

PSYCHIATRIC MORBIDITIES IN GERIATRIC CAREGIVERS OF HIV SEROPOSITIVE PATIENTS IN INSTITUTIONALIZED SETUP

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Abstract

Chronic illness is established cause of psychiatric co morbidity in patients as well as their caregivers (Benseñor IM, 1998; Johan Ormel, 2007; Hopwood et al, 1991 and Yatan Pal, 2011)^{1,2,3,4}. The burden and stress arising due to chronic illnesses are known precipitating and perpetuating causes of psychiatric illnesses in the caregivers.

Introduction:

Old age is a state of biological compromise leading to impaired coping with day to day life as well as stress. Old age caregivers of chronic illnesses have to face dual burden, so it is but natural to have feeling of more stress and burden from the same stress factor. So the impact due to any chronic illness is assumed to be more in geriatric population and so psychiatric morbidity is more in geriatric subjects⁵.

Human immune deficiency Virus (HIV) produces a chronic syndrome known as Acquired Immunodeficiency Syndrome (AIDS). It is an illness which is also associated with stigma of shame because it is assumed in some societies that it is a sexually transmitted disease which results from immoral lifestyle. Though it is a sexually transmitted disease but in reality other routes of spread are also common. In this way geriatric HIV caregivers have to face multiple stresses.

They have to work in the age they have to be retired. They cannot share the fact regarding the illness of their patients in society, cutting their hope to obtain help from society and experts. The geriatric population is a major population involved in care giving of HIV

patients. Hence specific types of needs of geriatric caregivers are necessarily yet to be explored.

Some studies had been conducted to evaluate the caregiver strain and stress on primary caregivers' mental health but the data regarding geriatric primary caregiver needs are lacking in western as well as in Indian continent. So this study was planned with the special focus on geriatric care giving needs.

Material and Methods:

The study was conducted on primary caregivers (aged ≥65 years) of HIV patients coming to Anti Retroviral Therapy (ART) centre of Sarojni Naidu Medical College, Agra, during a period of 1 year from June 2011 to June 2012 or were hospitalized there for treatment of AIDS related disorders. A control group of age and sex matched healthy geriatric (aged ≥65 years) subjects was also taken from general population for comparison. Method of sample selection was consecutive sampling and study design was cross sectional type.

Selection of Cases:

Total 493 primary care givers of ART enrolled (institutionalized) sero-positive patients were evaluated.

Out of which, only 36 primary care givers of HIV patients were aged ≥ 65 years, were included in the study. The caregivers were consecutively chosen. Written informed consent was taken from both the patients and their respective primary caregivers, maintaining confidentiality and anonymity. The caregivers were ascertained by their respective HIV patients themselves according to the responsibilities shared by them in their care. The subjects were evaluated using a preformed pro forma, Perceived Stressful Life Events Scale (PSLES), World Health Organization quality of life index brief (WHOQOL brief) scale and Mini-International Neuropsychiatric Interview PLUS (M.I.N.I.PLUS). Stress and quality of life was also assessed in general population by taking a sample of 30 age, sex and socioeconomic status matched healthy people from general population

Inclusion Criteria:

- Primary Care giver of HIV seropositive
- Age ≥ 65 years.
- Has given consent.

Exclusion Criteria:

- Caregiver should not be sero-positive for HIV.
- Caregivers with history of psychiatric illness 1 year prior to diagnosis of HIV in their patients.
- Caregivers with history of substance use prior to HIV diagnosis in their patients.(Change in substance use pattern will be included)
- Caregivers with chronic comorbid medical illnesses (Hypertension, Diabetes, Cardiac and Neurological illnesses etc).

Observation:

Total number of subjects evaluated was 493. Only 36 of age ≥ 65 years were included in the study.

Various socio-demographic details are provided in table 1

Table 1-Socio-demographic variables :(N=36)

Maximum numbers of caregivers were male with mean age 69.3 ± 3.2 years.

