J. Hong Kong Coll. Psychiatr. (1994) 4, SP2, 2 -6

PATTERN OF REFERRALS TO A COMMUNITY-BASED PSYCHO-GERIATRIC ASSESSMENT SERVICE ----- A 9 YEAR REVIEW

LINDA C.W. LAM, CAROL L. KWOK, Y.H. CHEUNG,

ALICE HUI & ERIC Y.H. CHEN

SUMMARY

A review of 856 referrals to a community-based psychogeriatric assessment service (St James Settlement) from October 1984 to October 1993 showed female predominance (female to male 3:1) and average age of 75 years old. A high degree of illiteracy was found. Non-medical referrals constitute almost all referrals to the centre throughout the 9 years of study. Presenting problems for consultation were mainly related to common psychiatric disorders in the old age like dementia and depression. Dementia usually presented with behavioural and memory disturbance. Depressed patients complaint more commonly with disturbance in mood, anxiety and insomnia. Although a relatively high default rate (38.7%) was found, one third of the remaining patients showed considerable benefit from the service. The limitations of the existing service and implications on future development were discussed.

Keywords: psychogeriatrics, community, referral, diagnosis

INTRODUCTION

With the advance of medical care in the general population, it is evident that the proportion of aged population increased rapidly. An estimate in USA revealed a growth of population over 65 from 4% of the general population at the turn of the century to over 12% of the population in the 1980s. The projected figure will reach more than 60 millions (over 20% of general population) by the year 2030(Besdine, 1987). As elderly population is the major user in health care, the emphasis in medical practice had shifted from prevention and treatment of acute diseases to managment of chronic degenerative disorders. Psychogeriatrics is one area which demand special attention as psychiatric disorders in late life constitute a significant part in psychiatric practice. Various studies showed that about 4% to 6% of the elderly population suffered from some forms of dementing disorder (Gao, et al, 1993; Burns, 1990). Increasing demands for psychoger-iatric referrals in UK was shown by a rise of 150% from 1974 to 1984 (Christie & Wood, 1987). Mainprize & Rodin (1987) reported geriatric referrals consitituted 29% of all psychiatric referrals to a consultation-liaison service in Canada. Improved specificity to psychogeriatric liaison referrals was observed with increase in awareness of psychogeriatric service as a special need (Anderson et al, 1988). Coupling with a downward trend in the mortality rate of very elderly demented, there has been considerable implication on psychiatric service provision for the elderly (Blessed, 1982; Christie, 1982; Christie & Train, 1984).

In the present study, we attempted to analyse the referral pattern to psychogeriatric assessment service at St. James Settlement (SJS). SJS is a multi-purpose community centre located centrally on Hong Kong Island run by a voluntary agency. A psychogeriatric assessment clinic jointly run by SJS and Department of Psychiatry, University of Hong Kong had been in operation since October 1984. Visiting psychiatrists from the university attended the clinic on weekly basis. In order to facilitate referrals from caregivers, referrals from all sources, including self-referral, were accepted. The benefits of taking non-medical referrals in psychogeriatrics had been highlighted by other authors before (Harris et al, 1990; Lippert et al, 1990). Each patient underwent an initial psychiatric assessment and treatment plans were formulated accordingly. Apart from clinical assessment, SJS also run a multi-disciplinary community-based service for the elderly. It involved counselling, support groups, geriatric day care centre and

meal services. As evaluation on psychogeriatric services had consistently demonstrated benefits on community and multidisciplinary approaches (Wasylenki et al, 1984; Hard-Thompson, 1992; Collighan et al, 1993), we believed that the experience of a pioneer psychogeriatric project at St. James Settlement will be beneficial for service planning in this area. Review on the pattern of referrals for the past 9 years (1984-1993) was reported as follows and potential implications were discussed.

METHOD

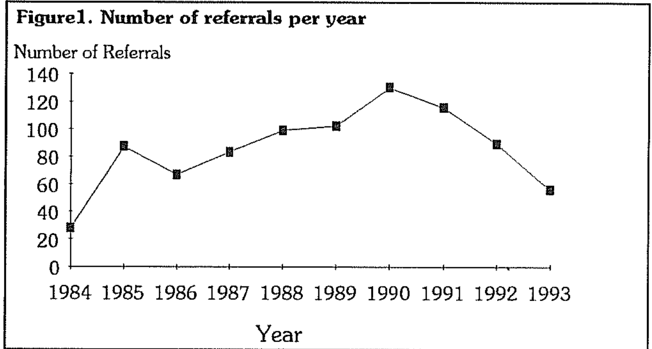
The study was based on a retrospective case record review of all subjects who had attended initial assessment at SJS Psychogeriatric Assessment Service from October 1984 to October 1993. 856 records were reviewed. Demographic characteristics and source of referral were recorded. Presenting problems reported in case records were categorised into 12 groups: memory deterioration, behavioural problems, confusion, personality change, psychotic features, anxiety, mood disturbance, sleep problems, suicidal ideation, relationship problems, mental competence assessment and psychoactive substance abuse. Clinical diagnoses were classifed as DSM-III-R categories retrospectively. Initial plan of management and outcome were reported and analysed.

