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A Comparative Study to Assess the Level of Depression among Elderly People Residing in Old Age Homes and Families in Selected Areas of Ludhiana.

Rajratan[1], Mahesh Chand Gaur[2], Sadiq Ali[3]
[1]Ph.D, NIILM University, Kaithal, Haryana, India
[2]Professor, Dept of Psychology, NIILM University, Kaithal
[3]Principal, Nightingale College of Nursing, Narangwal, Ludhiana

Abstract: *BACKGROUND: Depression is associated with alterations in brain chemistry that affect communication between nerve cells, particularly involving neurotransmitters such as serotonin, dopamine, and norepinephrine. The levels of these neurotransmitters can be influenced by various factors, including physical illness, genetic predisposition, hormonal changes, medication use, aging, brain injuries, seasonal variations in light exposure, and social circumstances. Geriatric depression is a common mental health disorder that affects older adults and can significantly impair their physical, emotional, and social well-being. The present study aimed to compare the levels of depression among elderly people residing in old age homes and those living with their families.*

METHODOLOGY: A quantitative research approach was adopted for the study. The sample comprised 80 elderly individuals, including 40 residents of old age homes and 40 elderly persons living with their families, selected using a standardized sampling technique. The data collection tool consisted of two parts: Part I, which included socio-demographic variables, and Part II, which comprised the Beck Depression Inventory-I (BDI-I) Scale for assessing the level of depression. The reliability of the instrument was established using the split-half method, yielding a reliability coefficient of 0.80, indicating good reliability.

RESULTS:The findings revealed that the mean depression score among elderly people residing in old age homes was 20.00, whereas the mean score among those living with their families was 9.88. The unpaired t-test value was 6.560, with a p-value < 0.001, indicating a statistically significant difference in the levels of depression between the two groups.

The study therefore concluded that depression was more prevalent among elderly people residing in old age homes than among those living with their families. Among the elderly residing in old age homes, 15 (37.5%) had moderate depression, 13 (32.5%) had mild depression, 7 (17.5%) had severe depression, and only 5 (12.5%) reported no depression. In contrast, among elderly people living with their families, 4 (10%) had moderate depression, 10 (25%) had mild depression, none (0%) had severe depression, and 26 (65%) reported no depression.

These findings indicate a significantly higher level of depression among elderly people residing in old age homes compared to those living with their families in Ludhiana, Punjab.

Keywords: Assess, Depression, Elderly People, Old Age Homes and Families

I. INTRODUCTION

Ageing or aging is the process of the becoming older the term refers especially to human being, many animals, and fungi. In humans, ageing represents the accumulation of changes in a human being over time, encompassing physical, psychological, social changes.[1]

A basic mark of old age that affects both mind and body is "slowness of behaviour" this slowing down principle find a correlation between advancing age and slowness of reaction and physical and mental task performance.[2]

At what age old age begins cannot be universally defined because it differs according to the context. Most developed-world countries have accepted the chronological age of 65 years as a definition of 'elderly' or older person. The United Nations has agreed that 60+ years may be usually denoted as old age and this is the first attempt at an international definition of old age. However, for its study of old age in Africa, the World Health Organization (WHO) set 50 as the beginning of old age. At the same time, the WHO recognized that the developing world often defines old age, not by years, but by new roles, loss of previous roles, or inability to make active contributions to society.[3]Many age related disabilities begins to appear along with the physical problems, there is an increase in prevalence of mental problems due to many ageing factors and depression is one of the major problem among the elderly person. A psychological problem arises due to problem in area of daily living.[3]

Sample of geriatric home health care patients indicates depression is highly prevalent in mid population but usually unrecognized and rarely treated. Failure to recognize and treat depression increases the risk of prolonged course of depressive illness as well as risk of suicide and mortality from other causes.[3]

Depression is the common type of complaints in psychiatric patient. In depression the patient will be quiet, restrained unhappy and pessimistic. Patient will have feeling of discouragement and hopelessness. His attention and concentration are also impaired due to depressive ramification.[4]

Depression among old age will be in the top three disorders in the world. The prevalence rate of major depression is around 60/1000 of population. Recent data from a representativeDepression may be a temporary normal human emotional response to a loss disappointment, or failure. It may also be pathological, causing a persistent intense state of unhappiness. Depressive illness affect person for month or even years and involve the body, mood and thoughts .This disorder characterized by depressed mood or loss of interest or pleasure in usual activities .A major depressive episodes last at least two weeks. There is no history of manic behaviour and the symptoms cannot be attribute to use of substance or general medical condition.[5]

