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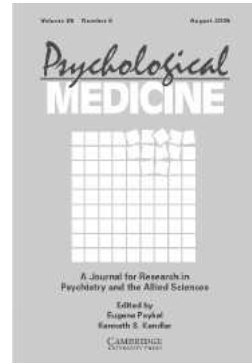
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# Worry content across the lifespan: an analysis of 16- to 74-year-old participants in the British National Survey of Psychiatric Morbidity 2000

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## ABSTRACT

**Background.** Previous studies suggest that worry content and prevalence may vary as a function of age, but evidence is limited.

**Method.** Cross-sectional national survey of 8580 householders in Great Britain aged between 16 and 74 years. This analysis examined the relationship between age, worry content (relationships/family, financial/housing, work, health, miscellaneous), common mental disorders, and functional limitation, adjusting for other sociodemographic factors.

**Results.** Overall, the prevalence of worries declined with age. However, with the exception of worry about relationships, the strength of associations between worry types and mental disorder either remained constant or increased in the older age groups. Compared to the 16–24 years reference group, worries about relationships/family, finances/housing and work were lower in the 55–74 years age groups. Financial/housing worries were increased in the 25–44 years group, and health worries were increased in the 25–64 years groups. There were independent associations between all worry items and the categories of mental disorder. All worry types apart from miscellaneous worries were independently associated, positively or negatively, with functional limitation.

**Conclusions.** Worry content in the general population varies as a function of age, gender, marital status, and educational attainment. All categories of worry are more prevalent in individuals with common mental disorders. The lower prevalence of worries and their stronger association with mental disorder in old age emphasize the clinical significance of these symptoms in this age group.

## INTRODUCTION

Worry is common in the general population at all ages, and occurs in all of the common mental disorders, such as depression and generalized anxiety (Singleton *et al.* 2001). Pathological worry is defined in terms of frequency, intensity and controllability, and worry content is not currently thought to have diagnostic significance (WHO, 1993; APA, 1994). There is, however, some evidence for qualitative as well as

quantitative differences in the worries of those who do and do not meet diagnostic criteria for mental disorders. Clinical studies in younger adults have suggested that patients with generalized anxiety disorder (GAD) are more likely to worry about minor matters than are controls (Craske *et al.* 1989; Roemer *et al.* 1997; Hoyer *et al.* 2001) or those with other disorders, such as social phobia (Hoyer *et al.* 2001). In community samples, this has also been reported in the elderly (Montorio *et al.* 2003), but not in young females (Becker *et al.* 2003). One study comparing volunteer samples of older individuals with and without GAD found no differences

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in worry content between the older groups (Diefenbach *et al.* 2001*a*); however, they did find differences between their older groups and the younger groups reported by Roemer *et al.* (1997), with older individuals worrying more about health and less about work. Several studies have also found that, contrary to some stereotypes, older adults report significantly fewer worries overall than younger age groups (e.g. Powers *et al.* 1992; Doucet *et al.* 1998; Skarborn & Nicki, 2000; Hunt *et al.* 2003). This suggests that both the content and frequency of worry may vary as a function of age, which has implications for the assessment, diagnosis and treatment of disorders such as GAD in older individuals, in whom these conditions are often unrecognized and poorly treated (Diefenbach *et al.* 2001*a*). As Hunt *et al.* (2003) point out, if different age groups have different concerns and methods of coping, then diagnostic assessments and cognitive-behavioural and problem-solving interventions may need to be adapted to address these issues, and to take account of any age-specific strengths and weaknesses.

Research into worry content is also important in helping us to understand better the nature and function of worry (Diefenbach *et al.* 2001*b*). Most cognitive formulations focus on its pathological aspects, regarding it as the cognitive driver of anxious affect (Beck & Emery, 1985), or as an avoidance activity in which worry about minor issues keeps more painful thoughts at bay (Borovec & Roemer, 1995). More positively, it has been proposed that worry may be a problem-oriented coping mechanism that acts to reduce anxiety (Davey, 1994); if so, studies of worry in those with and without mental disorder may help to identify those factors associated with pathological as opposed to non-pathological worry.

