Mortality rates of patients admitted to a psychogeriatric assessment unit

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SUMMARY

Admission of elderly people to a geriatric hospital may carry an increased risk of death. In this study 355 admissions of 243 elderly persons with dementia to a purpose built psychogeriatric unit were studied and the mortality rate found to be 8.2%, which is less than that reported elsewhere. Admission for the purpose of respite (holiday) relief is a safe procedure and should not be discouraged.

INTRODUCTION

The number of elderly people in the population will increase slightly until the end of this century but more importantly, the proportion of these who are over 85 will increase disproportionately. Most elderly people live in their own homes or with relatives and quite often family members make great sacrifices to care for these elderly relatives and may themselves suffer from psychiatric illness as a result. It has been suggested that attendance at a psychogeriatric day hospital does not offer relief to strained carers but that partial or total institutionalisation is more likely to be effective. It thus follows that the demand for holiday relief admissions to geriatric or psychogeriatric units is likely to increase. A study by Rai and others indicated that admission to a geriatric hospital for a short period was associated with an increase in mortality and they concluded that admission to hospital should be discouraged, and alternative forms of home care provided. Criticisms can be made of that study: the conclusions are very broad and make no reference to planned respite admissions to purpose built psychogeriatric units or Social Services facilities; the results show that planned holiday admissions have a much lower mortality rate (13%) than unplanned “social admissions” (35%) and although this lower rate is apparently higher than the mortality rate (8.9%) quoted for the elderly (over 85) admitted with an acute illness to their geriatric wards no tests of significance were done. These results are nevertheless worrying especially as the authors make it clear that both the social and holiday admissions were free of acute illness.

Because of the implications of Rai’s work it was decided to look at the mortality rates of patients admitted to a purpose built psychogeriatric unit which caters for large numbers of planned respite admissions. Holywell Hospital is a large (614 beds) psychiatric hospital situated in a rural area with a suburban catchment in its south east corner: the over 65 population of the area is 29,400 covered by three

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consultant psychiatrists. A new 60 bedded purpose built unit to cater for all respite admissions, and for assessment of demented patients was opened in May 1984.

METHODS
The medical records of all admissions to the unit between May 1984 and March 1986 were examined. All admissions were planned and occurred during the working week (Monday to Friday, 9 am to 5 pm). All patients had a physical examination on admission and for first admissions a full psychological and social assessment was performed together with a battery of blood tests, chest X-ray and urine culture. All re-admissions and a few of the first admissions were for respite care.

Prior to a first admission all patients were assessed at home and any patient with an acute medical condition requiring hospital care was referred to a physician or geriatrician.

RESULTS
The charts of nine patients were not available for inspection as they had moved to another area. This left 243 patients who had a total of 355 admissions. Of these 168 had one admission only (nearly all for assessment) and 75 had multiple (respite) admissions. (52 were re-admitted once, 16 twice, and 7 three or more times). Of the admissions, 37% were for less than 1 month, 37% stayed between four and seven weeks and 25% stayed eight weeks or longer. Most of those who stayed over eight weeks were waiting for long-term accommodation elsewhere but a few had become ill (eg cerebrovascular accident) after admission. The average length of stay for first admissions was eight weeks and for re-admissions 5-7 weeks. The sex ratio for first admissions was 1:1.8 (M:F) and for re-admissions 1:1.3.

There was no significant difference in the average age of first admissions (78 years) compared to re-admissions. The outcome of the most recent admission is shown in the Table. There were 20 deaths during the 22-month period (death

| Last residence | Placement on discharge | Death |
|----------------|------------------------|-------|
| Home           | Home                   | Social Services | Hospital | Psychogeriatric | |
|                | 175                    | 98    | 27    | 10    | 24    | 16    |
|                | (72%)                  | (56%) | (15%) | (6%)  | (14%) | (9%)  |
| Social Services| -                      | 27    | 4     | 12    | -     | 4     |
|                | (19%)                  |       | (57%) | (9%)  |       | (9%)  |
| Hospital       | 21                     | 6     | 5     | 7     | 3     | -     |
|                | (9%)                   | (29%) | (24%) | (33%) | (14%) | -     |
| Total          | 243                    |       |       |       |       |       |

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rate of 8·2%). 16 of the deaths occurred in people admitted from home and four in those admitted from Social Services accommodation. The average age of those who died was 80·2 years. Six of the deaths (30%) occurred in the first two weeks and 10 (50%) within eight weeks, with the rest being evenly distributed over the following sixteen weeks. 14 deaths (70%) were due to bronchopneumonia and the others due equally to cerebrovascular accident or cardiac arrest.

DISCUSSION

The overall mortality rate for patients with dementia admitted to this psychogeriatric assessment unit was 8·2% which compares with a rate of 25% for those admitted to a general geriatric unit in Northern Ireland and 35% for social admissions and 13% for holiday admissions to Rai’s unit. Other studies show rates of in-patient deaths from 19 to 33%. The majority (70%) of deaths occurred in people admitted for the first time and one might postulate that they had problems which necessitated admission and assessment. Survival following treatment of existing medical problems would lower the death rate on re-admission. Rai concluded that “admission to hospital . . . must be discouraged.” That very sweeping statement was based on a geriatric unit with acute admissions, planned (holiday) admissions and social admissions whereas all the patients in the present study were selected and admissions were planned by the medical staff. Planned respite care for the demented elderly who are not suffering from acute medical problems needing acute hospital care is a safe procedure and should not be discouraged.

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