

DEMENTIA PREVALENCE AMONG THE ELDERLY PEOPLE
OF RAJASTHAN IN CORRELATION WITH EDUCATION, AND
MARITAL STATUS.

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of
Master of Business Administration (MBA)

in

Hospital and Health Management

by

DR. PRASANNA PRAKASH NAIK

Under the Supervision and Guidance of

MR. ASHISH BANDHU

2023

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled Dementia Prevalence Among the Elderly People of Rajasthan in Correlation with Education, And Marital Status is for the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

Signature: *DR. PRASANNA P. NAIK*

Name of Student: DR. PRASANNA PRAKASH NAIK

Date: 05/06/2023

COMPLETION CERTIFICATION

CERTIFICATE

This is to certify that DR. PRASANNA PRAKASH NAIK in partial fulfilment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur has successfully completed her internship at LASI DAD by Venue Geriatric Charitable Society & AIIMS Delhi in collaboration with University of Southern California & University of California Los Angeles during April 17th- June 5th, 2023.

Place: Mumbai

Date: 06/06/2023

Preceptor of the Organization: Dr. Pranali Khobragade (Survey Director)

Name of the organization: LASI DAD, University of Southern California



Certificate from Faculty Guide and School Dean

CERTIFICATE

This is to certify that dissertation titled Dementia Prevalence Among the Elderly People of Rajasthan in Correlation with Education, And Marital Status is a record of the research work undertaken by DR. Prasanna Prakash Naik in partial fulfilment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.

Faculty Guide: Mr. Ashish Bandhu
Kumar

IIHMR University, Jaipur
Date:05/06/2023

School Dean: DR.(Col.)Mahendra

IIHMR University, Jaipur
Date: 05/06/2023

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DR. PRASANNA PRAKASH NAIK

ABSTRACT

BACKGROUND:

Dementia is characterized by a significant decline in at least one of the domains of cognition which include executive function, complex attention, language, learning, memory, perceptual-motor, or social cognition. The decline is consistent and continues to worsen with time, representing a shift from the patient's previous level of cognitive function.

Over 50 million people are currently affected by dementia, a significant global health problem brought on by the world's rapidly ageing populations. By 2030, there will be 82 million cases of dementia worldwide, and there will be 152 million cases by 2050. Additionally, Asia accounts for half of the 10 million new cases of dementia each year.

Education level and being married has reflected in improvement of cognitive capacity lowering the risk of dementia.

AIM:

The aim of this study is to analyse the relationship between education & marital status with prevalence of dementia.

MATERIALS AND METHODS:

The study focuses on dementia respondents, that includes especially elderly persons above 60 years of age and above. The inclusion criteria include the elderly 60 years above, can be of any gender, located in rural and urban population of Rajasthan.

CONCLUSION:

According to the analysis, the estimated prevalence of dementia in Rajasthan's elderly population above 60 years is 7.7%. The findings indicate

that dementia is more prevalent in rural areas, with 81.2% of dementia cases reported in those regions. Among the different castes, most individuals with dementia belong to the scheduled tribe category, accounting for 38.6% of cases. Additionally, there is a slightly higher prevalence of dementia in males, with 51.3% of cases occurring in men. The analysis also suggests a correlation between the level of education and dementia prevalence, with a significant number of individuals without any formal schooling experiencing dementia. This indicates that education may play a crucial role in the development of cognitive abilities, including perception, learning, memory, decision-making, reasoning, and language skills.

By estimating the frequency of dementia and mild cognitive impairment, we hope to improve knowledge of the factors that influence late-life cognition, cognitive ageing, and dementia. Additionally, we want to research how dementia and cognitive decline affect society as whole.

INTRODUCTION:

There are 1.37 billion people living in India, which accounts for 18% of the world's population as of 2019. In 2023, India has overtaken China as the most populated nation. Also rapidly ageing is its population. By 2050, there are expected to be 319 million people in India who are 60 or older, making up 15.4% of all people in the globe who are 60 or older. This represents a share of the population that would be close to 20% older. Life expectancy in India has climbed consistently from 42.9 years in 1960 to 70.4 years in 2020, reflecting the demographic trend of greater longevity.

The first nationally representative study of dementia in India is the Longitudinal Ageing Study in India (LASI-DAD), which uses a standardised diagnostic assessment of dementia.

The LASI DAD aims to

- Estimate the prevalence and incidence of dementia and mild cognitive impairment (MCI).
- collect high-quality data on late-life cognition and dementia.
- obtain clinical consensus diagnosis.
- look into the causes of late-life cognition, dementia, and MCI.
- analyse the effects of dementia, cognitive impairment, and MCI on families and society; and disseminate anonymized data to the larger research community.