RESULTS

DEMOGRAPHIC CHARACTERISTICS

879 patients attended SJS psychogeriatric assessment service from October 1984 to October 1993. 856 (97%) case records were available for analysis. Of the 856 assessments, 635 female and 221 male patients attended. The sex ratio (female : male) was 3 :1. The mean age was 74.2 years (S.D.= 10.1). The mean years of education received was 3.5 (S.D.= 4.5). 78% of the patients were either semiskilled labourers, housewives or unemployed. The number of referrals received per year up to October 1993 was shown in Figure 1.

Figure1. Number of referrals per year



PATTERN OF REFERRALS

Source of referrals

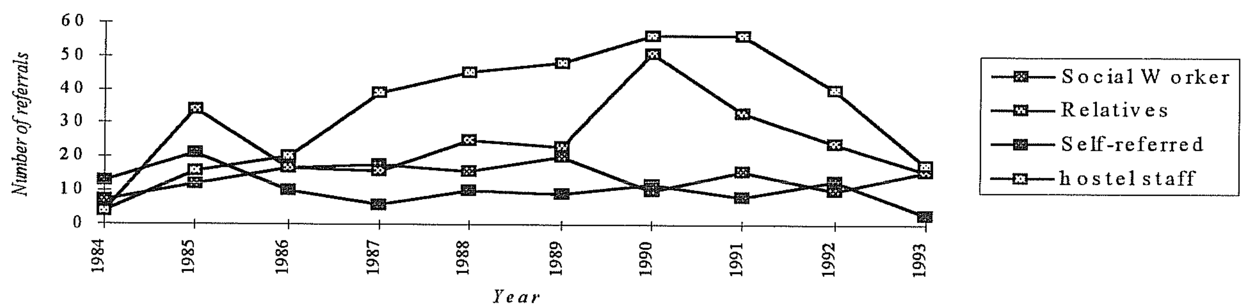
Six main groups of referrals were identified. These included general practitioners (8, 0.9%), medical specialists (7, 0.8%), social workers (142, 16.6%), aged hostel staffs (342, 40%), relatives and friends (243, 28.4%) and self-referrals (105, 12.3%). 9 cases (1.1%) with source of referrals unknown.

Most referrals to SJS were intiated from non-medical referrals including hostel staffs and relatives. Medical referrals only constituted a very small proportion. The trend for differential pattern on source of referrals from 1984 to 1993 showed that a significant proportion of the increase in referrals came from aged hostel staffs and relatives. (See Figure 2)

Past Health

88(10%) patients had previous history of mental illness. 21 reported history of depression, 22 reported neurosis, 12 reported dementia and 12 had previous history of psychotic disorders. Previous medical problems were more common, 366(43%) patients had at least one significant medical problem in the past. Common medical diagnoses included hypertension (62), cerebrovascular accident (63), pulmonary problems (48), cardiac problems (44) and diabetes(44).

Figure 2. Distribution of source of referrals from 1984 to 1993



PRESENTING PROBLEM

The mean duration of complaint before presentation were found to be 24 months (S.D.= 23 months). A wide variation was found in the duration of presenting complaint before actual attendence. Since great variation and inaccuracy of duration of reporting symptoms in chronic problems were unavoidable, an estimate of 90 months was adopted to all those when symptoms had been reported for more than 8 years. As a result, the mean duration was only an estimation to show the magnitude but not the exact figure.

Multiple symptom presentation was common. Frequently reported symptoms included mood problems, memory disturbance, insomnia, anxiety and behavioural disturbance. The relative frequency of occurrence of each symptom was summarized in Table 1. The percentages add up to more than 100% because of multiple symptom presentation in some cases.