Geriatric depression is a mental and emotional disorder affecting senior citizens. Feelings of sadness and occasional "blue" moods are normal. However, lasting depression is not a typical part of aging. The elderly are more likely to suffer from subsyndrome depression. This type of depression doesn't meet the full criteria for major depression. The National Institute for Mental Health estimates that as many as five million elderly people in the U.S. suffer from subsyndromal depression. It can lead to major depression if left untreated. Depressed elderly are at high risk for suicide. Although senior citizens comprise only 12 percent of the U.S. population, they accounted for 16 percent of all suicides in 2004 (NIMH, 2007).[8]

According to WHO, factors increasing depression risk in older adults include genetic susceptibility, chronic disease and disability, pain, frustration with limitations in activities of daily living (ADL), personality traits (dependent, anxious or avoidant), adverse life events (separation, divorce, bereavement, poverty, and social isolation) and lack of adequate social support. Many studies have demonstrated a relationship between depression and various socioeconomic variables such as advanced age, low education, poverty, and manual occupation. [9]

Old age is the time when a kind of vacuum is created as a person is separated from their loved ones and the rest of family members. There is no concrete work schedule to follow and you start feeling unwanted. When all the young members of the are busy in their discourses of life, they lack love and attention needed. All these factors contribute in depression. [10]

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II. MATERIALS AND METHODS

Study Design & Sample Size: A quantitative research approach was adopted to assess the level of depression among elderly people residing in selected old age homes and living with their families in selected community areas of Ludhiana, Punjab. Data were collected in June 2022. The study sample comprised 80 elderly individuals, of whom 40 were residents of old age homes and 40 were living with their families.

Ethical Consideration: Ethical permission was obtained from NIIL University Kaithal 2022

Data Collection Measures: A **convenience sampling technique** was used to select the study participants. The socio-demographic data questionnaire was validated by experts and found to be reliable.

The data collection tool consisted of two sections:

Section A: Socio-demographic Variables

This section included **nine items** designed to obtain personal and general information about the participants, such as age, gender, religion, educational status, marital status, type of residence (family setting or old age home), duration of stay in the old age home, and source of income.

Section B: Beck Depression Inventory-I (BDI-I)

This section comprised the **Beck Depression Inventory-I (BDI-I)**, a standardized scale used to assess the level of depression among elderly people residing in selected old age homes and families in Ludhiana, Punjab.

The level of depression was categorized according to the BDI-I scoring criteria as follows:

Severe Depression: 30-63

Moderate Depression: 19-29

Mild Depression: 10-18

No Depression: 0-9

Statistical Analysis: Descriptive and Inferential statistics were used for the analysis of data as per the objectives and hypothesis. In the descriptive analysis calculations were done by using frequency and percentage. mean, median and SD& for inferential statistics was calculated by unpaired test and Chi-Square test.

III. RESULTS

Findings Related to Socio-Demographic Variables

The frequency and percentage distribution of participants according to their socio-demographic characteristics revealed that there were no substantial differences between the two groups.

Section A: Duration of Stay in Old Age Homes

Among the elderly people residing in old age homes, the majority **16 (40%)** had been staying in the institution for **more than 3 years**, **15 (37.5%)** had been residing there for **1 to 3 years**, and **9 (22.5%)** had been staying for **less than 1 year**.

Section B: Type of Family and Source of Economic Support

Regarding the type of family, among elderly people living with their families, the majority **21 (52.5%)** belonged to **nuclear families**, **18 (45%)** belonged to **joint families**, and **1 (2.5%)** belonged to an **extended family**.

With respect to the source of economic support, the majority of elderly people residing in old age homes, **17 (42.5%)**, depended on the **old age home** for financial support, **11 (27.5%)** received support through **pension**, **8 (20%)** depended on **family support**, and **4 (10%)** relied on **other sources**.

In contrast, among elderly people residing with their families, the majority **30 (75%)** received **family support**, while **10 (25%)** were supported through **pension**. None of the participants **(0%)** reported receiving financial support from old age homes or other sources.

Table No: 1:-Frequency and percentage distribution of samples, according to socio demographic variables.

