Mental Disorder in People with Debt in the General Population

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Abstract

Objective: To test the hypothesis that mental disorder is more common in people with debt in the general population than in people with no debts, and to examine whether this relationship varies with type of disorder and type of debt.

Design: Cross sectional nationally representative survey.

Setting: Private households in England, Scotland and Wales.

Participants: 8545 adults aged 16-74.

Outcome measures: Neurosis, psychosis, alcohol abuse and drug abuse, identified through structured assessments including SCAN, AUDIT and other measures. Detailed questions were asked about finances and debts.

Results: Around half of people with debts in the general population have a mental disorder, compared with 14% of the general population with no debts, and 15% of the general population. People in debt have two to three times the rate of neurosis, three times the rate of psychosis, over twice the rate of alcohol dependence and four times the rate of drug dependence as people with no debt. Having had a disconnected utility, cutting down on utility use and borrowing money from informal sources are respectively associated with
three to four times, twice, and two to three times increased rates of disorder compared to those who have not.

**Conclusion:** Debt, disconnected utilities, trying to reduce consumption of utilities and borrowing from informal sources are all predictors of markedly raised rates of all kinds of mental disorder. Whether the association is causal, an outcome of mental illness or reciprocal, these findings demonstrate the mental health aspects of the significant public health impact of debt in the general population; and have implications for debt policy, debt counselling agencies and for companies managing loans, repayments and pursuing debt recovery.
Introduction

People on low incomes are known to have higher rates of mental disorder\(^1\), and this relationship seems to be largely driven by the presence and severity of debt.\(^2\) Social policy research into the circumstances and experience of people in debt has indicated that debt is linked to high levels of stress, anxiety and depression.\(^3\)-\(^7\) Indeed Drentea\(^8\) found that anxiety levels increased with the ratio of credit card debt to income, and rose with the number of months of payment default. However, there are no previous published reports about the prevalence of mental disorders in people with debt and financial hardship, or on the sources and types of debt in relation to the major forms of mental disorder. This paper uses the opportunity afforded by the British National Psychiatric Morbidity survey to examine the relationship between mental illness and debt. Our earlier analysis showed that both low income and debt are associated with mental illness but the effect of income is substantially reduced when both are entered into the same model, and vanishes when other sociodemographic variables are adjusted for. The effect of debt however remains strong when income and other variables are adjusted for.\(^2\) Given that this nationally representative data indicated that debt is an important predictive variable for mental illness, the present analysis uses the directly collected information about debt, financial hardship and mental disorders in the survey, to explore the basic public health implications of this relationship. We do this by establishing the prevalence of mental illness in people in debt, in people with disconnected utilities and in people who have tried to cut down on use of utilities. We also examine whether the association between debt and mental illness varies with type of disorder and type of debt.
Methods

Overall survey design: The second British National Survey of Psychiatric Morbidity was carried out between March and September 2000. It adopted a two-phase approach to the assessment of mental disorders. Adults aged 16-74 years and living in private households in England, Wales and Scotland were sampled. The first phase interviews were carried out by Office for National Statistics interviewers, and included structured assessment of some mental conditions, together with screening instruments to assist the identification of other disorders at the second phase. They also covered a range of other topics, including sociodemographic factors, income and debt, as well as other risk factors for mental disorder. In the second phase of the survey, those who screened positive on the Psychosis Screening Questionnaire \(^8\) were selected to take part in a clinical interview that used the Schedules of Clinical Assessment in Neuropsychiatry \(^9,10\) to assist the definitive identification of psychosis.