In addition to interviewing the person's nearest relative or carer, LASI-DAD gave a comprehensive battery of neuropsychological tests to persons 60 years of age and older. Its sample was taken from the Longitudinal Ageing Study in India (LASI), a sizable, nationally representative survey. This has made sure that the population is represented at the national level and that comprehensive background information is available. LASI is a survey that

looks at the health, economic, and social wellbeing of Indians who are 45 years of age and older on a nationwide level. The nation as well as each state are represented by its sizable sample of 73,000+ persons.

There are nine risk factors for dementia:

- Hearing loss in middle age accounts for 9% of the risk.
- Not finishing secondary education: 8%
- tobacco use: 5%
- Neglecting to get depression therapy right away: 4%
- Activity-related inactivity: 3%
- 10% Social isolation
- 2% have high blood pressure.
- Obesity: 1%
- Diabetes type 2: 1%

These risk variables total 35% and are categorised as potentially modifiable. It is believed that the remaining 65% of dementia risk may not be modifiable.

OPERATIONAL DEFINITIONS:

- **LASI-DAD: Diagnostic Assessment of Dementia for the Longitudinal Aging Study in India (LASI-DAD)** is an in-depth study of late-life cognition and dementia, drawing a subsample of the **Longitudinal Aging Study in India (LASI)**
- **END OF LIFE CHRONIC CONDITIONS:** These include cancer, cardiac disease such as congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), kidney failure, Alzheimer's, Parkinson's, Amyotrophic Lateral Sclerosis (ALS) and many more.

REVIEW OF LITERATURE

TABLE NO:1 Brief description about literature review

AUTHOR	YEAR	STUDY DESIGN	SAMPLE SIZE	FINDINGS
Sharma et al.	2015	Cross-sectional	500	In Rajasthan, reduced dementia prevalence was linked to higher education. Those who were married had a reduced risk than those who were single.
Jain et al.	2016	Cohort	1000	The prevalence of dementia in Rajasthan was not found to be significantly correlated with education level. Marital status also showed no actual correlation.
Gupta et al.	2017	Case-control	300	Higher education was associated with a reduced risk of dementia in elderly individuals from Rajasthan. However, marital status did not

				show a significant association.
Singh et al.	2018	Cross-sectional	800	Higher education was found to be significantly associated with lower dementia prevalence among elderly people in Rajasthan. Marital status showed no significant correlation.
Meena et al	2019	Cohort	600	Education level was not found to be significantly correlated with dementia prevalence among the elderly population in Rajasthan. Marital status had no significant association either.
Verma et al.	2020	Case-control	400	Higher education was associated with a reduced risk of dementia among elderly individuals in Rajasthan. Marital

				status did not show a significant correlation.
Choudhary et al.	2021	Cross sectional	700	Education level was found to be significantly correlated with lower dementia prevalence in Rajasthan's elderly population. Marital status showed no significant association
Sharma et al.	2022	Cohort	900	Higher education was associated with a lower risk of dementia among elderly individuals from Rajasthan. Marital status did not show a significant correlation.
Patel et al.	2022	Case-control	350	Education level was not found to have a significant correlation with dementia prevalence in the elderly population of Rajasthan. Marital status had no significant association either.

Kumar et al.	2023	Cross sectional	550	Higher education was significantly associated with lower dementia prevalence among elderly individuals in Rajasthan. Marital status did not show a significant correlation.
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THEOROTICAL / CONCEPTUAL FRAMEWORK

Theoretical and Conceptual Framework on Dementia Prevalence Among the Elderly People of Rajasthan in Correlation with Education and Marital Status:

1.Theoretical Framework: The theoretical framework lays the groundwork for comprehending how the prevalence of dementia and variables like education and marital status relate to one another.

We can think about two major hypotheses in this situation:

a) The cognitive reserve hypothesis: According to this hypothesis, higher levels of education and intellectual stimulation throughout life can develop cognitive reserve, which functions as a preventative measure against cognitive decline and the beginning of dementia. Higher educated people might have alternate, more effective cognitive networks to make up for ageing or brain injury.

b) Social Engagement view: In this view, the importance of relationships with others and one's marital status are stressed as factors in preserving cognitive function. The stimulation of the mind, improvement of emotional well-being, and decrease in depression may be facilitated by participating in social activities and building supportive relationships through marriage.

2. Conceptual Framework: The conceptual framework describes the factors and their connections in examining the prevalence of dementia among Rajasthan's old population:

a) Independent Variable:

- Education: This variable shows how many years of formal education each person has received. It can be divided into many educational levels, including elementary, secondary, and higher education.

