

CHINESE PSYCHOGERIATRIC PATIENTS IN A GENERAL HOSPITAL

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ABSTRACT

A retrospective study of 100 consecutive elderly Chinese patients (29 males, 71 females) aged 65 years and above admitted to a general hospital psychiatric unit, showed a predominance of depressive disorders (n=36) and dementia (n=26). Depressed patients (mean age=72.0; SD=5.8) were significantly younger than demented patients (mean age=75.6; SD=6.7) ($p < 0.03$). Patients with depressive disorders presented with low mood, sleep disturbance, attempted suicide as well as vague somatic symptoms in the absence of organic causes. Those suffering from dementia presented with cognitive dysfunctions (especially memory impairment), confusional state, deteriorated self care and sleep disturbance. More than three quarters of the depressed patients were prescribed antidepressants, and five had required electroconvulsive therapy. Almost nine out of every ten patients had co-existing physical disorders, with one in two being afflicted by two or more physical disorders; the average number of physical disorders was 1.55 per patient. The commonest were cardiovascular disorders such as hypertension (37%) and ischaemic heart diseases (12%). Endocrine disorders like diabetes mellitus constituted 21%. The mean duration of admission of all patients was 16.3 days (SD=12.6 days.)

Keywords: elderly, Chinese, inpatients, psychiatric disorders.

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INTRODUCTION

One of the most significant demographic developments of the twentieth century has been the dramatic increase in the number and proportion of the elderly population. Over the next three decades, the age profile of the world's population is projected to become older, mainly as a result of changes in fertility and mortality rates. United Nations projections foresee that by 2025 only 25% of the world's population will be in the 0-14 years age group, and nearly 14% (or 1,200 million persons) will be more than 60 years old, 71% of whom will be living in developing countries. Asia's population will age faster than that of the developed nations because of a greater decline in fertility rate. By the early part of the next century, the effects of an older Asian population profile will be felt, especially in the economic, social and public health sectors.

Singapore's demographic pattern is no exception to this global phenomenon. With the elderly population aged 65 years and above projected to rise from 5.6% in 1990 to 14.5% in 2020, she will lead the Association of South-East Asian Nations (ASEAN) countries with the highest percentage of elderly; Malaysia and Thailand having 7.8 and 7.5 respectively⁽¹⁾. The United Nations Bureau of Census projects that Singapore's 348% jump in its number of elderly people over the next four decades puts it second on a list of 31 countries surveyed, exceeded only by the ageing rate of 357% in Guatemala⁽²⁾. The dependency ratio (ratio of persons aged 15 to 59 years to persons 60 years and above) will also decline

steadily (9.1, 7.8, 6.0 and 2.2 for the years 1980, 1990, 2000 and 2030 respectively). From approximately seven economically active persons supporting one elderly today, there will only be two supporting one elderly in forty years' time.

Until recently, there was no psychogeriatric unit in both the general hospitals or psychiatric institutions in Singapore. All elderly psychiatric patients were treated on general psychiatric wards by psychogeriatricians and general psychiatrists. However, with increasing emphasis on the health care of a greying population, the new state psychiatric hospital has just set up a psychogeriatric unit for both inpatient and outpatient treatment of psychiatric disorders in the elderly. The National University Hospital was the first general hospital in Singapore to have its own inpatient psychiatric unit with a twenty-eight bedded ward for adult psychiatric patients. This study illustrates the types of elderly patients treated on the psychiatric ward in this teaching hospital.

METHODS AND SUBJECTS

All Chinese patients aged 65 years and above who were admitted consecutively to the psychiatric ward were included in the study. The case records of one hundred new admissions from September 1986 to August 1992, constituting approximately 5% of all new admissions, were analysed. They were referred by family doctors and other primary health physicians, clinicians of other departments in the hospital, as well as psychiatrists from other hospitals. Information gathered included age, sex, presenting problems or complaints, diagnosis, medical disorders, treatment and duration of admission. Only medical conditions that had caused active signs or symptoms, or those requiring ongoing medical surveillance were included. All cases were reviewed by a team of consultant psychiatrists (including a psychogeriatrician), senior registrars, registrars, psychiatric residents, psychologist, social worker and nursing staff. Besides physical and mental state examinations of patients, their care-givers were interviewed so as to enhance accuracy of diagnosis. When indicated, referrals were made to specialists of other medical disciplines such as internists, orthopaedic surgeons, ophthalmologists, etc for management of concomitant physical disorders. Geriatricians posted to the ward also helped assess

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the physical status of patients. Basic laboratory investigations such as a full blood count, renal, liver and thyroid function tests, blood glucose, urinalysis, electrocardiography and chest X-rays were done. Where indicated, electroencephalography, computerised tomography of the brain and psychometric tests were conducted. Diagnosis was based on the International Classification of Diseases, Ninth Revision (ICD-9), World Health Organisation⁽⁴⁾.

