

A Study to Assess Level of Stress Among the Elderly in Selected Old Age Home at Meerut- A View to Develop Information Booklet Regarding Stress Management

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ABSTRACT

Background With India's elderly population growing rapidly, stress among older adults, particularly those in institutional settings, is emerging as a major public health concern. Elderly individuals residing in old age homes often experience stress due to factors such as health deterioration, social isolation, loss of autonomy, and inadequate support systems. Chronic stress can lead to physical and psychological ailments, reducing the overall quality of life. This study was undertaken to assess the stress levels of elderly individuals residing in selected old age homes and to develop an informational booklet aimed at educating them about stress management techniques.

objectives To assess the level of stress among elderly residents in selected old age homes in Meerut. To find the association between stress levels and selected demographic variables. To develop and provide an informational booklet on stress management techniques for the elderly.

methodology A descriptive research design with a quantitative approach was adopted. A total of 100 elderly individuals aged 60 years and above, residing in selected old age homes in Meerut, were selected using a purposive sampling technique. Data were collected using a structured socio- demographic questionnaire and the standardized Perceived Stress Scale (PSS-10). Following the data collection, a validated informational booklet on stress management was developed and distributed to participants.

results The study revealed that 40% of participants experienced high stress, 38% had moderate stress, and 22% reported low stress. A significant association was found between stress levels and variables such as age, gender, financial dependency, and family visitation frequency. The development and distribution of the information booklet served as an educational intervention to promote awareness and coping mechanisms among the elderly population.

Conclusion The findings indicate a considerable prevalence of stress among elderly residents of old age homes. The study highlights the need for regular psychological assessments and the implementation of supportive educational tools, such as stress management booklets, to improve coping strategies and enhance emotional well-being. The informational booklet provided was a feasible and effective step toward addressing mental health challenges in the geriatric population.

Keywords: Alcohol Dependence, Stress, Psychoeducation Programme, Caregiver Burden, Nursing Intervention

INTRODUCTION

Aging is an inevitable part of life, bringing with it a myriad of changes— physical, emotional, and social. As individuals age, they often face challenges such as declining health, loss of loved ones, and reduced social interactions. These changes can lead to increased stress levels, particularly among the elderly residing in old age homes. Stress in the elderly is a significant concern as it can exacerbate existing health conditions, reduce quality of life, and lead to mental health issues such as depression and anxiety. Stress is defined as "a state of mental or emotional strain or tension resulting from adverse or demanding circumstances." It is a natural response to challenging situations, but when stress becomes chronic, it can have detrimental effects on an individual's health and well-being. For the elderly, stress can stem from various sources, including health problems, financial instability, loneliness, and the loss of independence.

OBJECTIVES OF STUDY

- To assess the level of stress among elderly residents in selected old age homes in Meerut.
- To find the association between stress levels and selected demographic variables.
- To develop and provide an informational booklet on stress management techniques for the elderly.

RESEARCH HYPOTHESIS

H1: There will be a significant association between the level of stress among elderly and their selected demographic variables.

METHODOLOGY

Research Approach: quantitative research approach

Research Design: Pre-experimental one-group pre-test post-test design
Setting: The study will be conducted at selected old age homes in meerut district, Uttar Pradesh. Abha Manav Vradha ashram , Shri Shai Satyanand Vardhaasram ,Shri Shai Seva Trust (Dada Dadi Niwas Gaga Nagar Meerut

Population: aged 60 years and above) residing in selected old age homes at Meerut.

Sample Size: 100

Sampling Technique: purposive sampling technique

Tool: Perceived Stress Scale (PSS-10)

Intervention: Provide the information booklet on stress management,

Data Analysis: Data Entry and Statistical Analysis - Frequency, Percentage - Mean, SD, t-value- Paired t-test - Chi-square test

Table- 1: Distribution of Respondent According to Age (In Years)
(N=100)

Age (in years)	Frequency	Percentage
60-65 Yr	76	76.0%
66-75 Yr	24	24.0%
Total	100	100%

The table 1 presents the age-wise distribution of participants in the study. It shows that the majority of the participants, 76 individuals (76.0%), were in the age group of 60 to 65 years. In comparison, 24 participants (24.0%) belonged to the 66 to 75 years age group.

