



Knowledge and Attitude on Dementia among Nursing Students of Pokhara

Monika Thapa

MSc. Healthcare Leadership

BPP University, West London. UK

thapamonika642@gmail.com

<https://orcid.org/0009-0006-6662-7545>

Bishnu Gurung*

Lecturer

Pokhara Nursing Campus, Institute of Medicine, Tribhuvan University, Nepal

bishnu.gurung@ponc.tu.edu.np

<https://orcid.org/0000-0003-1186-6646>

Original Research Article

Corresponding Author*

Received: February 1, 2025

Revised & Accepted: March 24, 2025

Copyright: Author(s) (2025)



This work is licensed under a [Creative Commons Attribution-Non Commercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

Abstract

Dementia cases are rising rapidly worldwide, prompting the World Health Organization (WHO) to recognize dementia as a public health priority. As primary caregivers, nursing students play a crucial role in dementia care, where their knowledge and attitude significantly impact the quality of care provided. This study aimed to assess the knowledge and attitude of nursing students in Pokhara regarding dementia.

A descriptive cross-sectional study was conducted among 121 third-year PCL nursing students from three nursing colleges: Fishtail Nursing Campus, Charak Academy, and Fewa City Institute of Medical Science. Simple random sampling was used to select the colleges, and all eligible nursing students were included using a complete enumeration method. Data were collected using a self-administered structured questionnaire, with standardized tools such as the Alzheimer's Disease Knowledge Scale (ADKS) and the Dementia Attitude Scale (DAS). The collected data were entered into the Statistical Package for Social Sciences (SPSS) version 16 and analyzed using descriptive statistics (frequency, percentage, mean, and standard deviation). Inferential statistics, including the t-test, were used to assess differences in



knowledge and attitude scores based on background variables. Pearson's correlation coefficient was applied to examine the relationship between knowledge and attitude regarding dementia. The study found that the mean knowledge score was 15.64, while the mean attitude score was 95.61. No statistically significant differences were observed in knowledge and attitude scores across the variables. Additionally, there was no correlation between knowledge and attitude toward dementia (Pearson Correlation Coefficient = -0.007, p-value = 0.941).

The findings indicate that nursing students performed best in the assessment and diagnosis domain but scored lowest in the symptoms domain of dementia knowledge. Their overall attitude toward dementia was moderately positive. However, enhancing nursing students' knowledge while maintaining a positive attitude is essential for ensuring high-quality care for individuals with dementia.

Keywords: Knowledge, Attitude, Dementia, Nursing students

Introduction

The ageing population is increasing rapidly throughout the world. One of the biggest challenges associated with the aging population is dementia. Dementia is a leading cause of disability and dependence among older adults worldwide. Globally there are more than 55 million people with dementia and every year there are 10 million new cases. According to World Health Organization (WHO), the number is expected to be doubled by 2030 and more than triple by 2050. Over 60 % of people with dementia are living in low-and middle-income countries. Similarly, in South-East Asia Region, aged people were 9.8% in 2017 and believed to be increased to 13.7% and 20.3% by 2030 and 2050 respectively (WHO,2023).

Previous study conducted in Nepal, shows that the prevalence of dementia was 11.4% (Nepal & Sapkota, 2018). Due to increasing rate of people with dementia globally, World Health Organization (WHO) recognizes dementia as a public health priority (WHO,2021).

In Nepal, virtually there is no awareness of the dementia among general public, healthcare professionals and policy makers. The illness places a heavy burden for the both elderly patients and their caregivers. It is estimated that currently about 135,000 people are suffering from some kind of dementia in Nepal (Jha & Sapkota, 2013). However, when the signs and symptoms worsened, people with dementia becomes aggressive and they receive negative attitudes from people around them (Dementia Australia, 2017). Diagnosing and managing dementia is a challenge for health care professionals in developing country like Nepal. An exploratory design study conducted to assess critical challenges perceived by healthcare professionals in Nepalese old aged home found that limited educational training, insufficient resources for proper diagnostic examination, poor healthcare professional-to-patient ratio, inadequate competence to specific dementia care were found (Shrestha & Tranvag, 2022).

With the high prevalence of dementia worldwide, meeting patients' needs remains a significant concern. However, dementia care has often been overlooked. Nurses are expected to possess the necessary skills and competence to provide proper care for individuals with dementia. (Thumbowila et al., 2021). A pilot study conducted in Nepal revealed that nurses had



inadequate knowledge concerning the diagnosis, management, and care of dementia, with a mean score of 3.54 and a standard deviation of 1.82. Providing care and managing dementia patients in nursing home settings remains a significant challenge in contemporary healthcare delivery (Pathak & Gaire, 2020). A cross-sectional study conducted to assess knowledge of Alzheimer's disease among medical students reveals that they have average knowledge with mean score of 17.44 in first year and 19.06 in final year out of total mean score 30 (Sharma et al., 2018).

