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Comparing Depression Levels of Institutionalized and Non-Institutionalized Elderly in Vadodara: Developing an Information-Interventional Package

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ABSTRACT
A predicted 41% increase in the elderly population aged 60 and over by 2031 will lead to a significant increase in depression among the elderly. In this study, depression levels in institutionalized and non-institutionalized elderly individuals are determined and compared. A descriptive cross-sectional survey was conducted among 200 elderly individuals over 60 years of age. Data were collected from old age homes and urban areas in Vadodara using non-probability convenient sampling Depression has been assessed using the Yesavage Geriatric Depression Inventory. Data were analyzed using SPSS Software 25.0. (Descriptive and inferential statistics were used). The study found that depression is prevalent among elderly individuals, including those living in old age homes and with family members. The prevalence of moderate depression was higher among elderly individuals living with relatives (87%) than those living in old age homes (79%), while severe depression was more prevalent among elderly individuals living with family (11%) than those in old age homes (1%). The study also found that non-institutionalized elderly individuals had higher levels of depression than institutionalized elderly individuals, with a significant p-value of 0.05. A study concludes that the elderly living with family is at higher risk of depression. Age, gender, education, marital status, religion, family types, and physical disease history do not significantly affect depression among institutionalized and non-institutionalized elderly. The interventional package, which included psycho-education and self-help coping strategies, was effective in managing depression among the elderly.
Keywords: *Elderly, depression, old age homes, non-institutionalized, institutionalized, socio-demographic variables, coping strategies.*

INTRODUCTION

By 2030, one in six people globally will be 60 years old or above, and the number of people aged 60 years and above is projected to increase to 1.4 billion by 2020 and to 2 billion by 2050 [1]. Low- and middle-income countries will see the most significant changes in demographic aging. Good mental health is defined as the ability to manage everyday challenges, work efficiently, achieve one's potential, and contribute to society [2]. Depression is a common mental illness that frequently goes undiagnosed and untreated in older people. India's senior population is expected to increase by 41% in the next decade, with a projected rise from 138 million in 2021 to 194 million in 2031[2]. Aging can lead to several physical and psychological changes that may increase the risk of developing mental illnesses like depression.[3] Elderly people are vulnerable, and they frequently prefer solitude, which is linked to greater risks of depressive episodes. Therefore, it is essential to stay connected with someone and seek advice when experiencing loneliness or alienation [4].

The increasing percentage of elderly individuals globally and the rise in average lifespan have brought a greater focus on the psychological effects of aging Geropsychology is the field dedicated to understanding, treating, and enhancing the psychological well-being of senior citizens. [4]Psychological and physical well-being are related, and elderly individuals with chronic medical conditions are more likely to experience depression, which can negatively impact their treatment outcomes [5]. Depression is a prevalent illness among the elderly, affecting around 5-7% of the population, and is often underrecognized and poorly managed [6]. With the world's population aging rapidly and with more than 264 million sufferers globally, depression is predicted to overtake other diseases as the third largest cause of global illness burden by 2030 [7]. India is the country with the largest elderly population, and depression is a serious societal issue that needs to be addressed. The prevalence of depression among the elderly population in India varies

widely, with findings ranging from 6% to 62%. The increasing aging population worldwide, coupled with low birth rates, means that the demand for elderly care is expected to almost triple by 2050 [8].

OBJECTIVE
The objective of this study is to determine the level of depression among institutionalized and non-institutionalized elderly individuals and to compare the level of depression between these two groups. The study also aims to identify any socio-demographic variables that may be associated with depression in the elderly.

MATERIAL AND METHOD
A comparative descriptive cross-sectional survey of 200 seniors, 60 years of age and older, was undertaken. Data from a few metropolitan regions and senior living facilities in Vadodara were collected using a non-probability convenient sampling technique. The 30-item Yesavage Geriatric Depression Scale was designed to gauge the severity of depression. The scale has high psychometric qualities and is frequently used to evaluate depression in older people. Descriptive and inferential statistics, such as chi-square tests and t-tests, were used to analyze the data. Participants received an interventional package that included a PowerPoint presentation, a booklet with coping techniques, and instructions for managing depression.