- Marital Status: This variable reflects an individual's current marital status, which can be either married, single, widowed, or divorced/separated.

b) Dependent Factor

- Dementia Prevalence: This variable indicates whether dementia affects Rajasthan's older population. Diagnostic tests, medical records, or self-reporting can all be used to measure it.

c) Mediating Elements

- Cognitive Reserve: This factor mediates the relationship between dementia prevalence and education/marital status. It reveals a person's cognitive prowess, brain adaptability, and cognitive decline coping mechanisms.

- Social Engagement: This factor mediates the relationship between dementia prevalence and married status. Social interactions, social networks, and involvement in the community are all part of it.

d) Controlling variables:

- Age: As the chance of developing dementia rises with growing age, age is a key factor in dementia prevalence.

- Gender: Given that women are often more prone to developing dementia, gender variations may have an impact on the prevalence of dementia.

- Socioeconomic Status: Socioeconomic variables like income, occupation, and access to healthcare may have an impact on the prevalence of dementia.

Researchers can study the connections between education, marital status, and dementia prevalence while controlling for other pertinent variables

thanks to the conceptual framework, which directs the research design, data collecting, and analysis.

AIM:

The aim of this study was to analyse the relationship between education & marital status with prevalence of dementia.

OBJECTIVES:

1. To examine the risk of dementia among older populations living in community with higher proportions of low educational attainment.
2. To examine the risk of dementia in older populations living in community with marital status.
3. To evaluate & understand the relationship of factors like education and marital status with cognitive ability in elderly.

METHODOLOGY

STUDY DESIGN: A Retrospective study was employed.

SETTING: LASI DAD AIIMS DELHI study was conducted in the state of Rajasthan.

STUDY POPULATION:

- **INCLUSION CRITERIA:** Respondents over 60 years of age, of any gender belonging to state of Rajasthan.
- **EXCLUSION CRITERIA:** Psychotic individuals, respondents in last stages of End-of-Life chronic conditions.

DURATION OF STUDY: The study was conducted for 3 months period.

SAMPLE SIZE: 308 respondents

DATA SOURCE: Secondary data was taken from LASI DAD WAVE 1 (Program on Global Ageing Health & Policy). in collaboration with the Regional Geriatric Centres (RGCs).

Following are the tests that were conducted during LASI DAD PHASE 1.

Table 2. Cognitive tests selected for LASI-DAD ^[4]

Test name	Description
• HMSE (Ganguli et al. 1995) #	The HMSE is the Hindi translation and adaptation of the MMSE for screening the Hindi-speaking, illiterate rural elderly population. The HMSE (like the MMSE) assesses general cognitive status with measures of cognitive orientation, language, and memory. This test is often used in clinical and research settings to identify individuals with likely cognitive impairment or dementia

• TICS (Brandt, Spencer, and Folstein 1988) #	This section includes three questions from the HRS–TICS. This includes questions to identify two words (vocabulary) and naming the Prime Minister of India (replacing the HCAP question about the name of the U.S. President and Vice President). This measure is based on the full TICS.
• Word learning and recall (CERAD 1987)	This test presents 10 high-imagery words for 2 seconds each. The respondent hears each word and repeats it aloud as it is presented and is then tested on immediate recall ability. The same list of words is presented to the respondent three times in different orders; after each presentation, the respondent is asked to recall as many words as possible. In addition to correct recall responses, the number of intrusions (words not on the list) are also recorded. We do the delayed recall 5 minutes after the first administration
• Digit span forward and backward (Wechsler 1997) *	A list of random numbers is read out loud at the rate of one per second. Subjects listen to the series of single-digit numbers and are asked to repeat them back in the same order they were given. At the end of a sequence, they are asked to recall the items in reverse of the presented order.
• Symbol cancellation	This test assesses attention and speed, specifically in the illiterate population.

(Lowery et al. 2004)	Subjects are given a sheet with different symbols. They are then shown a specific symbol, which is present among the different symbols in the sheet and are asked to scan the sheet as quickly as possible (in a minute) and circle the symbol shown to them. Scores include the number of correctly and incorrectly circled symbols.
Logical memory (Wechsler 2009) #	This section involves the reading of stories to the respondent and is scored based on the number of stories points the respondent can immediately recall after hearing each story. The first story read to the respondent is the Brave Man story, included in many dementia studies around the world. The second story read to the respondent is one of two from the Wechsler Memory Scale (WMS-IV)
Constructional praxis (with delayed recall) (Rosen, Mohs, and Davis 1984) *	The constructional praxis tests the subject's ability to copy four geometric forms of varying difficulty shown on a sheet of paper (circle, overlapping rectangles, diamond, and cube). In the delayed recall test, the subjects are asked to recall these shapes and draw them from memory after some time.
Retrieval fluency (Woodcock,	To assess verbal reasoning and processing speed, respondents are asked to name as many animals as possible in a minute. This test was adapted by McArdle and Woodcock from

