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Prevalence of Psychiatric Morbidity, Physical Illness, and Coping Strategies in Residents at Old Age Homes: A Cross-Sectional Study

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ABSTRACT

Background:

Older adults living in long-term care facilities, such as old age homes, often face a range of physical and mental health challenges that can significantly impact their overall well-being. **Objectives:** This study investigated the prevalence of psychiatric morbidity, physical illness, and coping strategies in old age home residents in Visakhapatnam, India. **Methods:** A cross-sectional study recruited 300 consenting residents. Standardized tools, namely the Mini-Mental Status Examination (MMSE), the six-item version of Goldberg's General Health Questionnaire (GHQ-6), and the Mini International Neuropsychiatric Interview (MINI) for diagnosing psychiatric disorders as per DSM-V criteria, were used to assess mental health. The Coping Checklist by Kiran Rao was also used. **Results:** Significant psychiatric morbidity was found in 15.33% of residents, with depression being the most prevalent disorder. Females, widowed individuals, those from urban backgrounds, and residents of nuclear families were more likely to report depressive symptoms. Physical illness was identified in 70% of the participants. **Conclusion:** This study highlights a considerable burden of psychiatric illness and physical health problems among residents of old age homes. Furthermore, it suggests that specific demographic factors are associated with an increased risk of depression. These findings emphasize the need for comprehensive mental and physical healthcare services within old age homes, with tailored interventions for vulnerable populations.

KEYWORDS: Psychiatric morbidity, Coping strategy, Physical illness, Geriatric health

INTRODUCTION

Globally, life expectancy has increased significantly, resulting in more individuals living into their sixties and beyond. This demographic shift is evident across all nations, where both the size and proportion of the elderly population are rising. By 2030, it is projected that one in six people globally will be aged 60 years or older. At this time, the population in this age group has grown from 1 billion in 2020 to 1.4 billion, which is anticipated to double, reaching 2.1 billion by the year 2050. Furthermore, the population of those aged 80 years or older is forecasted to triple between 2020 and 2050, reaching 426 million. [1]

At present, the elderly population in India is 8.6% of the total population, which is expected to rise from 13.4% in 2020 to 21.3% by 2050. [2] Aging is associated with a decline in physical and mental capacity and an increased risk of chronic diseases such as hearing loss, cataracts, osteoarthritis, diabetes, depression, and dementia. Additionally, older adults are more likely to experience multiple health conditions simultaneously, commonly called geriatric syndromes. The modernization of society has disrupted traditional family structures, leading to diminished family support for elderly individuals. The generation gap and lifestyle changes have exacerbated feelings of isolation and insecurity among the elderly. With increased life expectancy, households have become smaller and more congested, resulting in financial constraints and stress within joint families. Consequently,

many elderly individuals are increasingly moving to old age homes (OAHs). However, most OAHs in India lack adequate facilities, recreational activities, counseling services, and caregivers. [3, 4]

Older adults living in old age homes in India and around the world commonly experience a range of physical health problems. [2, 5, 6] Studies conducted in Delhi's old age homes revealed high frequencies of vision impairment, cognitive impairment, frailty, depression, malnutrition, and functional loss among residents. [3, 6] Furthermore, the shift from community-based care to individualized societies has exacerbated mental health challenges among the elderly, with a high prevalence of psychiatric morbidity among the elderly inhabitants, with depression being the most common issue observed. [7, 8] These findings underscore the pressing need for comprehensive health services and collaborative efforts from governments and organizations to address the multifaceted health needs of elderly individuals in institutional care settings.

The present study was conducted to investigate the prevalence of psychiatric morbidity, physical illness, and coping strategies among residents of old age homes. Additionally, the study seeks to examine the association between sociodemographic variables and psychiatric morbidity in this population. Through this research, we aimed to provide a comprehensive understanding of the mental health challenges faced by elderly residents in institutional settings and identify key factors that may influence their psychological well-being.

METHODOLOGY

A cross-sectional study was conducted using a convenience sampling method. The sample consists of 300 elderly residents from several old age homes (Prema Samajam, Mother Teresa, Loyola, St. Joseph's, and Golden Age) in Visakhapatnam. Participants included elderly individuals aged 60 years and above who were willing to participate in the study. The study was carried out after obtaining approval from the institutional ethics committee and obtaining valid written informed consent from both the old age homes and the study participants.