Table 1. Frequency of Presenting Complaints

Presenting Complaints	***Frequency of presentation (%)***
Memory deterioration	394 (46)
Mood disturbance	323 (38)
Sleep problems	282 (33)
Behavioural Problems	216 (25)
Psychotic features	206 (24)
Confusion	159 (19)
Anxiety	131 (15)
Suicidal ideation	61 (7)
Personality change	49 (6)
Relationship problems	42 (5)
Mental competence	8 (<1)
Psychoactive substance abuse	7 (<1)

DIAGNOSES

A significant proportion of the patients was diagnosed as dementia (46.6%) after initial clinical assessment. Other common psychiatric diagnoses included depression (18.5%) and delusional disorder (12%). Details of the relative frequency of each diagnostic category were reported in Table 2. It was found that some complaints were presented more frequently in specific diagnostic entities: 46.3% of patients presented with mood problems were diagnosed as suffering from depression, 90.5% of patients with memory disturbance were subsequently diagnosed as dementia. The frequency of occurrence of presenting complaints in some major psychiatric disorders were described in Table 3.

As reported in Table 4, there was a difference in profile of psychiatric diagnosis distribution in different age groups. Anxiety disorders generally reflected the complaint of young elderly patients. They mainly presented with mood problems, behavioural abnormality was less frequent. Depression also occurred more frequently in the young geriatric age group. Old elderly patients were much more frequently diagnosed with dementing disorders. The trend got more obvious with increasing age.

Table 2. Frequency of psychiatric diagnosis

Psychiatric Diagnosis	***Frequency (%)***
Acute organic brain syndrome	11 (1.3)
Dementia	399 (46)
Depression	158 (18.5)
Bipolar affective disorder	6 (0.7)
Schizophrenia	23 (2.7)
Delusional disorder	103 (12)
Anxiety disorders	63 (7.4)
Adjustment disorder	18 (2.1)
Personality problem	11 (1.3)
Psychoactive substance abuse	9 (1.1)
Other psychiatric diagnosis	6 (0.7)
No psychiatric diagnosis	49 (5.7)

Table 3. Frequency of presenting complaints in different psychiatric disorders.

Presenting complaints	***Dementia (%)***	***Depression (%)***	***Anxiety disorders (%)***	***Schizophrenia (%)***	***Delusional disorders (%)***	***Total (%)***
Mood	81 (28.8)	130 (46.3)	31 (11.0)	8 (2.9)	31 (11.0)	281 (100)
Psychotic features	70 (37.4)	7 (3.7)	2 (1.1)	16 (8.6)	92 (49.2)	187 (100)
Memory problem	343 (90.5)	22 (5.8)	6 (1.6)	2 (0.5)	6 (1.6)	379 (100)
Personality change	23 (56.1)	10 (24.4)	1 (2.4)	0 (0)	7 (17.1)	41 (100)
Confusion	147 (96.7)	4 (2.6)	0 (0)	0 (0)	1 (6)	152 (100)
Anxiety	11 (9.7)	45 (39.8)	50 (44.3)	1 (0.9)	6 (5.3)	113 (100)
Substance abuse	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	2 (100)
Suicidal ideation	3 (5.5)	46 (83.7)	2 (3.6)	2 (3.7)	2 (3.7)	55 (100)
Sleep disturbance	114 (44.5)	85 (33.2)	23 (9.0)	6 (2.3)	28 (10.9)	256 (100)
Behavioural problem	141 (76.6)	12 (6.5)	2 (1.1)	7 (3.8)	22 (12)	184 (100)
Relationship problem	6 (26.1)	7 (30.4)	2 (8.7)	1 (4.4)	7 (30.4)	23 (100)

Table 4. Distribution of age and psychiatric diagnosis

Psychiatric Diagnoses	Age(Years) (%)				
	65 or below	*66-75*	*76-85*	*over 85*	*Total*
Acute organic brain syndrome	*0(0)*	*5(1.9)*	*5(1.8)*	*1(0.8)*	*11(1.3)*
Dementia	*33(17.4)*	*115(43.6)*	*169(60.4)*	*82(67.2)*	*399(46.6)*
Depression	*63(33.2)*	*43(16.3)*	*42(15)*	*10(8.2)*	*158(18.5)*
Bipolar affective disorder	*2(1.1)*	*2(0.8)*	*2(0.8)*	*0(0)*	*6(0.7)*
Schizophrenia	*13(6.8)*	*6(2.3)*	*3(1.1)*	*1(0.8)*	*23(2.7)*
Delusional disorder	*14(7.4)*	*34(12.9)*	*37(13.2)*	*18(14.7)*	*103(12)*
Anxiety disorders	*36(18.9)*	*25(9.5)*	*2(0.7)*	*0(0)*	*63(7.4)*
Adjustment disorder	*5(2.6)*	*8(3.0)*	*3(1.1)*	*2(1.6)*	*18(2.1)*
Personality problem	*3(1.6)*	*2(0.8)*	*3(1.1)*	*3(2.5)*	*11(1.3)*
Substance abuse	*5(2.6)*	*3(1.1)*	*1(0.4)*	*0(0)*	*9(1.1)*
Other psyiatric diagnoses	*2(1.1)*	*1(0.4)*	*1(0.4)*	*2(1.6)*	*6(0.7)*
No psychiatric diagnosis	*14(7.4)*	*20(7.6)*	*12(4.3)*	*3(2.5)*	*49(5.7)*
Total	***190(100)***	***264(100)***	***280(100)***	***122(100)***	***856(100)***