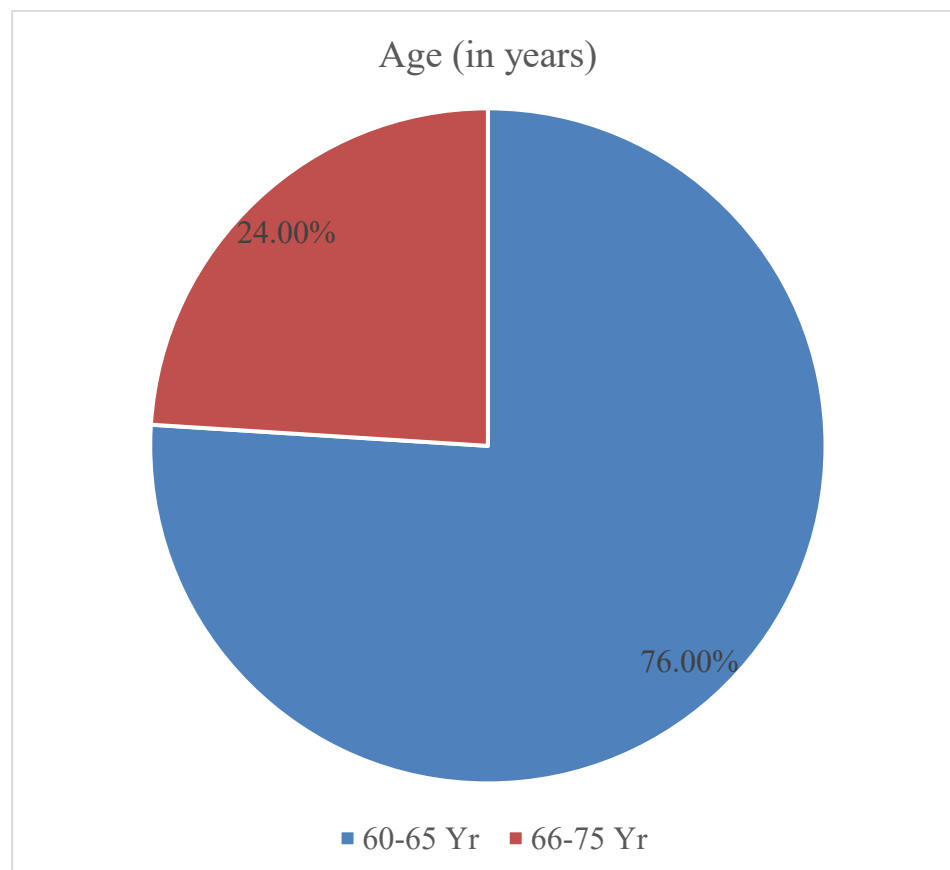


Figure - 3: Distribution of Subjects by Age (In Years)

Table- 2: Distribution of Respondent According to Gender
(N=100)

Gender	Frequency	Percentage
Male	40	40.0%
Female	60	60.0%
Total	100	100%

The table 2 illustrates the gender distribution of the study participants. Out of the total 100 individuals, 60 (60.0%) were female, and 40 (40.0%) were male.

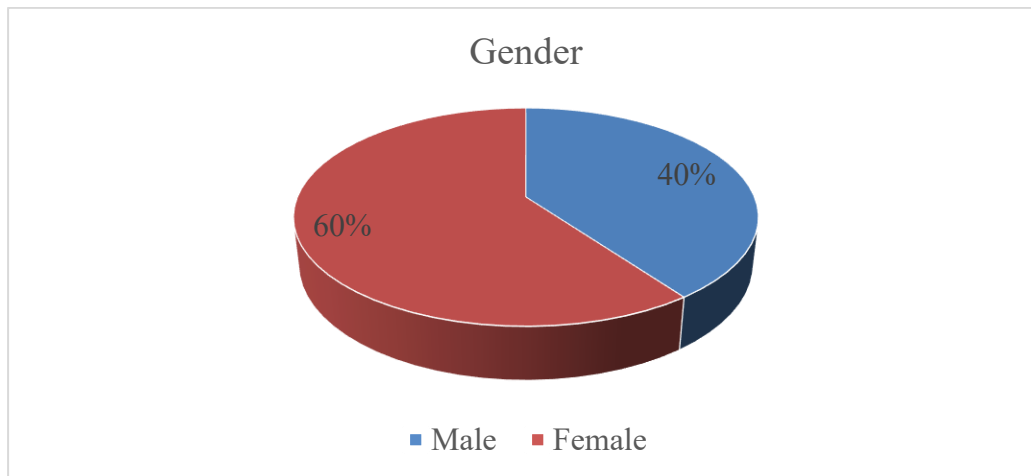


Figure - 4: Distribution of Respondent by Gender

Table- 3: Distribution of Respondent According to Marital Status
(N=100)

Marital status	Frequency	Percentage
Married	50	50.0%
Widowed	31	31.0%
Divorced	6	6.0%
Unmarried	13	13.0%
Total	100	100%

The table 3 presents the marital status distribution of the study participants. Out of a total of 60 individuals, half of the participants (50.0%) were married. A significant portion, 31 participants (31.0%), were widowed. Additionally, 13 participants (13.0%) were unmarried, and a smaller number, 6 participants (6.0%), were divorced.

