Geriatric Psychiatry: Socio-demographic Characteristics and Diagnostic Profile among senior citizens attending the psychiatric outpatient department of a tertiary health care facility in Nepal.

Naba Raj Koirala Pashupati Mahat Mahendra K. Nepal Saroj P. Ojha Uday K. Sinha Anupam Pokhrel Vidya Dev Sharma

Abstract

A retrospective study of patients, aged 60 years and over, attending the psychiatric outpatient Department of T.U. Teaching Hospital, during the study period of one-year (1999 April to 2000 March) has been carried out with the aim of studying the socio-demographic characteristics and diagnostic profile. Result revealed that the average age of elderly patients attending geriatric clinic was 67.33 years with the standard deviation of 6.32 years. The average duration of illness was 1030 weeks. The highest number of the patients were illiterate (54.2%). There were more females than males. In other socio-demographic variables, the highest number of the patients was seen in nuclear family (62%), Brahmin in cast (43.8%) and lower socio-economic strata [i.e. income less than Rs. 3000 per month (34.67%)]. Diagnostic profile indicated higher prevalence of mood disorder (30.7%) followed by organic brain disorder (28%) and tension headache (9.3%). The majority of the patients were referred from "other agencies" (28%) and only 44% of the elderly patients gave the history of their illness themselves. This study has important implications in the planning of psychiatric services for the population in this age group, but the findings has to be substantiated in a larger sample of the elderly population.

Keywords: geriatric psychiatry; senior citizens; ICD-10 DCR; T. U. Teaching Hospital.

Introduction

The proportion of elderly people in Nepal has been increasing significantly over the last few years. In 1991 the population of aged over 60 was more than one million which has reached a figure of nearly 1.2 million in 1996, and is projected to be equal to a figure of 1.3 million in 2001 (CBS, 1996). This rapidly increasing growth of elderly people in Nepal not only possess a serious challenge to the overall available health services, but also inevitably leads to an increase in age-related psychiatric disorders, such as dementia, depression, anxiety and suicide. In many occasions these conditions of old age cause serious disturbances on the quality of life and significant economic loss in the life of sufferer, their family and nation as a whole (Desjarlais et al, 1995).

There are plenty of studies in world literature that addresses the issue of mental health status of elderly people, but many of them are from western countries and in country like Nepal the systematic studies of these issues have not been carried out yet. This study is therefore carried out to fulfill these lacunae.

Material and method

The sample for the study comprised of case records of all new patients aged 60 years or above, who have attended the psychiatric outpatient department of TUTH over the study period of one year (1999 April to 2000 March). A self-designed proforma was used to record the socio-demographic data and information about the illness. The records, which lacked information on any of the variable under study, were excluded from the study. Data were double entered into a personal computer (Pentium-III) and analyzed with the help of statistical software SPSS 7.5 version for Windows.

Result of the study

There were 75 patients, who attended the psychiatric out-patient Department of TUTH during the one-year period. The mean age of these patients was 67.33 years with 6.32 standard deviation (Table I). The age range distributed from 60-88 years with the range of 28. Similarly, the average duration of the illness was 1030 weeks with the standard deviation of 2079.84. There was a large variation in the range of duration of illness.

Education and sex distribution (Table II) revealed that the illiterates were highest (50.7%) and primary level education had been obtained by more than 40%. The study of family (Table III) showed that 62 percent of the patients was from nuclear family and 38 percent was from joint family. The marital status (Table IV) showed that 84.0% was married. About 12 percent was widow and 4.0% was single at the time of interview. More males were found married than the females.

Family income (Table V) showed that only 12.0% had income more than ten thousand while 34.7% had income less than three thousand per month. Table 6 reflects the distribution of patients in different cast with sex. The Brahmins were the highest percentage (42.7%), followed by Newars (20.0%) and the Chhetri (10.7%).

