MENTAL ILLNESS IN THE ELDERLY

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SYNOPSIS

In a retrospective survey of all elderly patients admitted to Woodbridge Hospital in 1980, there was a total of 194 patients with a sex ratio of 1 male: 1.4 females. The incidence of psychogeriatric admission was 30 per 1000 cases. The common psychiatric disorders were late paraphrenia, chronic schizophrenia, senile dementia and affective disorder. There was a female preponderance in all diagnostic categories except in arteriosclerotic dementia and chronic schizophrenia where men predominated. Six months after admission 76% were discharged, 19% remained as inpatients and 5% were dead — most of the patients with late paraphrenia, affective disorder and chronic schizophrenia were discharged. Comparison between inpatients with dementia and functional psychoses indicated a significant degree of disability and dependency of patients with dementia.

INTRODUCTION

The statistics of population trend in Singapore demonstrate a rising proportion of individuals aged 60 and over. In the 1980 Population Census[1] there were 173,600 (7.2%) in this category and by the year 2030 the projected figure will have arisen to 785,300 (21.2%). The ageing of the population begets social, economic and medical problems of increasing magnitude. Most sociocultural practices, which in the past had helped support old people, have undergone changes because of urbanization and industrial development. Alteration of family structure, alienation and lack of emotional support add to the plight of the aged. Psychiatric problems occur not infrequently and probably constitute the largest single cause of chronic infirmity in the senescence.[2] An epidemiological study of old people by Kay et al [3] in Newcastle-upon-Tyne reported a high incidence of 40% psychiatric morbidity. In Singapore this may differ but there is an expected increase in psychogeriatric admission to the mental hospital that will augment the ageing residential population, as chronic patients survive a longer period.

The aims of this study were firstly, to determine the types of mental illness amongst elderly patients admitted to Woodbridge Hospital, Singapore and secondly, to assess the outcome of these patients.

In a major research on the natural history of mental disorder in old age, Roth[4] established that five psychiatric syndromes could be defined on the basis of clinical features and patterns of outcome.

(a) **Senile dementia** — clinical picture dominated by a history of gradual and progressive failure of memory, intellect and disorganisation of personality, occurring after the age of 65 and not attributable to specific causes such as infection, neoplasm, chronic intoxication or cerebrovascular disease.

b) **Late paraphrenia** — this includes paranoid schizophrenia of late onset and those with a well-organised system of paranoid ideas with or without auditory haliucination existing in a setting of a well-preserved personality and affective response.

c) **Affective disorder** — all cases whose admission to hospital have been occasioned by a sustained depressive or manic symptom-complex.

d) **Arteriosclerotic dementia** — those in whom dementia is associated with focal signs and symptoms indicative of cerebrovascular disease and a remittent or fluctuating course with features of emotional incontinence, preservation of insight or epileptiform seizures.

e) **Acute confusional state** — rapidly evolving clouding of consciousness produced by extraneous cause and occurring neither in a setting of definite dementia nor as a complication of one of the other diseases defined above.

Besides these five clinical categories the elderly psychiatric population includes chronic schizophrenic patients (onset usually between 20-40 years) who have survived to this age group.

METHODOLOGY

This was a retrospective survey of all patients who were 60 years and over on admission to Woodbridge Hospital in 1980. The case records were examinted for the following information — age, sex, psychiatric history and diagnosis, and the outcome of these patients 6 months after admission. For those who were still inpatients an inquiry about their physical and mental disabilities was conducted by the nursing staff using the Geriatric Assessment Schedule. For discharged patients it was noted whether they were living at home or in residential care.

RESULTS

Table 1 illustrates the diagnostic categories of all elderly patients admitted to Woodbridge Hospital in 1980. There was a total of 194 cases with 116 women and 78 men; the sex ratio was 1 male: 1.4 females. The incidence of geriatric admission was 30 per 1000 cases. Late paraphrenia formed the majority of admission, followed by chronic schizophrenia, senile dementia and affective disorder. In all the categories there was a female predominance except in arteriosclerotic dementia and chronic schizophrenia where there were more men. The single case of presenile dementia was probably Alzheimer's disease.

For all types of mental illness except in senile dementia there was a preponderance of cases in the age group 60-69 years (Table 2). Above 70 years there were more patients with late paraphrenia and senile dementia.