The Mini-Mental Status Examination (MMSE) was administered to rule out dementia. [9] Personal socio-demographic and clinical data were collected using a self-devised information sheet for all subjects. Participants were screened for psychiatric health problems using the six-item version of Goldberg's General Health Questionnaire (GHQ-6). [10] Those who scored positive for at least one item were subsequently assessed for Axis-I disorders using the Mini International Neuropsychiatric Interview (MINI 7). The Coping Checklist was administered to determine the coping strategies used in stressful situations. [11]

RESULTS

Initially, 350 residents from various old age homes (OAHs) in Visakhapatnam were approached for participation. Following the exclusion criteria, 40 residents were excluded due to unwillingness to participate, and 10 were excluded due to critical illness.

The mean age of the study population was 68.5 years. The age distribution among the participants is depicted inFigure 1. The largest age group within the sample was those aged 65-69 years, accounting for 46% of the population. This was followed by the 70-74 years age group, which constituted 20% of the participants. Other age groups included those aged 60-64 years (18.7%), 80-84 years (8.0%), and 75-79 years (7.3%).

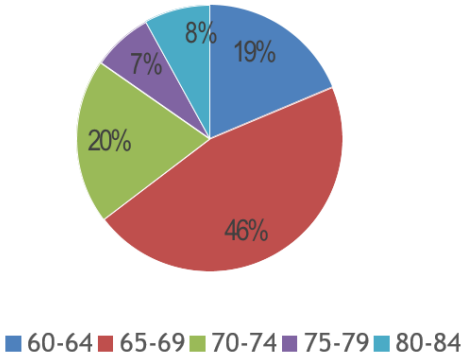

Figure 1: Age Distribution of Participants of Old Age Homes in the Study

The gender distribution revealed that females constituted the majority of the sample, with 178 individuals (59.33%), while males numbered 122 (40.67%). In terms of marital status, the majority of the participants were widows or widowers, comprising 64% of the total population. Both unmarried and separated individuals each represented 18% of the sample.

All 300 participants underwent the General Health Questionnaire (GHQ-6) to identify those with potential psychiatric morbidity. Among them, 209 participants screened positive on the GHQ-6 and were further assessed using the Mini International Neuro-psychiatric Interview (MINI 7) to diagnose specific psychiatric disorders according to DSM-V criteria. The percentage of people with psychiatric illness is 15.33% (n=46), with 10% (n=30) having depression and 5.33% (n=16) having generalized anxiety disorder (GAD).

Finally, all 300 participants completed the Coping Checklist to evaluate their coping strategies in stressful situations. (Figure 2)

The most common chronic illnesses in this study of 300 elderly patients were hypertension (including those with hypertension and diabetes or hypertension and arthritis), affecting 92 individuals (30.67%), followed by arthritis (including those with diabetes and arthritis or hypertension

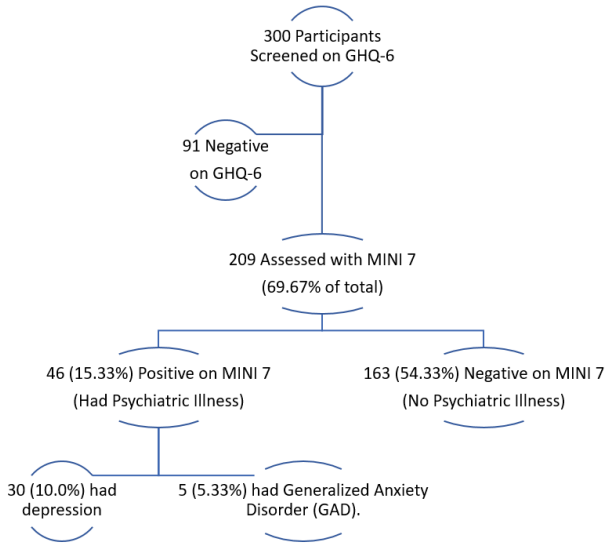

Figure 2: Distribution of Psychiatric Illness of Study Participants from Old Age Homes

and arthritis) in 86 patients (28.67%). Diabetes was identified in 56 participants (18.67%). Notably, a significant proportion of the participants (22.7%, n = 67) reported having multiple chronic illnesses.