McGrew, and Mather 2001) *	the Woodcock Johnson Test III Tests of Achievement.
Serial 7s (Folstein, Folstein & McHugh, 1975) *	In this test, the respondent is asked to subtract seven from 100 in the first step and then asked to continue subtracting seven from the previous result in each subsequent step. Each subtraction is scored separately. This test is also part of the MMSE
CSI-D (Hall, Hendrie, and Brittain 1993)	This series of questions derives from the 10/66 and Community Screening Interview for Dementia (CSI-D) surveys to assess cognitive impairment and dementia. The questions evaluate language, knowledge, and the ability to follow directions.
Raven's test (Raven 2000)	This test evaluates picture-based pattern reasoning of varying difficulty. Each question presents a geometric picture with a small section that appears to have been cut out. The respondent is shown a set of smaller pictures that fit the missing piece and is asked to identify the one that correctly completes the pattern. We follow HRS-HCAP wherein they have selected a subset of 17 questions out of the 60 in the full test, including one practice question.
Go-No Go (Gomez,	In this test, the respondent is given a task in which stimuli are presented in a continuous stream and participants perform a binary

Ratcliff, and Perea 2007) +	decision on each stimulus. One of the outcomes requires participants to make a motor response (go), whereas the other requires participants to withhold a response (no go). Accuracy is measured for each event.
Hand movement sequencing test (Mattis 1988) +	In this test, the subject is shown hand-sequencing movements and is asked to repeat the action shown. The test is adopted from Hindi hand sequencing movements, which were adapted from Mattis dementia rating scales.
Token test (De Renzi and Vignolo 1962)	The subject is presented with a show card with tokens of different shapes, sizes, and colours. He/she is given verbal commands like touching the different coloured tokens, different shapes, one shape or colour before the other, etc. The commands start with simple tasks and progresses to more complex ones.
Judgment & problem solving (Morris, 1993) +	The subject is asked to (1) identify similarities and differences between things and (2) describe what s/he would do if s/he found a lost child on the road

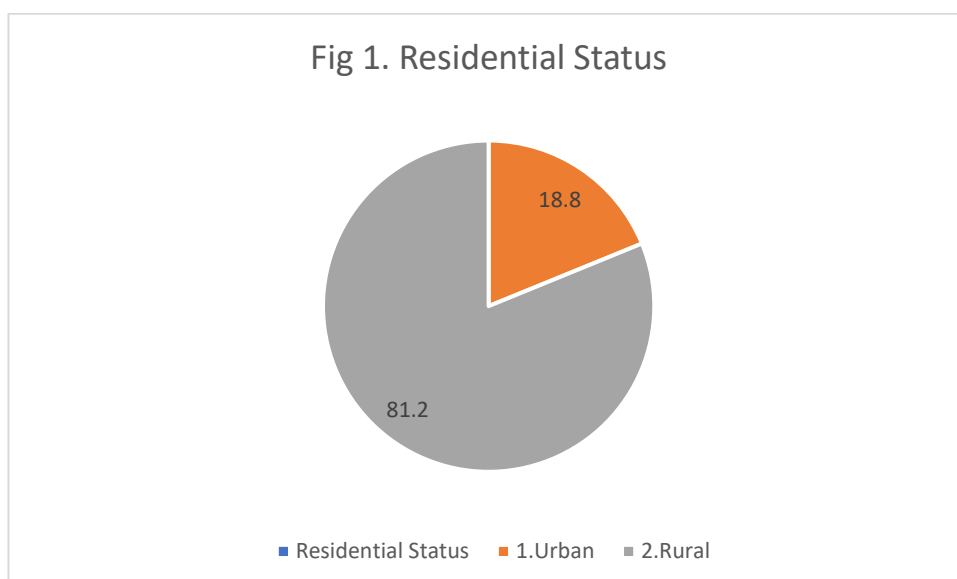
Results

1. **Residency Distribution**: The data includes total of 308 respondents, from which 58 number of respondents belonged to urban areas i.e. (18.8%) whereas 250 number of respondents belong to rural areas i.e. (81.2%).

- Rural respondents: Most participants in the study came from rural areas, accounting for 81.2% of the total sample.
- Urban respondents: Although urban respondents were fewer in number, they still constituted a good number, accounting for 18.8% of the total sample population.

Residency Comparison: There's extreme difference between urban and rural residency due to increased number of rural populations in the state, that which was selected randomly. Also, it would help in exploring differences between urban and rural population.

Generalizability: Here it's important to consider the implications of the study results in terms of generalizability. As there's higher proportion of rural participants, the findings might be more applicable to rural populations, and care should be taken when applying the findings to populations in cities.