N=40 +40 =80

SOCIO DEMOGRAPHIC	OLD AGE HOMES	FAMILIES

VARIABLES				
	(F)	(%)	(F)	(%)
AGE (In Years)				
55-65 Years	8	20	16	40
66-75 Years	19	47.5	18	45
76 and Above	13	32.5	6	15
GENDER				
Male	18	45	18	45
Female	22	55	22	55
RELIGION				
Hindu	18	45	14	35
Sikh	22	55	19	47.5
Muslim	0	0	3	7.5
Christian	0	0	4	10
EDUCATION				
No formal Education	8	20	14	35
Primary education	10	25	18	45
Secondary Education	8	20	7	17.5
Higher secondary Education	2	5	1	2.5
Graduation and Above	12	30	0	0
MARITAL STATUS				
Married	29	72.5	33	82.5
Unmarried	2	5	1	2.5
Divorced or Separated	2	5	0	0
Widow or Widower	7	17.5	6	15
TYPE OF RESIDENCE				
Old age home	40	100	0	0
Family	0	0	40	100
TYPE OF FAMILY				
Joint	0	0	18	45
Nuclear	0	0	21	52.5
Extended	0	0	1	2.5
DURATION OF STAY IN OLD AGE HOME				

Less than 1 year	9	22.5	0	0
1-3 years	15	37.5	0	0
Above 3 years	16	40	0	0
ECONOMIC STATUS				
Pension	11	27.5	10	25
Family Support	8	20	30	75
Old Age Home	17	42.5	0	0
Others	4	10	0	0

Level of Depression Among Elderly People Residing in Old Age Homes and Families (Table 2)

The findings showed that among elderly people residing in old age homes, 15 (37.5%) had moderate depression, 13 (32.5%) had mild depression, 7 (17.5%) had severe depression, and 5 (12.5%) had no depression.

The mean depression score among elderly people residing in old age homes was 20.00, with a standard deviation (SD) of 8.524, a median score of 19, and a mean percentage of 31.75%.

In contrast, among elderly people residing with their families, the majority 26 (65%) had no depression, 10 (25%) had mild depression, 4 (10%) had moderate depression, and none (0%) had severe depression.

The mean depression score among elderly people residing with their families was 9.88, with a standard deviation (SD) of 4.757, a median score of 9, and a mean percentage of 15.67%.

Overall, the findings presented in Table 2 indicate that depression was more prevalent and severe among elderly people residing in old age homes than among those living with their families.

Table No 2:- Compare the Frequency and Percentage of level of Depression among Elderly People residing in selected old age homes and families in selected areas of Ludhiana, Punjab

CRITERIA MEASURE OF DEPRESSION SCORE	**n= 80**	
OLD AGEHOME	**WITH FAMILY**	
Category Score DEPRESSION (f)%	**DEPRESSION (f)%**	
Severe depression (30-63)	7(17.5%)	0(0%)
Moderate depression (19-29)	15(37.5%)	4(10%)
Mild depression (10-18)	13(32.5%)	10(25%)
No depression (0-9)	5(12.5%)	26(65%)

Maximum = 63

Minimum = 0

Comparison of Depression Scores Between Elderly People Residing in Old Age Homes and Families. The mean depression score among elderly people residing in old age homes was **20.00**, whereas the mean depression score among those living with their families was **9.88**. The calculated **unpaired *t*-test value was 6.560**, with a **p-value less than 0.001**, indicating a highly statistically significant difference between the two groups.

Therefore, the study findings demonstrate that elderly people residing in old age homes experienced significantly higher levels of depression compared to those living with their families. Hence, the null hypothesis was rejected, and it was concluded that a significant difference existed in the mean depression scores of elderly people residing in selected old age homes and families in Ludhiana, Punjab.

Association Between Depression Level and Socio-Demographic Variables,Based on the third objective of the study, the Chi-square test was used to determine the association between the level of depression and selected socio-demographic variables.

Among elderly people residing in old age homes, the analysis revealed no statistically significant association between the level of depression and socio-demographic variables such as age, gender, religion, marital status, educational status, type of residence, and economic status. The calculated Chi-square values for these variables were less than the corresponding table values at the 0.05 level of significance.

Similarly, among elderly people residing with their families, the Chi-square analysis showed a statistically significant association between the level of depression and type of family. However, no significant association was found between the level of depression and other socio-demographic variables, including age, gender, religion, educational status, marital status, and economic status, as the calculated Chi-square values were lower than the table values at the 0.05 level of significance.

Overall, the findings indicate that type of family was the only socio-demographic variable significantly associated with the level of depression among elderly people living with their families, whereas no significant associations were observed for the remaining variables in either group.

DISCUSSION

The present study was conducted to assess and compare the level of depression among elderly people residing in old age homes and those living with their families in Ludhiana, Punjab. The findings revealed a substantially higher prevalence of depression among elderly residents of old age homes compared to those living with their families.