Methodological limitations of studies into worry content to date limit the conclusions that can be drawn. Some are confined to clinical populations or to specific age and gender groups; numbers are often small; comparisons are made between specific age groups rather than by examining the interaction between mental disorder and worry across the age span; and few studies have controlled for the confounding effects of other sociodemographic variables, such as gender, marital status and educational attainment. The principal aim of this study was

to study the relationship between age, worry content and mental disorder, adjusting for a range of sociodemographic factors in a large, representative community sample. Specifically, we aimed to examine the following hypotheses: that the specific content of worry changes with age; that the likelihood of worry declines rather than increases with increasing age after controlling for the effects of other sociodemographic variables; and that this age-related decline also occurs in those with mental disorder.

## METHOD

### Study sample

Data were analysed from the second National Survey of Psychiatric Morbidity, carried out in Great Britain (England, Wales and Scotland) in 2000 by the Office for National Statistics (Singleton *et al.* 2001). Small area postcode units (postcode sectors) were selected randomly from a sampling frame stratified for region and social class composition to generate a nationally representative sample. Households were selected randomly from within each unit and, in each household containing at least one person aged between 16 and 74 years, one person was selected randomly and invited to participate. A total of 12792 adults were approached, with 8580 participants.

### Measures

#### *Worry content*

Information on worry content was collected as part of the revised Clinical Interview Schedule (CIS-R) (Lewis *et al.* 1992), which was administered to all participants. Those who admitted to worrying or feeling depressed (within the past month) were shown a card with a list of 11 worry items (Table 1), and asked which had been making them worry. They were then asked to identify from the selected items the single main cause of their worry. Subjects who when asked were unable to identify specific worry topics were excluded. For this analysis, the worry items were grouped into the five content areas usually employed in studies of this topic (Craske *et al.* 1989; Sanderson & Barlow, 1990; Diefenbach *et al.* 2001*a*): relationships/family, financial/housing, work, health, and miscellaneous.

Table 1. *Worry items*

Relationships/family
Relationship with partner
Relationship with friends
Members of family
Financial/housing
Money/bills
Housing
Work
Work or lack of work
Health
Own physical health
Own mental health
Miscellaneous
Legal difficulties
Political issues/the news
Other

### *Sociodemographic factors*

The following were included, on the basis that they have been shown to have univariate associations with worry in previous studies (e.g. Hunt *et al.* 2003):

- (1) Gender.
- (2) Age, categorized into 10-year bands (9-year band for the youngest group).
- (3) Educational attainment, categorized in terms of highest qualification: no qualification; GCSE or equivalent (GCSE examinations usually taken at age 16 years); A-level or higher (A-level examinations usually taken at 18 years).
- (4) Marital status: married/cohabiting, separated, single, divorced, widowed.

### *Explanatory variables*

For certain worry types, the impact of specific possible explanatory variables in the survey data set were examined by entering them into the logistic regression models, as follows:

- (1) Financial/housing worries: presence/absence of debt (seriously behind with payment of one or more household bills in the previous year).
- (2) Work worries: employment status [working full-time, working part-time, unemployed, economically inactive (student, ill/disabled, retired)].
- (3) Health worries: presence/absence of any self-reported longstanding physical illness.

### *Mental disorder*

The CIS-R is a widely used fully structured assessment of psychiatric morbidity (Jordanova *et al.* 2004). Common mental disorder (CMD) was defined from this instrument using standard criteria (Lewis *et al.* 1992): scores from each of the 14 sections of the CIS-R are totalled to give an overall score (maximum 57 points), and CMD is defined as present on the basis of a score of 12 or above. In addition, ICD-10 diagnoses of GAD and depression were also derived from the survey data using standard algorithms.

### *Life events*

As worry and worry content may be influenced by recent exposure to significant adverse life events (Hunt *et al.* 2003), this factor was also adjusted for. During the interview, subjects were shown cards listing a range of 12 adverse life events, derived from the List of Threatening Experiences questionnaire (Brugha *et al.* 1985), and asked to identify those that they had experienced within the previous 6 months. Examples of life events include: serious illness, injury or an assault to self or close relative; death of parent, child or spouse; separation due to marital difficulties.