Sample: The small users postcode address file (PAF) was used as the sampling frame for the survey because of its good coverage of private households in Great Britain. In an initial sample of 15,804 delivery points, 10% were ineligible because they contained no private households. Of the remaining addresses, 11% contained no one within the chosen age range of 16-74, leaving an eligible sample of 12,792 addresses. The Kish grid method was used to select systematically one person in each household. Kish \(^11\) who was then asked to take part in an initial computer assisted personal interview.
In this initial phase, just under 70% of those approached agreed to an interview. Full details of sampling are provided by Singleton.12

**Coverage of disorders:** We examined the prevalence of neurosis, psychosis, alcohol and drug abuse in people who were in debt compared to those with no debts and to the general population. All diagnostic categories of mental disorder included in the current paper were based on ICD 10.9

**Alcohol misuse and dependence:** Alcohol misuse was assessed using the Alcohol Use Disorder Identification Test.13 Further details about scoring are given by Singleton.12 In this paper, we focus on alcohol dependence, identified though the Severity of Alcohol Dependence questionnaire.14 The SAD-Q was asked of all respondents who had an AUDIT score of 10 or more.) The SAD Q consists of 20 questions covering a range of symptoms of dependence, and possible scores range from 0 to 3 on each question. A total SAD-Q of 3 or less indicates no dependence, while a score of 4-19 suggests mild dependence, 20-34 moderate dependence and 35-60 severe dependence. The reference period of the questions on alcohol dependence was the six months prior to interview.

Information was collected on all the types of drugs that respondents had ever used, and on those used in the year before interview.

**Drug dependence:** Information was first collected on all drugs that respondents had ever used, and then about drugs used in the year before
interview. Further information about drug use in the past year and past month was collected for cannabis, amphetamines, crack, ecstasy, tranquillisers, opiates and volatile substances, such as glue. Included in the questions about drug use in the past year and month were five questions to measure drug dependence, indicated by a positive response to any one of them.

**Common mental disorders:** Non-psychotic psychiatric disorder was assessed using the Clinical Interview Schedule (revised), which can be administered by non-clinically trained interviewers. It provides diagnoses of depressive episode, obsessive compulsive disorder, panic disorder, phobic disorder, generalised anxiety disorder and mixed anxiety/depressive disorder. These diagnoses were the basis for an overall category of neurotic disorders.

**Psychosis:** A two-phase approach was adopted to assess the presence of psychotic disorder. The Psychosis Screening Questionnaire was administered at the first interview. Features considered indicative of possible psychotic disorder were: self-report of symptoms suggestive of psychotic disorder, (e.g. hearing voices or mood swings) or of having been given a diagnosis of psychotic disorders, such as schizophrenia or manic depression; taking anti-psychotic medication; a history of admission to a mental hospital or ward; and a positive response to a question from the Psychosis Screening Questionnaire that asks about auditory hallucinations. A positive response to any one of these criteria led to selection for a second phase interview (N=203) using Version 2.1 of the Schedule for Assessment in Neuropsychiatry. A proportion of people who screened negative were also selected for the
second phase: 420 of these were eventually interviewed. Some people selected for a second phase interview refused it, and some could not be contacted during the field work period. To estimate the prevalence of psychotic disorder based on the sample who had undertaken the initial interview, a designation of 'definite or probable psychotic disorder' was applied, using criteria used originally in the Survey of Psychiatric Morbidity among prisoners. 16 Definite cases comprised those assessed as having a psychotic disorder at SCAN interview. Those who had had no SCAN interview who reported two or more of the psychosis screening criteria at initial interview listed above were taken as probable cases. For brevity, the combined group will henceforth be described as having psychotic disorder.

Assessment of debt: Respondents were asked to indicate whether they had incurred different types of debt over the last year, including mail order payments, road tax, electricity, TV licence, gas, Water or DSS Social fund Loan. The questions were drawn from a survey of Poverty and Social Exclusion, the field work of which was done through the General Household Survey. More information can be found at:

Assessment of financial hardship: Financial hardship was assessed by questions about attempts to cut down on consumption of utilities, about whether utilities had been disconnected, and questions about borrowing money and sources of loans.
**Analysis:** The data were weighted to correct for the sampling design and non-response, and then weighted to the age-sex population distribution. We analysed the prevalence of specific mental disorders in people reporting debts and financial hardship.
Results

Debt in the general population: The prevalence of debt of any kind in the general population is 11.6%. 4.5% of the general population were behind with council {local area} tax payments, 2.6% with rent, and 0.8% with mortgage repayments. 3.7% of the general population owe money to telephone, 2.4% to gas, 2.3% to water and 1.8% to electricity companies.1.4% were behind with mail order payments, 2.3% with credit card payments, 1.0% with goods on hire purchase, and 0.6% with road tax payments.