Among elderly people residing in old age homes, 37.5% had moderate depression, 32.5% had mild depression, 17.5% had severe depression, and only 12.5% reported no depression. The mean depression score was 20.00 ± 8.524, indicating a relatively high level of depressive symptoms among institutionalized elderly individuals. These findings suggest that elderly residents of old age homes are more vulnerable to depression, possibly due to factors such as social isolation, loss of family support, loneliness, and adjustment difficulties associated with institutional living.

The findings are consistent with the study conducted by Maktha and Kumar (2015) in Hyderabad, Telangana, among 124 elderly participants, which reported a mean depression score of 21.64 ± 2.32. The similarity in findings supports the observation that depression is highly prevalent among elderly individuals residing in institutional settings.[11]

In contrast, among elderly people living with their families, 65% had no depression, 25% had mild depression, 10% had moderate depression, and none had severe depression. The mean depression score was 9.88 ± 4.757, indicating a comparatively lower level of depressive symptoms. These findings emphasize the potential protective role of family support, emotional bonding, and social interaction in maintaining the psychological well-being of older adults.

Similar findings were reported by Bhamani, Karim, and Khan (2008) in Pakistan, who observed a prevalence of depression among older adults and highlighted the influence of social and family factors on mental health status. The results of the present study further reinforce the importance of a supportive family environment in reducing the risk of depression among elderly individuals.[12]

A comparison of depression scores between the two groups demonstrated a statistically significant difference. The mean depression score among elderly people residing in old age homes (20.00) was considerably higher than that of elderly people living with their families (9.88). The calculated unpaired *t*-test value was 6.560, with a p-value < 0.001, indicating a highly significant difference between the groups. These findings suggest that living arrangements have a substantial impact on the mental health status of elderly individuals.

The present findings are in agreement with those reported by Qadir et al. (2014) in Pakistan, who examined depression among elderly individuals residing in old age homes and community settings. Their study also highlighted differences in psychological well-being between institutionalized and community-dwelling older adults, supporting the conclusion that residential environment is an important determinant of mental health in later life.[13]

The study further examined the association between depression levels and selected socio-demographic variables. Among elderly people residing in old age homes, no statistically significant association was found between the level of depression and variables such as age, gender, religion, marital status, educational status, type of residence, and economic status. The calculated Chi-square values for these variables were less than the corresponding table values at the 0.05 level of significance.

Among elderly people living with their families, a statistically significant association was observed between the level of depression and type of family. However, no significant association was found between depression and other socio-demographic variables, including age, gender, religion, educational status, marital status, and economic status.

The findings related to socio-demographic characteristics are partially supported by the study conducted by Rao, Chennamsetty, and Rao (2014) in Jammu. Their study reported that depression among elderly residents of old age homes was more common among females, less educated individuals, and those belonging to nuclear families; however, these associations were not statistically significant. In the community group, depression was observed more frequently among elderly individuals who were female, widowed, unmarried, or belonged to nuclear families. These observations highlight the complex relationship between socio-demographic factors and depression among older adults.[14]

Overall, the findings of the present study indicate that depression is significantly more prevalent among elderly people residing in old age homes than among those living with their families. Family support appears to play a crucial role in promoting emotional well-being and reducing depressive symptoms among older adults. Therefore, targeted mental health interventions, regular psychological screening, and enhanced social support systems should be implemented, particularly in old age homes, to improve the quality of life and mental health of elderly individuals.

II. CONCLUSION

The present study was conducted to assess and compare the level of depression among elderly people residing in old age homes and those living with their families in Ludhiana, Punjab. Based on the findings of the study, it was concluded that elderly people residing in old age homes experienced significantly higher levels of depression than elderly people living with their families. A considerable proportion of elderly residents of old age homes had moderate to severe depression, whereas the majority of elderly individuals living with their families reported no depression.

The comparison of mean depression scores revealed a statistically significant difference between the two groups (t = 6.560, p< 0.001), indicating that residential setting plays an important role in the psychological well-being of older adults. The mean depression score was higher among elderly people residing in old age homes (20.00 ± 8.524) compared to those residing with their families (9.88 ± 4.757).

The study also examined the association between depression levels and selected socio-demographic variables. Among elderly people residing in old age homes, no significant association was found between depression level and variables such as age, gender, religion, marital status, educational status, type of residence, and economic status. The calculated Chi-square values were less than the corresponding table values at the 0.05 level of significance.

Among elderly people living with their families, a statistically significant association was found between depression level and type of family. However, no significant association was observed between depression level and other socio-demographic variables, including age, gender, religion, educational status, marital status, and economic status.

