

## A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING DEMENTIA AMONG B.SC. NURSING FOURTH YEAR STUDENTS AT SELECTED NURSING COLLEGE, JAIPUR, RAJASTHAN

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### ABSTRACT

*Dementia is a progressive neurodegenerative condition that affects memory, cognition, behavior, and daily functioning, posing a major challenge to healthcare systems. Nurses play a vital role in the early identification and care of individuals with dementia; therefore, adequate knowledge among nursing students is essential. This descriptive study aimed to assess the knowledge regarding dementia among B.Sc. Nursing fourth-year students at selected nursing colleges in Jaipur, Rajasthan. A quantitative research approach with a descriptive design was adopted. Data were collected using a structured knowledge questionnaire from selected participants. Descriptive and inferential statistics were used for data analysis. The findings revealed varying levels of knowledge among students, with associations observed between knowledge scores and selected demographic variables. The study highlights the need for strengthened dementia-focused education in nursing curricula.*

**Keywords:** Dementia awareness, Cognitive impairment, Geriatric care, Undergraduate disorders, Clinical preparedness

## INTRODUCTION

Dementia is a progressive neurodegenerative condition that affects memory, cognition, behavior, and the ability to perform everyday activities.<sup>1</sup> It is a major cause of disability and dependency among older adults worldwide, posing significant challenges not only for the individuals affected but also for their families, caregivers, and healthcare systems (World Health Organization. Alzheimer's disease is the most common form of dementia, contributing to 60–70% of cases globally.<sup>2</sup>

According to the World Health Organization (WHO), more than 57 million people were living with dementia globally in 2021, with nearly 10 million new cases each year.<sup>2</sup>

In India, the estimated number of people living with dementia is around 5.3 million, with the majority of cases remaining undiagnosed or misdiagnosed due to a lack of awareness and limited access to appropriate healthcare services.<sup>3</sup>

Despite the increased prevalence of dementia in India, reports indicate little awareness of the disease. Symptoms are often misinterpreted or neglected, which could lead to late diagnosis, reducing the choices available regarding future care.<sup>4</sup>

Considering that most nurses caring for the elderly will work with people with dementia in the future, there is concern surrounding their ability to meet the needs of these patients, requiring them to obtain the necessary knowledge and positive attitudes for treatment.<sup>5</sup>

Nurses play a critical role in the identification, care, and management of individuals with dementia. Their knowledge, attitudes, and competencies significantly influence the quality of care provided to these patients.<sup>6</sup>

B.Sc. Nursing students, especially in their final year, are expected to have foundational knowledge and clinical exposure to various health conditions, including geriatric disorders like dementia. However, studies have shown that nursing students often possess inadequate knowledge and may hold misconceptions about dementia, which can affect their readiness to care for such patients effectively.

## STATEMENT OF THE PROBLEM

“A descriptive study to assess the knowledge regarding dementia among B.Sc. Nursing fourth year students at selected Nursing Colleges in Jaipur, Rajasthan”

## OBJECTIVES OF THE STUDY

- To assess the knowledge regarding dementia among B.Sc. nursing Fourth year students at selected nursing colleges in Jaipur, Rajasthan.

- To find out the association between knowledge regarding dementia among B.Sc. nursing fourth year students at selected nursing colleges in Jaipur, Rajasthan with their selected background variable.

## MATERIALS & METHOD

A quantitative research approach with a descriptive research design was employed. The study was conducted in Government College of Nursing Jaipur, Rajasthan with a sample size of 95 B.Sc. Nursing 4th year students selected through non-probability convenient sampling. Data collection tools include a structured knowledge questionnaire validated by 07 experts, with a reliability coefficient of 0.73. Data were gathered and analyzed using descriptive statistics (frequency, percentage, mean) and inferential statistics (chi-square test) to identify associations between knowledge levels and background variables.