### *Functional limitation*

Information was collected about limitations in seven domains of activities of daily living (ADL): personal care, use of transport, medical care, household activities, practical activities, paperwork, and managing money (Meltzer *et al.* 2002). Subjects were classified as impaired on ADL if they responded positively to one or more of these items.

### **Statistical analysis**

Data were analysed using STATA software, version 8 (StataCorp, College Station, TX, USA). All analyses were carried out using standard weighting procedures to allow for the stratified, clustered sampling and non-response. The associations between worry item groups and dependent sociodemographic and mental disorder variables were analysed using logistic regression. Effect modification was tested by entering an interaction term between worry item group and age (six groups) for given dependent variables, to examine its independent

significance in the model. All models included gender, education, marital status and recent exposure to adverse life events as potential confounding factors; analyses of functional limitation also adjusted for mental and physical ill-health (CMD, self-reported longstanding physical illness).

## RESULTS

The weighted mean age of the sample was 42.6 years (standard error 0.22), and 50.1% were female. GAD was present in 431 (4.4%), depression in 255 (2.6%), and any CMD in 1400 (15%). A total of 5439 (63.4%) of the sample reported feelings of depression or worry in the previous month, with data on worry content available for 5294 (97.3%). About one quarter of the sample (2242, 26.1%) reported experiencing one or more significant adverse life events in the previous 6 months.

### Age

As Table 2 shows, the five worry item groups differed in their independent associations with demographic variables in this sample. Fig. 1 shows the different profiles of relationships between worry types and age. Overall, the prevalence of worries reduces with age. Compared to the 16–24 years reference group, worries about relationships/family, finances/housing and work were significantly lower in the 55–74 years age groups. Financial/housing worries were increased in the 25–44 years group, and health worries were increased in those over 24, although this was only significant for the 25–64 years groups.

### Other sociodemographic variables

Female gender was associated with worries about relationships/family [odds ratio (OR) 2.00, 95% confidence interval (CI) 1.78–2.19,  $t=12.63$ ,  $p<0.0001$ ] and health (OR 1.23, 95% CI 1.07–1.41,  $t=3.02$ ,  $p=0.003$ ), and male gender with worries about work (OR 1.62, 95% CI 1.44–1.83,  $t=7.85$ ,  $p<0.0001$ ). There were significant age variations in the association between gender and worry about work (OR 1.13, 95% CI 1.03–1.24,  $t=2.58$ ,  $p=0.01$ ), worry about finances/housing (OR 1.10, 95% CI 1.02–1.18,  $t=2.46$ ,  $p=0.014$ ) and worry about health (OR 1.16, 95% CI 1.06–1.27,  $t=3.31$ ,

$p=0.001$ ), with males reporting more worry with increasing age, and females reporting less. Worry about relationships/family was greater in the separated and divorced, worry about health was increased in the separated and divorced, and financial/housing and miscellaneous worries were increased in all groups compared to the married (Table 2).

### Explanatory variables

When presence/absence of debt was included in the logistic regression model for financial/housing worries, this did not significantly alter the independent associations of this worry type with age, gender or marital status. Debt was associated with financial worries (OR 4.07, 95% CI 3.43–4.83,  $t=16.08$ ,  $p<0.0001$ ).

There were no significant changes in the independent associations between worry about work and age, gender, marital status or education when employment status was entered into the model for this worry type. Part-time employment, unemployment and being economically inactive were all associated with more worries about work than full-time employment.

The presence of a longstanding physical complaint was significantly associated with worry about health (OR 2.9, 95% CI 2.51–3.36,  $t=14.39$ ,  $p<0.0001$ ). When this variable was included in the logistic regression model for health worries, this worry type emerged as significantly less common in the 65–74 years group than in the reference group (OR 0.70, 95% CI 0.49–1.00,  $t=1.99$ ,  $p<0.05$ ).

