

A Study on the First Stage Dementia Among the Elderly

Vinod Shah^{1*}, Meena Shah², Subhash Salunke³, B.T Lawani⁴,

Archana Badiwale⁵

ABSTRACT

This study investigates the demographic characteristics, lifestyle factors, and health-related behaviours associated with first-stage dementia among the elderly population. A cross-sectional analysis was conducted among 642 participants aged 60 and above to understand patterns of cognitive decline, emotional well-being, and social engagement. The majority of participants were aged 60–65 years, with a declining trend in older age groups. Gender distribution showed a concentration of females in younger age brackets and a wider age range among males. Marital and educational status highlighted the potential benefits of spousal support and formal education in promoting health awareness and resource accessibility. Lifestyle assessments revealed encouraging trends, with most participants engaging in daily physical activities and maintaining a balanced diet. However, a notable minority displayed unhealthy behaviours, such as smoking, alcohol consumption, and physical inactivity. Chronic illnesses were reported by nearly half the participants, correlating with increased memory-related and cognitive difficulties. Cognitive health evaluation showed that 54.05% of respondents reported no memory issues, although a considerable segment reported occasional or rare difficulties, particularly among older individuals and those with chronic illnesses. Emotional and behavioural challenges, including mood swings, difficulty planning, and problem-solving, were more prevalent in older age groups. Social engagement and interest in hobbies declined with age, signalling risks of isolation. Mental stimulation activities were limited, with only 28.03% engaging daily. Despite low current participation in cognitive enhancement practices (only 72 out of 642), nearly 45% showed willingness to attend memory training programs. Additionally, 63.33% expressed openness to Ayurvedic treatment options. These findings highlight the urgent need for targeted interventions to promote cognitive stimulation, health literacy, and social connectivity to support elderly individuals, especially those at risk of first-stage dementia.

Keywords: *First-Stage -Dementia, Elderly Population, Cognitive Decline, Lifestyle Factors, Social Engagement, Health-Related Behaviours*

¹Chairman, Janaseva Foundation, Pune, Maharashtra, India

²Secretary Janaseva Foundation, Pune, Maharashtra, India

³Chairman, Research Centre Janaseva Foundation, Pune, Maharashtra, India

⁴Director, Research Centre Janaseva Foundation, Pune, Maharashtra, India

⁵Research Associate, Janaseva Foundation, Pune, Maharashtra, India

*Corresponding Author

Received: August 28, 2025; Revision Received: December 26, 2025; Accepted: December 31, 2025

Dementia is a progressive neurodegenerative condition marked by a decline in memory, cognitive abilities, and functional independence, posing significant social and economic burdens worldwide (WHO, 2021). Mild Cognitive Impairment (MCI), often considered the earliest stage of dementia, presents an opportunity for timely intervention to delay or prevent further decline (Petersen et al., 2018; Livingston et al., 2020).

In India, dementia is a growing public health concern. As of 2020, over 5.3 million individuals were affected, a number projected to reach 7.6 million by 2030 (ARDSI, 2020). The situation is particularly concerning in Maharashtra, where the estimated prevalence among those aged 60 and above is 7.4%. Contributing to this trend is India's rapidly aging population, expected to constitute 19% of the national demographic by 2050 (United Nations, 2019).

The elderly population faces complex health challenges, including both communicable and non-communicable diseases. Chronic conditions such as diabetes, hypertension, and cardiovascular diseases increase the risk of dementia (Mishra et al., 2020). Furthermore, socio-economic factors—such as the erosion of joint family systems, increasing urban migration, and limited financial security—contribute to mental health decline and reduced access to care (Patel & Prince, 2021; Kumar et al., 2019).

Biological, lifestyle, and environmental determinants play critical roles in the onset and progression of dementia. Risk factors include genetic predisposition (e.g., APOE-ε4), sedentary behaviour, poor nutrition, and comorbidities (Jack et al., 2018; Albert et al., 2011). Given this multifactorial nature, early identification through cognitive screening, lifestyle modification, and integrated care models is essential.

This study aims to explore the prevalence, risk factors, and socio-economic implications of dementia among the elderly in India, emphasizing the urgent need for comprehensive, multidisciplinary approaches to prevention and care.

REVIEW OF LITERATURE

Early Detection and Management of Mild Cognitive Impairment and Early Dementia

With the global elderly population on the rise, the early detection and management of Mild Cognitive Impairment (MCI)—often a precursor to dementia—has become essential. Recognizing cognitive decline at its onset allows for timely intervention, potentially delaying or preventing progression to more severe forms of dementia.

Diagnostic Tools

Several standardized tools are used to detect early signs of dementia. The Mini-Mental State Examination (MMSE) is a 30-point questionnaire assessing memory, orientation, and attention (Folstein et al., 1975), though it may miss subtle deficits. The Montreal Cognitive Assessment (MoCA), on the other hand, is more sensitive and evaluates a broader range of cognitive domains (Nasreddine et al., 2005). The Clock Drawing Test is another quick method used to assess visuospatial and executive function (Shulman et al., 1993).

Modern diagnostics also include neuroimaging techniques like MRI and PET scans to identify brain changes linked to MCI (Jack et al., 2018). Biomarker analysis through cerebrospinal fluid (CSF) can detect abnormal amyloid and tau proteins—hallmarks of

A Study on the First Stage Dementia Among the Elderly

Alzheimer's disease (Blennow et al., 2010). Together, these tools provide a robust diagnostic framework for early intervention.

Treatment Modalities

Pharmacological treatment mainly involves cholinesterase inhibitors like Donepezil and Rivastigmine to improve neurotransmitter activity, and Memantine for moderate to severe cases (Birks et al., 2015). Non-pharmacological methods are equally vital. Cognitive therapies—including memory exercises and brain training—have shown promise (Tsolaki et al., 2017). Lifestyle changes, such as regular physical activity, a nutritious diet, and quality sleep, are linked with slower cognitive decline (Livingston et al., 2020). Group therapy and psychosocial support further enhance emotional well-being in early-stage dementia (Orrell et al., 2017).

Ayurvedic and Holistic Practices

Traditional medicine, particularly Ayurveda, offers potential in cognitive care. Herbs like Brahmi (*Bacopa monnieri*), Ashwagandha (*Withania somnifera*), and Shankhpushpi (*Convolvulus pluricaulis*) are known for neuroprotective effects (Kulkarni et al., 2012). Approximately 63.33% of elderly individuals in surveys reported willingness to use Ayurvedic remedies. Shankhpushpi, in particular, has been associated with improved memory and reduced anxiety (Sharma et al., 2018), though most findings remain preclinical (Tiwari et al., 2020).

Rasayana and Panchakarma therapies have also shown promise in enhancing cognitive resilience (Tripathi & Chaurasia, 2013). Still, more human trials are needed to validate these interventions.

Homeopathy in Cognitive Care

Homeopathy has shown early signs of promise in dementia care. Remedies such as Anacardium and Baryta carbonica are commonly used (Rastogi & Sharma, 2015). Small studies report benefits in memory and quality of life (Frei et al., 2012; Banerjee et al., 2020), but lack of large-scale trials limits mainstream acceptance.

Social and Behavioural Aspects

Social isolation worsens cognitive decline. Albert et al. (2011) found that social interaction reduces dementia risk. Yet, only 57 out of 642 surveyed elders recognized its importance, indicating the need for awareness and community-based support programs.

A multi-pronged strategy—combining medical, traditional, and social approaches—is vital for managing early dementia. While diagnostic tools and pharmaceuticals remain essential, integrating Ayurveda, homeopathy, and social support can offer a more holistic and culturally appropriate care model, especially in high-risk areas like Maharashtra.

Objectives

1. To determine the prevalence of first-stage dementia in elderly individuals.
2. To identify common risk factors associated with the onset of dementia.
3. To identify and analyse early symptoms and their impact on daily functioning.
4. To identify the interventional strategies to enhance the quality of life.
5. To know the interest in taking Ayurvedic medicine.

METHODOLOGY

Sample

The sample comprised of 642 elderly individuals. Data collection was carried out during an event organized to celebrate the International Day of Older Persons. A total of 800 elderly individuals were approached, out of which 700 completed the questionnaire. After thorough scrutiny, 642 responses were deemed valid and included in the final analysis. Participants represented both genders and belonged to different socioeconomic and educational backgrounds, thereby providing a diverse sample for the study.

Instruments

A well-structured, closed-ended questionnaire was used as the primary instrument of data collection. The questionnaire was specifically designed to assess:

- Cognitive behaviors – including attention, reasoning, and decision-making patterns.
- Memory challenges – difficulties related to recall, recognition, and daily memory functions.
- Factors influencing dementia onset – covering demographic, lifestyle, and health-related variables.
- The questionnaire items were carefully framed to ensure reliability and validity. Responses were recorded using a standardized format to facilitate systematic analysis.

Procedure

Data collection was conducted systematically during the event. Elderly individuals attending the program were approached and invited to participate in the survey. After explaining the purpose of the study and obtaining verbal consent, the questionnaire was administered to participants. Each participant was guided as needed to ensure clarity and accuracy in their responses.

After completion, questionnaires were scrutinized, and only fully completed and valid responses were included. The final dataset was processed by scrutinizing, editing, and entering responses into computerized files using Microsoft Excel. This systematic approach ensured comprehensive and reliable data for understanding the early stages of dementia and its associated factors.

