult to draw firm conclusions about the prevalence of debt in this population compared with the general population, because no control group with similar sociodemographic characteristics was gathered. However, the prevalence of debt, both in those under the age of 30 years and those with a weekly income below £100, was higher than in Berthoud & Kempson's (1990) community survey. A provisional conclusion is that debt is more common among those who deliberately poison themselves than in the general population. Such a conclusion would confirm the link between many of the common underlying causes of debt and self-harm such as redundancy and relationship changes.

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