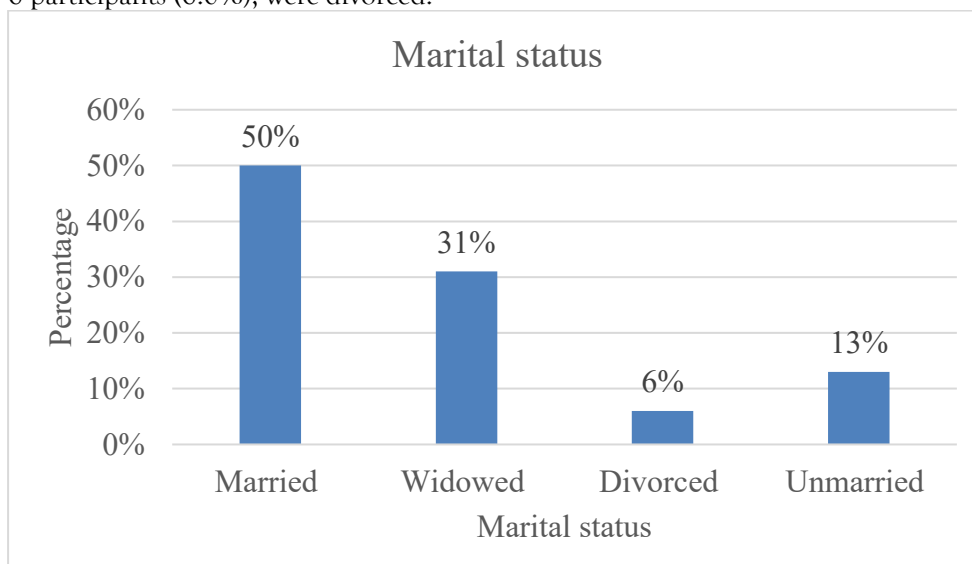


Figure - 5: Distribution of Respondent by Marital Status

Table- 4: Distribution of Respondent According to Religion
(N=100)

Religion	Frequency	Percentage
Hindu	81	81.0%
Muslim	13	13.0%
Christian	1	1.0%
Sikh	5	5.0%
Total	100	100%

The table 4 shows the distribution of participants based on their religion. A majority of the participants, 81 individuals (81.0%), identified as Hindu. This was followed by 13 participants (13.0%) who were Muslim, 5 participants (5.0%) who were Sikh, and only 1 participant (1.0%) who was Christian.

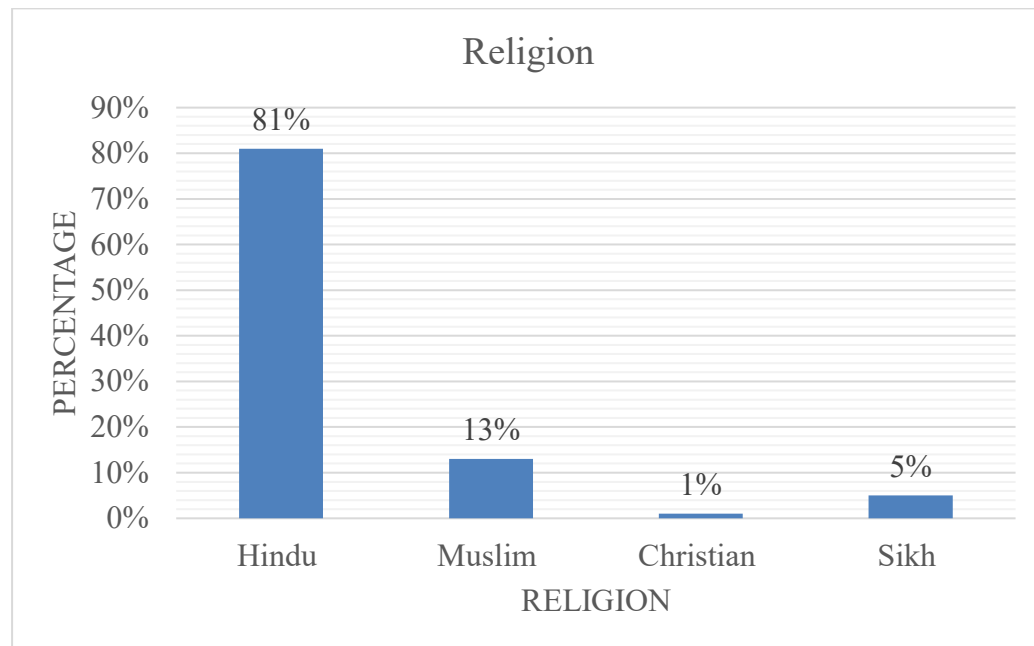


Figure- 6: Distribution of Respondent by Religio

Table- 5: Distribution of Respondent According to Education Qualification
(N=100)

Education qualification	Frequency	Percentage
Illiterate	42	42.0%
Primary education	28	28.0%
Secondary education	28	28.0%
Higher secondary education	0	0%
Graduate and above	2	2.0%
Total	100	100%

The table 5 outlines the educational qualifications of the study participants. A significant portion, 42 individuals (42.0%), were illiterate, indicating no formal education. Both primary and secondary education levels were reported equally, with 28 participants each (28.0%). Notably, none of the participants had completed higher secondary education. Only a small number, 2 participants (2.0%), were graduates or held higher qualifications.