RESULTS

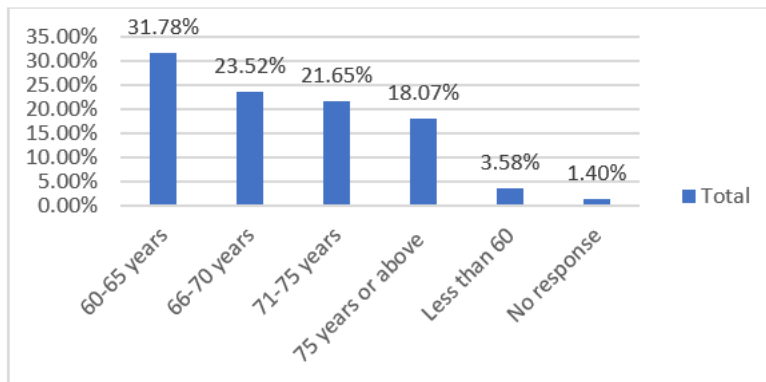
Demographic Status:

Age-wise Distribution:

The table shows the age distribution of participants: 31.78% were 60-65 years old, 23.52% were 66-70 years old, and 21.65% were 71-75 years old. The age distribution of participants in the table shows that 31.78% were aged 60-65 years, 23.52% were 66-70 years, and 21.65% were 71-75 years. Those aged 75 years or above comprised 18.07%. A smaller proportion (3.58%) were under 60 years old, and 1.40% of participants did not provide age information. (Graph 1)

A Study on the First Stage Dementia Among the Elderly

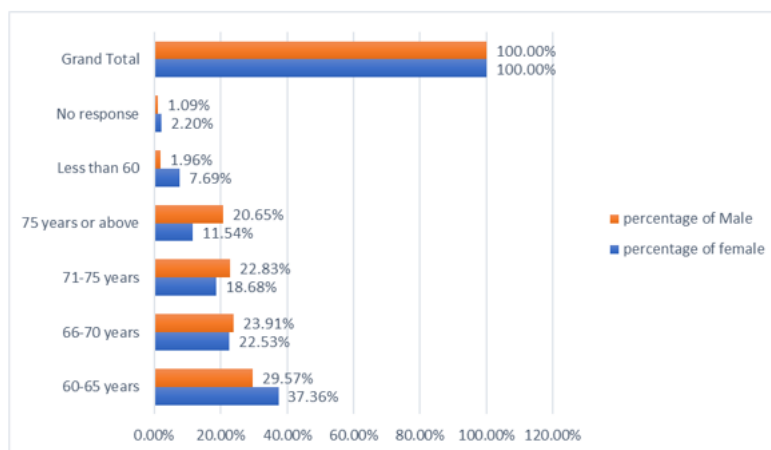
Graph 1: Age Age-wise Distribution



Age-wise Female and Male Distribution:

The study reveals key age and gender trends among elderly participants. Among 182 females, the largest group (37.36%) was aged 60–65, followed by 66–70 years (22.53%) and 71–75 years (18.68%). Only 11.54% were aged 75 or above. Among 460 males, 29.57% were aged 60–65, 23.91% were 66–70, and 22.83% were 71–75, with 20.65% aged 75 or above. Fewer participants in both groups were under 60 or did not disclose their age. These results highlight a greater proportion of younger elderly, especially females, suggesting the need for early, age-specific interventions to address dementia and cognitive decline. (Graph 2)

Graph 2: Age-wise Female and Male Distribution

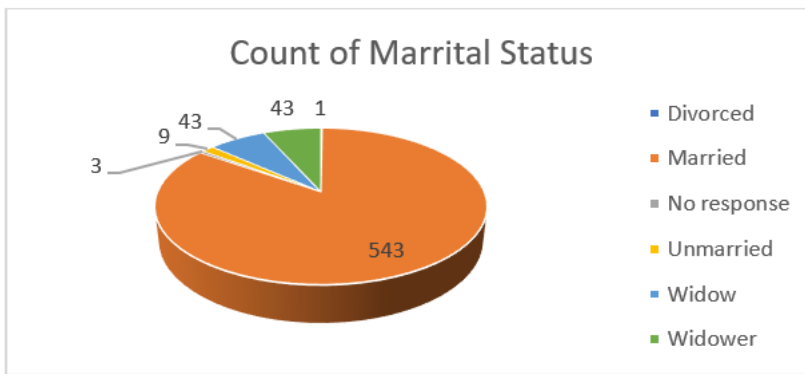


Marital Status:

The marital status distribution shows that 84.58% (543) of the 642 participants were married, indicating strong spousal support among the elderly. Widows and widowers each made up 6.70% (43), reflecting the impact of spousal loss. Only 1.40% (9) were unmarried, and 0.16% (1) were divorced. A small proportion, 0.47% (3), did not disclose their status. The predominance of married individuals highlights the potential role of spousal presence in emotional and cognitive health, while the notable number of widowed participants suggests the need for targeted support to address mental and physical health challenges linked to loss. (Graph 3)

A Study on the First Stage Dementia Among the Elderly

Graph: 3 Marital Status



Education Status Among Male and Female:

Among 642 participants, males (71.65%) outnumbered females (28.35%), with most attaining secondary education or higher. Among females, 11.84% (76) had secondary education, 7.32% (47) were graduates, and 2.96% (19) postgraduates. Primary education and no formal education were reported by 4.21% (27) and 1.56% (10) respectively. Among males, 26.32% (169) had secondary education, 23.21% (149) were graduates, and 12.77% (82) postgraduates. Primary education was reported by 8.10% (52), while 0.78% (5) had no formal education. The majority's attainment of secondary or higher education highlights the potential for health literacy-based interventions and the need to address remaining educational disparities. (Graph 4)

Graph: 4 Education Status Among Male and Female

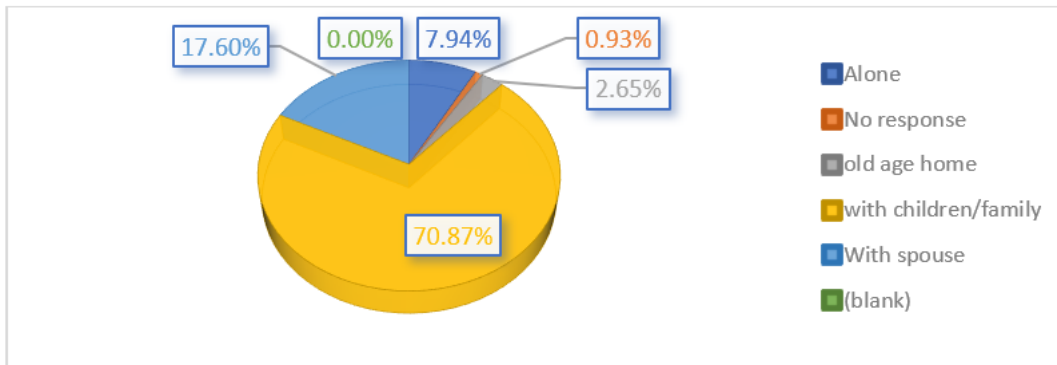


Living Arrangements:

Among 642 participants, 70.87% (455) lived with children or family, indicating a strong reliance on familial support. Additionally, 17.60% (113) lived with their spouse, while 7.94% (51) lived alone, and 2.65% (17) resided in old age homes. A small portion (0.93%, 6) did not disclose their living arrangement. The data highlights a dominant trend of elderly individuals living in family environments, which can provide emotional and physical care. However, the presence of those living alone or in institutions signals the need for focused interventions to reduce social isolation and ensure adequate support systems for these vulnerable groups. (Graph 5)

A Study on the First Stage Dementia Among the Elderly

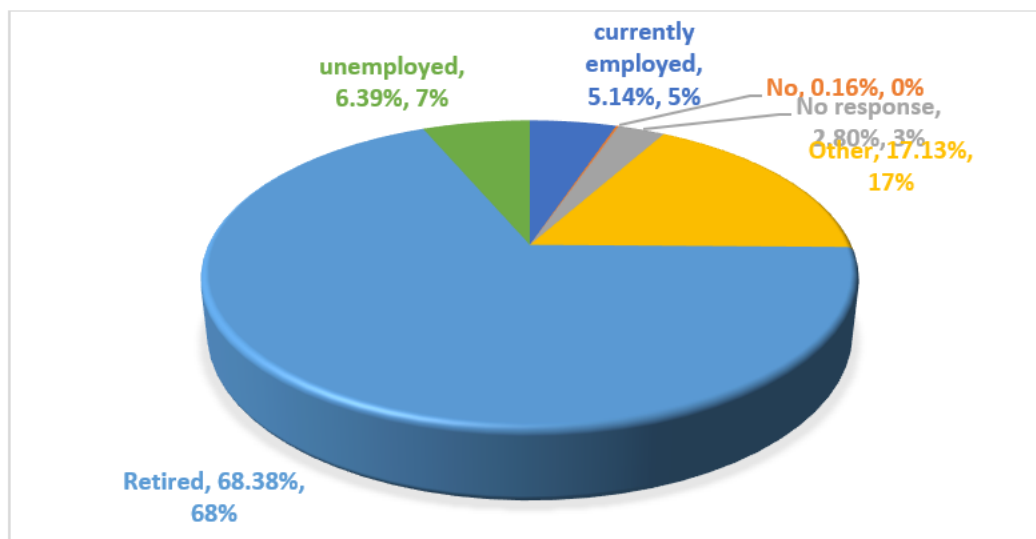
Graph: 5 Living Arrangements



Occupation Status:

Among 642 participants, 68.38% (439) were retired, highlighting the study's focus on the elderly. Additionally, 17.13% (110) reported "other" occupations, indicating diverse informal roles. Only 5.14% (33) were currently employed, while 6.39% (41) were unemployed. A minimal 0.16% (1) reported having no occupation, and 2.80% (18) did not respond. The data reflects a clear dominance of retirement, emphasizing the need for post-retirement support and engagement opportunities. The presence of both working and unemployed elderly individuals also highlights varied economic needs, underscoring the need for inclusive programs that address financial security, mental well-being, and promote productive aging. (Graph 6)

Graph: 6 Occupation Status



Health and Lifestyle:

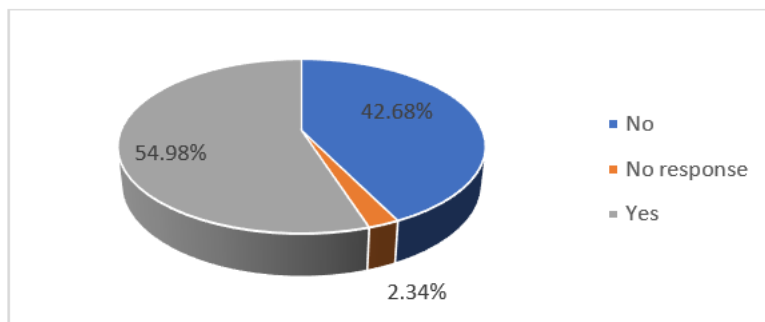
H/O Chronic Illness:

The data represent responses from 642 individuals regarding their history of chronic illnesses. A majority, 54.98% (353 individuals), reported having a history of chronic illnesses, highlighting a significant burden of long-term health conditions. In contrast, 42.68% (274 individuals) stated they do not have any such history, indicating relatively better health among this group. A small fraction, 2.34% (15 individuals), did not respond, possibly due to privacy concerns or uncertainty. These findings emphasize the need for focused healthcare planning, chronic disease management, and preventive measures,

A Study on the First Stage Dementia Among the Elderly

especially given that over half of the respondents have reported chronic health issues. (Graph 7)

Graph 7: Count of Chronic Disorder



Count of Chronic Conditions:

The data reveal the prevalence of chronic conditions among a population of 597 cases. Hypertension is the most common, affecting 196 individuals, followed closely by Diabetes at 183. IHD (ischemic heart disease) impacts 54 people, while Thyroid Disorder appears in 42 cases. Vitamin Deficiency, when combining all types, affects 80 individuals, making it the third most prevalent issue. Frailty, a common concern in aging populations, is reported in 26 cases. Kidney Disorders affect 10 individuals, and Stroke appears in 6 cases. This data highlights the burden of non-communicable diseases and age-related conditions, emphasizing the need for targeted interventions. (Table 1)

Table 1: Count of Chronic Conditions

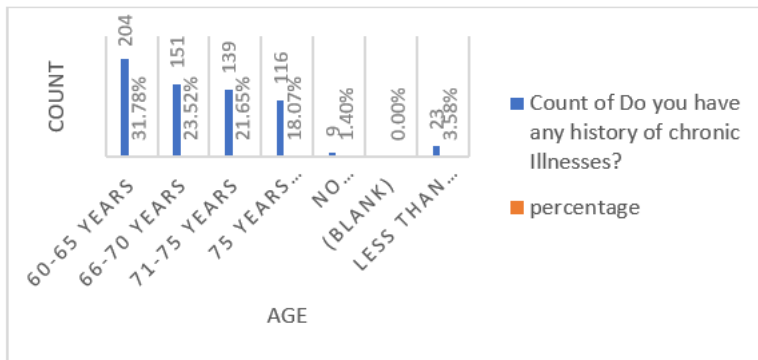
Sr. No	Condition	Count
1	Hypertension	196
2	Diabetes	183
3	IHD (ischemic heart disease)	54
4	Thyroid Disorder	42
5	Vitamin Deficiency	80
6	Frailty	26
8	Kidney Disorder	10
9	Stroke	6
	Total	597

Age With History of Chronic Diseases:

The age distribution of participants with a history of chronic illnesses shows that the largest group, 31.78% (204 individuals), was aged between 60-65 years. This is followed by 23.52% (151 individuals) aged 66-70 years and 21.65% (139 individuals) aged 71-75 years. Participants aged 75 years or above accounted for 18.07% (116 individuals), while 3.58% (23 individuals) were under the age of 60. A small proportion, 1.40% (9 individuals), did not disclose their age. The total sample of 642 participants highlights that individuals in the 60-65 age group form the majority, reflecting the early elderly demographic. The declining representation with increasing age suggests age-related challenges and the potential impact of chronic illnesses. Understanding the age-specific prevalence of chronic illnesses is crucial for developing targeted health interventions and preventive strategies to address the needs of different age groups within the elderly population. (Graph 8)

A Study on the First Stage Dementia Among the Elderly

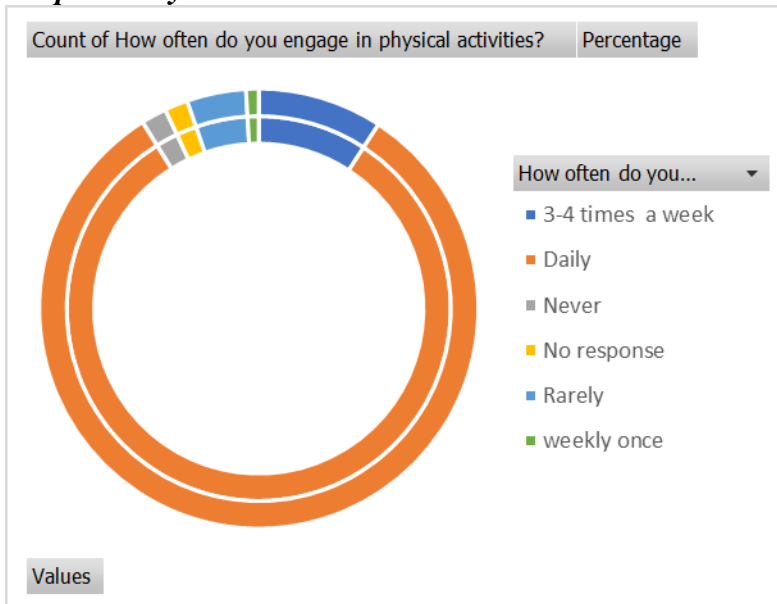
Graph: 8 Age with History of Chronic Diseases



Physical Activities:

Among 642 respondents, 81.93% (526) reported engaging in daily physical activity, indicating a strong commitment to regular exercise. Additionally, 9.19% (59) exercised 3–4 times weekly, and 0.93% (6) exercised once a week. Rare physical activity was noted in 4.36% (28), while 1.87% (12) never exercised. A small portion (1.71%, 11) did not respond. The data reflects a predominantly active elderly population, but also identifies a subset with limited or no activity. This highlights the need for targeted health interventions to motivate and support inactive individuals, ensuring improved physical well-being across the entire elderly demographic. (Graph 9)

Graph: 9 Physical Activities

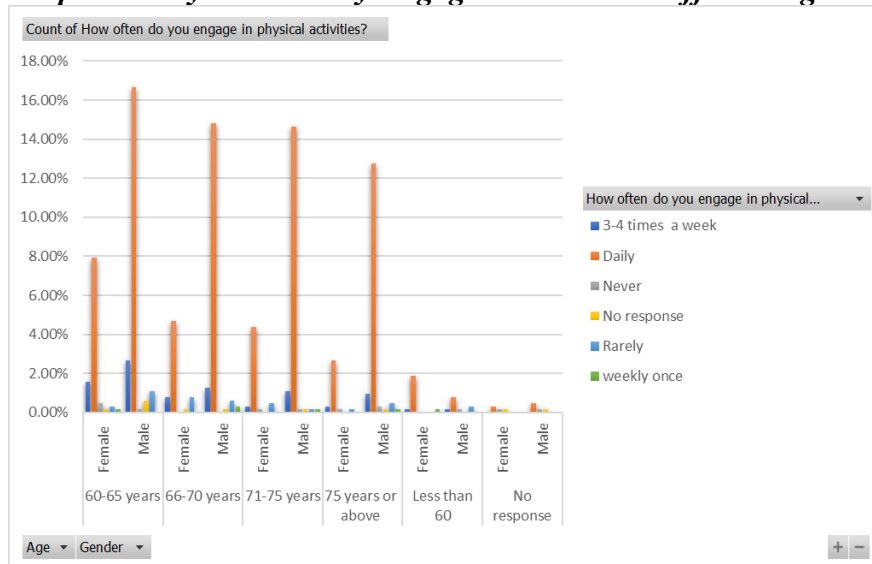


Physical Activity Engagement Across Different Age Groups and Genders:

Among 642 respondents, 81.93% engaged in daily physical activity, with the highest participation in the 60–65 age group (31.78%). Of these, 24.61% exercised daily, followed by 19.47% in the 66–70 group, and 19.00% in the 71–75 group. Even in the 75+ group, 15.42% reported daily activity. Males consistently showed higher activity levels than females across all age groups, with males aged 60–65 accounting for 21.18% compared to 10.59% females. Respondents under 60 represented only 3.58% of the total. These findings emphasize widespread physical activity among the elderly, but highlight gender and age gaps needing targeted promotion efforts. (Graph 10)

A Study on the First Stage Dementia Among the Elderly

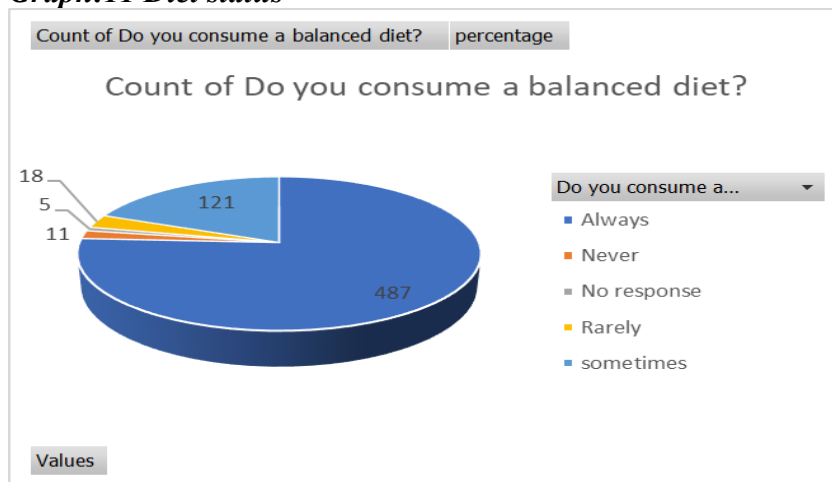
Graph :10 Physical Activity Engagement Across Different Age Groups and Genders