RESULTS
Elderly people, including those who reside in nursing facilities and those who live with family members, frequently experience sadness, according to the study. Elderly people living with a family experienced moderate depression at a rate that was higher than that of elderly people living in nursing homes (79% vs. 87%), while severe depression at a rate of 11% vs. 1% was more common among elderly people living with family. Age-related depression was more prevalent in non-institutionalized old people than in institutionalized elderly people, with a significant p-value of 0. There was no significant association found between socio-demographic variables and the level of depression among institutionalized and non-institutionalized elderlies.
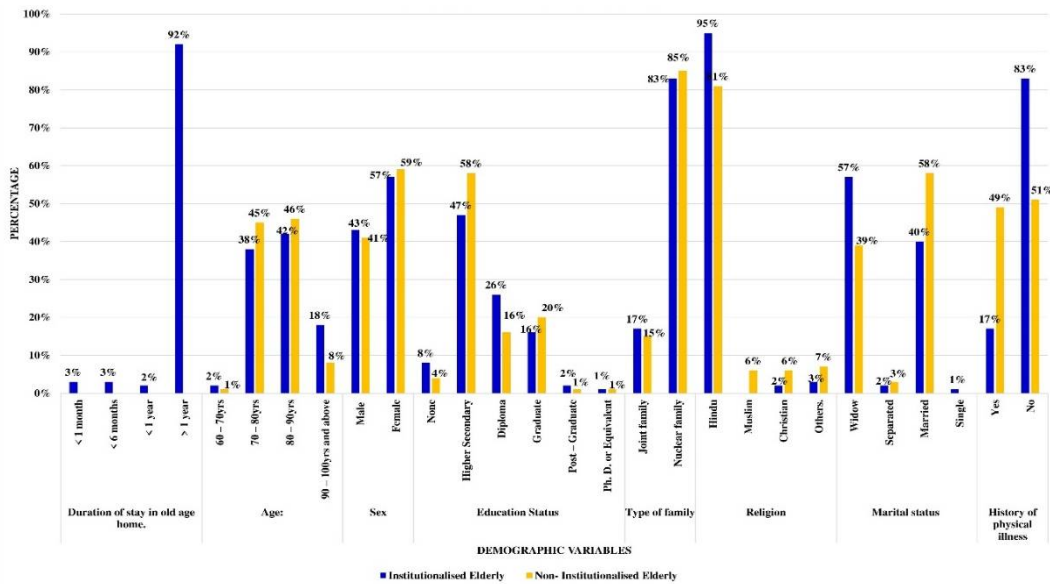

Fig. 1 : Socio-demographic Variable

Findings related to Yesavage Geriatric Depression Scale Score among Institutionalized and Non Institutionalized Elderly.

Levels of Depression	Non- Institutionalized Frequency (%)	Institutionalized Frequency (%)
Normal (≤9)	2(2%)	20(20%)
Mild Depressed (10- 19)	87(87%)	79 (79%)
Severely Depressed (20 – 30)	11(11%)	1(1%)

Table No 1 - Comparison of Institutionalized and Non-Institutionalized Depression Score (n=200)

Findings related to Yesavage Geriatric Depression Scale Score comparison among Institutionalized and Non-Institutionalized Elderly.

Table 2: Comparison level of depression between institutionalized and non-institutionalized elderly. n=200

Sr. No	Levels of Depression	Mean rank	P value
1	Non-Institutionalized	113.41	
2	Institutionalized	87.59	0.000001

Chi-square analysis shows that the calculated p-value is more than 0.05 level of significance. Therefore, no significant association was found between institutionalized or non-institutionalized elderly related to depression and socio-demographic variables such as age, sex, education, marital status, religion, types of family, and history of physical illness.

DISCUSSION

Study findings show older people suffer from sadness often, regardless of whether they live with family or in nursing homes. There was a higher risk of mild depression in elderly people living with family members than those living without family members, whereas severe depression was more common among those without family members. A study also showed that older people who were not institutionalized experienced higher levels of depression. According to these results, depression is a substantial problem among the elderly, especially those who are not institutionalized.