### Mental disorder

There were strong independent associations for all worry item groups with CMD, GAD and depression (Table 3). These three categories of mental disorder were also associated with a greater number of worry items in all age and sex groups (data not shown). There was a significant correlation between the number of worry items and CIS-R score ( $R^2=0.33$ ,  $p<0.0001$ ). Exposure to one or more adverse life events in the previous 6 months was also associated with all worry item groups (Table 3).

With regard to the associations between worry item groups and CMD, there were significant linear age interactions as follows: the association increased with age for worry about work (OR 1.16, 95% CI 1.04–1.29,  $t=2.77$ ,

Table 2. Associations between demographic measures and worry items

	<i>n</i>	Relationships		Finances		Work		Health		Miscellaneous	
		%	OR (95% CI)	%	OR (95% CI)	%	OR (95% CI)	%	OR (95% CI)	%	OR (95% CI)
Age (years)											
16–24	794	38.3	1.00	31.8	1.00	33.4	1.00	11.5	1.00	20.3	1.00
25–34	1683	35.5	0.85 (0.69–1.06)	38.9	1.52 (1.23–1.88)**	33.9	1.03 (0.83–1.29)	14.8	1.43 (1.06–1.91)*	15.9	0.80 (0.61–1.05)
35–44	1848	39.1	0.95 (0.76–1.20)	34.6	1.26 (1.00–1.58)*	31.5	1.03 (0.82–1.29)	16.1	1.57 (1.18–2.08)**	13.0	0.67 (0.51–0.89)**
45–54	1545	38.9	0.96 (0.76–1.21)	25.5	0.81 (0.64–1.04)	28.5	0.95 (0.74–1.22)	17.4	1.74 (1.30–2.33)**	13.4	0.74 (0.55–1.00)*
55–64	1442	33.2	0.78 (0.62–1.00)*	16.5	0.48 (0.37–0.63)**	13.0	0.41 (0.31–0.54)**	14.2	1.40 (1.03–1.91)*	12.7	0.73 (0.54–0.99)*
65–74	1268	27.3	0.60 (0.47–0.78)**	11.5	0.31 (0.23–0.41)**	1.5	0.04 (0.03–0.07)**	11.6	1.12 (0.80–1.56)	12.1	0.70 (0.50–0.97)*
Sex											
Male	3852	28.6	1.00	27.8	1.00	30.7	1.00	13.4	1.00	14.2	1.00
Female	4728	43.5	1.97 (1.78–2.19)**	28.6	1.06 (0.95–1.18)	20.6	0.62 (0.55–0.70)**	15.8	1.23 (1.07–1.41)**	15.1	1.09 (0.94–1.26)
Education											
None	2565	34.1	1.00	23.3	1.00	13.7	1.00	15.1	1.00	11.7	1.00
GCSE	2968	36.8	1.06 (0.92–1.21)	28.8	0.96 (0.82–1.12)	23.8	1.33 (1.11–1.60)**	13.6	0.88 (0.74–1.04)	15.0	1.27 (1.05–1.53)**
A-level	2982	36.8	1.13 (0.98–1.31)	31.6	1.08 (0.92–1.27)	36.7	2.36 (1.96–2.84)**	15.3	1.01 (0.84–1.22)	16.6	1.46 (1.20–1.77)**
Marital status											
Married	4383	34.3	1.00	23.0	1.00	23.0	1.00	13.9	1.00	12.3	1.00
Separated	360	60.8	2.51 (1.90–3.30)**	48.3	2.49 (1.88–3.30)**	24.9	0.95 (0.70–1.28)	20.1	1.41 (1.03–1.94)*	18.7	1.52 (1.10–2.09)**
Single	2279	35.1	0.92 (0.80–1.06)	34.2	1.25 (1.06–1.47)**	34.0	1.13 (0.96–1.33)	13.7	1.14 (0.94–1.39)	18.1	1.23 (1.02–1.48)*
Divorced	982	44.7	1.41 (1.20–1.66)**	38.9	2.03 (1.71–2.41)**	23.3	0.98 (0.80–1.20)	20.9	1.51 (1.23–1.86)**	15.7	1.31 (1.05–1.64)*
Widowed	576	32.3	0.97 (0.79–1.20)	20.6	1.70 (1.26–2.28)**	5.6	0.70 (0.46–1.08)	14.3	1.11 (0.83–1.48)	16.1	1.53 (1.17–2.01)**

OR, Odds ratio, adjusted for age, gender, education, marital status, and exposure to life events; CI, confidence interval.