Diagnostic profile (Table VII) revealed that altogether (30.7%) of the sample received, the clinical diagnosis of one or other form of affective disorders. This was followed by organic mental disorders (28%) and Somatoform disorder (5.3%), whereas there was a diagnostic confusion between organic mental disorder and affective disorder in about 4%. Diagnosis of tension headache was received by 9.3% of the total sample, and 4.0% each received either no psychiatric diagnosis or diagnosis other than psychiatric problems.

Table I: Age and duration of illness

	N	Range	Mean	Std. Deviation
Age	75	28	67.33	6.32
Duration of illness	75	14399	1030	2079.84

Table II: Level of Education

Level of	Se	Total			
Education		Male	Female		
1 Illiterate	N	9	29	29	
	%	12.0%	38.7%	6	50.7%
2 Primary	N	25	5		30
	%	33.3%	6.7%		40.0%
3 Middle	N	3	2		5
	%	4.0%	2.7%		6.7%
4 College	N	2	.00		2
	%	2.7%			2.7%
Total	N	39	36		75
	%	52.0%	48.0%	ó	100%

Table III: Level of Education

Type of	Statistics				
Family	Frequency	Percent			
1>Nuclear	47	62.7			

2>Joint	28	37.3
Total	75	100.0

Table IV: Marital Status

Marital		Se	ex	Total		
Status	Male	Female				
1>Single	N	1	2		3	
-	% 1.3%		2.7%		4.0%	
2>Married	N	34	29		63	
	%	45.3%	38.7%	6	84.0%	
3>Widow	N	4	5		9	
	%	5.3%	6.7%		12.0%	
Total	N	39	36		75	
	%	52.0%	48.0%	6	100%	

Table V: Family Income

Family	Statistics				
Income	N	%			
1000-3000	26	34.7			
3000-5000	20	26.7			
5000-10,000	20	26.7			
<10,000	9	12.0			
Total	75	100.0			

Table VI: Sex and Caste Distribution

Sex	Caste							
	Brahmin	Chhetri	Newar	Rai/Limbu	Tamang	Gurung	Others	Total
Male N	18	6	6	3	2	.00	4	39
%	24.0%	8.0%	8.0%	4.0%	2.7%		5.3%	52.0%

Female N	14	2	9	.00	4	4	3	36
%	18.7%	2.7%	12.0%		5.3%	5.3%	4.0%	48.0%
Total N	32	8	15	3	6	4	7	75
%	42.7%	10.7%	20.0%	4.0%	8.0%	5.3%	9.3%	100%

Table VII: Diagnostic Distribution

Table VII. Diagnostic Distribution								
	Statistics							
Diagnosis	N	%	Cumulative Percent					
F00	21	28.0	28.0					
F00/32?	3	4.0	32.0					
F10	1	1.3	33.3					
F22	1	1.3	34.7					
F31	1	1.3	36.0					
F32	20	26.7	62.7					
F33	2	2.7	65.3					
F43	2	2.7	68.0					
F45	4	5.3	73.3					
F51	1	1.3	74.7					
G40	2	2.7	77.3					
G43	1	1.3	78.7					
Medcase	3	4.0	82.7					
Neurcase	3	4.0	86.7					
No psych	3	4.0	90.7					
T. Headac	7	9.3	100.0					
Total	75	100.0						

Discussion

The current study has shown the average age of patients attending geriatric clinic to be 67.33 years with 6.32 standard deviation. The highest age of the patients attending such clinic was 88 years. The average duration of illness is 1030 weeks and there is a wide variation in duration of illness. One possible reason for this variation could be due to different level of awareness among the people regarding mental illness and its treatment.

The majority of the patients were illiterate (N=38, 50.7%) and the preponderance of female than male illiteracy as seen in this sample is self-explainable on the ground of literacy pattern of the country. It is considered that education is directly related with the increased coping ability by providing wider horizon to the problems. The level of education vis-à-vis psychiatric morbidity has also been the focus of investigation in other studies and both have been found to have an inverse relationship. This is exemplified in the study of Premaranjan *et al.* (1993) where psychiatric morbidity in illiterate subjects was highest (23.6%) and declined progressively, and was only (8.3%) in those who had been educated till postgraduate level or had professional qualification.