Section – I Sociodemographic factors

In residential care facilities, 92% of elderly residents have been there for at least a year, excluding those who live with their families. There were about 3 to 2% of the elderly who had settled in less than a year. The 70-100 age bracket has more seniors. 2 percent were 60 to 70 years old, 42% were 80 to 90, 38% were 70 to 80, and 18% were 90 to 100 years old. Most of the elderly living with their families were between 70 and 90, or 45 to 46%. 8% were over 90, while 1% were between 60 and 70. Vrudhashram had 43% older people and 59% female residents, while 41% were still living with their families. Vrudhashram elders had 47% higher secondary education, 26% diplomas, 16% graduation, 8% not in school, and 1-2% postgraduate or doctoral degrees. Although 20% of those living with families had graduated and 16% had completed a diploma in a different occupation, 58% completed their further education. 1% have earned postgraduate and doctoral degrees, while 4% have never attended university. In Vrudhashram, 83% of seniors came from nuclear families, while 17% were from joint families. On the other hand, 15% of elderly people live in joint families and 85% live in nuclear families. In nursing homes, 95% of residents were Hindus, 2% were Christians, and 3% were others. Moreover, 81% are Hindus, 6% are Muslims, 7% are Christians, and 7% are others. Vrudhashram has 57% widowed elderly, 40% are married, 2% are separated, and 1% are single; however, 58% of people living with family are married, 39% are widowed, and 3% are separated. There were 17% of elderly nursing home residents with a history of physical illness compared to 83% of elderly people living with family.

Section – II To assess the Level of Depression among Institutionalized and Non - Institutionalized Elderly

While only 79% of elderly residents at Vrudhashram for the Aged experience significant depression, 87% of elderly relatives do. Elderly residents living with families experienced severe depression 11% more often than nursing home residents. The normal rate of depression among elders living with family is 2%, and the normal rate of depression among nursing home residents is 20%. In a similar study, "Deepthi Karini, et, al. 2019, assessed and compared depression among elderly people living in old age homes (OAHs) and communities. We surveyed 100 elders, 50 of whom lived in old age homes and 50 of whom live in communities. A study resulted in the Prevalence of depression was high among inmates of old age homes (80%) compared to those of communities (52%). The high prevalence of depression in the studied population suggests elderly people need to be screened for depression [9]."

Section- III To compare the Level of Depression among Institutionalized and Non -Institutionalized Elderly

Among elderly people, depression is common, including those in nursing homes. Moderate depression affects 87% of elderly people living with relative's vs 79% who live in a Vrudhashram. In comparison to nursing home residents, elders living with families had an 11% severe depression rate. A normal level of depression is 2% in people living with their families and 20% in those living in old age homes. A supportive study was conducted by "Ather M Taqui, et. Al. 2017. To evaluate the prevalence of depression in the elderly at a tertiary care hospital in Karachi, Pakistan, 400 subjects aged 65 and older were interviewed. According

to the study, depression is prevalent 19.8% of the time. The elderly living in a nuclear family system were 4.3 times more likely to suffer from depression than those living in a joint family system, according to multiple logistic regression analysis (p 0.05). Having a nuclear family is an independent predictor of depression in the elderly.29than men (44.83%). The percentage of depression among widows and widowers was 67.57%, followed by divorcees and separated (63.63%) and never married (40%). Depression was more prevalent among the elderly living in old age homes. Females were more likely to suffer from depression than males, and depression prevalence increased with age [10].

Section - IV Associate the Level of Depression among Institutionalized and Non - Institutionalized Elderly with the selected demographic variable

The calculated p-value is greater than 0.05 level of significance from chi-square analysis. Age, gender, education, marital status, religion, type of family, and history of physical illness did not significantly affect depression in non-institutionalized elderly. Descriptive Correlation Cross-Sectional Survey conducted by "Nita Fitria, et al., 2022. Data were collected based on. Consecutive sampling techniques recruited 41 respondents for the study. To analyze depression scale, the Geriatric Depression Scale Indonesian version was used (GDS-15). In the study, gender (p=0.662), marital status (p=0.561), last education (p= 0.570), social support (p= 0.189,) and family support (p= 0.655) were not correlated with depression. According to the study, the depression scale does not correlate with determinant factors. Social support is one of the reasons for this. As a result, researchers suggest looking for other determinants of depression in the elderly [11].

CONCLUSION

In conclusion, the purpose of this study was to determine if social-demographic factors related to depression in the elderly in Vadodara, as well as evaluate depression levels among institutionalized and noninstitutionalized seniors. Depression is common among older people, whether living in nursing homes or with family members. Nevertheless, older people living with family are more likely to suffer mild depression than those in nursing homes, and more likely to suffer severe depression. Older people, especially those living with family, need efficient support systems and treatments. Institutionalization may also protect against geriatric depression, according to the findings. It would be helpful to find more potent interventions to enhance elderly mental health and well-being in future studies.

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