MANAGEMENT & OUTCOME

Of the 856 patients assessed, 557(65.1%) were prescribed medication. 119(13.9%) patients were managed with counselling and psychosocial assistance alone. 170(19.9%) were referred to other psychiatric centre for subsequent managment.

As for the outcome, 331(38.7%) defaulted from the clinic, 120(14%) improved substantially with no regular follow up required, 207(24%) reported stable condition while 38(4.4%) deteriorated. The number of deaths were uncertain because of the lack of provision for follow up of defaulters .

DISCUSSION

The demographic data showed female predominance with an average age of 75 appeared consistent and representative of the population structure in Hong Kong(Census and Statistics Department, 1992). Given the scanty chance of formal education at the turn of the century, especially in an over-represented female group, it is perceivable that a high degree of illiteracy was reported.

From the information obtained, it appeared that the number of referrals rose steadily from 1984 to 1990 and dropped progressively for the past two years. Further exploration into the cause of decrease in number of consultations revealed a change in policy of the clinic. In the inital 2 years (1984-1986), the clinic served mainly as an initial assessment centre. Patients were mostly referred to other government psychiatric services for managment if regular psychiatric treatment was considered necessary. Patients receiving continued follow up at SJS were either well or only required attention on as needed basis. Only a small number of patients accumulated in the follow up group. The policy changed in the next few years, a greater proportion of the patients were followed up at SJS. Coupling with the better established service with increase awareness by health workers in the area, more referrals especially from aged hostel staffs were received and accepted at the clinic. The number rose to over 100 new consultation per year in 1990 and 1991. With accumulation of patients being actively follow up, it was decided that the clinic would set a limit to the number of new referrals accepted per session. A waiting list was set up with an apparent reduction of total number of new consultations for the past two years. The other possible factor affecting the number of new referrals to SJS was the setting of psychogeriatric services in other areas of Hong Kong. The sharing of patient load also accounted for a proportion of the drop as well.

The benefits for accepting non-medical referrals had already been highlighted(Harris, 1990). In our study, it was found that non-medical referrals took up almost all referrals for the past 9 years. The provision for direct referrals by caregivers speeded up the referral process and was readily accepted by health workers for the elderly, whereas medical practitioner inclined more to the conventional doctor-doctor referral system. Given the close contact between the patients and caregivers, it appeared that referrals from them had an important and pragmatic place. The availability of such service helped to minimize unnecessary procedures which would otherwise hinder attendance in the group who would not ask for help directly.

The presenting complaints could be either subjective or objective. Objective complaints were initiated by caregivers and this included those like behavioural disturbance and confusion. Subjective experience of mood disturbance, anxiety and sleep problems probably represented a different dimension of problem. Dementia and depression were the most frequent diagnoses found in this review. Complaints like memory problem, confusion, behavioural problems and sleep disturbance were most frequently assoicated with a diagnosis of dementia. This seem to be compatible with the impression that demented people caused problems which are readily observable to caregivers and so objective

complaints were reported. Depression, the second most frequent diagnosis, was more experience of self and subsequently reported complaints were more subjective in nature, like mood problem, insomnia and suicidal ideation were common. Memory complaints were reported both subjectively and objectively. Similar issues of assoication between neurotic symptoms and memory complaints in elderly depressives had been discussed by other authors (Abrahms et al., 1991; Philpot, 1987).

