

biochemistry was normal, but results of liver function tests were deranged, with a bilirubin concentration of 46  $\mu\text{mol/l}$  (2.7 mg/100 ml), alkaline phosphatase 265 U/l, and  $\gamma$ -glutamyltransferase 263 U/l. Arterial blood gas tensions were: oxygen 8.0 kPa (60 mm Hg), carbon dioxide 3.9 kPa (29 mm Hg), bicarbonate 21 mmol (mEq)/l, and pH 7.45. Haemoglobin concentration was 172 g/l. The ratio of forced expiratory volume in one second to forced vital capacity was 1.5:2.43 litres (predicted 2.0 (SD 0.4):2.6 (0.4) litres). Ventilation perfusion lung scanning showed no evidence of pulmonary embolism. Echocardiography showed an enlarged right ventricle and right atrium, paradoxical motion of the interventricular septum, but normal left sided structures. At heart catheterisation the pressures were: right atrium, atrial 22 mm Hg, ventricular 28 mm Hg (mean 18 mm Hg); right ventricle 120/20 mm Hg; pulmonary artery 120/60 (mean 75 mm Hg); aorta 140/80 (mean 95) mm Hg; and left ventricle 140/0-10 mm Hg. Pulmonary capillary wedge pressure could not be obtained. Pulmonary arterial oxygen saturation was 51% and aortic 90%, with no evidence of an intracardiac shunt. Cardiac index was 1.5 litres/min/m<sup>2</sup>.

She was not grossly obese, and we did not think she had developed hypoxia from hypoventilation. She did not give a history of chronic bronchitis, results of pulmonary function tests were normal, and she had only mild hypoxaemia. Severe primary pulmonary hypertension was diagnosed. She was electively readmitted for invasive monitoring of pulmonary artery pressure and acute drug testing. High flow oxygen (60%), nifedipine, captopril, hydralazine, and isoprenaline failed to produce a beneficial effect. As anticoagulation improves survival in primary pulmonary hypertension<sup>4</sup> warfarin was started. She died suddenly several months later. At necropsy there was appreciable right ventricular dilatation and hypertrophy. Histological examination of the lungs showed the changes of florid classical plexogenic pulmonary hypertension with no evidence of thromboembolic disease or chronic bronchitis.

### Comment

Pulmonary hypertension has been reported previously in two patients taking fenfluramine.<sup>3</sup> The pulmonary hypertension was of moderate severity (50/20 and 50/28 mm Hg) and resolved completely on withdrawal of the drug. Gaul *et al* subsequently described pulmonary hypertension (98/45 mm Hg) in a 53 year old woman treated three years previously with fenfluramine; nifedipine considerably reduced the pressure.<sup>5</sup> Severe and intractable pulmonary hypertension, which may be irreversible, may result from fenfluramine treatment.

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## Hazards for elderly people admitted for respite ("holiday admissions") and social care ("social admissions")

Sheldon in 1948 suggested the use of short stay hostels to support the carers of disabled elderly people.<sup>1</sup> Since then various other schemes using different periods of admission to achieve the same aim have been developed. Though the duration of stay and intervals between admissions may vary, nearly all studies suggest that hospital beds should be used. This is despite the fact that admission to hospital is associated with appreciable mortality and morbidity.<sup>2</sup> The purpose of this study was to look at the incidence of illness and death during the first arranged admission for respite care. As patients admitted for social care (so called "social admissions") are also free of acute illness we decided to look at this group also.

### Patients, methods, and results

We analysed the medical records of all patients admitted as "holiday" or social admissions during July 1980 to February 1985. A holiday admission was defined as an elective admission arranged to give the carer a break. A social admission was defined as an unplanned admission in which no medical or rehabilitation cause was found. The diagnosis of social admission was made not only initially by the admitting doctor but also at the time of discharge. A total of 112 patients were admitted with these two diagnoses. The table gives details of age, sex ratio, occurrence of adverse events, and outcome in these patients.

The principal diagnoses in the group admitted for respite care were dementia in 28 cases, cerebrovascular disease in 24, Parkinson's disease in six, amputation in three, other diseases in seven, and a combination of these conditions in one.

### Comment

These findings show that elderly people admitted for respite care or for social reasons suffer a very high morbidity and mortality—exceeding even the 8.9% recorded for mortality among the elderly admitted with acute illness (over the age of 85) to our geriatric wards.<sup>3</sup>

Why do so many of these elderly people who do not have acute medical problems die shortly after admission to hospital? Is this high mortality related to disability, to the treatment they receive, or to the move from home to hospital? It is difficult to answer these questions, as there are no data on these particular groups. Data on institutionalisation of the elderly, however, may help. Many studies on institutionalisation of disabled elderly people<sup>4,5</sup> clearly show a substantial early death rate, particularly within the first three months, suggesting that the move itself from a familiar setting may be important. The mortality is higher in men and in those with chronic brain syndrome, severe physical dependence, and incontinence.

### Clinical details and outcome for patients admitted for respite care (holiday admissions) and social reasons

	Holiday admissions	Social admissions
No of patients	69	43
Mean age in years (SD)	82 (7.9)	85 (5.0)
Sex ratio (M:F)	1:2.0	1:1.7
Outcome:		
Death	9*	15†
Long stay	5	4
Transfer to part III	0	2
Transfer to psychogeriatric ward	0	1
Discharged home	55	21
Minor adverse events:		
Infections	5	1
Falls	2	1

\*Cause of death bronchopneumonia in all cases.

†Cause of death bronchopneumonia in 13 patients, left ventricular failure in one, cerebrovascular accident in one.

Whatever the reason or reasons for the high mortality, plainly even a temporary move for a short period is not without risk for the elderly. At present there are various schemes for providing short term relief—for example, so that carers may go shopping—and we must look for a means of providing prolonged periods of care at home to relieve relatives. Admission to hospital, which has been and still is readily accepted by doctors, relatives, and community workers as a solution to a social problem, must be discouraged.

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