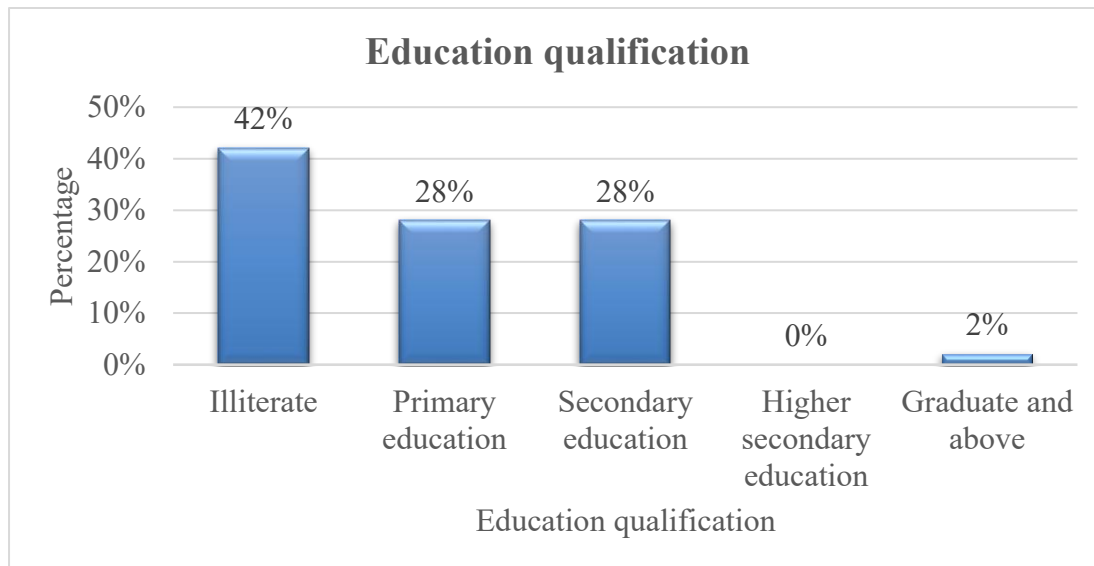


Figure- 7: Distribution of Respondent by Education Qualification

Table- 6: Distribution of Respondent According to Previous Occupation
(N=100)

Previous occupation	Frequency	Percentage
Unemployed	41	41.0%
Government employee	2	2.0%
Private employee	12	12.0%
Self employed	19	19.0%
Daily wage worker	26	26.0%
Total	100	100%

The table 6 presents the distribution of participants based on their previous occupation. The majority, 41 participants (41.0%), were unemployed, indicating they had no formal occupation in the past. Daily wage workers made up 26 participants (26.0%), reflecting a significant portion engaged in labor-based jobs. Additionally, 19 participants (19.0%) were self- employed, while 12 (12.0%) had worked in the private sector. Only a small number, 2 participants (2.0%), were former government employees.



Figure- 8: Distribution of Respondent by Previous Occupation

Table- 7: Distribution of Respondent According to Family Income
(Per Month In ₹)
(N=100)

Family income (per month in ₹)	Frequency	Percentage
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< 10000	33	33.0%
10001 - 20000	28	28.0%
20001 - 30000	34	34.0%
>30000	5	5.0%
Total	100	100%

The table 7 displays the monthly family income distribution of the participants. A majority of the participants, 34 individuals (34.0%), reported a monthly income between ₹20,001 and ₹30,000. This was followed by 33 participants (33.0%) with a monthly income of less than ₹10,000, indicating a considerable portion of the population with low income. Additionally, 28 participants (28.0%) had a monthly income ranging from ₹10,001 to ₹20,000. Only a small number, 5 participants (5.0%), reported earning more than ₹30,000 per month.