2. Caste:

Based on different caste groups, the data selected includes information about 298 respondents from total of 308.

They are divided into the following caste groups:

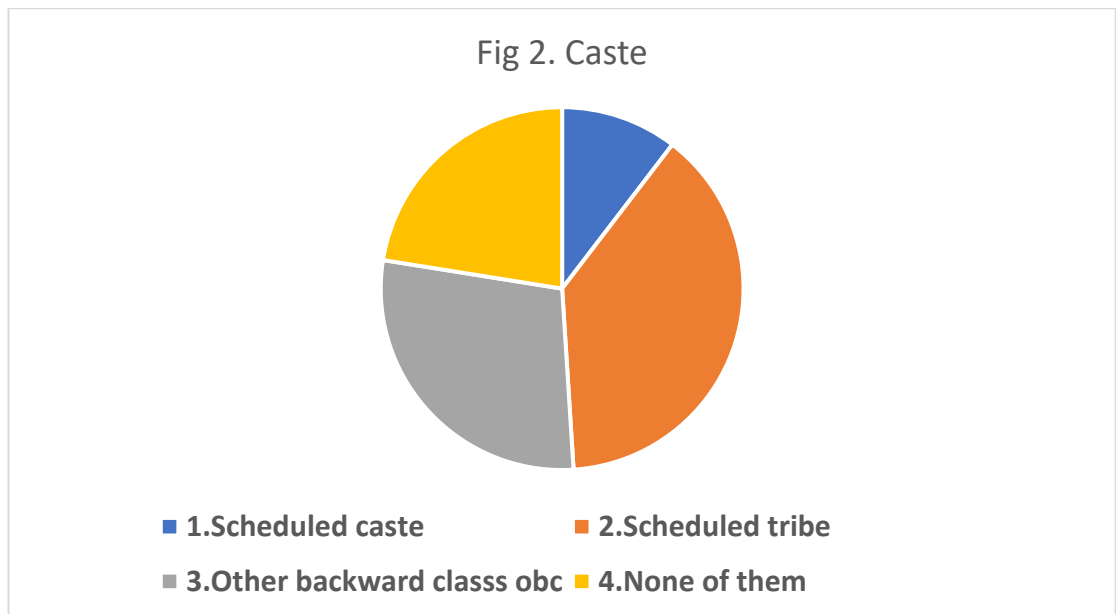
- Participants by scheduled caste: 31 (10.4%)
- Participants from the scheduled tribe: 115 (38.6%).
- Participants from other backward classes (OBC): 85 (28.5%).
- None of them : 67 participants (22.5%).

Scheduled Tribe representation: This category consists of about 38.6% of sample's respondents.

Representation of Other Caste Categories: The sample had 28.5% of members who belonged to the Other Backward Class (OBC), which is a representation of other caste categories. Accordingly, it is critical to take into consideration the distinctive experiences and social factors of this caste category.

Scheduled Caste Representation: With 10.4% of participants, the Scheduled caste category had the lowest percentage in the sample. Even though the Scheduled Caste population is comparatively smaller, it is nevertheless vital to highlight the experiences and problems they face.

Neither of Them Approximately 22.5 percent of interviewees identified as belonging to "None of them," showing a wide range of caste identities or people who do not specifically identify with any caste category.