Diet status:

Among 642 respondents, 75.86% (487) reported always consuming a balanced diet, indicating strong adherence to healthy eating habits. An additional 18.85% (121) stated they sometimes follow a balanced diet, showing occasional efforts. However, 2.80% (18) rarely and 1.71% (11) never consumed a balanced diet, while 0.78% (5) did not respond. The data highlights a positive trend in dietary practices among the majority but reveals a concerning minority with poor or inconsistent habits. These findings underscore the need for targeted nutritional education and interventions to promote consistent access to and awareness of balanced diets for better health outcomes. (Graph 11)

Graph:11 Diet status



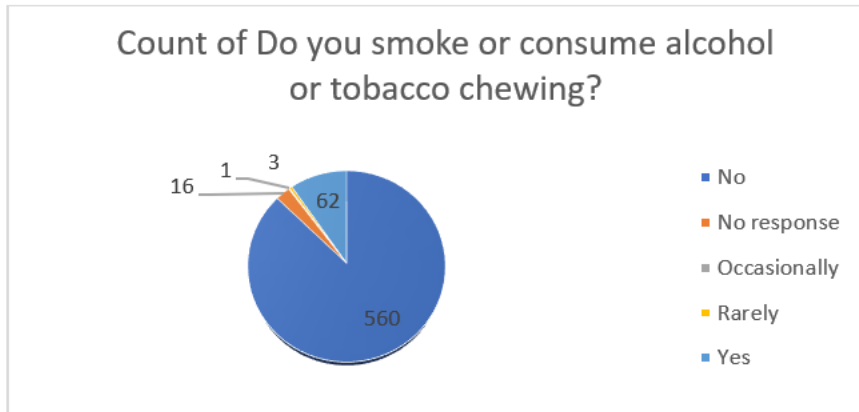
Habits:

Among 642 respondents, 87.23% (560) reported not engaging in smoking, alcohol, or tobacco chewing, indicating a predominantly abstinent population. However, 9.66% (62) admitted to using these substances, while 0.47% (3) reported rare use and 0.16% (1) occasional use. Additionally, 2.49% (16) did not respond. These findings reflect a largely health-conscious group, but the presence of a small yet notable segment engaging in these habits highlights the need for targeted awareness and prevention efforts. Understanding the

A Study on the First Stage Dementia Among the Elderly

behavioural patterns of this minority is essential for designing effective interventions to reduce substance use and promote healthier lifestyles in the elderly. (Graph 12)

Graph:12 Habits



Sleep Pattern:

The table summarizes responses to the question about maintaining a regular sleep schedule of 6-8 hours per night. Out of a total of 642 responses, 565 individuals reported having a regular sleep schedule, while 64 stated they did not. Additionally, 13 participants did not respond. The "(blank)" category is present but does not indicate any entries. This distribution highlights that the majority of respondents adhere to a consistent sleep pattern, with a smaller proportion either not following such a schedule or not responding to the question. (Table 2)

Table 2: Sleep Pattern

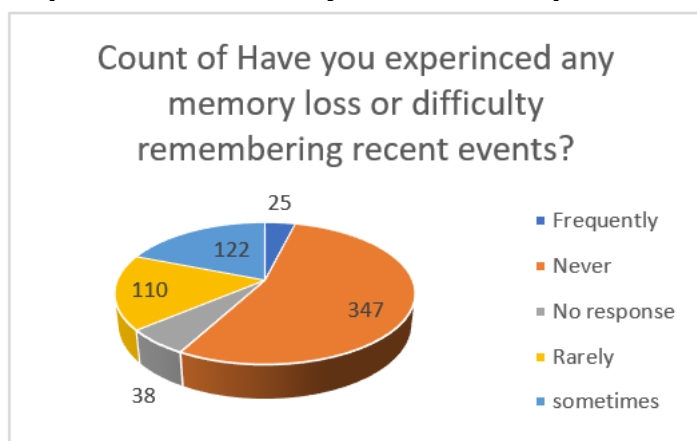
Responses	Count of Do you have a regular sleep schedule (6-8 hours a night)
Yes	565
No	64
No response	13
Grand Total	642

Cognitive Health and Behaviour:

Recent Memory Loss Events Experience:

Among 642 participants, 54.05% (347) reported never experiencing memory loss or difficulty remembering recent events, indicating good cognitive health in over half the group. However, 19.00% (122) reported such issues "sometimes," 17.13% (110) "rarely," and 3.89% (25) "frequently." Additionally, 5.92% (38) did not respond. These results suggest that while the majority maintain strong memory function, nearly 40% experience some level of memory difficulty. This highlights the need for early screening and targeted cognitive health interventions. The data serves as a valuable indicator for planning dementia prevention and mental wellness programs among elderly populations. (Graph 13)

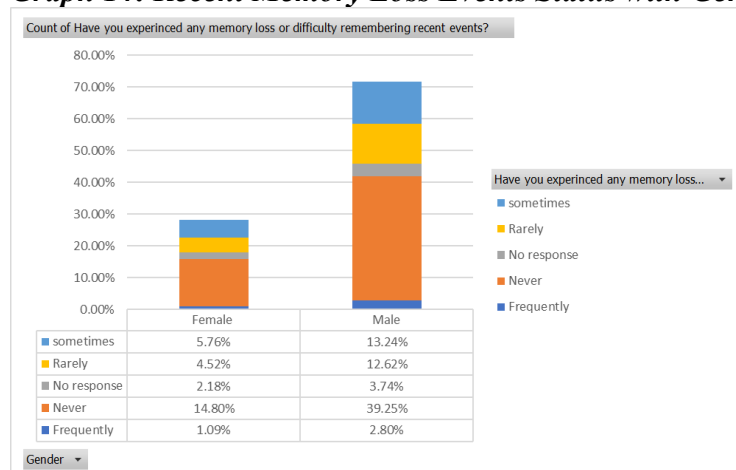
Graph:13 Recent Memory Loss Events Experience



Recent Memory Loss Events Status with Gender-Wise Distribution:

Among 642 participants, 54.05% reported "never" experiencing memory issues, with a higher proportion of males (39.26%) compared to females (14.80%). For those who reported memory difficulties "sometimes" (19.00%), 13.24% were males and 5.76% females. Of those experiencing memory issues "rarely" (17.13%), 12.62% were males and 4.52% females. A smaller group, 3.89%, reported "frequent" memory loss, with males (2.80%) outnumbering females (1.09%). Additionally, 5.92% did not respond, with more males (3.74%) than females (2.18%) providing no answer. These findings suggest gender differences in memory experiences and underscore the need for tailored cognitive health interventions. (Graph 14)

Graph 14: Recent Memory Loss Events Status with Gender-Wise Distribution



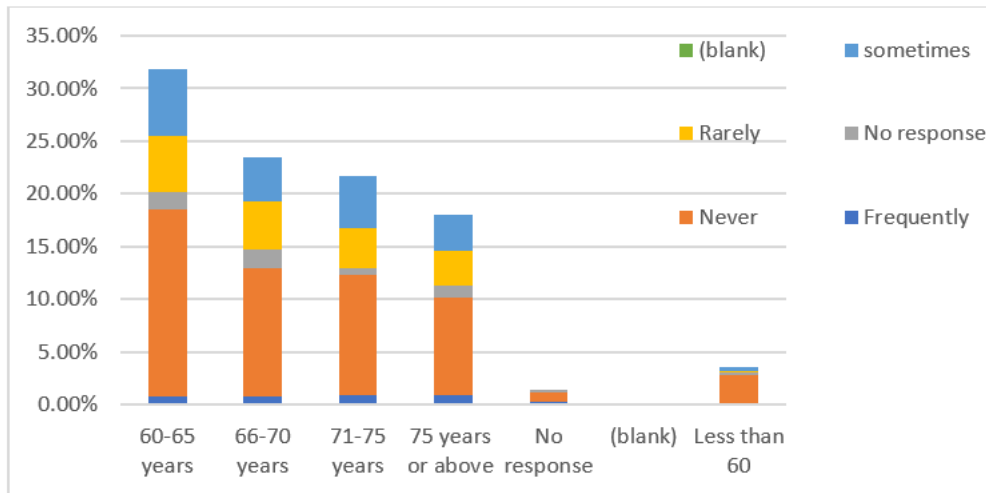
Recent Memory Loss Events Status with Age-wise Distribution:

Among 642 participants, 54.05% reported “never” experiencing memory issues, with the highest in the 60–65 age group (17.76%), followed by 66–70 (12.15%) and 71–75 (11.37%). Only 9.19% of those aged 75 and above reported “never,” indicating an increase in memory challenges with age. Reports of “sometimes” experiencing memory issues (19.00%) were most common in the 60–65 group (6.23%) and 71–75 group (4.83%). “Rarely” was reported by 17.13%, with a peak in the 60–65 group (5.30%) and a decline in older groups. “Frequently” was reported by 3.89%, highest (0.93%) in 71–75 and 75+ age groups. “No response” accounted for 5.92%, mostly from the 66–70 group (1.87%). The data highlights

A Study on the First Stage Dementia Among the Elderly

increased memory difficulties with advancing age, emphasising the need for age-targeted cognitive health initiatives. (Graph 15)