Disease	Number of Individuals (%)
No Illness	102 (34.0%)
Hypertension (HTN) Only	40 (13.3%)
Diabetes Only	10 (3.3%)
Arthritis Only	66 (22.0%)
HTN & Diabetes	36 (12.0%)
Asthma/COPD	14 (4.7%)
Epilepsy	6 (2.0%)
Multiple Comorbidities	67 (22.3%)

Table 1: Distribution of Diseases Among Elderly Individuals (N=300)

While a significant portion (34%, n = 102) reported no diagnosed illnesses, a substantial majority (66%, n = 198) lived with at least one chronic condition. Among those with reported illnesses, hypertension (HTN) only was present in 13.33% (n=40), arthritis only in 22% (n=66), diabetes only in 3.33% (n=10), DM with HTN in 12% (n=36), asthma or COPD in 4.67% (n=14), and epilepsy in 2% (n=6). (Table 1) A significant portion, 22.3% (n=67), had additional other chronic diseases such as hypothyroidism, varicose veins, frailty, etc., apart from DM, HTN, or arthritis.

Psychiatric morbidity is more found in females ($p<0.05$) and in those with upper primary level of education

Variables	Psychiatric Morbidity Yes (n=46) No. (%)	No Psychiatric Morbidity(n=254) No. (%)	Statistical Significance
Sex			
Male	12 (26.1)	110 (43.3)	p < 0.002
Female	34 (73.9)	144 (56.7)	
Age			
60-69	32 (69.6)	162 (63.8)	p = 0.27
70 & above	14 (30.4)	92 (36.2)	
Marital Status			
Widow/er	26 (56.5)	166 (65.4)	p = 0.04
Single	6 (13.0)	48 (18.9)	
Separated	14 (30.4)	40 (15.8)	
Educational Status			
Illiterate	0	109 (42.9)	p < 0.001
Primary	10 (21.7)	49 (19.3)	
Upper Primary	26 (56.5)	46 (18.1)	
Secondary	10 (21.7)	50 (19.7)	
Domicile			
Urban	42 (91.3)	185 (72.8)	p < 0.01
Rural	4 (8.7)	69 (27.2)	
Type of Family			
Joint	14 (30.4)	120 (47.2)	p = 0.034
Nuclear	32 (69.6)	134 (52.8)	
Duration of Stay			
< 2 years	11 (23.9)	103 (40.6)	p = 0.031
> 2 years	35 (76.1)	151 (59.4)	
Type of Payment			
Free	11 (23.9)	173 (68.1)	p < 0.001
Paid	35 (76.1)	81 (31.9)	

Table 2: Demographic Variables and Psychiatric Morbidity Among Elderly Individuals

(p<0.001). Widows/widowers have more psychiatric health issues than other groups (p<0.05), and more in the urban population (p<0.05) and in those from nuclear families (p<0.05). Analysis revealed a statistically significant association between the duration of stay and psychiatric morbidity, with 11 individuals (9.7%) experiencing psychiatric issues after less than 2 years compared to 35 individuals (27.6%) after more than 2 years (p<0.05). Additionally, a significant difference was observed based on the type of payment, where 11 individuals (9.7%) under free conditions and 35 individuals (27.6%) under paid conditions exhibited psychiatric morbidity (p<0.05). (Table 2) These findings underscore the impact of prolonged residency and financial considerations on mental health outcomes among elderly residents in institutional settings.