RESULTS

There were 29 males (29%) and 71 females (71%) with ages ranging from 65 to 92 years with a mean of 72.6 years (SD=6.5 years). The mean duration of admission was 16.3 days (SD=12.6 days). Depressive disorders (n=36) and dementia (n=26) together formed about two-thirds of the admissions (Table I). The third commonest condition was paranoid states (n=20). Four patients suffered from neurotic disorders (anxiety states and hypochondriasis), while others included three cases of delirium, two cases each of mania, chronic schizophrenia and opium addiction, three cases of adjustment reaction, and a case of alcohol dependence. Finally, one patient had a brain tumour presenting as an organic psychotic disorder.

Table I - Distribution of cases by diagnosis

Diagnosis	Percentage (n=100)
Depressive disorder	36
Dementia	26
Paranoid states	20
Neurosis	4
Others	14
Total	100

Co-existing physical disorders were very common, with only 13% of the patients having no evidence of any physical disorder at the time of admission, while 48% had two or more physical disorders. The average number of physical disorders was 1.55 per patient. Cardiovascular disorders such as hypertension and ischaemic heart diseases were the commonest conditions (49%), followed by endocrine disorders such as diabetes mellitus and hypothyroidism (24%), ophthalmological (15%), and genito-urinary (13%) disorders. Respiratory diseases (eg chronic obstructive airway diseases and pneumonia), neurological conditions (eg Parkinson's disease) and diseases of the musculoskeletal-rheumatological systems (eg osteoarthritis, rheumatoid arthritis) were each present in approximately one-tenth of the cases. Others included four with malignancies (two cases of bronchial carcinoma, a case of brain tumour and one with stomach cancer), a case of syphilis, and another with arterio-venous malformation of the spinal cord.

Among the thirty-six patients (26 women, 10 men) diagnosed as suffering from a depressive disorder, 29 had neurotic depression (ICD-9 code 300.4) and 7 psychotic depression (ICD-9 code 296.1). The mean age was 72.0 years (SD=5.8 years) with 25 young-olds (aged 65 to 74) and 11 old-olds (aged 75 and above). Besides depressed mood in almost two-thirds of patients (n=23), more than half of the depressed patients (n=20, 56%) complained of vague somatic symptoms without known organic causes. Sleep disturbance was also fairly common (n=14, 39%); nine patients (25%) attempted suicide while another seven (19%) had delusional beliefs such as delusions of persecution, poverty or nihilism. Others had undue worries (n=6, 17%) or exhibited agitated behaviours (n=5, 14%).

Twenty-eight depressed patients (78%) were treated with antidepressants, with antipsychotic drugs added for the treatment of psychotic depression. Benzodiazepines were prescribed mainly as hypnotics for sleep disturbance. The 7 deluded depressed elderly stayed an average of 21.9 days whereas for the 29 non-deluded depressives, it was 15.5 days. Five depressed elderly patients were given electroconvulsive therapy (ECT) - mainly for suicidal behaviour and psychotic features. Psychological treatment such as supportive psychotherapy and family work, as well as social intervention were used as adjunct therapies.

Patients with dementia (n=26) had ages ranging from 65 to 92 years. Compared to the depressed patients, they were significantly ($p<0.03$) older (mean age 75.6, SD=6.7) but there was no difference in sex distribution. The types of dementia based on history, clinical findings and laboratory investigations were: 12 multi-infarct dementia (6 males, 6 females), 10 Alzheimer's disease (2 males, 8 females), one general paralysis of the insane, one brain tumour, and two of unknown aetiology. Demented patients commonly presented with memory impairment, especially for recent events (n=20, 77%), and deteriorated self care (n=11, 42%). Others exhibited disturbed states like agitation or aggressive behaviours (n=12, 46%), while a significant proportion (n=10, 39%) had disturbances in sleep with reversal of their sleep-wake cycles, and acute confusional states (n=8, 30.8%). Social disinhibition (n=4, 16%) like stripping themselves in public or psychotic features like delusions and hallucinations (n=6, 23%) were also reasons for admission. Antipsychotic drugs were frequently prescribed for aggressive behaviours and agitation, while hypnotics of the benzodiazepine type were prescribed for sleep disturbance. Besides pharmacotherapy, non-pharmacological treatments like reality orientation therapy, day centre attendance and residential placement were also necessary.