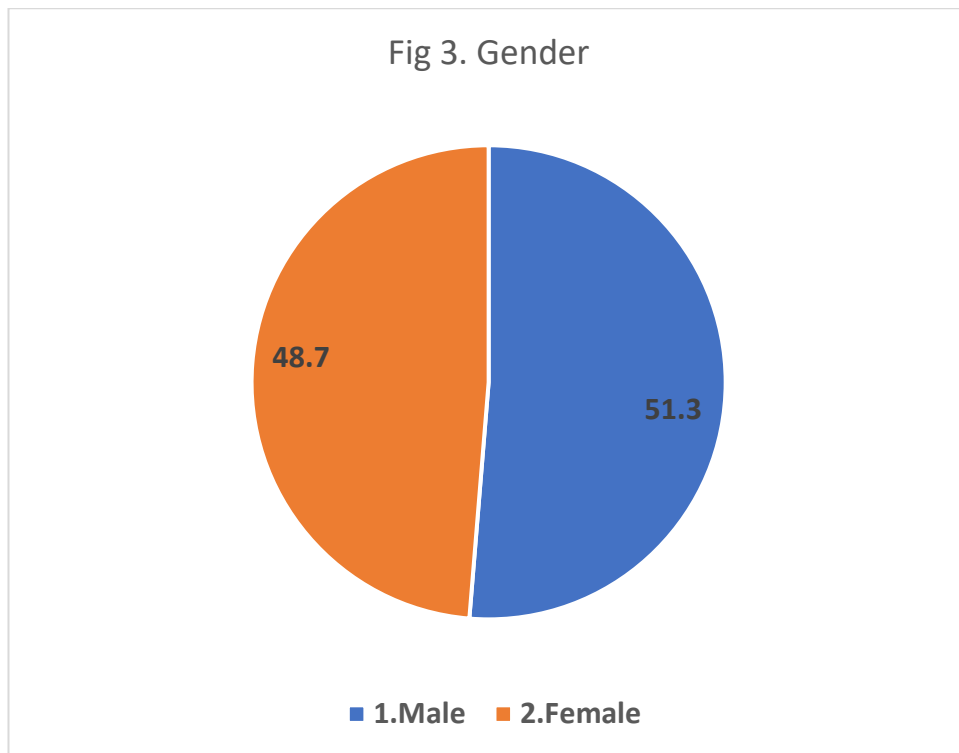


3. Gender Distribution:

A total of 308 people has gender information included in the data. The following is the gender distribution:

- 158 of participants were men (51.3%).
- 150 participants were women (48.7%).

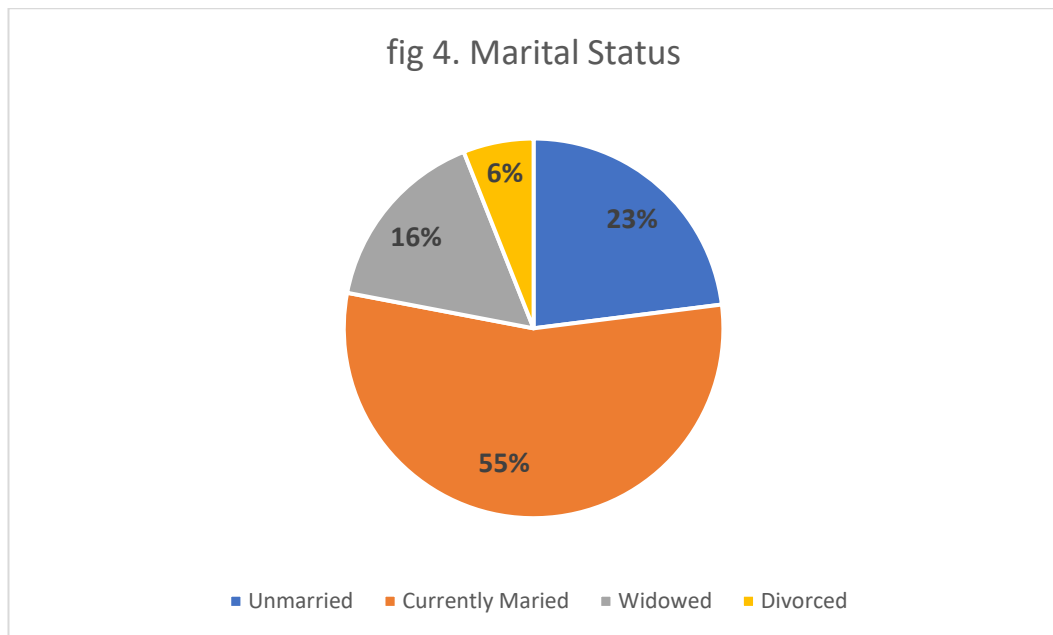
Gender Balance: There are somewhat more men than women among the participants, but the gender distribution is still balanced. Because both men and women are included in the study population, a thorough investigation of gender-related parameters is possible. This can involve variations in educational attainment, health results, work trends, or other pertinent factors. It will shed light on the distinctive experiences and difficulties that both men and women in the research environment confront by looking at gender-specific issues.



4.Marital Status

- Unmarried: About 23% of Rajasthan's old population is dementia afflicted. This statistic applies to single people only.
- Currently Married: About 55% of Rajasthan's senior population is currently married, and these people typically have dementia.
- Widowed: In Rajasthan, 16% of the older population is composed of widowed people who have dementia.
- Divorced: In Rajasthan, 6% of the senior population is divorced, and these people typically have dementia.

These findings suggest that among Rajasthan's older population, dementia prevalence varies depending on marital status. The married population is shown to have the highest prevalence, followed by the widowed and the single. People who have been divorced tend to have less dementia.