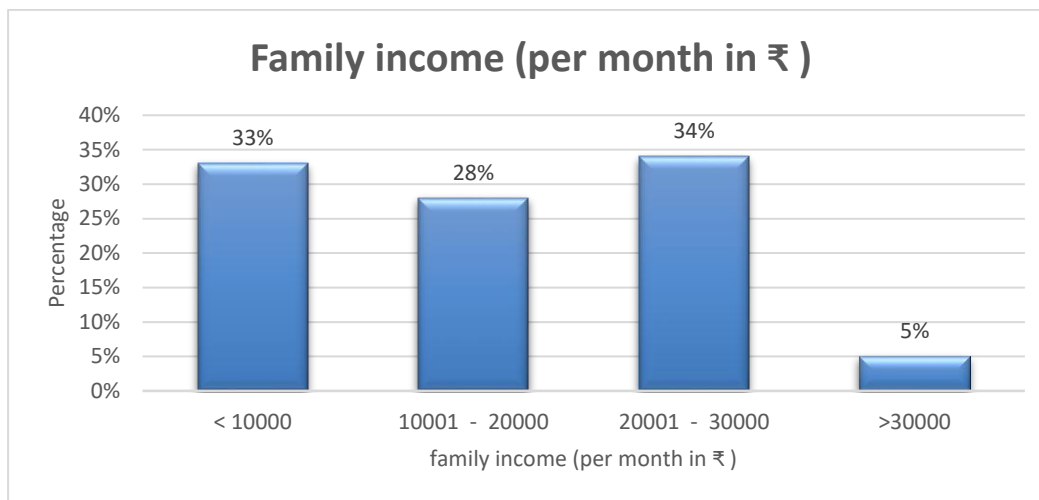


Figure- 9: Distribution of Respondent by Family Income (Per Month In ₹)

Table- 8: Distribution of Respondent According to Source of Financial Support (N=100)

Source of financial support	Frequency	Percentage
Self	0	0%
Family	1	1.0%
Govt Support	0	0%
NGO	99	99.0%
Total	100	100%

The table 8 illustrates the sources of financial support for the participants. An overwhelming majority, 99 participants (99.0%), reported receiving financial assistance from non-governmental organizations (NGOs). Only 1 participant (1.0%) was supported by their family. Notably, none of the participants were financially self-sufficient or received any support from the government.

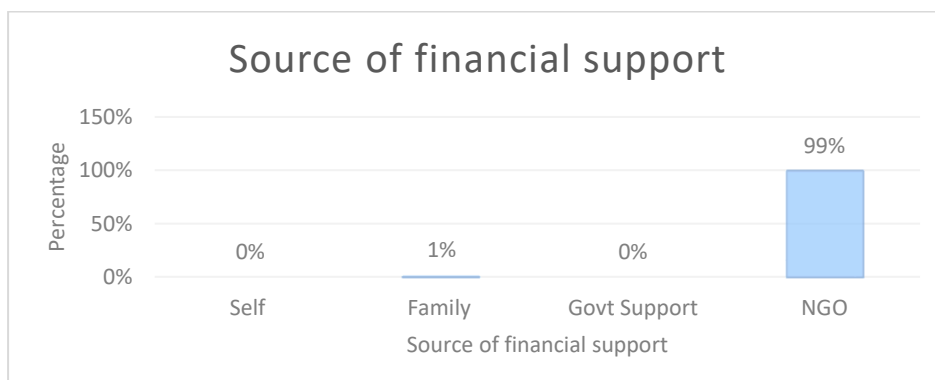


Figure- 10: Distribution of Respondent by Source of Financial Support

Table- 9: Distribution of Respondent According to Duration of Stay in Old Age Home (N=100)

Duration of stay in old age home	Frequency	Percentage
Less than 1 year	72	72.0%
1 – 3 years	26	26.0%
Above 3 years	2	2.0%
Total	100	100%

The table 9 presents the duration of stay of participants in the old age home. The majority, 72 participants (72.0%), had been residing in the old age home for less than one year, indicating a recent increase in admissions. Another 26 participants (26.0%) had been staying for 1 to 3 years. Only a small number, 2 participants (2.0%), had been living there for more than 3 years.

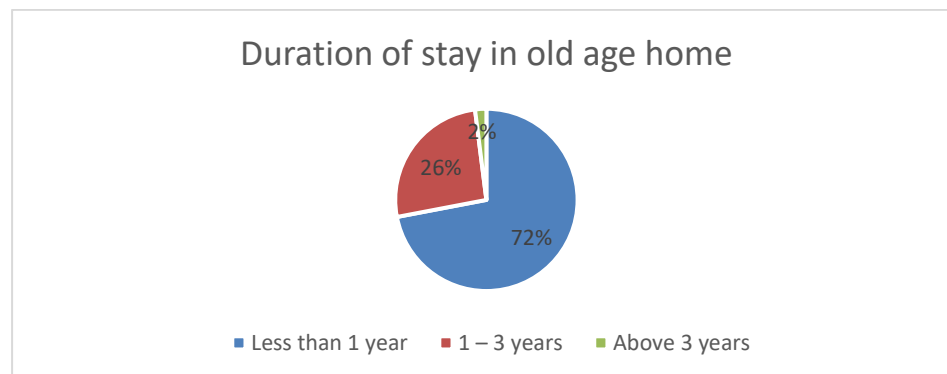


Figure- 11: Distribution of Respondent by Duration of Stay in Old Age Home

Table- 10: Distribution of Respondent According to Frequency of Family (Members) Visit N=100

Frequency of family (members) Visit	Frequency	Percentage
Frequently (Weekly)	16	16.0%
Occasionally (Monthly)	42	42.0%
Rarely (Few times a Year)	35	35.0%
Never	7	7.0%
Total	100	100%

The table 10 outlines the frequency of visits by family members to the participants living in the old age home. A majority of participants, 42 (42.0%), reported that their family members visited them occasionally, about once a month. This was followed by 35 participants (35.0%) who mentioned that they were visited rarely, only a few times a year. Sixteen participants (16.0%) stated that their families visited them frequently, on a weekly basis. However, 7 participants (7.0%) reported that they never received any visits from their family members.

