Psychiatric and Physical Morbidity in Old Age Homes of Southern India

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Abstract
Introduction: *The pace of population ageing around the world is also increasing dramatically. By 2050, 80% of all older people will live in low and middle-income countries. In the present situation, the current study was planned and carried out on a pilot basis in Kakinada, Andhra Pradesh, India.*
Aim: *To study the Psychiatric and Physical Morbidity in inmates of old age homes*
Methodology: *A total of 145 inhabitants of five old age homes were included, ICD-10 was used for the diagnosis of the patient. Brief Psychiatric Rating Scale and Mini-Mental State Examination scales were administered to assess the psychotic, non- psychotic symptoms and cognitive function. The quantitative data obtained was analyzed by means of frequency tables.*
Results: *Depression was the most common among inhabitants of old age homes followed by anxiety and dementia.*
Conclusion: *The overall prevalence of Psychiatric disorders was 44.14%. A universal health insurance and pension scheme would be a welcome move in our country. The government policy should include the same.*
Keywords*: Old age homes, elderly, psychiatric, mental, morbidity, physical illness.*

I. Introduction

The geriatric population is defined as a population aged 60 years and above.[1] The Global Age Watch Index, 2015, India ranks 71st out of 96 countries on elderly (60 years plus) care.[2] We have the second highest population of elderly people in the world, projected to rise to 12% of the total population by 2020. We are an "ageing population", 80% of our elderly are in rural areas with 40% below the poverty line and over 73% illiterate. Scarily, about 90% of them have no official social security (i.e, no PF, gratuity, pension, etc).

The Indian family has traditionally been described to provide natural social security to ill, dependent and the older family members.[3] Elderly persons are held in reverence, are consulted in matters of marriage, festivals, property and are given prominence in all family functions. However in recent times, such traditionally described roles of the family has become more and more elusive and that increasingly issues of community care and support for patients without families are beginning to emerge.[4]

Due to urbanization, modernization, industrialization, globalization have brought major transformation in family in the form of structural and functional changes.[5] As a result of these changes elderly adults are forced to shift from their own place to old age homes.[6] Multiple factors are known to affect mental health in the elderly. Female sex, low education, marital status, medical comorbidites,[7] economic dependence, nuclear family are known to play a significant role in psychiatric illness among elderly.[8] Risk factors leading to development of late life depression are complex interactions among genetic vulnerabilities, cognitive diathesis, age associated neurobiological changes and stressful life events.[9] In the present situation, the current study was planned and carried out on a pilot basis in Kakinada, Andhra Pradesh. India.

II. Aim
To study the Psychiatric and Physical Morbidity in inmates of old age homes.

III. Methodology

The consultant psychiatrist contacted the ten old age homes management for permission to visit their old age homes to see the inhabitants for any psychological and physical disorders and to advise proper treatment. Five old age homes gave consent and date/time was fixed with the management. The total inhabitants were 162, out of which 16 were terminally ill and one male inmate refused consent. A total of 145 (55 males and

90 females) inhabitants were included in the study. This is a descriptive study conducted for a period of one month. The purpose of the study was explained and informed verbal consent was taken from both the person and the caregiver. Socio-demographic details were obtained from the participants with the help of semi-structured identification proforma. Brief Psychiatric Rating Scale (BPRS) was used to measure major psychotic and non-psychotic symptoms. Mini-Mental State Examination (MMSE) scale was administered to screen for cognitive Impairment. The quantitative data obtained was analyzed by means of frequency tables.

Inclusion criteria:
* Age 60 years and above.
* Inmates not having difficulty in speech and communication.
* Inhabitants staying in old age homes for more than 6 months.

Exclusion criteria:
* Age less than 60 years.
* Inmates who are uncooperative, failed to give consent.
* Inhabitants who had difficulty in communication.
* Inmates staying in old age home for less than 6 months.
* Long standing terminally ill.

Tools:
* Semi-structured proforma for socio-demographic profile
* ICD-10 diagnostic criteria
* The Brief Psychiatric Rating Scale (BPRS): It is a 7-point scale comprised of 18-items and has good reliability and validity, used to measure the major psychotic and non-psychotic symptoms.
* Mini-Mental State Examination (MMSE) scale with a maximum score of 30. Those with scores less than 23 are supposed to have mild cognitive decline and should be assessed further.

IV. Results
The present study consists of 145 inmates among which 55 of them are males (38%) and 90 are females (62%) (Table 1) Most of the inmates of the old age home were aged 60-90 years, 24.1% belonged to age group 60-69 years, 54.5% belonged to 70-79 yrs age group and 21.4% were above 80 yrs. (Table 2)

Most of the elderly subjects were from rural background. The predominance of rural elderly subjects in the current study maybe due to the location of the old age home in urban area with healthcare facilities surrounded by villages. Females are more in number than males majority of the subjects are illiterate and widowed.

80% of the elderly subjects were Hindus, 18% Christians and 2% Muslims. 85% inmates had nuclear family of origin, 5% joint families, 10% having no one to take care, indicating that elderly adults living in nuclear family are forced to join old age home if there is no one to look after them.

