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A follow up study of depression in the carers of dementia sufferers

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Caring for people with dementia is stressful,¹ and depression occurs in 30-50% of carers.² Few data are available, however, about the course of depression or variables associated with the length of episodes, such as age, closeness of relationship, and non-cognitive symptoms among patients. We followed up a group of carers over a year to assess the length and determinants of depression.

Subjects, methods, and results

We recruited 124 patients with dementia as defined by DSM-III-R from consecutive referrals to psychiatric services in Birmingham (99) and a memory clinic in Bristol (25); 90% of those approached agreed to participate. One hundred and nine had informal carers, of whom 85 were followed up for one year.

Carers were interviewed initially and every month with the geriatric mental state schedule and the Cornell depression scale, with additional questions about the duration and impact of symptoms. Depression was diagnosed according to research diagnostic criteria. In the patients the geriatric mental state schedule/history and aetiology schedule/secondary dementia schedule package was used to diagnose dementia; depression was assessed in the same way as for carers. Psychotic symptoms were evaluated with the Burns symptom check list. Cognitive function was assessed with the cognitive section of the Cambridge assessment of mental disorders in the elderly initially and after one year. Problem behaviours and social support were evaluated using the carers stress scale. References for the instruments are given elsewhere.³

Depression was defined as resolved if major or minor depression was absent for three consecutive months. Correlations between the number of months of depression and age, gender, whether the carer was living with the patient, patient depression, psychotic symptoms, severity of dementia, baseline cognitive function score, cognitive decline, social support, and being a first degree relative were calculated using Pearson's correlation coefficient. Significant associations were then tested with a logistic regression analysis comparing carers with and without at least three months of depression. A probability of 0.01 represented statistical significance.

Eighty five of the 109 (78%) carers were followed up for one year (table 1). Eighteen of the 26 cases of major (3/6) or minor (15/20) depression resolved during the follow up year but eight did not. Carers with depression had a mean of 5.27 (SD 4.54) months of depression and a mean Cornell depression score of 8.70 during depressed months. Fourteen (54%) experienced at least three months of depression and 10 (39%) at least six months. Twenty eight of the 59 (48%) carers without depression initially developed major (nine) or minor (19) depression during the follow up

Table 1—Demographic characteristics of carers and patients. Results are numbers and percentages

Characteristics	No (%)
Carers:	
No (%) men	46 (54.1)
Mean age (years)	64.8
No (%) living with patient	48 (56.5)
No (%) marital partners of patients	41 (48.2)
No (%) children of patients	30 (35.3)
No (%) siblings of patients	3 (3.5)
No distant relatives or friends of patients	11 (12.9)
No with minor depression at baseline	20 (23.5)
No with major depression at baseline	6 (7.1)
Patients	
No (%) women	65 (76.5)
Mean age (years)	79.36
Mean CAMCOG score at baseline	46.23
Clinical dementia rating scale	1-21, 2-53, 3-11

year, and 14 were depressed for at least three months.

Only living with a dementia sufferer ($r=0.30$, $P=0.005$), depression in the patient ($r=0.37$, $P=0.001$), and problem behaviours ($r=0.39$, $P=0.007$) were significantly associated with the number of months of depression. In the logistic regression analysis only the overall level of problem behaviours was significantly associated (Wald 7.57, $P=0.006$).

Comment

Our sample was representative of dementia sufferers with mild to moderate impairment in contact with clinical services. Depression was diagnosed according to standardised criteria. Among these carers the annual incidence of depression lasting a month or more was almost 50% and of that lasting three months or more 25%. Thirty per cent of cases persisted for the whole follow up year, and carers with depression initially experienced on average over five months of depression. The incidence of depression was well above that reported in community studies, although the length of depressive episodes was similar.⁴

In our study both problem behaviours and depression were significantly associated with the number of months of depression, a feature not consistently shown in previous cross sectional studies.⁵ This emphasises the importance of treating non-cognitive symptoms.

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