DISCUSSION

The elderly person is not uncommonly afflicted with a myriad of physical disorders which may affect their psychological well-being. Moreover, pharmacological treatment of such disorders may have drug interactions with those meant for the treatment of psychiatric disorders. In this study, almost nine in ten patients had at least one physical disorder, with an average of 1.55 per patient; almost half were due to diseases of the cardiovascular system such as hypertension (37%) and ischaemic heart disease 12%). Sheline's study⁽⁵⁾ of 95 geriatric inpatients (57 men, 38 women) aged 60 years and older on a psychiatric unit reported that 92 had at least one significant medical problem, with an average of 1.9 per patient; a third being caused by diseases of the cardiovascular system. Endocrine disease, especially diabetes mellitus were also common among our patients (24%). The precipitation of psychiatric illnesses by medical condition is an important consideration in evaluating these patients; however, as this study was done retrospectively, it was difficult to ascertain whether this was a reason for admission. Nonetheless, it is imperative that a comprehensive approach with combined medical-psychiatric care be integrated in the management of elderly patients.

Depressive disorders and dementia are common psychiatric disorders of the elderly in general hospitals⁽⁵⁻⁹⁾ as well as the community⁽¹⁰⁻¹²⁾. Almost two-thirds of the patients in the present study suffered from either condition. The prevalence of depressive disorders among the elderly living in the community varies from a low of 1.1% in nine Copenhagen suburbs⁽¹³⁾ to as high as 12.4% in London and

13% in New York⁽¹⁴⁾. Kua reported a prevalence of 4.6% among elderly Chinese in Singapore⁽¹⁵⁾.

Depression is also the most frequent diagnosis in hospitalised elderly psychiatric patients⁽¹⁶⁾ and among elderly patients referred for psychiatric assessment in general hospital⁽⁸⁾. The present study shows that 2.5 times as many women as men had a depressive disorder, with twice as many in young-olds than old-olds. Kua's community study⁽¹⁵⁾ also showed a higher prevalence in young-olds (5.3%) than old-olds (2.7%), and in women (5.4%) than men (3.6%).

In a study of depression in various adult age groups, Gurland⁽¹⁷⁾ found no clear distinction in symptomatology between the elderly and younger patients, except for more frequent somatic concerns in the former. Indeed, besides depressed mood (which was absent in more than a third of our depressed elderly), 56% reported some kind of somatic symptoms without adequate organic basis. These patients may deny their feelings of sadness and instead attribute their symptoms to physical illness. This association between somatic symptoms and depressive disorder has been well documented in various studies, including those among Chinese^(15,18-21). For instance, Tseng⁽¹⁸⁾ found that 70% of patients who were later documented as suffering from mental illness had initially presented to the psychiatric clinic at the National Taiwan University Hospital with somatic complaints. Similarly, Kleinman⁽²⁰⁾ found that 22 (88%) of 25 depressed Chinese patients had initially complained only of somatic symptoms.

Study of traditional Chinese medical literature reveals an early awareness of the mind-body relationship. Chinese classic novels also explicitly demonstrate the belief that strong emotions such as anger, grief, sorrow and regret often lead people to sicken or die⁽²²⁾. Interestingly, in spite of the recognition of the relationship between one's emotion and physiological state, many traditional Chinese physicians (*sinseh*) treat mental illness the same way they manage physical disorders. Kleinman⁽²³⁾ noticed that it is extremely difficult to elicit personal ideas and feelings from Chinese because they reduce the intensity of anxiety, depression, fears, and many strong emotions by keeping them undifferentiated in language. To a Chinese, an important aspect of social identity is self-discipline, so a person must exercise self-control, especially of the emotions. This restraint of feelings is even more important than improper behaviour⁽²³⁾, and direct expression of strong feelings is seen as rude and disgraceful. This probably explains the often serene quality found in classic Chinese painting and music. Thus, when an affective problem stems from interpersonal relationship, it implies moral weakness, and brings shame to the family if family members are the source. Therefore, it would be better to conceal them, or more commonly, somatize the emotional conflicts.