\*  $p < 0.05$ , \*\*  $p < 0.01$ .

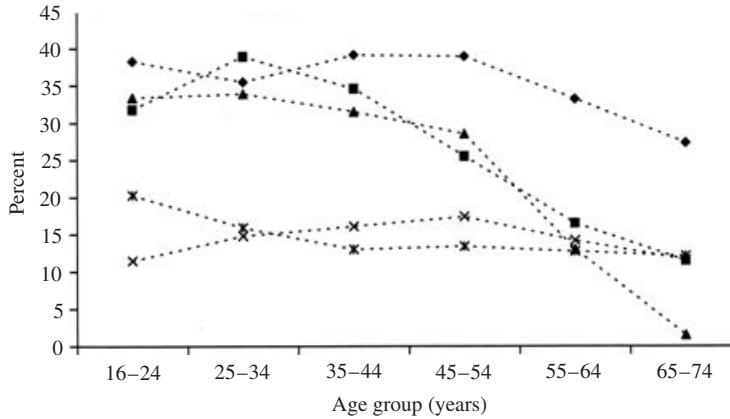


FIG. 1. Prevalence of worry type by age group. ---◆---, Relationships; ---■---, finances; ---▲---, work; ---×---, health; ---✱---, miscellaneous.

$p=0.006$ ) and for miscellaneous worries (OR 1.18, 95% CI 1.07–1.30,  $t=3.42$ ,  $p=0.001$ ); it decreased with age for worry about relationships/family (OR 0.86, 95% CI 0.79–0.94,  $t=3.38$ ,  $p=0.001$ ). Similar patterns of association were found when GAD and depression were analysed as separate outcomes (data not shown). There were no significant age interactions across the age range for worries about finances/housing and health, but the former was most strongly associated with CMD in the youngest 16–24 years age group, and the latter most strongly associated with CMD in the oldest 65–74 years age group.

### Functional limitation

All worry item groups apart from miscellaneous worries were independently associated with functional limitation (impaired on one or more ADL) (Table 3). These associations were positive in all cases except for worry about work, which was negatively associated with functional limitation. The strength of these associations decreased with increasing age for worry about relationships/family (OR 0.88, 95% CI 0.80–0.96,  $t=2.87$ ,  $p=0.004$ ), worry about finances/housing (OR 0.91, 95% CI 0.82–1.00,  $t=1.99$ ,  $p=0.047$ ) and worry about work (OR 0.87, 95% CI 0.76–0.99,  $t=2.12$ ,  $p=0.035$ ).

### DISCUSSION

This study has a number of advantages over previous research into worry content: it is

based on a large and nationally representative sample, the diagnoses of mental disorder have been developed using validated epidemiological methods, and important confounding factors such as sociodemographic variables and life events are adjusted for. There are also some limitations. The upper age cut-off of this sample is 74 years, so no conclusions can be drawn about worry in more elderly individuals. The survey items dealing with worry were necessarily brief, and no data are available on some aspects of worry, such as controllability, frequency, intensity, and coping style, that have been examined in smaller but more intensive studies using instruments such as the Penn State Worry Questionnaire (PSWQ; Meyer *et al.* 1990). Only those subjects who reported being worried or depressed in the previous month were asked about the content of their worries, so this survey will not have identified the milder concerns of those without worry or depressed mood over this time period. This survey was cross-sectional, so it is not possible to attribute causality, or to distinguish between age, period and cohort effects.