Debt and mental disorder: Table 1 shows that nearly half of people in debt and the general population had a psychiatric disorder of some kind, with around 33% of them having a neurotic disorder, 1.6% having a psychotic disorder, 15% alcohol dependence and 12% drug dependence. This compares with 14%, 0.4%, 6% and 3% of people with no debt in the general population. Thus people in debt had two to three times the rate of neurosis, four times the rate of psychosis, over twice the rate of alcohol dependence and four times the rate of drug dependence as people with no debt. The strength of the associations varied between specific types of debt. Intriguingly, the rates of psychosis were not especially raised among those with gas and electricity debts, but they were amongst those with mail order repayment debts, TV licence debts, water debts, phone debts and rent arrears.

[Table 1 about here]
Financial hardship arising from debt and mental disorder: Table 2 shows that around half of all those experiencing a utility disconnected in the last year had a mental disorder, compared with 20% of those with no utility disconnected.

[Table 2 about here]

Table 3 shows that around half of those making efforts to cut down on utilities in the last year had a mental disorder compared with 16% of those who had made no efforts to reduce utility consumption, with the relationship being much more marked for neurosis and psychosis than for substance dependence.

[Table 3 about here]

Unofficial borrowing and mental disorder: Table 4 shows that between half and three quarters of those who borrow money from family, friends, pawnbroker or money lenders had a mental disorder of some kind.

[Table 4 about here]

Credit card debts were more likely to be associated with neurotic disorders, and rent arrears with alcohol dependence. Department of Social Security social fund loans were more likely to be associated with drug dependence.
Discussion

This study is based on a large and nationally representative sample, using comprehensive assessments of mental disorder, substance abuse, debt and financial hardship, and is the first to examine the prevalence of mental disorder in people in the general population who have debts. The reasons for the substantially increased rates of mental disorder in people with debts need to be examined critically. This is a cross sectional survey which can indicate associations but not the sequence of events, and was thus unable to establish whether debt is a cause or consequence of mental disorder, or both.

Mental health professionals have tended to assume that debt is largely a consequence of mental disorder, and its accompanying social disability which can include reduced capacity to manage finances, but the converse may also be true, and debt may be a significant chronic stressor associated with the onset and maintenance of mental disorders. ¹⁷

People dependent upon alcohol or drugs may be more likely to spend money on their habit thereby getting into debt. It is likely that a malign resonance between debt and disorder is set up which produces increasing spiral of debt.

There are obvious difficulties in obtaining from individuals sampled in national survey information of a potentially sensitive nature, such as that relating to debt. However, informants were allowed to key in the data themselves, and this may have encouraged more accuracy. It was not possible to validate their responses from collateral accounts or independent information. There may be
differences in the degree to which people with disorders are prepared to reveal their indebtedness, and the financial hardship thus engendered, compared with those with no disorder. It is possible that people who have mental disorder are more likely to be preoccupied with their debts and hence to report them.

Once in utility debt, people with mental illness do make an attempt to reduce their bills by cutting consumption, and this may add to their hardship. Also worth noting is that those who are drug or alcohol dependent are least likely to do this, indicating that managing debt is a problem for them.