In classical Chinese medicine, health is related to the concept of *yin-yang* and five universal elements. A sound mind will contribute to the fine balance of *yin* and *yang*, a bipolarity that is both opposite and complementary; while good health depends on the equilibrium of five basic emotions and organs. Excessive emotions may cause imbalance of *yin* and *yang* resulting in malfunctions of the organs and therefore ill health. For instance, anger is injurious to the liver, extravagant joy is injurious to the heart, extreme grief (worry) to the lungs, extreme sympathy (sorrow) to the stomach (spleen), and fear to the kidneys⁽²²⁾. Any disequilibrium of the *yin-yang* can be detected by a weak pulse (a common practice to elicit health problems), and may also result in sickness.

Although the prevalence of physical disorders was high

among our patients, the somatic complaints were unrelated to and inexplicable by any physical pathology. Yet psychiatrists are referred only a small and unrepresentative proportion of patients who somatize. To a large extent this is due to patients' own perception of themselves as physically ill, and thus regard psychiatric referral as inappropriate⁽²⁴⁾. Although somatization has several social advantages, it may obscure underlying psychopathology. It is important to establish a psychiatric diagnosis as early as possible so that treatment may be started before a chronic pattern of illness behaviour is established⁽²⁴⁾. Otherwise depressed patients who somatize may be subjected to unnecessary and costly laboratory investigations, as well as carrying the risk of iatrogenic disease.

Nine depressed elderly patients had attempted suicide - all but one by self poisoning; the last tried to hang himself. The incidence of suicide increases with age, with a rate of 6 per 100,000 in the age group 50 - 59 years, rising to 13 per 100,000 in the 60 - 69 groups, and a peak of 31 per 100,000 in those 70 years and above⁽²⁵⁾. In the elderly, suicide is commonly associated with a depressive disorder, thus depression should be adequately treated to avert such an outcome.

Although sleep requirement is generally reduced in the elderly, about 40% of depressed elderly patients were bothered by it. One woman even overdosed herself with hypnotics to ensure that she had adequate sleep. In a study of 92 consecutive depressives admitted to a gero-psychiatric unit, Post⁽²⁶⁾ reported that about a third had agitation or retardation; while guilt, poverty or hypochondriacal delusions were reported in about two-thirds. Agitation and retardation were uncommon in our series whilst delusional beliefs occurred in those with psychotic depression. Interestingly, none of the depressed elderly patients presented with significant cognitive deficits as in pseudodementia.

The 7 deluded depressed elderly stayed an average of 21.9 days, whereas for the 29 non-deluded depressives, it was 15.5 days. In Baldwin's⁽²⁷⁾ study of 24 patients with late-onset depression at the index admission, deluded patients were significantly more depressed, were in hospital longer, responded poorly to antidepressants alone, and required more physical treatments, especially ECT and major tranquillizers. More than three-quarters (n=28) of the depressed patients were prescribed antidepressants while ECT was administered to 5 - mainly for suicidal behaviours and psychotic features. ECT tended to be the preferred treatment in patients who had failed to respond to drugs or when a delay in the outcome of antidepressant drugs was accompanied by increased risk of suicide.

Patients with dementia formed the next largest diagnostic group (n=26). Compared to the depressed patients, they were significantly older ($p<0.03$), but showed no difference in the sex ratio. They presented with memory impairment, especially for recent events, deteriorated self care, and sleep disturbances with reversal of their sleep-wake cycles. Most of them were admitted for symptomatic treatment or for short respite stay for the care-givers. Other than pharmacotherapy, reality-orientation therapy, day centre attendance and residential placement were often necessary. Indeed drug therapy should only be prescribed when there are strong enough indications, as age-related body changes may alter the response of older patients to a psychotropic drug, notwithstanding that polypharmacy increases with age and related medical disorders⁽²⁸⁾.

CONCLUSION

Psychiatrists have a professional and legal obligation to

recognise the presence of physical disorders in their patients, especially the elderly. Such disorders eg brain tumour may cause mental disorders, or else worsen an existing one. Moreover, they could give rise to psychopathological reactions eg secondary depression. Finally, psychiatric patients eg the demented, may be unwilling or unable to seek medical care on their own. Psychiatrists will often require the assistance of other clinicians in managing their psychogeriatric patients especially when somatic complaints are common among these patients. An approach integrating both psychiatric and physical care is imperative if doctors are to discharge their duty nobly.

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