### Worry and age

The findings of this study support the hypothesis, based upon previous research, that after adjustment for confounding factors older adults report significantly fewer worries overall than younger age groups. This age-associated decline is probably due to a number of specific age, period and cohort effects beyond the scope of

Table 3. Associations between mental health measures, life events, functional limitation and worry items

	n	Relationships			Finances			Work			Health			Miscellaneous		
		%	OR (95% CI)	%	OR (95% CI)	%	OR (95% CI)	%	OR (95% CI)	%	OR (95% CI)	%	OR (95% CI)	%	OR (95% CI)	
CMD	7180	29.8	1.00	22.3	1.00	21.9	1.00	9.0	1.00	12.6	1.00	12.6	1.00	2.31 (1.95-2.74)**		
Absent	1400	71.0	5.15 (4.47-5.94)**	60.9	5.05 (4.41-5.79)**	46.6	3.66 (3.14-4.27)**	46.0	8.37 (7.16-9.79)**	25.8	2.31 (1.95-2.74)**	25.8	2.31 (1.95-2.74)**			
GAD	8149	34.4	1.00	26.5	1.00	24.8	1.00	13.0	1.00	13.8	1.00	13.8	1.00	3.07 (2.37-3.97)**		
Absent	431	71.1	4.52 (3.53-5.78)**	64.3	4.87 (3.93-6.05)**	44.5	2.78 (2.20-3.50)**	49.5	5.86 (4.68-7.34)**	31.7	3.07 (2.37-3.97)**	31.7	3.07 (2.37-3.97)**			
DEP	8325	35.1	1.00	27.1	1.00	25.2	1.00	13.4	1.00	14.2	1.00	14.2	1.00	2.36 (1.68-3.31)**		
Absent	255	69.7	3.58 (2.64-4.85)**	71.0	5.89 (4.33-7.99)**	42.7	2.39 (1.74-3.26)**	62.5	9.62 (7.04-13.14)**	29.7	2.36 (1.68-3.31)**	29.7	2.36 (1.68-3.31)**			
Life events in previous 6 months	6338	31.6	1.00	24.5	1.00	24.3	1.00	13.3	1.00	13.2	1.00	13.2	1.00	1.44 (1.25-1.66)**		
Yes	2242	48.5	2.05 (1.83-2.30)**	38.6	1.85 (1.63-2.10)**	29.6	1.25 (1.08-1.43)**	18.5	1.49 (1.28-1.73)**	18.7	1.44 (1.25-1.66)**	18.7	1.44 (1.25-1.66)**			
Functional limitation (ADL score 1+)	6551 <sup>a</sup>	33.6	1.00	25.6	1.00	26.7	1.00	10.5	1.00	14.1	1.00	14.1	1.00	1.02 (0.86-1.21)		
Absent	1962	43.7	1.18 (1.02-1.36)*	38.3	1.65 (1.41-1.93)**	22.0	0.83 (0.70-1.00)*	30.7	2.47 (2.11-2.89)**	16.7	1.02 (0.86-1.21)	16.7	1.02 (0.86-1.21)			

OR, Odds ratio; CI, confidence interval; CMD, common mental disorder; GAD, generalized anxiety disorder; DEP, depression; ADL, activities of daily living. OR adjusted for age, gender, education, marital status, exposure to life events (also CMD, physical complaints in the case of functional limitation).  
<sup>a</sup> No ADL data for 67 subjects.  
 \*  $p < 0.05$ , \*\*  $p < 0.01$ .

this study design to investigate. There is some evidence that younger and older adults have different coping styles: more active and problem-focused in the young, more passive and emotion-focused in the old (Folkman *et al.* 1987). Perhaps increasing age and life experience brings increased mental resilience and ‘wise detachment’ (Valliant, 1977); old age certainly brings retirement, which currently removes the need for many individuals to worry about work. Alternatively, there may be cohort effects, with different generations showing different levels of liability to worry in the face of adversity. Specific period effects, particularly those related to employment and income, may also have different effects at different ages. The current cohort of 65- to 74-year-olds is well provided for in retirement by occupational pensions and other sources of income; in this sample only 21% of this age group were reliant on state pensions and benefits alone. This trend may continue beyond the 74-year cut-off point of our study; Doucet *et al.* (1998) found that individuals aged 75 years and over worried less than those aged 55-64 years about the future, work and finances.