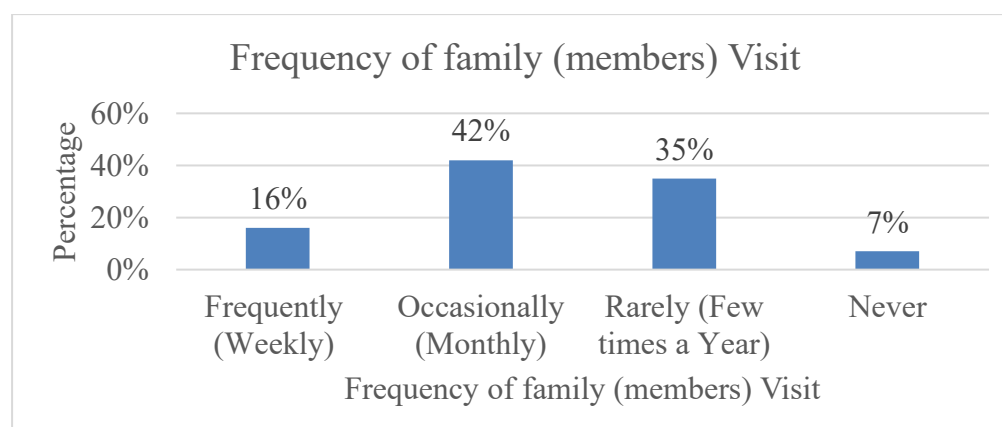


Figure- 12: Distribution of Respondent by Frequency of Family (Members) Visit

Table- 11: Distribution of Respondent According to History of Chronic Illness
(N=100)

History of Chronic Illness	Frequency	Percentage
Yes	56	56.0%
No	44	44.0%
Total	100	100%

The table 11 presents information on the presence of chronic illness among the participants. Out of the total 100 individuals, a majority—56 participants (56.0%)—reported having a history of chronic illness. The remaining 44 participants (44.0%) did not have any chronic illness.

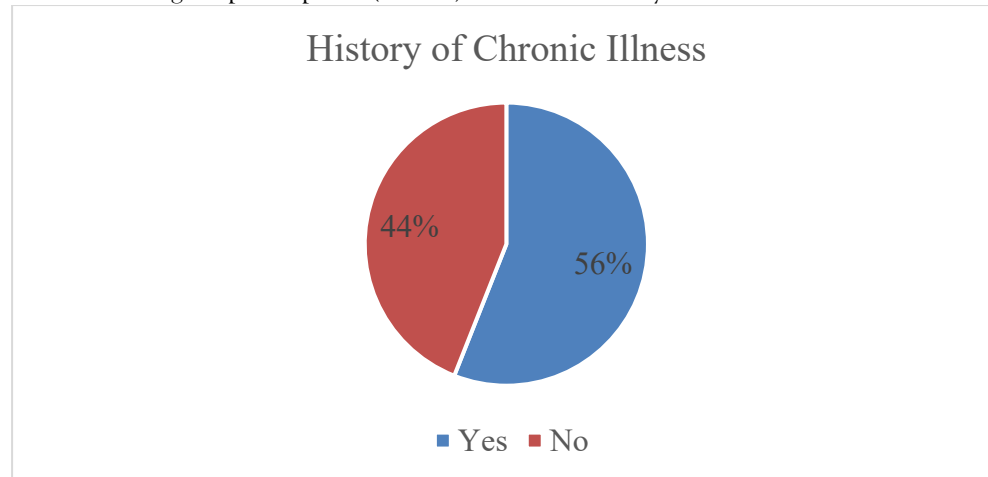


Figure -13: Distribution of Respondent According to History of Chronic Illness

Table- 12: Distribution of Respondent According to History of Substance Abuse
N=100

History of substance abuse	Frequency	Percentage
Yes	21	21.0%
No	79	79.0%
Total	100	100%

The table 12 shows the distribution of participants based on their history of substance abuse. Out of 100 individuals, 21 participants (21.0%) reported having a history of substance abuse, while the majority, 79 participants (79.0%), had no such history.