Table I

ADMISSION OF ELDERLY PATIENTS TO WOODBRIDGE HOSPTIAL, 1980

Clinical Categories	Male	Female	Total
Senile Dementia	8	21	29
Late Paraphrenia	32	59	91
Affective Disorder	6	18	24
Acute Confusion	—	2	2
Arteriosclerotic Dementia	5	2	7
Chronic Schizophrenia	24	14	38
Others*	3	—	3
Total	**78**	**116**	**194**

***Two cases of chronic alcoholism and a case of presenile dementia.**

Table 2

AGE DISTRIBUTION AND TYPES OF MENTAL ILLNESS

Age in Years	Senile Dementia	Late Paraphrenia	Affective Disorder	Acute Confusion	Arterio-sclerotic Dementia	Chronic Schizophrenia	Others	Total
60 — 64	—	30	7	1	4	16	3	61
65 — 69	6	34	10	—	3	8	—	61
70 — 74	8	10	3	—	—	7	—	28
75 — 79	7	10	3	—	—	5	—	25
80 — 84	5	7	—	1	—	1	—	14
85 & above	3	—	1	—	—	1	—	5
Total	**29**	**91**	**24**	**2**	**7**	**38**	**3**	**194**

Six months after admission, 147 patients (76%) were discharged, 38 (19%) remained as inpatients and 9 (5%) were dead (Table 3). Of those discharged only 10 were sent to residential care and the rest returned home. In senile dementia the causes of death in the 5 cases were either due to broncho-pneumonia or myocardial infarction. One patient with arteriosclerotic dementia died after a cerebrovascular accident and the other from ischaemic heart disease. Most cases of late paraphrenia (82%), affective disorder (75%) and chronic schizophrenia (71%) were discharged as compared to senile dementia (48%).

Of the 38 cases who remained as inpatients, there were 12 dementia and 26 functional psychoses. Comparison of the two groups indicated a statistically significant degree of disability and dependency problems in dementia (Table 4). Those with functional psychoses were noted by the nurses to be more helpful in ward chores but behavioural problems (restlessness, disruptive tendency, etc) were similar in both groups.

The admission of elderly patients to Woodbridge Hospital was compared to Crichton Royal Hospital, Dumfries, Scotland,[5] as shown in the histogram (Figure 1). In the latter there was a predominance of senile dementia (38%) and affective disorder (25%) whereas in the former a larger proportion was late paraphrenia (47%) and chronic schizophrenia (20%). Senile dementia and affective disorder constituted only about 15% and 12% respectively of admissions to Woodbridge Hospital.

DISCUSSION

Mental disorder in old age is not merely a problem of dementia. The results showed that 79% of geriatric admission to Woodbridge Hospital were functional psychoses, namely, late paraphrenia, affective disorder and chronic schizophrenia. This might not be representative of the pattern of psychogeriatric illness in the country as a whole as it was based on a hospital population. But it indicates that most of the psychiatric disorders of late life are treatable and not as bleak as in dementia. A measure of the state of mental health prevailing in the aged population is the suicide rate. In 1980 about 30% of suicides in Singapore were 60 years and over[6] — the extent of the psychiatric problem cannot be understimated or overlooked.

In developed countries 20% of patients admitted to mental hospital are elderly people.[7] In 1980, psychogeriatric admission to Woodbridge Hospital represented only 3.6% of total admission.

Whether admission takes place or not depends not only on the severity and nature of the illness, but also on the availability of inpatient facilities in the psychiatric hospital, on admission policies and on a large number of social and economic factors including family structure, income, housing and community attitude towards the aged and the mentally ill. These are significant issues to investigate when comparing admission rate with Crichton Royal Hospital, Dumfries, Scotland. Generally, only the more

Table 3

OUTCOME AT SIX MONTHS AFTER ADMISSION

Clinical Categories	Discharged	Inpatient	Dead	Total
Senile Dementia	14	10	5	29
Late Paraphrenia	75	15	1	91
Affective Disorder	23	1	—	24
Acute Confusion	1	—	1	2
Arterosclerotic Dementia	3	2	2	7
Chronic Schizophrenia	28	10	—	38
Others	3	—	—	3
Total	**147**	**38**	**9**	**194**