Though the Bhramins, Chhetris and Newars were over represented, at present it is not possible to expatiate conclusively on the existing caste difference. A probable rational could be that the Brahmins, Newars and Chhetris are more aware of psychiatric illnesses and their treatment due to the privilege of higher education/socio-economic status. There is higher proportion of the distribution in the total census of the country as well (CBS, 1996). A similar result has been found in India (Tiwari & Srivastava, 1998). In their study they found higher number of psychiatric illness among upper caste than the backward and schedule caste.

The available social support system in addition to the burden imposed by these elderly with mental disorder and the possible degree of high suspicion of mental illness by the careers could be the reason for the higher percentage of patients coming from the married group. The presence of very low number of widow could be a possible reason for not seeking treatment as a result of lack of the support in the family due to death of the significant figure in their life. However, a well designed large scale, population-based study is needed to establish this argument.

Economic status has been considered as one of the factors which indirectly determines the individuals vulnerability to illness (Brown & Harris, 1978, 1986) and also to the pattern of utilization of health services (Desjarlais et al, 1995). A similar pattern of inverse relationship between income level and the psychiatric morbidity has been noticed in the present study as well as many other indigenous investigators in the past (Koirala et al, 1998; Koirala et al, 1999)

Present study showed that the majority (30.7%) of elderly citizens who attended the psychiatric outpatient department of a tertiary level hospital suffer from either affective disorders (F32 = 26.7%, F33= 2.7% and, F31=1.3%) or organic mental disorders (28%). Despite the differences in subjects and sample size, Blazer and Williams (1980), Tiwari and Srivastva (1998), Deshpande et al. (1998), Nair et al. (1998) and, Koirala et al, (1999) have also reported higher prevalence of affective disorders, in particular, depression and organic mental disorders amongst the elderly citizens. The group of organic mental disorder comprised majority of cases from Alzheimer's Dementia (42.86%, N=9/21)

and Vascular Dementia (28.5%, N=6/21). The higher prevalence of affective and organic mental disorders amongst the elderly population attending the psychiatric outpatient department of a tertiary hospital could be explained on the ground of presence of various stress factors such as lack of adequate support in the family, lack of income due to retired life, lack of means of recreation and presence of family tension and higher susceptibility to physical disorders.

Though many investigators in the West have reported that alcohol and substance have been used by many of the elderly citizens as a reaction to lack of social support, mainly disruption of family life and social isolation, the lower number of alcohol and substance related problems in the present study could be the result of integrated family structure where the elderly citizens form the nucleus of recognition and power. This assumption could further be enhanced by the lack of socio-cultural acceptance for use of substance in the Nepalese society.

Although the present study is not carried out in the community, and the findings of this study could not be generalized, it still throws some insight into the problems of elderly mentally ill citizens attending a tertiary level hospital. This has prompted the Department of Psychiatry to establish specilised geriatric psychiatry clinic at T.U. Teaching Hospital.

References

- 1. Blazer, D. G. & Williams, C. D. (1980): Epidemiology of Dysphasia and depression in an Elderly population. Am. J. of Psychiatry, 137.
- 2. Brown, G. W. & Harris, T. O. (1978). Social origins of depression. London: Tavistock.
- 3. Brown, G. W. & Harris, T. O. (1986). Stressor, vulnerability, and depression: a question of replication. *Psychological Medicine*, **16**, 739-744.