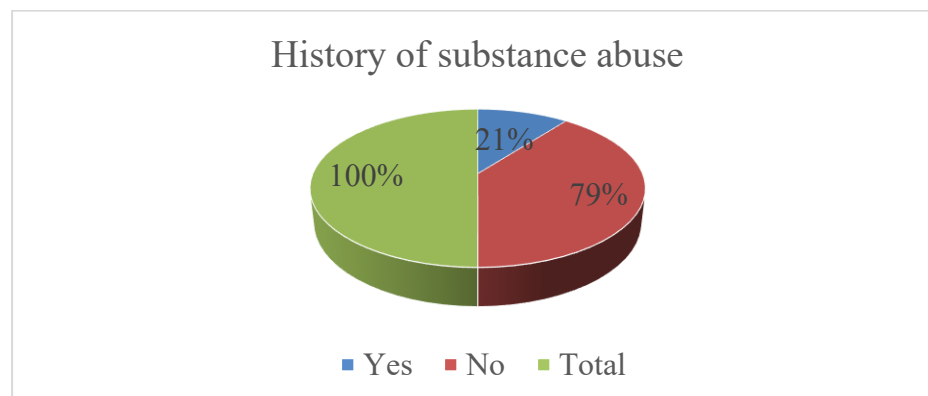


Figure- 14: Distribution of Respondent by According to History of Substance Abuse

Table- 13: Distribution of Respondent According to Any Previous Counselling Therapy for Stress Management
(N=100)

Any previous counselling therapy for		
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stress management	Frequency	Percentage
Yes	1	1.0%
No	99	99.0%
Total	100	100%

The table 13 highlights the participants' history of receiving counselling therapy for stress management. Out of 100 individuals, only 1 participant (1.0%) had previously undergone counselling for stress, while a vast majority—99 participants (99.0%)—had never received any such therapy.



Figure- 15: Distribution of Respondent According to Any Previous Counselling Therapy for Stress Management

Table 16- Association Between the Stress Levels with Selected Demographic Variables Among Elderly at Old Age Home Meerut (N=100)

Variable	High	Moderate	Df	Chi-square value	P value	Inference
Age in year						
60-65 Yr	50	26	1	1.526	0.163	NS
66-75 Yr	19	5				
Total	69	31				
Gender						
Male	33	7	1	5.680	0.014	NS
Female	36	24				
Total	69	31				
Marital status						
Married	34	16	3	1.273	0.765	NS
Widowed	20	11				
Divorced	5	1				
Unmarried	10	3				
Total	69	31				
Religion						
Hindu	55	26	3	0.778	0.943	NS
Muslim	9	4				
Christian	1	0				
Sikh	4	1				
Total	69	31				
Education qualification						
Illiterate	29	13				

Primary education	18	10	3	1.267	0.782	NS
Secondary education	20	8				
Graduate and above	2	0				
Total	69	31				
Previous occupation						

Variable	High	Moderate	Df	Chi- square value	P value	Inference
Unemployed	27	14	4	1.314	0.896	NS
Government employee	2	0				
Private employee	8	4				
Self employed	14	5				
Daily wage worker	18	8				
Total	69	31				
Family income (per month in ₹)						
< 10000	22	11	3	0.391	0.961	NS
10001 - 20000	20	8				
20001 - 30000	24	10				
>30000	3	2				
Total	69	31				
Financial support						
Family	1	0	1	0.454	0.690	NS
NGO	68	31				
Total	69	31				
Duration of stay in old age home						
Less than 1 year	50	22	2	0.345	1.000	NS
1 - 3 years	18	8				
Above 3 years	1	1				
Total	69	31				
Frequency of family (members) Visit						
Frequently (Weekly)	15	1	3	6.034	0.111	NS
Occasionally (Monthly)	26	16				
Rarely (Few times a Year)	24	11				
Never	4	3				
Total	69	31				
History of Chronic Illness						
Yes	33	23	1	6.035	0.012	S
No	36	8				
Total	69	31				

Variable	High	Moderate	Df	Chi- square value	P value	Inference
History of substance abuse						
Yes	14	7	1	0.068	0.494	NS
No	55	24				
Total	69	31				
Any previous counselling therapy for stress management						
Yes	1	0	1	0.454	0.690	NS
No	68	31				
Total	69	31				

NS = not significant 0.05 level of significant

The table 16 shows chi – square value for Age ($\chi^2 = 1.526$), Gender ($\chi^2 = 5.680$), Marital Status ($\chi^2 = 1.273$), Religion ($\chi^2 = 0.778$), Education qualification ($\chi^2 = 1.267$), Previous Occupation ($\chi^2 = 1.314$), Family income (Per Month) ($\chi^2 = 0.391$), Source of financial support ($\chi^2 = 0.454$), Duration of stay in old age home ($\chi^2 = 0.345$), frequency of family (member) Visits ($\chi^2 = 6.034$), History of substance abuse ($\chi^2 = 0.068$), any previous counselling or therapy for stress management ($\chi^2 = 0.454$). The obtained p value for these variables is more than $p < 0.05$ value, which indicates that there is no significant association. History of chronic illness ($\chi^2 = 6.035$) obtained p value for this variable is less than $p < 0.05$ value, which indicates that there is a significant association.

Section 2:

Part - 1:: Discussion on Stress Levels Among Elderly Residents

The study found that none of the participants fell into the low-stress category. A total of 31% experienced moderate stress, while a substantial majority (69%) reported high perceived stress. The mean stress score was 30.98 out of a maximum possible score of 50, indicating that the overall level of stress among elderly residents is significantly high.