The high default rate(38.7%) showed the limitations of an informal part-time psychogeriatric assessment service. Consultation hours were highly insufficient(one 3-hour session per week), staff provision were limited and supporting services like laboratory investigation and medical social worker were lacking. The perception of caregivers and patients were also contributing to the problem. Up to the present moment, psychiatric disorders, whether onset at old age or not, were heavily stigmatized. Both caregivers and patients tended to default when situation got better or worse. Without adequate follow up service provided in the community, it would be very difficult to keep those in need be attended to regularly. On the other hand, for those who attended regular follow up the clinic, one third of them reported improved or stable condition. It showed that the beneficial effects could not be neglected. More efforts should be put in to ensure more elderly patients who needed psychiatric care will be able to receive it. In conclusion, St. James Settlement Psychogeriatirc Assessment Service had provided an important and easily available services to elderly patients with a wide variety of psychiatric conditions. However, the experience showed that the need is always greater than the supply. With increasing number of population advancing into old age, the potential need for better service for the elderly should be anticipated as a priority.

REFERENCES

Abrams, R.C., Young, R.C. & Alexopoulos, G.S. (1991) Neuroticism may be associated with history of depression in the elderly. **International Journal of Geriatric Psychiatry, 6:** 483-488

Anderson, D.N., Philpott, R.M. & Wilson, K.C. (1988) Psychogeriatric liaison referrals. **British Journal of Psychiatry, 153:** 413

Barker, A., Carter, C. & Jones, R. (1994) Memory performance, self-reported memory loss and depressive symptoms in attenders at a GP-referral and a self-referral memory clinic. **International Journal of Geriatric Psychiatry, 9**: 305-311

Besdine, R.W. (1987) Normal human aging. **Proceedings on Second Seminar on Aging: Singapore, Taipei, Hongkong**. 3-13.

Blessed, G. & Wilson, I. D. (1982) The contemporary natural history of mental disorder in old age. **British Journal of Psychiatry, 141**: 59-67.

Burns, A. (1990) Old age psychiatry. **Postgraduate Psychiatry-Clinical and Scientific Foundations**, edited by Appleby L. & Forshaw D.M., Heinemann Medical Books, 255-272

Census Planning Section, Hong Kong (1991) **Population Census: Basic Tables for District Board Districts.** Census and Statistics Department, Hong Kong.

Christie, A.B. & Wood, E.R.M. (1987) Psychogeriatrics 1974 to 1984: Expanding problems and fixed resources. **British Journal of Psychiatry, 151:** 813-817

Christie, A.B. (1982) Changing patterns in mental illness in the elderly. **British Journal of Psychiatry, 140:** 154-159

Christie, A.B. & Train, JD. (1984) Change in the pattern of care for the demented. **British Journal of Psychiatry, 144:** 9-15

Collighan, G., Macdonald, A. Herzberg, J. Philpot, M. & Lindesay, J. (1993) An evaluation of the multidisciplinary approach to psychiatric diagnosis in elderly people. **British Medical Journal, 306**(6881): 821-824

Hardy-Thompson, C., Orwell, M.W. & Bergmann, K. (1992) Evaluating a psychogeriatric domicillary visit service: views of general practitioners. **British Medical Journal, 304**: 421-422.

Harris, A.G., Marriot, J.A.S. & Robertson, J. (1990) Issues in the evaluation of a community psychogeriatric service. **Canadian Journal of Psychiatry, 35**: 215-222.

Lippert, G.P., Conn D., Schgt B. & Ickowicz A. (1990) Psychogeriatric consultation. General hospital versus home for the aged. **General Hospital Psychiatry, 12**(5): 313-318.

Mainprize, E. & Rodin, G. (1987) Geriatric referrals to a psychiatric consultation-liaison service. **Canadian Journal of Psychiatry, 32:** 5-8

Philpot, M.P. & Levy, R. (1987) A memory clinic for the early diagnosis of dementia. **International Journal of Geriatric Psychiatry, 2:** 195-200

Wasylenki, D.A., Harrison, M.K., Britnell, J. & Hood, J. (1984) A community-based psychogeriatric service. **Journal of American Geriatrics Society, 32**(3): 213-218.

*Linda Chiu-wa Lam, MRCPsych, Lecturer, *Dept of Psychiatry, Chinese University of Hong Kong, formerly Senior Medical Officer of Kwai Chung Hospital.*

Carol Lan Kwok, MB, *Research Assistant, Department of Psychiatry, University of Hong Kong.*

Yuk-har Cheung, RN, *St. James Settlement.*

Alice Hui, RN, *volunteer to St. James Settlement.*

Eric Yu-hai Chen, MA(Oxon), MRCPsych, *Lecturer, Department of Psychiatry, University of Hong Kong.*

*Correspondence: Dr. Linda Lam, Lecturer, Department of Psychiatry, 11/F, Prince of Wales Hospital, Shatin, Hong Kong.