**Implications:** Debt is prevalent in western societies. UK consumer debt in 2007 exceeded £1.4 trillion (20% of which is not in the form of mortgages and loans secured by property), and in 2006/7 the British Citizens’ Advice Bureau dealt with 1.7 million debt problems. US consumer debt has more than doubled over the last decade, reaching £2.16 trillion in September 2005, excluding mortgages and other loans secured by real estate, and personal bankruptcy filings have also doubled in last ten years. Indeed America has twice as many people as Japan but 23 times as much credit card debt (2005 figures). Debt and financial hardship are associated with mental disorder, and mental disorder is greatly over-represented in people with debt and in people coping with the consequences of debt such as disconnected utilities. This demonstrates the mental health aspects of the public health impact of debt in the general population, and association should be taken into account in national policy dialogue about the role of debt in society. It should also feature
in liaison with clients and in the training of staff of companies and of agencies involved with giving loans, managing and recovering debts.
**Conclusion**

Nearly half of all people with debts in the general population have a mental disorder. Whether the association is causal, an outcome of mental illness, or bi-directional, its strength demonstrates argues for mental disorder to be addressed in policy and practice around people who are in significant debt.
References


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   Behavioural Disorders: Clinical description and diagnostic guidelines: World 

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13. Saunders JB, Aasland OG, Babor TF, de la Fuente JR, Grant M. 
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    collaborative project on early detection of persons with harmful alcohol 
    consumption II. Addiction 1993; 88:791-804.


Table 1 Prevalence of different mental disorders in people with different kinds of debt

<table>
<thead>
<tr>
<th>Types of debt</th>
<th>Neurotic disorder</th>
<th>Psychotic disorder</th>
<th>Alcohol dependence</th>
<th>Drug dependence</th>
<th>Any disorder</th>
<th>No disorder</th>
<th>Base</th>
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<tr>
<td>Mail order payments</td>
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<td>2.7</td>
<td>20.0</td>
<td>17.1</td>
<td>61.1</td>
<td>38.9</td>
<td>135</td>
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<td>1.0</td>
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<td>17.0</td>
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<td>38.1</td>
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<td>42.7</td>
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<td>19.3</td>
<td>59.3</td>
<td>40.7</td>
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<td>TV licence</td>
<td>42.4</td>
<td>1.9</td>
<td>20.5</td>
<td>22.6</td>
<td>57.2</td>
<td>42.8</td>
<td>132</td>
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<tr>
<td>Gas</td>
<td>41.3</td>
<td>0.8</td>
<td>19.9</td>
<td>12.8</td>
<td>53.4</td>
<td>46.6</td>
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<td>Water</td>
<td>41.1</td>
<td>2.2</td>
<td>10.6</td>
<td>12.2</td>
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<td>48.1</td>
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<td>DSS Social Fund Loan</td>
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<td>-</td>
<td>22.7</td>
<td>24.2</td>
<td>54.1</td>
<td>45.9</td>
<td>27</td>
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<td>0.5</td>
<td>16.6</td>
<td>13.1</td>
<td>51.1</td>
<td>48.9</td>
<td>174</td>
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<td>Phone</td>
<td>38.0</td>
<td>11.2</td>
<td>18.5</td>
<td>18.5</td>
<td>53.5</td>
<td>46.5</td>
<td>312</td>
</tr>
<tr>
<td>Goods on hire purchase</td>
<td>36.7</td>
<td>1.7</td>
<td>14.3</td>
<td>14.3</td>
<td>48.0</td>
<td>52.0</td>
<td>84</td>
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<td>Rent</td>
<td>36.7</td>
<td>2.0</td>
<td>19.4</td>
<td>15.0</td>
<td>51.1</td>
<td>48.9</td>
<td>235</td>
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<tr>
<td>Council tax</td>
<td>33.9</td>
<td>1.4</td>
<td>14.9</td>
<td>10.5</td>
<td>47.4</td>
<td>52.6</td>
<td>400</td>
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<tr>
<td>Other loans</td>
<td>50.0</td>
<td>2.2</td>
<td>14.0</td>
<td>13.2</td>
<td>60.6</td>
<td>39.4</td>
<td>104</td>
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<td><strong>32.5</strong></td>
<td><strong>1.6</strong></td>
<td><strong>15.2</strong></td>
<td><strong>11.5</strong></td>
<td><strong>45.0</strong></td>
<td><strong>55.0</strong></td>
<td><strong>1090</strong></td>
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<td>6.3</td>
<td>2.7</td>
<td>20.4</td>
<td>79.6</td>
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Table 2: Proportion of all people with disconnected utilities who have a mental disorder