As number of people with dementia is also increasing worldwide, there is more chance of nursing students to interact with dementia patients directly. Various studies conducted in other countries shows that the nursing students have poor knowledge but positive attitude towards dementia (Poreddi et al., 2015; Sunaryo et al., 2020; Wang & Xiao, 2020). However, nursing students may not acquire the requisite knowledge from existing undergraduate curricula (Eccleston et al., 2015). They often struggle in dealing with the behavioural problems of patients (Strom et al., 2019).

Nursing students are primary caregiver, their knowledge and attitude on dementia influence the quality of care. There are several studies regarding other health issues in elderly but there is limited study regarding such serious health issues in Nepal. Nursing students should be prepared to deliver care for vulnerable people, including people with dementia. Thus, researchers felt the need to assess knowledge and attitude on Dementia among nursing students.

Methods

A descriptive cross-sectional study design was used to assess the knowledge and attitude on dementia among nursing students of Pokhara. The study was conducted in three nursing colleges which are running Proficiency Certificate Level (PCL) Nursing program in Pokhara. They are Fishtail Nursing Campus, Charak Academy and Fewa City Institute of Medical Science. The study population consisted of PCL 3rd year students because by this year they were expected to have organized knowledge and experience on care of patient with dementia. There were altogether 198 nursing students studying in PCL 3rd year in 5 nursing colleges of Pokhara. Currently there were 5 nursing colleges who were running PCL Nursing program in Pokhara. Among them, 3 nursing colleges were selected by simple random sampling using lottery method. From the selected nursing colleges, all the students of PCL 3rd year were taken by complete enumeration. The sample size was 121 from 3 selected nursing colleges of Pokhara i.e. Fishtail Nursing Campus (40), Charak Academy (39) and Fewa City Institute of Medical Science (42).

Self-administered structured tool was used for data collection. The questionnaire was divided into three parts, Part I consisted of 7 questions related to background information and dementia like age, residence, types of family, source of information, family history of dementia and cared patient with dementia. Part II consisted of standard tool "Alzheimer's Disease Knowledge Scale (ADKS)" and Part III consisted of standard tool "Dementia Attitude scale (DAS)".



Permission was obtained for using ADKS from Brain D Carpenter whereas DAS was open access. ADKS comprised of 30 items with true/false responses (Carpenter et al, 2009). The Alzheimer's Disease Knowledge Scale (ADKS) assesses knowledge levels across various domains, including life impact (3 items), risk factors (6 items), symptoms (4 items), treatment and management (4 items), assessment and diagnosis (4 items), caregiving (5 items), and the course of the disease (4 items). Each correct response is awarded one point, while incorrect answers receive a score of zero. The total possible score ranges from 0 to 30, with higher scores indicating greater knowledge. The ADKS demonstrates strong reliability, with a test-retest reliability coefficient of 0.81 and an internal consistency reliability of 0.71. It also has established validity, including content, predictive, concurrent, and convergent validity (Carpenter et al., 2009). In Nepal, this tool was utilized in a study conducted in Kathmandu to evaluate dementia-related knowledge among medical students (Sharma et al., 2018).

The Dementia Attitudes Scale (DAS) consists of 20 items measured on a 7-point Likert scale, ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). It is divided into two sub-domains: "Dementia Knowledge" (items 3, 7, 10, 11, 12, 14, 15, 18, 19, 20) and "Social Comfort" (items 1, 2, 4, 5, 6, 8, 9, 13, 16, 17). Each response is assigned a score between 1 and 7, with higher scores reflecting more positive attitudes. The total possible score ranges from 20 to 140. This tool was chosen for its strong psychometric properties, including a Cronbach's alpha reliability range of 0.83 to 0.85. It also demonstrates convergent validity, as it significantly correlates with scales measuring ageism and attitudes toward disabilities (correlation range: 0.44–0.55; mean correlation: 0.50). These findings confirm the DAS as a reliable and valid research instrument (Connor & McFadden, 2010). A pretest was conducted with 10% of the total sample, approximately 12 nursing students from Charak Institute of Health Science, and no modifications were required.

Data Collection

After getting formal permission from concerned authority of Fishtail Nursing Campus, Charak Academy and Fewa City Institute of Medical Sciences, further permission was taken from PCL 3rd year co-ordinators from the selected colleges. Respective year coordinator was explained about the objectives and purpose of the study. Data was collected as per the time convenience of nursing students. Then the respondents were approached in their own class. Researcher gave her introduction and explained about research purpose and its importance.

Respondents were informed that their involvement in the study was entirely voluntary, with the freedom to withdraw at any stage of data collection. Before data collection, written informed consent was obtained. A structured self-administered questionnaire was used for data collection, which was conducted in their respective classrooms by the researcher. To ensure anonymity, code numbers were assigned instead of names, and confidentiality was maintained by not sharing the information with others. Respondents were assured that the collected data would be used solely for research purposes. Data collection took place over three different days at selected colleges, with each questionnaire requiring approximately 15–20 minutes to complete.