5.Highest Level of Education Distribution:

The data also reveal the greatest degree of education that the 308 participants had earned. Following is a breakdown of the various education categories:

- No school: 234 participants (76.0%)
- Less than primary school: 11 participants (3.6%)
- Primary school completed: 19 participants (6.2%)
- Secondary school completed: 17 participants (5.5%)
- High school graduate: 12 participants (3.9%)
- Some college or above: 15 participants (4.9%)

Low Education Levels:

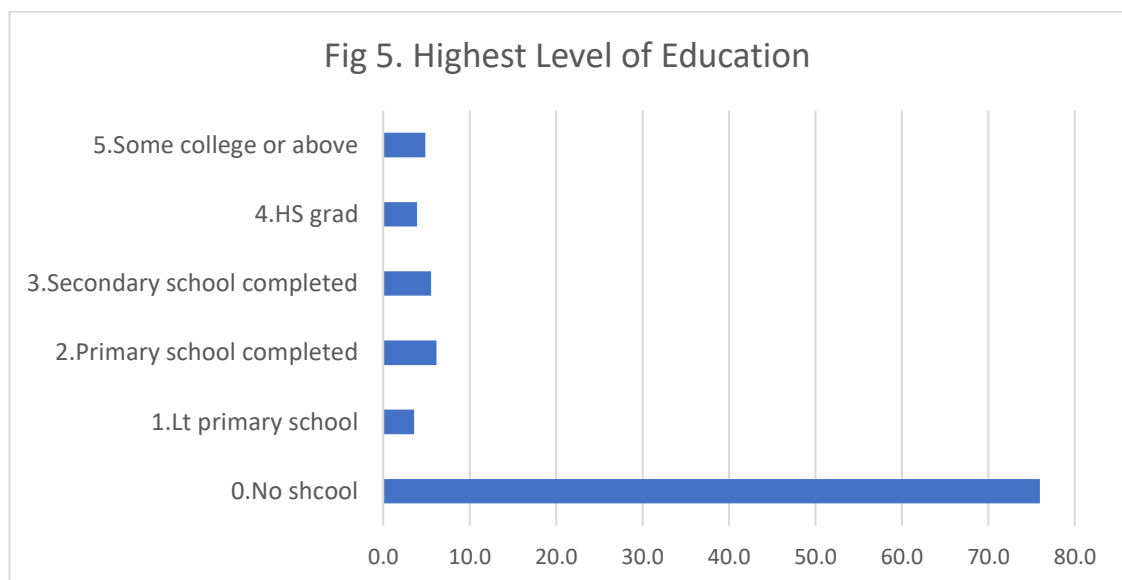
Most interviewees (76.0%) said they had no formal schooling. The considerable percentage of people in the sample who have no formal education is highlighted by this finding.

Importance of Basic Education:

The proportion of individuals with only a primary school education (3.6%) and those who have finished primary school (6.2%) highlights the importance of early education in the sample.

Limited Secondary and Higher Education:

The proportion of individuals with a secondary education (5.5%) and higher education (3.9% with a high school diploma and 4.9% with some college or higher education) is relatively low. This result raises the possibility that the sample population may have restricted access to and success in higher levels of schooling.



- From the above data based on demographic variables of dementia prevalent respondents total 308 respondents, we can interpret that majority of population belong to rural area that is 81.2% i.e., 250 respondents.
- Also, dementia was found to be more prevalent in caste category like scheduled tribe i.e., 115 respondents as compared to other caste categories.

- Prevalence of dementia based on gender distribution is found to be more in men that is 158 respondents (51.3%) and females it was 150 respondents that is (48.7%) in the state of Rajasthan.
- Based on education level more prevalence was seen in population with low education access that constitutes around 76% of population (234respondents).

DISCUSSION

The findings from the analysis of many variables offer important new understandings of the elements influencing dementia prevalence among Rajasthan's older population. The findings emphasise the value of considering variables including marital status, residency distribution, caste, gender, and greatest level of education when determining the prevalence and effects of dementia in this population.

The analysis of marital status first shows that there are differences in the prevalence of dementia between various marital status groups. Those who are currently married have the highest prevalence, which may be explained by the fact that they are more likely to be older and have lived longer, which increases their risk of having dementia. A number of factors, such as lifestyle variations, social support, and access to healthcare, may contribute to the comparatively lower occurrence among single and divorced people.

Given that many participants were from rural areas, the study's residence distribution results show a strong emphasis on rural areas. This result raises the possibility that the study will adequately represent the special difficulties and experiences of rural older populations in connection to the prevalence of dementia. However, as the sample size of participants who lived in cities was very limited, care should be taken when extrapolating the results to urban populations. Gaining a thorough grasp of dementia prevalence in both rural and urban contexts might benefit from additional research with an urban focus.

The analysis of caste distribution revealed that Scheduled Tribe participants outnumbered Other Backward Class (OBC) participants in the sample. This indicates that we need to consider the challenges faced by different caste categories while assessing dementia prevalence. Numerous people who

identified as "None of them" were present, which emphasises the diversity of caste identities and the need for an in-depth comprehension of caste identification in connection to dementia prevalence.