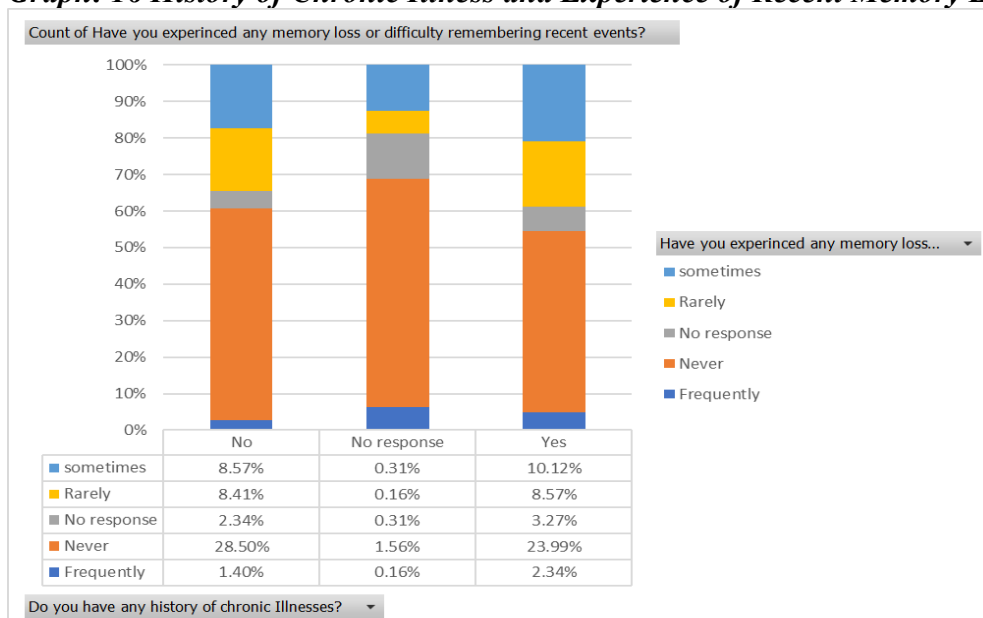
Graph 15: Recent Memory Loss Events Status with Age-Wise Distribution



History Of Chronic Illness and Experience of Recent Memory Loss:

Among 642 participants, 54.05% reported "never" experiencing memory loss. A comparison by chronic illness history reveals that 28.51% of respondents without chronic illness reported "never" having memory issues, while a slightly lower 23.99% of those with chronic illness reported the same. Memory issues were more frequently reported among participants with chronic illness—2.34% reported "frequently" and 10.12% "sometimes"—compared to 1.40% and 8.57%, respectively, among those without chronic illness. "Rarely" was evenly reported at 8.57% in both groups. The "no response" category was higher in the chronic illness group (3.27%) than in those without (2.34%). This pattern suggests a modest but notable association between chronic illness and increased memory-related difficulties, highlighting the need for integrated cognitive support in chronic disease management. (Graph 16)

Graph: 16 History of Chronic Illness and Experience of Recent Memory Loss

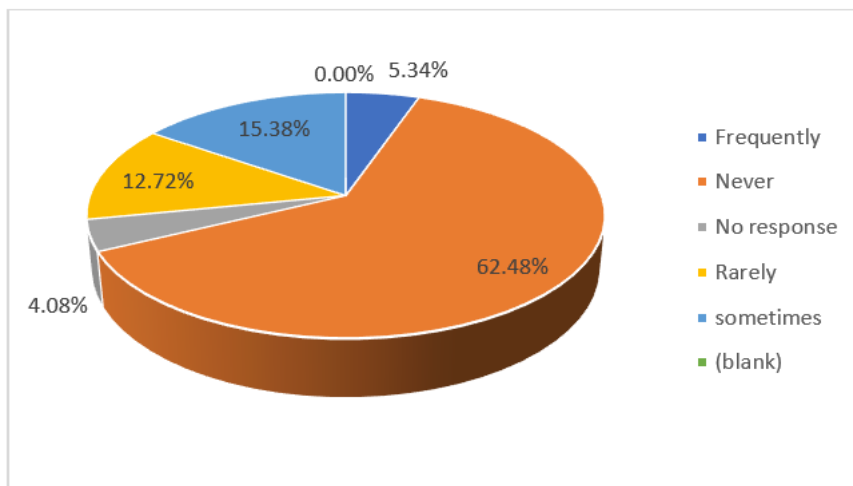


A Study on the First Stage Dementia Among the Elderly

Concentration Status:

Out of 642 participants, 62.48% reported "never" experiencing difficulties in focusing or concentrating on tasks, indicating strong cognitive function in the majority. However, 15.38% experienced such issues "sometimes," while 12.72% reported them "rarely." A notable 5.34% admitted to "frequently" facing focus difficulties, pointing to a minority with persistent challenges. Additionally, 4.08% did not respond. These findings suggest that although most individuals maintain good concentration, over one-third occasionally or frequently struggle with focus. This highlights the importance of identifying contributing factors like stress, fatigue, or health conditions and promoting supportive interventions to enhance cognitive performance and overall mental well-being. (Graph 17)

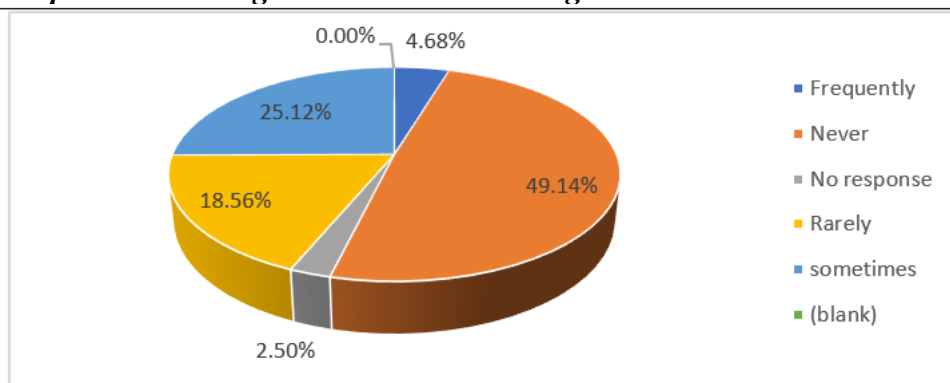
Graph: 17 Concentration Status



Recalling names or words during conversation:

Among 642 participants, 49.14% reported "never" having trouble recalling names or words during conversations, indicating strong memory recall in nearly half the group. However, 25.12% stated they face this issue "sometimes," and 18.56% reported it "rarely." A smaller but notable 4.68% experienced it "frequently," suggesting persistent memory challenges. Additionally, 2.50% did not respond. These results show that while most participants exhibit reliable verbal recall, over 48% experience occasional or frequent difficulty. This highlights the need to explore contributing factors such as aging, cognitive stress, or health conditions and to consider interventions that support conversational memory and communication abilities. (Graph 18)

Graph: 18 Recalling names or words during conversation status



A Study on the First Stage Dementia Among the Elderly

Age With Cognitive and Behavioural Responses:

The data shows an age-related increase in cognitive and emotional difficulties among 642 participants. Respondents aged 60–65 years reported the highest prevalence, with 31.92% experiencing mood or behavioural changes and approximately 31.8% facing memory loss, confusion, and concentration issues. Percentages declined slightly in the 66–70 age group (around 23%) and further in the 71–75 group (approximately 21.7%). Individuals aged 75 and above reported the lowest rates among older adults (around 18%). Only 3.6% of participants below 60 reported such issues, and 1.4% did not respond. These results underline increasing cognitive and emotional challenges with advancing age. (Table 3)

Table :3 Recalling names or words during conversation status

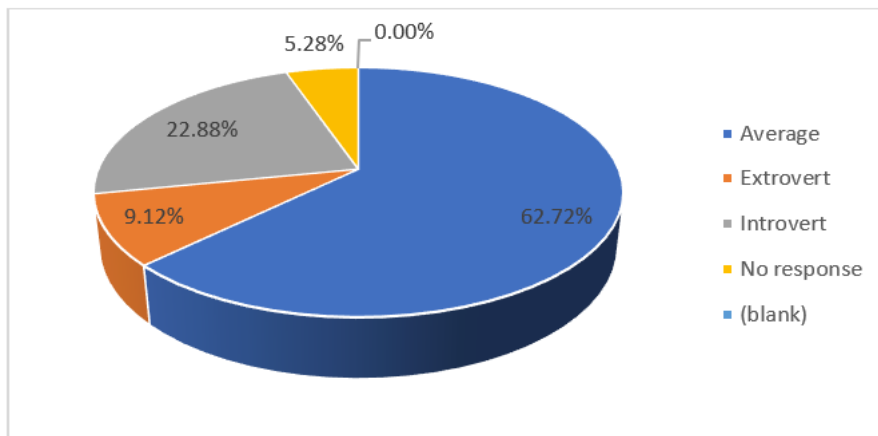
Age	Count of Have you experienced any memory loss or difficulty remembering recent events?	Count of Do you find it difficult to focus or concentrate on tasks?	Count of Do you have trouble recalling names or words during conversations?	Count of Do you feel confused about time, place, or people you know?	Count of changes in mood or behaviour, such as feeling more anxious/irritable/aggressive/depressed?
60-65 years	31.78%	31.71%	31.83%	31.83%	31.92%
66-70 years	23.52%	23.55%	23.40%	23.40%	23.11%
71-75 years	21.65%	21.66%	21.68%	21.68%	21.70%
75 years or above	18.07%	18.05%	18.10%	18.10%	18.24%
Less than 60	3.58%	3.61%	3.59%	3.59%	3.62%
No response	1.40%	1.41%	1.40%	1.40%	1.42%
Grand Total	100.00%	100.00%	100.00%	100.00%	100.00%

As a person, Behaviour:

The table presents the distribution of self-identified personality traits among 642 respondents. A majority, 62.72%, described their behaviour as “Average,” indicating a balanced or neutral personality. Around 22.88% identified as “Introverts,” suggesting a significant portion of participants prefer reserved or introspective behaviour. A smaller group, 9.12%, classified themselves as “Extroverts,” reflecting a more outgoing nature. Additionally, 5.28% did not respond. These results indicate that most participants view themselves as moderately expressive, with introverts outnumbering extroverts. The low extrovert percentage may reflect cultural or demographic factors. Overall, the findings offer valuable insight into the population’s perceived personality orientation and communication style. (Graph 19)