Variable	Denominator	Number of subjects (Percentage)
Gender	Male	29 (80.56%)
	Female	7 (19.44%)
Age	65-75	30 (83.33%)
	76-86	5 (13.89%)
	≥ 86	1 (2.8%)
Religion	Hindu	31 (86.11%)
	Muslim	4 (11.11%)
	Others	1 (2.8%)
Marital status	Married	12 (33.33%)
	Unmarried	1 (2.7%)
	Widow/widower	21 (58.33%)
	Divorced/separated	1 (2.7%)
Residence	Rural	24 (66.67%)
	Urban	12 (33.33%)
Education	Illiterate	6 (16.67%)
	Primary school or less	19 (52.78%)
	High school	8 (22.22%)
	Intermediate	2 (5.55%)
	Graduate	1 (2.7%)
	Postgraduate	0 (0%)
Occupation	Unemployed/Retired	23(63.89%)

	Unskilled	6(16.67%)
	Semi-skilled	4(11.11%)
	Skilled	2(5.56%)
	Professional	1(2.7%)
Family Type	Nuclear	15(41.67%)
	Joint	21(58.33%)
Role in family	Earning member	15(41.67%)
	Dependent member	21(58.33%)

Psychiatric morbidities in caregivers

On applying MINI PLUS out of 36 subjects, psychiatric morbidity was detected in 19 (52.76%) subjects.

Table 2- Prevalence of psychiatric morbidity in caregivers

Psles Scoring:

On PSLES scoring most of the caregivers scored high commonly to economic burden of disease, chronicity of illness in caregivers and their poor physical health. The mean PSLES score in caregivers was 196±65.41.

The mean PSLES score in the control group was 109.7±82.38. The difference in the PSLES scores in both the group is significant with P value <0.0001.

Table 3- Statistical comparison of caregiver and control group PSLES scoring

Subjects type	Mean PSLES Score	Standard deviation	Number of subjects (n)	T value	P value
Caregivers	196	65.41	36	5.127	<0.0001
Control	109.7	82.38	30		

WHO-QOL Scoring:

On analysis of WHO QOL scoring it was observed that majority of the care givers scored low with a mean score of 61.61±11.11, where as the mean score of WHO-QOL in the control group was 72.93±4.57. The difference in both the groups is highly significant with a P value of < 0.0001. This data clearly depicts poorer quality of life in the caregivers of HIV positive patients, which are

S.N.	Diagnosis	No. of Subjects (N=36)
1	Depression	11(30.56%)
2	GAD	3(8.33%)
3	panic disorder	1(2.78%)
4	Adjustment disorder	1(2.78%)
5	substance intake	1(2.78%)
6	Dementia	2(5.56%)
	Total	19(52.78%)

otherwise healthy and facing the challenge of care giving.

Comparing the WHO QOL scoring values (Table-4) between caregivers and control group by unpaired t test, two tailed P value was derived to be <0.0001 (extremely significant).

Table-4- Comparing the WHO QOL scoring

Subjects type	Mean WHOQOL Score	Standard deviation	Number of subjects	T value	Df	P value
Caregivers	61.61	11.11	36	5.57	48	<0.0001
Control	72.93	4.57	30			

Discussion:

Old age is a stage of deteriorating physical health. This is a major stressful event which comes certainly in one's life. Care giving of chronic illness patient is also a stressful event in one's life.

In geriatric caregivers these two stressful events acts simultaneously rendering them more susceptible for developing psychological maladjustment and psychiatric illnesses. Psychological well being of the care giver depends upon the coping strategies that he employs. The complex interaction of stigma and burden of HIV, and the coping strategies used by the care giver, influence the development of psychiatric morbidity in them. This in turn influences the quality of care rendered to the affected individual. So the chance of disturbance in coping is more in geriatric population.

In this context the present study was carried out in a general hospital with an ART centre, where HIV affected individuals are referred for treatment. Total 493 caregivers were evaluated. Out of 493 caregivers, 36 caregivers (7.3%) were included in the study after considering exclusion and inclusion criterion. According to the Indian census 2011, the elderly (>65 years) made up 5.5% of total population⁶, which is little bit less than our data 7.3%. This showed that significantly high number of geriatric subjects are involved in HIV caregiving.

The study was planned with the aim to assess psychiatric morbidity, stress and quality of life of geriatric primary care givers of HIV patients. For comparison of stress and Quality of life, 30 age sex matched normal subjects from general population were taken.

Socio demographic profile of the caregivers:

On examining the demographic details of the primary caregiver group (table-1), Most of them were

male (80.56%) and maximum number of caregivers belonged to the age group between 65-75 years constituting 83.33% of the study population.