Worry about health is also a feature of young adulthood and middle age rather than old age (up to 74 years) in this sample. Indeed, if the presence or absence of a longstanding illness is adjusted for, the 65-74 years group had the lowest rate of health worries, although it should be borne in mind that self-reported illness may be a function of that worry. In addition to the age, period and cohort effects mentioned above, this age-associated decline in health worries may also be a survivor effect, in that younger adults with the most severe health problems (and presumably worries) die before they reach old age. Worry about health may be more prevalent in those aged over 75, as suggested by Hunt *et al.* (2003), whose older group contained individuals up to the age of 86 who worried more about this topic than their young 18-25 years group.

**The impact of other sociodemographic variables**

This study confirms the need to control for the effect of other sociodemographic variables that have their own independent association with worry. In this sample as a whole, women worried more about relationships/family and health, but less than men about work, although the gender difference was absent in levels of



worry about work in the youngest and oldest age groups. A similar low level of worry about work in the post-retirement age group is to be expected; the lack of a gender difference in the youngest age group may be due to their equal involvement in the workplace in this age cohort. In this context, it is interesting that younger females were also more worried than males about finances/housing, a finding reported by Hunt *et al.* (2003). In the case of worry about finance, work and health, analysis of the age variations of their association with gender shows that the sex differences become less with increasing age.

This study also confirms the finding of Hunt *et al.* (2003) that the experience of worry varies with marital status. Unlike Hunt *et al.*, however, the single and widowed groups did not differ in levels of worry in our sample, perhaps because our analysis controlled for the effect of age.

### **Mental disorder and functional limitation**

Worry is clinically important. After controlling for sociodemographic variables and recent exposure to life events, strong independent associations remain between all worry item groups and the three categories of mental disorder examined in this study (CMD, GAD, depression). For each category of disorder, worries about health, finances/housing and relationships/family are the most prevalent concerns; in the case of health, it should be noted that this worry item included 'worry about one's mental health', which may have strengthened this association. In contrast to the age-associated decline in worry in the overall sample, the rates of all worry types associated with mental disorder either remain constant or increase in the oldest age groups, with the notable exception of worry about relationships/family. There was no significant age interaction in the association between worry about health and mental disorder in this sample, which runs counter to previous reports in relation to GAD (Montorio *et al.* 2003) and the usual perception that elderly people are particularly susceptible to this concern (Rodin & Timko, 1992; Hunt *et al.* 2003). It is the case, however, that the strongest associations between CMD and worry about health were with the oldest age groups, and inclusion of

subjects over the age of 74 years might have reinforced this trend.

The worry items were also independently associated with functional limitation in this sample, although less strongly than with mental disorder, and not always positively. It may be therefore that, in younger age groups at least, worries about family/relationships, finances/housing and health are disabling in their own right, separate from any relationship with physical and mental disorder. Alternatively, there may be degrees or episodes of disabling physical and mental disorder or disability associated with worry in this sample that are not captured by the variables used here to adjust for them (CMD and self-reported longstanding physical complaints). The negative association between functional limitation and worry about work is anomalous. Further analysis (data not shown) indicates that this is significant only for more severe degrees of functional limitation, so this may reflect the fact that more severely disabled individuals are relieved of the need to seek or hold down a job, and therefore the worry associated with this.

The sustained or increased strength of association between most worry items and mental disorder with increasing age, while relatively modest, is in contrast to a decline in the rate of worries with increasing age in the sample as a whole (Table 2). This suggests that the pathological significance of worry may vary with age, with specific worries being more indicative of mental disorder in old age than in younger adulthood. The reasons for this are not clear. It could be that this cohort of older adults are more efficient worriers whose concerns resolve more quickly if they do not develop into an episode of mental disorder. Another possibility is that this group uses fewer or less effective coping mechanisms to manage their worries, so increasing the risk of conversion to disorder (Hunt *et al.* 2003). Further research on the process, duration and outcome of worry at different ages is needed to resolve this point.

### **CONCLUSIONS**

The findings of this study indicate that worry content in the general population varies as a function of age, gender, marital status and

educational attainment. All categories of worry are more prevalent in individuals with common mental disorders. The lower prevalence of worries and a stronger association with mental disorder in old age is a reminder that significant worry in this age group should not be dismissed, but should prompt further assessment of the mental state.

## DECLARATION OF INTEREST

None.

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