## RESULT

**Table No. 1, Frequency and Percentage Distribution of Socio Demographical of Nursing Students.**

**N=95**

s.no.	Socio demographical variables	Categories	Frequency	Percentage
1	Gender	Male	40	42.11%
		Female	55	57.89%
2	Age in year	21-22	50	52.63%
		23-24	36	37.89%
		25 and above	9	9.47%
3	Family background	Urban	60	63.16%
		Rural	35	36.84%
4	Exposure	Yes	55	57.89%
		no	40	42.10%
5	Educational status of mother	Primary education	68	71.58%
		Secondary education	11	11.58%
		Higher secondary education	6	6.32%
		Graduation	7	7.38%
6	Educational status of father	Primary education	28	28.47%
		Secondary education	24	24.26%
		Higher secondary education	12	12.63%
		Graduation	31	32.63%

7	Type of family	Nuclear family	58	61.05%
		Joint family	28	29.47%
		Extended family	9	9.47%

**Table no.1 represents that**, the majority of participants were female 55 (57.89%), while 40 (42.11%) were male. With regard to age, most of the participants 50 (52.63%) belonged to the 21–22 years age group, followed by 36 (37.89%) in the 23–24 years category and 9 (9.47%) aged 25 years and above.

Regarding family background, the majority of participants 60 (63.16%) were from urban areas, while 35 (36.84%) belonged to rural areas. Concerning exposure, most participants 55 (57.89%) reported having exposure, whereas 40 (42.10%) reported no exposure.

With respect to mothers’ education, the largest group 68 (71.58%) had completed primary education, followed by secondary education 11 (11.58%), graduation 7 (7.38%), and higher secondary education 6 (6.32%). Regarding fathers’ education, the majority 31 (32.63%) were graduates, followed by primary education 28 (28.47%), secondary education 24 (24.26%), and higher secondary education 12 (12.63%). In terms of family type, most participants 58 (61.05%) belonged to nuclear families, followed by joint families 28 (29.47%) and extended families 9 (9.47%).

**Table no. 2, Frequency and percentage distribution according to the knowledge score regarding dementia among nursing students**

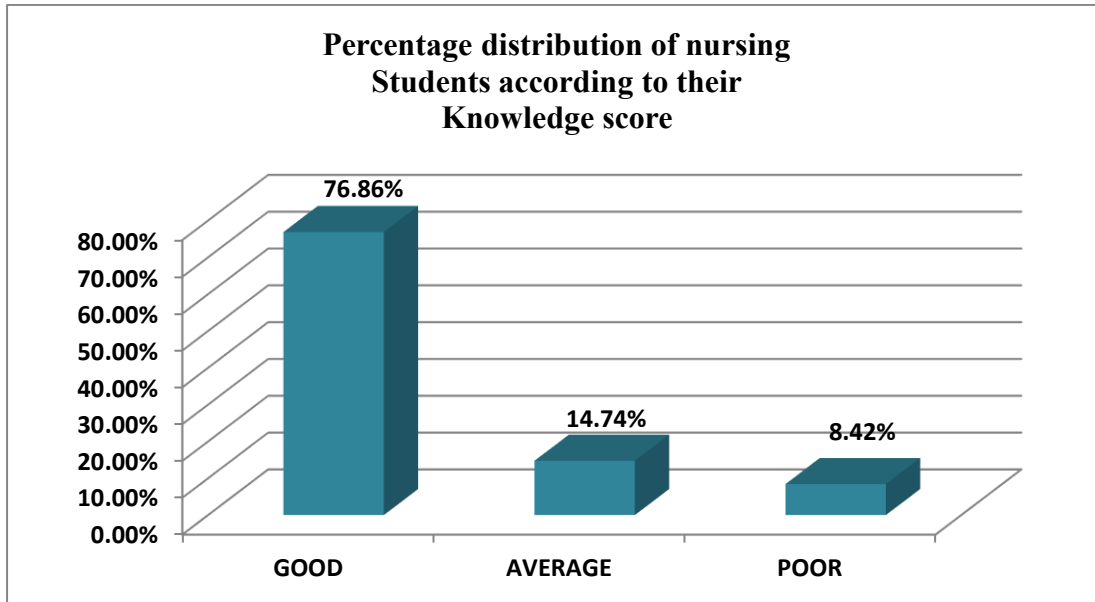
**N=95**

LEVEL OF KNOWLEDGE	SCORE	FREQUENCY(f)	PERCENTAGE (%)
GOOD	23-30	73	76.86%
AVERAGE	16-22	14	14.74%
POOR	1-15	8	8.42%

This table shows the Percentage Distribution According to the Level of Knowledge Score for nursing students. The knowledge levels are categorized into three groups: Good, Average, and Poor.