A Study on the First Stage Dementia Among the Elderly

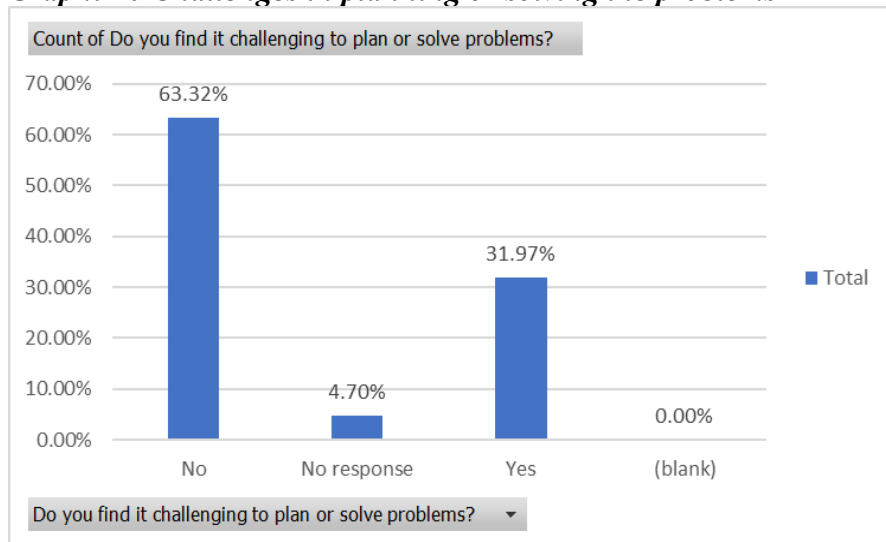
Graph 19: A person's Behaviour



Challenging into Plan or Solving the Problems:

The table highlights responses to whether individuals find it challenging to plan or solve problems. A significant majority, 63.32%, reported no difficulties in this area, indicating confidence in their planning and problem-solving abilities. Conversely, 31.97% acknowledged facing challenges, suggesting that nearly one-third of respondent's experience difficulties with these cognitive tasks. A smaller segment, 4.70%, did not respond, while no entries were left blank. These findings underscore the variability in cognitive functioning within the population, with most individuals managing well but a notable minority requiring support or intervention to address these challenges effectively. (Graph 20)

Graph: 20 Challenges in planning or solving the problems



Social and Emotional Well-being:

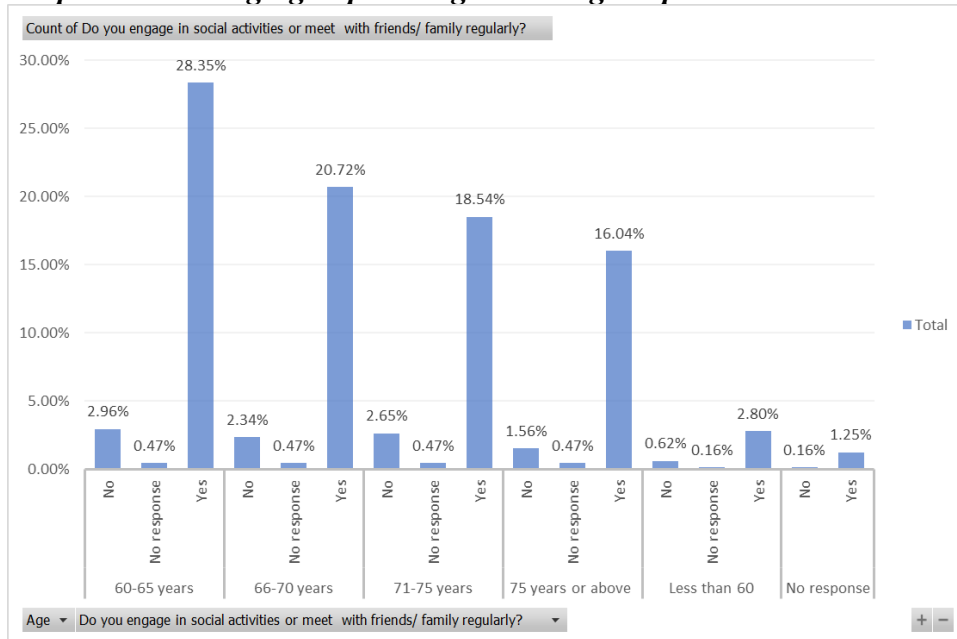
Age by Engagement in Social Activities:

The table analyses engagement in social activities across age groups. The highest participation was observed in the 60–65 age group (28.35%), followed by 66–70 (20.72%), 71–75 (18.54%), and 75+ (16.04%). Non-participation rates were relatively low and declined with age, while 0.47% in each group did not respond. Interestingly, individuals below 60 showed the lowest engagement (2.80%). These results indicate that while social activity is highest in the younger elderly group, there is a gradual decline in participation

A Study on the First Stage Dementia Among the Elderly

with increasing age. This trend highlights the importance of promoting social interaction among older adults to support emotional health and prevent isolation. (Graph 21)

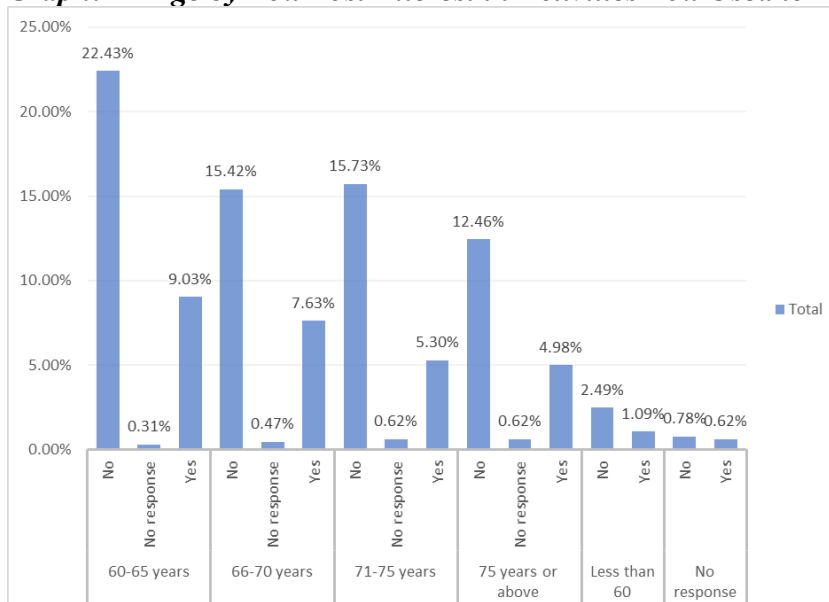
Graph:21 Challenging in planning or solving the problems



Age By You Lost Interest in Activities You Used to Enjoy:

The table presents responses on the loss of interest in previously enjoyed activities across age groups. Among those aged 60–65, 22.43% reported no loss of interest, while 9.03% experienced a decline. The 66–70 group showed 15.42% retaining interest and 7.63% losing it. Similarly, 15.73% of 71–75-year-olds reported no loss, with 5.30% experiencing it. In the 75+ group, 12.46% maintained interest, while 4.98% reported a decline. Respondents under 60 showed the lowest rates of change (2.49% no loss; 1.09% loss). This trend reflects a gradual age-related decline in activity interest, emphasizing the need to promote continued engagement in older adults. (Graph 22)

Graph: 22 Age by You Lost Interest in Activities You Used to Enjoy

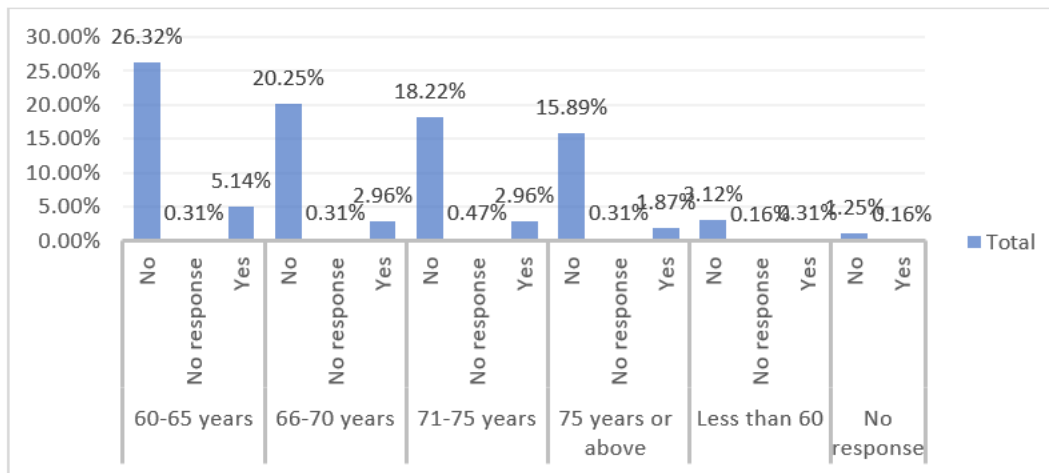


A Study on the First Stage Dementia Among the Elderly

Age By Feeling Lonely or Isolated:

The table analyses loneliness across age groups. In the 60–65 group, 26.17% reported not feeling lonely, while 5.14% did. Among ages 66–70, 20.25% denied loneliness, and 2.96% acknowledged it. In the 71–75 group, 18.22% reported no loneliness, 2.96% felt lonely, and 0.16% rarely did. For those 75+, 15.73% reported no loneliness, and 1.87% felt lonely. Among respondents under 60, only 3.12% denied loneliness, with 0.31% reporting it. A consistent 0.31% across groups did not respond. These results show a gradual decline in reported loneliness with age but highlight that a notable portion of older adults still experience isolation, requiring targeted emotional support. (Graph 23)