Coping Strategy	Not Using (%)	Using (%)	Associated Morbidity with Psychiatric
Problem Solving	46.7	53.3	Used by all, no specific association
Distraction Positive	22.0	78.0	No specific association
Distraction Negative	72.67	27.33	Mostly used by those with psychiatric morbidity
Acceptance/Redefinition	6.0	94.0	Mostly used by those without psychiatric morbidity
Religion/-Faith	2.0	98.0	Mostly used by those without psychiatric morbidity
Denial/Blame	11.3	88.7	Mostly used by those with psychiatric morbidity
Social Support	10.0	90.0	Mostly used by those without psychiatric morbidity

Table 3: Coping Strategies Among Elderly Individuals of Old Age Homes

The inmates of old age homes who had psychiatric morbidity used all three domains of coping strategies—problem-focused, emotion-focused, and social support. Religion/faith was the most commonly used coping strategy (98.0%), followed by acceptance/redefinition (94.0%) and social support (90.0%). Problem-solving was used by 53.3% of the study sample. (Table 3) These strategies were mostly used by individuals without any psychiatric morbidity. Distraction negative strategy and denial/blame strategy are mostly used by those with psychiatric morbidity.

DISCUSSION

The prevalence of chronic diseases in elderly individuals residing in old age homes varies significantly based on various factors. Studies have shown that the prevalence of chronic conditions such as hypertension, diabetes, heart disease, arthritis, and depression is higher in women compared to men, with arthritis being particularly prevalent among women. [12, 13] Additionally, the presence of multiple chronic conditions, known as multimorbidity, is more common in the elderly population, especially among women, highlighting gender differentials in disease combinations and prevalence, particularly in India. [14] Furthermore, lifestyle factors play a crucial role, with unfavorable lifestyles being associated with a higher prevalence of chronic diseases in the elderly. [5] It is essential to consider these factors, along with age, gender, and lifestyle, when addressing the healthcare needs of elderly individuals in old age homes to provide tailored and effective interventions for managing chronic diseases.

Common psychiatric disorders reported among elderly individuals in old age homes include depression, anxiety, cognitive impairment, and delirium. Studies have shown varying prevalence rates for these disorders. [15–17] For instance, in a descriptive cross-sectional study conducted at an Old Age Home (OAH) in Jabalpur, the study found a prevalence of 19.2% for anxiety, 41.1% for depression, and 23.3% for cognitive impairment among 73 residents. [18] Another study in South Delhi reported an overall prevalence of depression at 73.3%, with 26.7% having mild depression, 31.4% moderate depression, and 41.9% severe depression. [19] In another study from Nepal, 45.8% of 155 participants experienced mild depression, while 36.8% reported moderate depression. Significant associations were found between depression levels and factors such as marital status, educational background, asthma, and smoking habits among the elderly residents of old age homes. [20]

This study found a psychiatric morbidity rate of 15.33%, and educational status and urban domicile emerged as significant factors associated with psychiatric morbidity. Specifically, individuals with an upper primary level of education exhibited a higher prevalence of psychiatric morbidity compared to other educational groups ($p < 0.001$). Moreover, a higher incidence of psychiatric morbidity was observed among residents from urban areas ($p < 0.01$), suggesting potential environmental and social determinants influencing mental health outcomes in elderly populations of OAHs. Furthermore, the duration of stay in OAHs and type of payment were found to significantly influence psychiatric morbidity. These findings underscore the significant mental health challenges faced by elderly individuals in such settings, emphasizing the importance of early identification and appropriate interventions to improve their overall well-being.

The coping strategy adopted by elderly participants in this study correlates with other studies' findings, such as by Anuradha Set al. [21] and Nishanthi Rand Priya R. [22]

CONCLUSION

This study examined elderly residents in old age homes (OAHs) in India. Depression was the most common mental health issue, with females, widowed individuals, those from urban areas, and nuclear families reporting more symptoms. A significant portion (70%) also had at least one chronic illness.

In terms of coping mechanisms, residents employed various strategies. Those without mental health issues relied more on positive strategies like acceptance and social support, while individuals with psychiatric illness used distraction and denial more frequently. These findings suggest that positive coping mechanisms may be protective against mental health problems.

LIMITATIONS

The study design limited its ability to establish cause-and-effect relationships. The sample size was modest and primarily from paid OAHs in one district, potentially affecting generalizability.

RECOMMENDATIONS

Future research should employ longitudinal designs with larger and more diverse samples. Studies evaluating interventions like Cognitive Behavioral Therapy and psychotherapy, along with social support programs in OAHs, are needed. The breakdown of family support systems in urban areas highlights the need to explore alternative support structures. Finally, a holistic approach to healthcare in OAHs, addressing both physical and mental health needs, is crucial.

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