Part - 2: Discussion on Association Between Stress Levels and Selected Demographic Variables

Chi-square analysis was conducted to examine the association between stress levels and selected demographic variables. Out of all the variables tested, only history of chronic illness showed a statistically significant association with stress levels ($\chi^2 = 6.035$, $p = 0.012$). Participants with a history of chronic illness were more likely to report high stress compared to those without such a history.

Section 3:

Findings related to Evaluate the effectiveness of a Planned Psychoeducation Program on the reduction of stress levels among wives of alcohol-dependent patients The statistical analysis showed that the mean pre-test stress score (29.73 ± 4.16) was higher than the post-test score (23.01 ± 6.78), with a mean difference of 6.73, indicating a reduction after the intervention. The calculated t-value (6.505, $df = 59$) with a p-value of 0.000 confirms the result is statistically significant ($p < 0.05$). This demonstrates that the decrease in stress was not by chance but due to the psychoeducation programme. Hence, the research hypothesis H1, which states there will be a significant difference in pre-test and post-test stress levels, is accepted.

Section 4: Summary of the Study

The study aimed to assess the level of stress among elderly residents in selected old age homes in Meerut and to provide an information booklet on stress management. A quantitative research approach was adopted, with data collected from 100 participants using structured questionnaires and analyzed using descriptive and inferential statistics.

The demographic profile revealed that most participants were aged 60–65 years, female, widowed or married, Hindu, illiterate, and dependent on NGOs for financial support. Many suffered from chronic illnesses and had little or no access to mental health services.

Stress levels were found to be high among the majority of participants, with no individual reporting low stress. Chi-square analysis confirmed a significant link between stress and history of chronic illness, while other demographic variables did not show significant associations.

Section 5: Major Findings

Demographic Profile

Majority of participants were aged 60–65 years.

Females outnumbered males (60% vs 40%).

Most were either married or widowed.

Over 80% were Hindu.

Nearly half were illiterate.

Most were financially supported by NGOs.

Over 70% had lived in the old age home for less than a year.

Majority received occasional or rare family visits.
More than half had a history of chronic illness.
Very few had prior exposure to stress management counselling.

Stress Levels

None of the participants reported low stress.
31% experienced moderate stress.
69% experienced high perceived stress.
Mean stress score was 30.98 (61.96%).

Association with Demographic Variables

Only history of chronic illness showed a significant association with stress levels. Other variables did not show statistically significant relationships. This study highlights the alarming prevalence of stress among elderly individuals residing in old age homes in Meerut. With nearly 70% experiencing high stress and no individual reporting low stress, there is a clear need for targeted interventions to improve mental well-being in this population. The findings underscore the importance of addressing physical health issues, enhancing social support, and providing accessible mental health education.

Recommendations

- Based on the study findings, the following recommendations are proposed:
- Development and Distribution of Information Booklet:
- An informative, easy-to-understand booklet on stress, its effects, and simple coping strategies should be developed and distributed among elderly residents and caregivers.
- Conduct Regular Mental Health Assessments:
- Periodic screening using standardized tools like the Perceived Stress Scale should be implemented in old age homes.

Implement Stress Management Programs:

Programs like music therapy, yoga, meditation, group activities, and counseling should be regularly organized to reduce stress levels.

Improve Family Interaction:

Efforts should be made to encourage regular communication between elderly residents and their family members to reduce emotional stress.

Train Staff and Caregivers:

Caregivers should be trained to identify signs of stress and apply appropriate non-pharmacological interventions.

Increase Awareness and Education:

Workshops and awareness sessions for elderly people and their caregivers regarding mental health and stress management should be conducted.

Policy Inclusion:

Stress management should be made a part of elderly care policy at old age homes through regular monitoring, supportive care, and resource allocation.

Ethical Clearance – Taken from ethical committee of **L.L.R.M** Medical College, Meerut, Certificate no: SC-1/2025/5755

Source of funding – Self Funded

Conflicts of interest – Nil

REFERENCES

1. United Nations Population Fund (UNFPA), & International Institute for Population Sciences (IIPS). (2023). India Ageing Report 2023. UNFPA India. <https://india.unfpa.org/en/publications/india-ageing-report-2023>
2. Kumar, R., Younesi, S. J., Barekati, S., Ramshini, M., & Ghyasi, H. (2020). A comparative study on stress, anxiety, and depression between nursing- home elderly residents and home-dwelling elderly people.
3. World Health Organization. (2019). Global report on stress and mental health statistics. Geneva: WHO.
4. HelpAge India. (1998). Report on the status of elderly and old age homes in India. New Delhi: HelpAge India.
5. Ketaki, M. (2019). Orphanage control panel statistics on geriatric residents in old age homes (2017–2018). Department of Social Justice, Government of India