Psychiatric morbidity:
In the present study, Depression was common among females (27.8%) when compared with males (23.6%). Anxiety was seen in 11.1% of the females and 9.1% of the males. Dementia is the only organic disorder was seen among 7.6% of the inhabitants. (Table 3)

Physical morbidity:
In the present study, Prevalence of hypertension was common among males (54.5%) followed by diabetes mellitus (45.4%). In females 38.8% were hypertensive and 22.2% were diabetic. (Table 5)
Osteoarthritis was common among females (17.7%) when compared to males (10.9%).

Table 1: Gender wise distribution

GENDER	OLD AGE HOME (OAH)						
	OAH1	OAH2	OAH3	OAH4	OAH5	TOTAL	%
MALE	16	15	11	4	9	55	38
FEMALE	28	22	12	12	16	90	62

Table 2: Age wise distribution

AGE GROUP (YEARS)	OAH1	OAH2	OAH3	OAH4	OAH5	TOTAL	%
60-69	10	11	6	3	5	35	24.1
70-79	24	17	12	10	16	79	54.5
>80	10	9	5	3	4	31	21.4

Table 3: Gender and Psychiatric disease

GENDER	DEPRESSION (%)	ANXIETY (%)	DEMENTIA (%)	TOTAL (%)
MALE	13 (23.6%)	5 (9.1%)	6 (10.9%)	24 (43.6%)
FEMALE	25 (27.8%)	10 (11.1%)	5 (5.5%)	40 (44.4%)
TOTAL	38 (26.2%)	15 (10.34%)	11 (7.6%)	64 (44.14%)

Table 4: Pattern of Psychiatric disorders

PSYCHIATRY MORBIDITY	TOTAL INMATES	%
DEPRESSION	38	26.2
ANXIETY	15	10.34
DEMENTIA	11	7.6
TOTAL	64	44.14

Table 5: Gender wise distribution of Physical Morbidity

Physical illness	Number of inmates			
	Male	%	Female	%
Hypertension	30	54.5	35	38.8
Diabetes Mellitus	25	45.4	20	22.2
Hypothyroid	1	1.8	4	4.4
Osteoarthritis	6	10.9	16	17.7
Low backache	8	14.5	18	20
Cataract	1	1.8	3	3.3
Dental problems	2	3.6	4	4.4
Gynecological problems	-	-	6	6.6

V. Discussion

In our study the prevalence of psychiatric disorders in inhabitants of old age homes was 44.14% (Table 4) which was similar to a study conducted by Akbar S et al[8] which showed 43% overall prevalence of psychiatry illness among residents of old age homes.

The prevalence of psychiatric morbidity in females (44.4%) was more when compared with males (43.6%) in our study.

In the present study, Depression (26.2%) was the most common psychiatric disorder which was less when compared to study done by Akbar S et al[8] in which they observed that depression was the most prevalent disorder among inhabitants of old age homes (53.7%).

In our study Anxiety was found among 10.34% of inhabitants which was similar to study conducted by Pandey N et al[9] in which they stated that the prevalence of anxiety among inhabitants of old age home was 13%.

In the present study dementia was seen among 7.6% of inhabitants which was less when compared to study done by Pandey N et al[9] found that dementia was 11.1%.

In our study, we found no cases of Substance use- related disorders, Schizophrenia or Delusional disorder.

Singh A et al[10] concluded that depression was the most common psychiatric disorder in the general population (21.7%) and also in those living in old age homes (25%), followed by anxiety disorders (mean, 5.8%), substance use-related disorders (mean, 4.2%), and organic disorders (mean, 0.9%).

In the present study most of the inhabitants were illiterate, financially dependent and had poor socioeconomic status. These findings are important showing the degree of deprivation being more prevalent in females. All the inhabitants of the old age homes were having more psychological and social stressors, negligible family support, lack of medical (psychiatric/physical) care and facilities, restricted environment of old age homes and financial constraints.

Unlike in India, many Indonesians work until they get old, the rate of depression among the elderly remains low. In both China and Indonesia, poverty and depression rates are higher for old people who live separately from children living in the same area than those who live with the adult children or migrant children living farther away.

VI.   Conclusion

In our study among psychiatric disorders, depression was the most common morbidity found in the inmates followed by anxiety. We observed that depressed patients showed more medical illness.

Evaluation of mental health problems among inhabitants of old age homes is essential as it directly affects their quality of life and psychosocial wellbeing and indirectly to physical health outcome.

As the duration of stay in old age home increases psychological distress, hence the elderly adults joining old age home need psychological help to soothe the adjustment in the new environment.

The inmates staying in rented accommodation which are congested and lack basic amenities.
They are in need of people who would talk to them so that they can share their psychological and social issues.

Limitations of the study

* Small study sample due to a limited time frame.
* It is not a longitudinal study
* The association of physical illness with psychiatric morbidity is not assessed

Future Research

The rapid urbanization and societal modernization has brought in breakdown of family framework, family values, and family support leading to an increase in number of old age homes. Therefore more studies are needed to identify the psychiatric and physical disorders in the habitants of the old age home.

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