Overall, the study concludes that family support and a supportive living environment may contribute significantly to reducing depression among elderly individuals. Therefore, regular mental health assessment, psychosocial support, counseling services, and recreational activities should be strengthened, particularly in old age homes, to promote the mental well-being and quality of life of the elderly population.

Recommendations

A study can be conducted to assess the effectiveness of the laughter therapy among elderly in various settings such as geriatric nursing homes, rural and urban community. The study can be replicated on the large sample to generalize the

findings. Comparative study can be done in different setting. Daily activities of old age homes must have such type of activities which keep the mind agile.

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REFERENCES

1. Bowen RL, Atwood CS. Living and dying for sex. Gerontology. 2004;50(5):265-290.
2. Birren JE, Fisher LM. Ageing and speed of behavior: possible consequences for psychological functioning. Annu Rev Psychol. 1995;46:329-353.
3. Singh MB, Rani CS, Sharma R. A comparative study to assess the level of depression among elderly people residing in community and old age homes in selected areas of Jaipur, Rajasthan. BFUNJ. 2012;3(2):135.
4. Kapoor B. Textbook of Psychiatric Nursing. 2nd ed. New Delhi: Kumar Publishing House; 2007. p. 68.
5. Basavanthappa BT. Psychiatric Mental Health Nursing. 1st ed. New Delhi: Jaypee Brothers Medical Publishers; 2007. p. 590.
6. Schimelpfening N. The chemistry of depression [Internet]. 2017 [cited 2017 Apr 28]. Available from: https://www.verywell.com/the-chemistry-of-depression-1065137
7. Krans B. Geriatric depression: depression in the elderly [Internet]. 2012 [cited 2022 Apr 30]. Available from: https://www.healthline.com/health/depression/elderly
8. Schultz JM, Videbeck SL. Lippincott's Manual of Psychiatric Nursing Care Plans. 6th ed. Philadelphia: Lippincott Williams & Wilkins; 2012. p. 164.
9. Gauthami H. A study to assess the quality of life and role of stress among elderly people. Nightingale Nursing Times. 2016;12(7):48.
10. Ahuja N. A Short Textbook of Psychiatry. 5th ed. New Delhi: Jaypee Brothers Medical Publishers; 2002. p. 72.
11. Sheveta M, Kumar MV. A study on level of depression among elderly residing in an old age home in Hyderabad, Telangana. Int J Indian Psychol [Internet]. 2015 [cited 2022 Jun 12];3(1). Available from: http://oaji.net/articles/2015/1170-1447397985.pdf
12. Bhamani MA, Karim MS, Khan MM. Depression in the elderly in Karachi, Pakistan: a cross-sectional study. BMC Psychiatry [Internet]. 2013 [cited 2022 Jun 11];13(181). Available from: https://bmcpsychiatry.biomedcentral.com/articles/10.1186/1471-244X-13-181
13. Qadir F, Haqqani S, Khalid A, Huma Z, Medhin G. A pilot study of depression among older people in Rawalpindi, Pakistan. BMC Res Notes [Internet]. 2014 [cited 2022 Jun 17];7:409. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4119248
14. Rao SS, Chennamsetty SK, Rao SK. A comparative study of psychiatric morbidity, quality of life, and coping skills among elderly people living in old age homes and in the community. Int J Health Sci Res [Internet]. 2014 [cited 2022 Jun 18];4(8). Available from: http://www.ijhsr.org
15. American Psychological Association. Ageing and depression [Internet]. Washington (DC): APA; 2017 [cited 2022 May 5]. Available from: https://www.apa.org/helpcenter/aging-depression
16. HelpAge India. Old age homes [Internet]. New Delhi: HelpAge India; 2017 [cited 2022 May 6]. Available from: https://www.helpageindia.org
17. Ingle GK, Nath A. Geriatric health in India: concerns and solutions. Indian J Community Med. 2008;33(4):214-218.
18. Townsend MC. Psychiatric Mental Health Nursing: Concepts of Care in Evidence-Based Practice. 5th ed. Philadelphia: F.A. Davis Company; 2004. p. 491.

19. Black JM, Hawk JH. Medical-Surgical Nursing: Clinical Management for Positive Outcomes. 7th ed. Philadelphia: Elsevier Saunders; 2005. p. 146.
20. Goud AA, Nikhade NS. A cross-sectional study to assess prevalence of depression in older adults living in old age homes. Int Arch Integr Med [Internet]. 2015 [cited 2022 May 12];2(11). Available from: http://iaimjournal.com