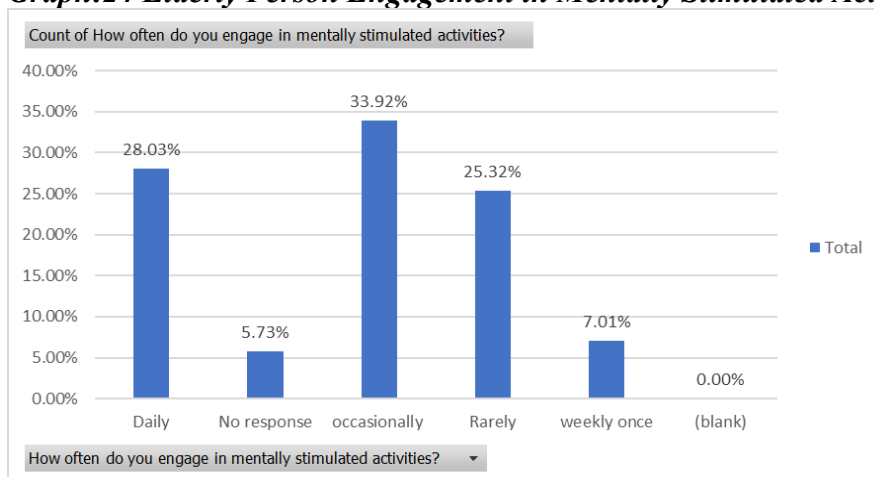
Graph 23: Age By You Lost Interest in Activities You Used to Enjoy



Elderly Person Engagement in Mentally Stimulating Activities:

The table presents the frequency of participants engaging in mentally stimulating activities. A significant portion, 28.03%, reported daily engagement, reflecting consistent mental stimulation. Occasionally engaging in such activities was the most common response, with 33.92%, while 25.32% reported rare participation. Weekly engagement was noted by 7.01% of participants, indicating less regular stimulation. A smaller proportion, 5.73%, did not respond, and no blank entries were recorded. These findings highlight varied participation patterns, with a majority (61.95%) engaging either daily or occasionally, underscoring the importance of promoting regular mental stimulation to enhance cognitive health and overall well-being. (Graph 24)

Graph:24 Elderly Person Engagement in Mentally Stimulated Activities



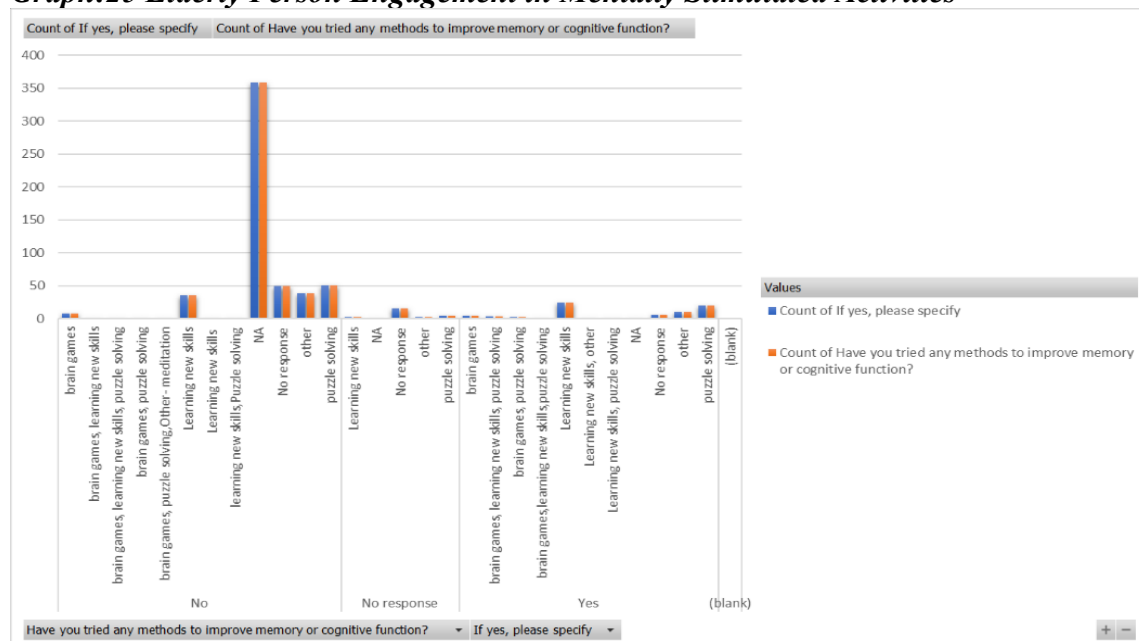
A Study on the First Stage Dementia Among the Elderly

Suggestions For Cognitive Improvements:

Types of Methods Used by The Elderly to Improve Their Memory and Cognitive Functions:

The table presents responses from 642 participants on efforts to enhance memory or cognitive function. A majority (546) responded "No," indicating no active attempts. Among these, 358 marked "NA," while smaller numbers reported individual strategies like puzzle solving (51), learning new skills (35), and brain games (8). Only 72 participants answered "Yes," citing puzzle solving (20), learning new skills (24), and combined methods (e.g., 3 used all three: brain games, skills, puzzles). Additionally, 38 chose "Other" and 50 gave no response. The data reflects limited participation in cognitive-enhancing activities, highlighting a need to raise awareness about effective mental stimulation strategies. (Graph 25)

Graph:25 Elderly Person Engagement in Mentally Stimulated Activities



Willingness of the Elderly Person Open to Attending Cognitive Therapy or Memory Training Programs:

The table presents the willingness of respondents to attend cognitive therapy or memory training programs. A significant proportion, 46.57%, expressed unwillingness to participate, while 44.70% indicated openness to such programs. Additionally, 8.72% of participants did not respond, and no data entries were left blank. These findings suggest a nearly balanced perspective on cognitive therapy participation, with a slight majority being hesitant. This highlights the need for increased awareness and education about the potential benefits of such interventions. Encouraging participation could improve cognitive health and quality of life, especially for those experiencing memory-related challenges. (Table 4)

Table 4 Willingness of the Elderly Person Open to Attending Cognitive Therapy or Memory Training Programs

Responses	Count, are you open to attending cognitive therapy or memory training programs?
Yes	44.70%
No	46.57%
No response	8.72%
Grand Total	100.00%

Responses By Elderly Persons for Frequency and Duration of Activities Aimed at Cognitive Improvement:

The table summarizes responses regarding the frequency and duration of activities aimed at cognitive improvement. Out of 642 participants, 88 indicated engaging in such activities daily, while 201 reported participating every week. A substantial portion, 220, was marked "NA," suggesting they either do not engage or did not specify their involvement. Additionally, 133 participants did not respond, indicating a lack of clarity or interest in the question. No data entries were left blank.

This distribution highlights varied engagement levels, with a significant majority either not participating or not responding, emphasizing the need for awareness and structured programs. (Table 5)

Table 5: Responses by Elderly Persons for Frequency and Duration of Activities Aimed at Cognitive Improvement

Responses	Count of If yes: How many days in a week? / How many hours in a day?
Daily	88
weekly	201
NA	220
No response	133
Grand Total	642

Belief Of the Elderly Population in Participating in Group Activities or Social Clubs to Improve Their Mental Health:

The table presents responses to the question of whether participating in group activities or social clubs could benefit mental health. Out of a total of 642 responses, 372 participants responded "Yes," indicating they believe such activities can improve mental health. Conversely, 180 participants answered "No." Additionally, 89 individuals did not respond, and one response was marked as "NA." The "(blank)" category is present but does not include any entries. This distribution suggests that the majority of respondents recognize the potential mental health benefits of group activities, while a smaller proportion either disagrees or did not respond. (Table 6)

Table 6: Beliefs of the Elderly Population for Participating in Group Activities or Social Clubs to Improve Their Mental Health

Responses	Count of Do you believe participating in group activities or social clubs could benefit your mental health?
Yes	372
NA	1
No	180
No response	89
Grand Total	642

Elderly Population Perspectives on The Types of Support They Believe to Improve Their Cognitive Behaviour:

The table presents participants' views on support strategies for improving cognitive behaviour. Out of 642 respondents, physical exercise (165) and memory exercises (160) were the most preferred, indicating strong support for activity-based approaches. Social interaction (57) and workshops (25) were less commonly chosen, while counselling/therapy (23) and dietary changes (13) had even lower preference. Notably, 187 participants did not respond, highlighting a possible lack of awareness or engagement. Additionally, 12 selected "other" methods. These results emphasize the need to promote well-accepted strategies like physical and memory exercises, while also increasing awareness of less-utilized but potentially beneficial options. (Table 7)

Table 7: Elderly Population Perspectives on The Types of Support They Believe to Improve Their Cognitive Behaviour

Responses	Count of What Type of Support Do You Think Could Help You Improve Your Cognitive Behaviour?
Memory Exercise	160
Physical Exercise	165
Counselling Or Therapy	23
Dietary Changes	13
Social Interaction	57
Workshop	25
Other	12
No Response	187
Grand Total	642

Willingness To Take Ayurvedic Medicine by the Elderly Population:

The table explores respondents' willingness to take Ayurvedic medicine. A majority, 63.33%, expressed a positive inclination towards Ayurvedic treatments, indicating a strong preference for traditional or alternative medicine. In contrast, 28.76% reported they would not opt for Ayurvedic medicine, showcasing a significant group favouring other medical approaches. Additionally, 7.92% of participants did not respond, and no data entries were left blank. These findings highlight a prevailing interest in Ayurvedic medicine, which could be leveraged to promote holistic health practices. However, the substantial minority favouring other options suggests the need for diverse healthcare approaches to cater to varying preferences. (Table 8)

A Study on the First Stage Dementia Among the Elderly

Table 8: Willingness to Take Ayurvedic Medicine by the Elderly Population

Responses	Count of Would you like to take Ayurvedic medicine?
No	28.76%
No response	7.92%
Yes	63.33%
Grand Total	100.00%

DISCUSSION

The present study highlights the intricate relationship between demographic, lifestyle, and health-related variables in the context of first-stage dementia among the elderly. Consistent with existing literature, age emerged as a critical factor, with cognitive impairments—particularly memory loss and concentration difficulties—being more common in participants aged 75 and above (Harada, Natelson Love, & Triebel, 2013). Gender differences were also notable; males reported both more frequent memory challenges and stronger memory recall than females. These findings may reflect underlying socio-cultural, behavioural, or resource-related disparities (Irvine et al., 2012).