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<tr>
<th>Utility disconnected in past year</th>
<th>Telephone</th>
<th>Electricity</th>
<th>Gas</th>
<th>Water</th>
<th>Any utility disconnected</th>
<th>No utility disconnected</th>
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</thead>
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<tr>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Neurotic disorder</td>
<td>40.3</td>
<td>40.1</td>
<td>31.5</td>
<td>[7]</td>
<td>34.4</td>
<td>15.4</td>
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<tr>
<td>Psychotic disorder</td>
<td>1.3</td>
<td>11.3</td>
<td>1.0</td>
<td>[1]</td>
<td>1.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>17.3</td>
<td>15.4</td>
<td>14.8</td>
<td>[3]</td>
<td>14.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Drug dependence</td>
<td>17.0</td>
<td>15.3</td>
<td>5.7</td>
<td>-</td>
<td>13.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Any disorder</td>
<td><strong>52.3</strong></td>
<td><strong>58.1</strong></td>
<td><strong>44.4</strong></td>
<td>[10]</td>
<td><strong>44.8</strong></td>
<td><strong>12.2</strong></td>
</tr>
<tr>
<td>No disorder</td>
<td><strong>47.7</strong></td>
<td><strong>41.9</strong></td>
<td><strong>55.6</strong></td>
<td>[6]</td>
<td><strong>55.2</strong></td>
<td><strong>77.8</strong></td>
</tr>
<tr>
<td>Base</td>
<td>342</td>
<td>42</td>
<td>76</td>
<td>16</td>
<td>500</td>
<td>8045</td>
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</table>
Table 3: Prevalence of mental disorders in people who have cut down on utilities in past year

<table>
<thead>
<tr>
<th></th>
<th>Telephone</th>
<th>Electricity</th>
<th>Gas</th>
<th>Water</th>
<th>Any utility cut down on</th>
<th>No utility cut down on</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Neurotic disorder</td>
<td>43.0</td>
<td>45.1</td>
<td>43.5</td>
<td>45.9</td>
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<td>14.2</td>
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<td>11.9</td>
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<td>0.6</td>
<td>2.1</td>
<td>0.4</td>
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<td><strong>53.4</strong></td>
<td><strong>50.4</strong></td>
<td><strong>55.5</strong></td>
<td><strong>46.2</strong></td>
<td><strong>21.1</strong></td>
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<tr>
<td>No disorder</td>
<td><strong>49.6</strong></td>
<td><strong>46.6</strong></td>
<td><strong>49.6</strong></td>
<td><strong>44.5</strong></td>
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<td>460</td>
<td>463</td>
<td>103</td>
<td>905</td>
<td>7640</td>
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<tr>
<td></td>
<td>Pawnbroker</td>
<td>Money lender</td>
<td>Friend(s)</td>
<td>Family</td>
<td>Anywhere</td>
<td>No money borrowed</td>
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<tr>
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<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
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<tr>
<td>Neurotic disorder</td>
<td>52.8</td>
<td>39.7</td>
<td>37.0</td>
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<td>2.0</td>
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<td><strong>50.0</strong></td>
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<td><strong>47.4</strong></td>
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Authors Contributions
Professor Rachel Jenkins wrote the first draft of the paper designed the analyses and coordinated subsequent drafts, Howard Meltzer conducted the analyses and other authors contributed to the discussion and the revisions.

Competing Interest Statement
"All authors declare that the answer to the questions on your competing interest form [http://bmj.com/cgi/content/full/317/7154/291/DC1] are all No and therefore have nothing to declare"

Ethical Approval
Ethical approval was obtained from the London MREC and then, as was required at the time, from all 149 LRECs which covered areas in which addresses had been selected.

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