In our study 66.67% of geriatric caregivers came from a rural residential area and 33.33% were from urban residential area. In our study 16.67% caregivers were illiterate, 52.78% educated up to primary, 22.22% educated up to high school, 5.55% educated up to intermediate and 2.7 % were graduate. These findings were in keeping with the Indian general population survey census (2011).

Unemployed/Retired formed majority (63.89%) of the study subjects. In our study, 58.33% of the caregivers were the dependant members of the family, only 41.67 % were earning members.

Out of 36 participants in our study, 58.33% were widow/widower, 33.33% were married, 2.7% were single, and 2.7% were divorced/separated.

Psychiatric Morbidity:

On evaluating the subjects on MINI PLUS scale out of 36 subjects, psychiatric morbidity was detected in 19 (52.76%) subjects.

Maximum number of subjects (30.56%) had depression, other had anxiety GAD (8.33%), Panic disorder (2.78%), adjustment disorder (2.78%), substance intake (2.78%) and dementia (5.56%)

The comparative findings from control group, regarding the level of stress and deterioration of quality of life was more in caregivers and is clearly suggestive of high burden of illness in caregivers. The economic burden of the treatment, chronicity of the illness in their respective patient and personal physical illness were the major stress related events in the life of caregivers.

Comparison of stress in caregiver and control group:

Stress in our study was evaluated by PSLES scoring. When we see the pattern of PSLES scoring in our study we see that score is high regarding undesirable events of life i.e. economic burden of disease, chronicity of illness and personal physical illness. The mean PSLES scoring in caregivers was 196 ± 65.41 . The mean PSLES score in the control group was 109.7 ± 82.38 . The difference in the PSLES scores in both the group is significant with P value < 0.0001 . This demonstrated high level of stress in caregivers as compared to control group. Maximum number of caregivers 21 in our study belongs to PSLES range 200-301. In control group maximum number of subjects 23 out of 30 (76.67%) belongs to PSLES range 0-100.

Comparison of Quality of life in caregiver and control group:

On analysis of WHO QOL brief scoring it was observed that majority of the caregivers scored low with a mean score of 61.61 ± 11.11 whereas the mean score of WHO-QOL in the control group was 72.93 ± 4.57 . The difference in both the groups was highly significant with a P value of < 0.0001 . This data clearly depicts poorer quality of life in the caregivers of HIV positive patients, which were otherwise healthy and facing the challenge of care giving.

Most affected domains were more need for medical treatment for caregivers, cannot enjoy life due to continuous involvement in care giving, deteriorated physical health, unhealthy physical environment, economic depletion, lack of knowledge and counseling regarding disease, no opportunity for leisure activities, lack of support, difficult access to health services, disturbed life and work schedule and recurrent negative feelings due to care giving task.

Conclusions:

The study was devoted to understand the needs of geriatric primary caregivers. This study was an attempt to understand the psychiatric morbidity, stress and quality of life of geriatric caregivers of HIV/AIDS infected individuals in association with their role as primary caregivers.

Among the caregivers, it was noted that majority of them were male (80.56%), from rural background (66.67%), educated up to primary (52.78%) and Unemployed/Retired (63.89%).

Study demonstrated high prevalence of psychiatric morbidity in otherwise healthy caregivers of HIV seropositive patients. The psychiatric morbidity detected in the study was fairly high 19 out of 36 caregivers were screened positive for various psychiatric morbidities (52.76%). Among caregivers Maximum number of subjects (30.56%) had depression, other had Generalized anxiety GAD (8.33%), Panic disorder (2.78%), adjustment disorder (2.78%), substance intake (2.78%) and dementia (5.56%). Prevalence of psychiatric morbidities seemed to be more as compared to prevalence in geriatric general population. The level of stress was also high in caregivers. Quality of life was compromised in the care givers.

This study demonstrates an urgent need for a tender help and supportive care in the affected domains of life of the geriatric caregivers and their families due to the burden of the disease i.e. economic, medical, social and moral.

Limitations of Present Study:-

The sample size of the study is small.

A larger sample group will be more representative.

A longitudinal follow up data with progressing time and illness is lacking.

A multicentre study with a larger sample size is required to reach a firm conclusion.

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