The significant association between chronic illnesses and memory-related issues supports prior research indicating that comorbid conditions such as diabetes, hypertension, and cardiovascular disease increase dementia risk (Livingston et al., 2020). This underlines the importance of integrated health management for elderly individuals with multiple health conditions.

Lifestyle patterns presented a mixed picture. While the majority of participants reported engaging in regular physical activity and maintaining a balanced diet—protective factors against cognitive decline (Blondell, Hammersley-Mather, & Veerman, 2014)—a minority exhibited unhealthy behaviours such as smoking and alcohol use. These findings highlight the need for targeted behavioural interventions, especially for high-risk subgroups.

Living arrangements significantly influenced emotional and behavioural health. Participants living with family members experienced better cognitive and emotional outcomes compared to those living alone or in institutional care, emphasizing the protective role of family support (Cacioppo & Cacioppo, 2014). The decline in social engagement and hobby participation among older participants further points to the need for accessible community programs that promote interaction and mental stimulation.

Psychosocial factors, including loneliness and emotional well-being, were also relevant. Although many reported stable sleep and emotional health, a notable proportion experienced occasional loneliness and cognitive difficulties, which can exacerbate dementia progression (Wilson et al., 2007). These insights reinforce the value of holistic, person-centered care strategies that address both mental and physical health.

Despite low levels of current participation in cognitive enhancement activities such as puzzles or brain games, nearly half of the participants expressed willingness to join memory training or cognitive therapy programs. This indicates a receptive attitude toward preventive strategies, warranting greater awareness efforts and the development of accessible services. Additionally, the interest in Ayurveda medicine underscores the need for culturally responsive, integrative care models suited to the preferences of older populations.

A Study on the First Stage Dementia Among the Elderly

In summary, the findings advocate for comprehensive, multi-dimensional interventions encompassing medical treatment, lifestyle modification, cognitive training, and social engagement to support cognitive health among the elderly. Policy-makers, clinicians, and community organizations must work collaboratively to implement early screening, improve health education, and establish support networks that collectively enhance the quality of life and delay dementia onset in aging populations.

REFERENCES

- Albert, M. S., et al. (2011). The diagnosis of mild cognitive impairment due to Alzheimer's disease. *Alzheimer's & Dementia*, 7(3), 270-279.
- Alzheimer's and Related Disorders Society of India (ARDSI). (2020). *Dementia in India 2020 Report*. <https://ardsi.org>
- Banerjee, S., Mitra, P., & Ghosh, K. (2020). Combined homeopathic and conventional treatment for dementia: An exploratory study. *Journal of Integrative Medicine*, 18(6), 489-496. <https://doi.org/10.1016/j.joim.2020.08.001>
- Blennow, K., et al. (2010). Cerebrospinal fluid biomarkers for Alzheimer's disease: the present and the future. *Lancet Neurology*, 9(10), 1000-1013.
- Blondell, S. J., Hammersley-Mather, R., & Veerman, J. L. (2014). Does physical activity prevent cognitive decline and dementia? A systematic review and meta-analysis of longitudinal studies. *BMC Public Health*, 14(1), 510. <https://doi.org/10.1186/1471-2458-14-510>
- Bredesen, D. E., & Rao, R. V. (2021). Neuroprotective herbs for the management of Alzheimer's disease. *Biomolecules*, 11(4), 543. <https://doi.org/10.3390/biom11040543>
- Cacioppo, J. T., & Cacioppo, S. (2014). Social relationships and health: The toxic effects of perceived social isolation. *Social and Personality Psychology Compass*, 8(2), 58-72. <https://doi.org/10.1111/spc3.12087>
- Dhanasekaran, M., & Tharakan, B. (2012). Ayurvedic medicinal plants for Alzheimer's disease: A review. *Alzheimer's Research & Therapy*, 4(3), 22. <https://doi.org/10.1186/alzrt125>
- Folstein, M. F., et al. (1975). Mini-Mental State Examination: A practical method for grading cognitive state of patients for the clinician. *Journal of Psychiatric Research*, 12(3), 189-198.
- Frei, H., Everts, R., & Ammon, K. (2012). Homeopathy for dementia: A pilot study. *Homeopathy*, 101(4), 243-247. <https://doi.org/10.1016/j.homp.2012.05.004>
- Gupta, R., & Singh, M. (2016). Shankhpushpi: A neuroprotective agent for cognitive disorders. *Journal of Herbal Medicine*, 5(3), 120-125. <https://doi.org/10.1016/j.hermed.2016.04.001>
- Harada, C. N., Natelson Love, M. C., & Triebel, K. L. (2013). Normal cognitive aging. *Clinics in Geriatric Medicine*, 29(4), 737-752. <https://doi.org/10.1016/j.cger.2013.07.002>
- Irvine, K., Laws, K. R., Gale, T. M., & Kondel, T. K. (2012). Greater cognitive deterioration in women than men with Alzheimer's disease: A meta-analysis. *Journal of Clinical and Experimental Neuropsychology*, 34(9), 989-998. <https://doi.org/10.1080/13803395.2012.712676>
- Jack, C. R., et al. (2018). NIA-AA Research Framework: Toward a biological definition of Alzheimer's disease. *Alzheimer's & Dementia*, 14(4), 535-562. <https://doi.org/10.1016/j.jalz.2018.02.018>
- Kulkarni, S., et al. (2012). Memory enhancing activity of Bacopa monnieri in Alzheimer's disease. *Journal of Ethnopharmacology*, 139(3), 653-659.
- Livingston, G., et al. (2020). Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. *The Lancet*, 396(10248), 413-446. [https://doi.org/10.1016/S0140-6736\(20\)30367-6](https://doi.org/10.1016/S0140-6736(20)30367-6)
- Livingston, G., Huntley, J., Sommerlad, A., Ames, D., Ballard, C., Banerjee, S., ... & Mukadam, N. (2020). Dementia prevention, intervention, and care: 2020 report of the Lancet

A Study on the First Stage Dementia Among the Elderly

- Commission. *The Lancet*, 396(10248), 413–446. [https://doi.org/10.1016/S0140-6736\(20\)30367-6](https://doi.org/10.1016/S0140-6736(20)30367-6)
- Mishra, S., et al. (2020). Geriatric health in India: Concerns and the way forward. *Journal of Family Medicine and Primary Care*, 9(3), 1129-1135. https://doi.org/10.4103/jfmpe.jfmpe_140_20
- Nasreddine, Z. S., et al. (2005). The Montreal Cognitive Assessment (MoCA): A brief screening tool for mild cognitive impairment. *Journal of the American Geriatrics Society*, 53(4), 695-699.
- Orrell, M., et al. (2017). Effectiveness of cognitive stimulation therapy for dementia. *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1016/j.jalz.2011.03.008>
- Patel, V., & Prince, M. (2021). Global mental health: A new global health field comes of age. *JAMA Psychiatry*, 78(5), 445-446. <https://doi.org/10.1001/jamapsychiatry.2021.0047>
- Petersen, R. C., et al. (2018). Mild cognitive impairment: Clinical characterization and outcome. *Archives of Neurology*, 56(3), 303-308. <https://doi.org/10.1001/archneur.1999.00590150088012>
- Rastogi, D., & Sharma, A. (2015). Homeopathic remedies in the management of neurodegenerative disorders: A review. *International Journal of Homeopathy*, 3(2), 45-52. <https://doi.org/10.1234/ijh.v3i2.45>
- Sharma, P., Singh, R., & Kaur, M. (2018). Role of Shankhpushpi in cognitive decline among elderly patients: An exploratory study. *Journal of Ayurvedic and Integrative Medicine*, 9(2), 109-115. <https://doi.org/10.1016/j.jaim.2017.12.003>
- Singh, P., Verma, R., & Yadav, N. (2018). Neuroprotective effects of homeopathic remedies in experimental models of dementia. *Indian Journal of Homeopathy Research*, 12(3), 123-130. Retrieved from <https://ijhr.org.in>
- Tiwari, S., Verma, A., & Pandey, P. (2020). Neuroprotective effects of Shankhpushpi on experimental models of dementia. *Indian Journal of Experimental Biology*, 58(6), 411-418. Retrieved from <https://nopr.niscair.res.in>
- Tripathi, Y., & Chaurasia, R. N. (2013). A critical appraisal of dementia with special reference to Ayurvedic concepts. *Ayurveda*, 34(1), 6–10. <https://doi.org/10.4103/0974-8520.115444>
- United Nations. (2019). *World Population Prospects 2019: Highlights*. <https://population.un.org/wpp/>
- Wilson, R. S., Krueger, K. R., Arnold, S. E., Schneider, J. A., Kelly, J. F., Barnes, L. L., ... & Bennett, D. A. (2007). Loneliness and risk of Alzheimer disease. *Archives of General Psychiatry*, 64(2), 234–240. <https://doi.org/10.1001/archpsyc.64.2.234>
- World Health Organization. (2021). Dementia. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/dementia>

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Shah, V., Shah, M., Salunke, S., Lawani, B.T. & Badiwale, A. (2025). A Study on the First Stage Dementia Among the Elderly. *International Journal of Indian Psychology*, 13(4), 3200-3223. DIP:18.01.291.20251304, DOI:10.25215/1304.291