- 4. Central Bureau of Statistics (1996): Statistical Pocket Book of Nepal. Kathmandu: H.M.G. Nepal.
- 5. Dube, K. C. (1970) A study of prevalence and bio-social variables in mental illness in rural and urban community in Uttar Pradesh, India. *Acta Psychiatrica Scandinavica*, **46**,327-332.
- 6. Deshpande, S. N., Mathur, M. N. L., Bhatia, T., & Bohra, N. (1998) Psychiatric Disorders in Women above 60 in a general psychiatric outpatients department. *Indian Journal Psychiatry*, **40**, 86.
- 7. Desjarlais, R.; Eisenberg, L.; Good, B. & Kleinman, A. (1995) World Mental Health: Problems and Priorities in Low Income Countries. Oxford University Press. New York,
- 8. Katona, C. L. E. (1995): Detecting and managing depression in older people. Dist. Psychiatric Education Services Symposium: Advances in old Age Psychiatry. *Human Psychopharmacology Clinical and Experimental,* **10** (Suppl).
- 9. Koirala, N. R., Regmi, S. & Khalid, A. (1998a): Interaction between Medical conditions and Psychiatric Symptoms in the Elderly. In: Souvenir of first conference of psychiatry association of Nepal (eds. S. K. Khandelwal & A. Sharma). Psychiatrists Association of Nepal.
- 10. Koirala, N. R., Nepal M. K., Sharma, V. D. (1998b) Evaluation of sucidal symptoms in adult depressive in-patients in T U T hospital. *Journal of Institute of Medicine*, **20**:146-152.
- 11. Koirala, N. R., Mubbashar, M. H., Minhas, F. A. & Mirza, Z. (1999) Prevalence and recognition of depressive disorder at a primary health care centre in Pakistan. *Journal of Institute of Medicine*, **21(1&2)**, 19-27.
- 12. Kovacs, M. (1996): Presentation and course of major depressive disorder during childhood and later years of life span. Journal.of American. Academy Of Child and Adolescent. Psychiatry, 35 (suppl. 6).
- 13. Lawlor, B. A. & Anderson, M. C. (1995 The neurobiology of late-life depression: Impact of silent cerebrovascular disease. Dist. Psychiatric education Services Symposium: Advances in Old Age Psychiatry. *Human Psychopharmacology Clinical and Experimental*, **10** (suppl.4).
- 14. Livingston, G., Hawkins, A. & Graham, N. (1990) The Gospel Oak Study: Prevalence rates of dementia, depression and activity limitation among elderly residents in inner London. *Psychological Medicine*, **20** (suppl. 1), 137-146.
- 15. Nandi, D. N., Ajmany, S., Ganguli, H., Banerjee, G. C., Ghosh, A. & Sarkar, S. (1975) Psychiatric disorders in a rural community in West *Bengal: An epidemiological study.* Indian Journal of Psychiatry, **17**,87-90.
- 16. Nair, Sudha; Nair Shobha & Pinto, C. (1999) Psychiatric morbidity in elderly female inpatients- A clinical study. *Indian Journal of Psychiatry*, **41.**
- 17. Premaranjan, K. C., Danabalan, M., Chowdhury, J. R., Mandal, D. & Boral, A. (1993) Prevalenceo fpsychiatric morbidity in an urban community of Pondicherry. *Indian Journal of Psychiatry*, **35** (suppl. 2), 99-102.
- 18. Ram Chandran, V., Sarada Menon, M. & Ram Murthi, B. (1979) Psychiatric disorders in subjects aged over fifty. *Indian Journal of Psychiatry*, **22**, 193-198.
- 19. Tiwari, S. C. & Srivastava, S. (1998) Geropsychiatric morbidity in rural Uttar Pradesh, India. *Indian Journal Psychiatry*, **40** (suppl. 3), 266-273
- 20. United Nations (1991) The World Ageing Situation. United Nations Office at Vienna, Centre for Social Development and Humanitarian Affairs. Geneva: United Nations.
- 21. Venkoba Rao, A. & Madhavan, T. (1982) Geropsychiatric morbidity surveys in a semi-urban area near Madurai. *Indian Journal of Psychiatry*, **24**, 258-262.
- 22. World Health Organization (1992): International Classification of Disease and Related Health Problems-Tenth Revision. Mental and behavioral disorders: Clinical Description and Diagnostic Guidelines. Geneva: World Health Organization.