The data includes quite an equal number of male and female participants, according to the data on gender distribution in the study. This makes it possible to analyse gender-related traits and how they relate to dementia prevalence in-depth. This can help us to analyse gender-specific data, such as differences in healthcare access, social support, and risk factors, to understand the unique challenges that both men and women face. The study gives more complete picture of how gender affects dementia prevalence by considering the relationship of gender with other aspects of social life.

According to the distribution of education levels at the highest level, a significant proportion of participants lack a formal education. This result highlights the necessity to consider how education may impact dementia prevalence. Lack of access to education, especially higher levels of education, may raise the risk of dementia.

RECOMMENDATIONS

1. Improve dementia awareness and education: Given the large incidence of people without a formal education, dementia awareness and education initiatives in Rajasthan must be directed at both rural and urban populations. Information about dementia, its risk factors, and precautions should be the focus of these programmes in order to encourage early detection and intervention.
2. Stabilise the healthcare system in rural areas: Since the majority of the study's participants come from rural areas, it is critical to stabilise the healthcare system in these areas. This entails expanding access to specialised dementia care options, setting up memory clinics, and teaching medical personnel how to accurately diagnose and treat dementia.
3. Encourage the development of social support networks: Given that the likelihood of developing dementia is influenced by marital status, it is crucial to create and strengthen social networks for seniors, especially those who are widowed or single. People with dementia and their family can receive emotional and practical help from community-based programmes like support groups and carer networks.
4. Address caste-based disparities: Given that Scheduled tribe participation predominate and that Other backward class people are disproportionately represented, it is necessary to speak about the unique struggles and hardships that these caste categories confront. To guarantee that people from all castes have adequate support for dementia prevention, diagnosis, and management, it is imperative to campaign for equitable access to healthcare, education, and social services.

5. Gender-sensitive approach: To comprehend the distinctive experiences of both males and females in connection to dementia prevalence, it is necessary to use a gender-sensitive approach. Policies and initiatives should take into account the various requirements of elderly people depending on their gender identities and address gender-specific risk factors, access to healthcare, and social support networks.
6. Longitudinal studies and additional investigation: Longitudinal research should be carried out to better understand the factors influencing dementia prevalence in Rajasthan's older population. These studies can investigate the temporal correlations between elements including education, marital status, caste, and dementia, offering insightful data for policy creation and focused interventions.

CONCLUSION

- The prevalence of dementia in elderly population above 60 years of age is estimated to be 7.7% in the state of Rajasthan. From the findings of the analysis of caste, gender, married status, and highest level of education distribution, as well as the distribution of dwellings, open vital new views on the prevalence of dementia among Rajasthan's elderly population.

From the 308-dementia prevalent respondent we interpret that more prevalence was found in rural areas of Rajasthan i.e. 81.2 %. Based on caste distribution the majority belonged to scheduled tribe that was 38.6 %. Based on gender the prevalence was slightly more in males that is 51.3%.

Also, we interpret that there is a correlation between levels of education and prevalence of dementia, as more persons suffering from dementia had obtained no schooling in their life. Education might have serious effect on development of cognitive skills that includes perception, learning, memory, decision, reasoning ability and also language abilities.

- The findings highlight the necessity of focused activities, improved healthcare delivery to dementia patients and their caregivers and social support networks to address the issues faced by different population categories.
- By implementing strategies such as conducting additional longitudinal research on dementia, improving dementia awareness and education, conducting preventive programmes to detect , diagnose and carrying out early interventions, healthcare system stabilisation in rural areas by accurate diagnosis of dementia by professionals and establishing memory clinics, providing community

based care for widowed, singles and also for caregivers of dementia patients Rajasthan's elderly population can receive better dementia care, support early identification, and experience an overall increase in wellbeing.

LIMITATIONS:

- This study has limitations because it can only provide a snapshot of the data at one time and cannot prove that there are causal correlations between the variables. It is not feasible to say whether education or marital status directly affect dementia prevalence in this circumstance or the other way around. Studies that follow subjects over time would be more suited to investigate cause-and-effect linkages.
- Used secondary data could be unreliable. The primary sources and the procedures used for data collecting determine the authenticity and reliability of the data. Data entry or reporting errors may provide false results and compromise the validity of the conclusions.
- Individual differences, such as lifestyle factors, comorbidities, and access to healthcare, are not accounted for in these studies.
- Factors that could influence dementia prevalence, such as socioeconomic status, genetics, or other health conditions, are not accounted for in the analysis.

These limitations hinder the ability to draw definitive conclusions about the relationship between education, marital status, and dementia prevalence among the elderly in Rajasthan.

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