Table 4

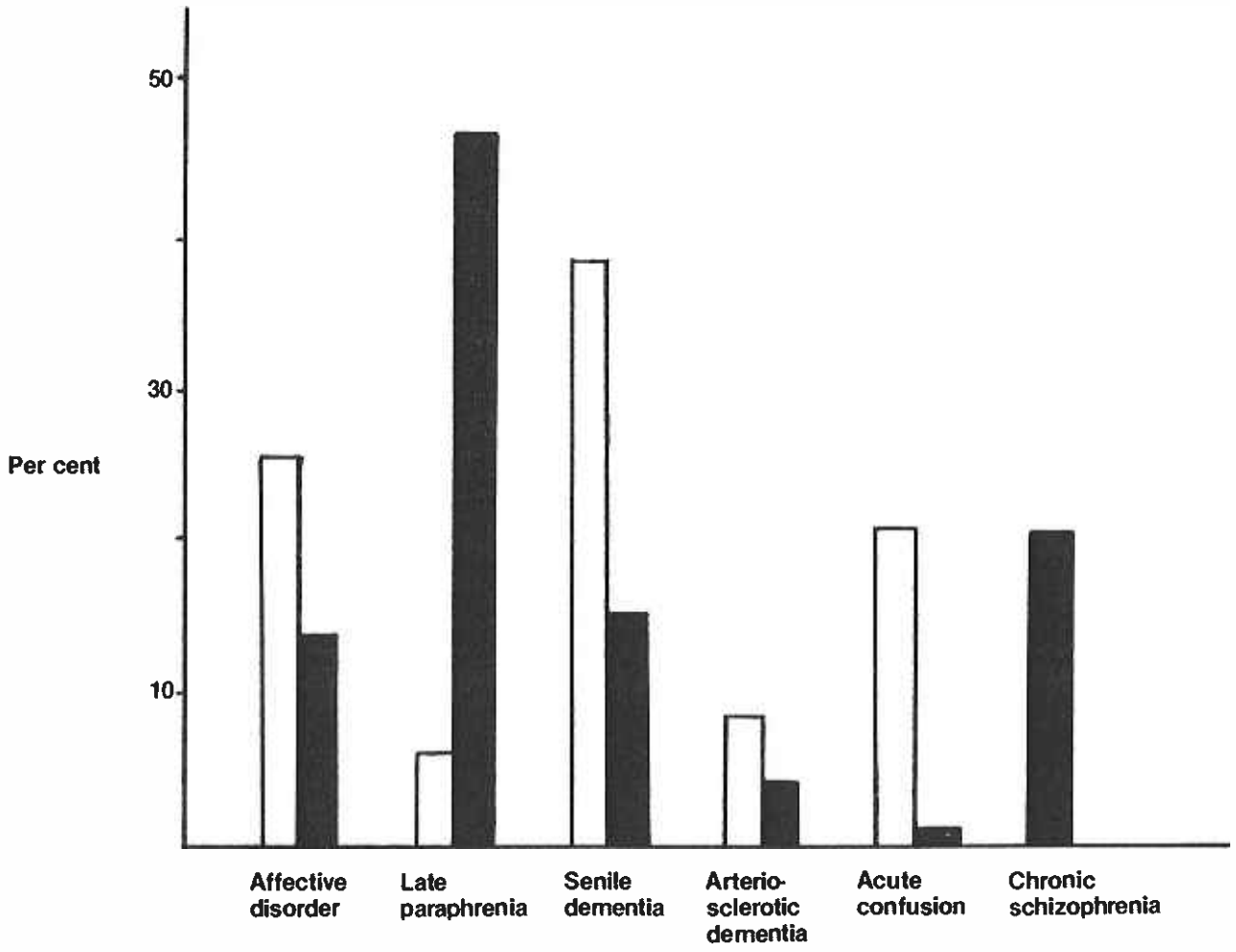
DISABILITY AND DEPENDENCY OF ELDERLY INPATIENTS WITH DEMENTIA AND FUNCTIONAL PSYCHOSES

	Dementia (N = 12)	Functional Psychoses (N = 26)	X^2
Poor vision	7	6	4.5*
Poor hearing	8	6	6.7**
Incoherent speech	10	5	14.1***
Behavioural problem	7	9	1.8 (N.S.)
Incontinence of urine	6	0	15.4***
Incontinence of faces	4	0	9.6**
Poor personal hygiene	8	3	12.1***
Mobility problem	5	1	8.8**
Feeding problem	6	0	15.4***
Helpfulness in ward	1	10	8.2**

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

Figure 1

PERCENTAGE DISTRIBUTION BY DIAGNOSIS BETWEEN WOODBRIDGE AND CRICHTON ROYAL HOSPITALS



disturbed and psychotic patients are admitted to Woodbridge Hospital but those with mild or moderate depression are treated by general practitioners as outpatients or remain undetected. Due to the fear and stigma of mental institution, families tend to bring their relatives with dementia to the general hospital or keep them at home. Those with late paraphrenia and chronic schizophrenia have a propensity to create upheavals and hence more likely to be brought into hospital.

As in other studies[4, 8] there were more female patients with senile dementia, late paraphrenia and affective disorder but for arteriosclerotic dementia men predominated.

Six months after admission 27% of demented patients in Crichton Royal Hospital were discharged, 47% remained as inpatients and 26% were dead. In contrast only 19% of demented patients admitted to Woodbridge Hospital died, 49% returned to the community and 32% were inpatients. The discharge rates for paraphrenia and affective disorder in both hospitals are comparable.

Evidences have accumulated that senile dementia is a less fatal disease than hitherto assumed. The neuropathology of senile dementia and Alzheimer's disease is indistinguishable — they are generally accepted as the same illness with the latter occuring at an earlier onset and associated with a significant shortening of life. The survival rate for senile dementia is prolonged now because of improvement in health services. With better treatment in the functional psychoses, bed space in mental hospital no longer used by this category of mental illness, will in future be taken over by dementia.[9]

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