The majority of the individuals fall into the good knowledge level, scoring between 23-30, this group

accounts for 73 people, which represents 76.86% of the total sample. The remaining individuals are in the average and Poor categories 14 people 14.74% achieved a average score, ranging from 16 to 22, while 8 people 8.42% were classified as Poor, with scores between 1 and 15.



**Fig.1** percentage distribution of nursing students according to their knowledge score

**Table No. 3, Mean, Median, Mode and Standard Deviation of level of knowledge score regarding dementia among nursing students.**

N=95

Maximum score	Mean	Median	Mode	Standard Deviation
30	24.56	26	27	4.52

This table presents key descriptive statistics. The average (mean) knowledge score among the nursing students regarding dementia is 24.56. The median score, which is the middle value when all scores are ranked, is 26. The mode, representing the most frequently occurring score, is 27. The measure of data spread, the standard deviation, is 4.52.

**Table No. 4, Association between level of knowledge regarding dementia among nursing students with their selected socio-demographical variables.**

S. No	Socio demographical variable		Knowledge score			Chi square value	Tabulated value	DF	Level of significance
1	Gender	Male	28	9	3	3.32	5.991	2	NS
		Female	45	5	5				
2	Age	21-22	43	5	2	12.45	9.488	4	S
		23-24	27	5	4				
		25 and above	3	4	2				
3	Area of living	Urban	47	8	5	0.27	5.992	2	NS
		Rural	26	6	3				
4	Exposure	Yes	40	11	4	2.97	5.992	2	NS
		No	33	3	4				
5	Education status of mother	Primary Education	63	6	0	51.58	12.592	6	S
		Secondary Education	6	0	5				
		Higher Secondary Education	4	4	1				
		Graduation	1	4	2				
6	Education status of father	Primary Education	20	5	3	16.75	12.592	6	S
		Secondary Education	22	2	0				
		Higher Secondary Education	5	3	4				
		Graduation	26	4	1				
7	Family background	Nuclear	45	9	4	3.56	9.488	4	NS
		Join	23	3	2				
		Extended	5	2	2				

This table represents that the socio-demographic variables, Age, Education status of mother, and Education status of father, have a statistically significant effect on the knowledge score at the 0.05 significance level, as the calculated values are greater than the tabulated values. Therefore, the researcher rejects the null hypothesis: “There is no significant association between knowledge score and the selected socio-demographic variables at 0.05 level of significance.”

The socio-demographic variables Gender, Area of living, Exposure, and Family background have no

statistically significant effect on the knowledge score, as the calculated values are less than the tabulated values. Therefore, the researcher failed to reject the null hypothesis for these variables.

## DISCUSSION

The present study reveals a higher proportion of female participants (57.89%) and a predominance of younger age groups (21–22 years), reflecting a demographic trend similar to recent health-science-based studies, but with slight variations in percentages. Earlier studies conducted by Sharma et al. (2018) and Patel et al. (2020) also reported female predominance, though with lower representation than observed in the current study. In contrast to previous findings where rural background was more prominent, the present study shows a higher urban representation (63.16%), suggesting improved urban access to education. Parental education patterns partially align with earlier research, showing lower maternal education compared to fathers. Overall, when compared with older studies, the present findings indicate shifting socio-demographic trends, emphasizing changing family structures, educational access, and urban influence on the study population.

## CONCLUSION

The study concludes that most B.Sc. Nursing fourth-year students possess good knowledge regarding dementia, indicating satisfactory theoretical understanding. However, a notable percentage demonstrated only average or poor knowledge, highlighting the need for strengthened educational strategies. The findings also reveal that parental education, particularly mothers and father's educational status, significantly influences the knowledge level of students regarding dementia. Other demographic variables such as age, gender, area of living, and exposure to dementia showed no significant association. Overall, the study emphasizes the need for focused educational interventions and practical exposure to ensure comprehensive understanding of dementia among nursing students.

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