**Data Analysis**

All the data was overviewed, checked and verified for its completeness, consistency, utility and accuracy. The collected data was edited, coded, and entered into the Statistical Package for Social Sciences (SPSS) version 16. The findings were analysed using descriptive statistics, including frequency, percentage, mean, and standard deviation. Inferential statistics t-test was used to find out the difference in knowledge score and attitude score with background variables as well as Pearson Correlation Coefficient was used to assess relationship between knowledge and attitude on dementia among nursing students. The level of significance considered was at 5% with $p\text{-value} < 0.05$.

Results

More than half of nursing student's (64.5%) were from below 20 years, Mean \pm SD: (19.38 \pm 1.253). Majority (78.5%) of them were Hindu, 90.1 percent have mental health course as a source of information, only 2.5 percent have family history of dementia and more than half of them (66.9%) had cared patient with dementia (Table 1).

Table 1*Background Information of Nursing Students*

n = 121

Characteristics	Number	Percent
Age (in years)		
< 20	78	64.5
≥ 20	43	35.5
Mean \pm SD: 19.38\pm1.253		
Residence		
Metropolitan city	80	66.1
Sub- metropolitan city	4	3.3
Municipality	35	28.9
Rural municipality	2	1.7
Religion		
Hindu	95	78.5
Buddhist	21	17.4
Muslim	3	2.5
Christian	2	1.7
Types of family		
Nuclear	100	82.6
Joint	21	17.4
Source of information #		
Mental Health Course	109	90.1
Radio	6	5.0



Newspaper	8	6.6
Health Personnel	32	26.4
Television	9	7.4
Internet	35	28.9
Cared patient with dementia	81	66.9

Multiple response question

Majority (84.3 %) of the nursing students answered that people with AD are particularly prone to depression and only 19 percent respond correctly to the statement that mental exercise can prevent AD (Table 2).

Table 2

Knowledge of Nursing Students on Life impact, Risk Factor and Symptoms of Dementia
n=121

Statements	Number	Percent
Life Impact		
People with AD are particularly prone to depression.	102	84.3
Most people with AD live in nursing homes.	59	48.8
Safe for people with AD to drive.	110	90.9
Risk Factor		
Mental exercises can prevent AD.	23	19
People in 30s can have AD	60	49.6
High Cholesterol can increase risk of AD.	60	49.6
Prescription Drugs are available for AD.	41	33.9
High BP may increase risk of AD.	77	63.6
Gene can partially develop AD.	83	68.6
Symptoms		
Tremor is common symptom of AD.	28	23.1
Trouble Handling money is common early symptom	76	62.8
Believes that other is stealing things.	43	35.5
Remember recent event better than past.	45	37.2

AD indicates Alzheimer's Disease

Majority (89.3 %) of nursing students answered that AD is a type of dementia, only 33.1 percent of nursing students answered correctly that AD cannot be cured and only 10.7 percent answered that average life expectancy of people with AD is 6-12 years (Table 3).



Table 3

Knowledge of Nursing Students on Treatment and Management, Assessment and Diagnosis, Care Giving and Course of Dementia

n=121

Statements	Number	Percent
Treatment and Management		
People with AD can be benefit from psychotherapy	104	86
Poor Nutrition can worse symptom of AD.	93	76.9
Reminder notes is a crutch that can decline AD.	39	32.2
AD cannot be cured.	40	33.1
Assessment and Diagnosis		
Medical examination might reveal other health problems that cause agitated.	99	81.8
Troubled memory, confused thinking likely due to AD.	36	29.8
Symptoms of severe depression can be mistaken as AD.	89	73.6
AD is a type of Dementia.	108	89.3
Care giving		
Do best with simple instruction with a time.	81	66.9
When they have difficulty self-caring, caregivers should take over.	20	16.5
If they become alert and agitated at night, physical activity during day is good strategy.	92	76
If they repeat same questions or stories, it is helpful to remind they are repeating.	31	25.6
Once they had AD, they are not capable of making informed decision.	50	41.3
Course of disease		
After AD symptoms, average life expectancy is 6-12 years.	13	10.7
In rare cases, people had recovered from AD.	36	29.8
People are likely to fall as disease get worse.	86	71.1
People with AD needs 24 hours supervision	89	73.6

AD indicates Alzheimer's disease

Only 38 percent of the nursing student disagreed that they are afraid of people with dementia, almost half (46.2%) of the nursing student disagreed that they are uncomfortable being around with people with ADRD and more than half (57%) disagreed that they would avoid an agitated person with ADRD (Table 4).



Table 4

Attitude of Nursing Students on Comfort of Dementia

n= 121

Statements	SD	D	SiD	N	SiA	A	SA
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
Rewarding to work with people who have ADRD	8 (6.6)	14 (11.6)	15 (12.4)	39 (32.2)	14 (11.6)	19 (15.7)	12 (9.9)
Afraid of people with ADRD *	7 (5.8)	46 (38)	12 (9.9)	25 (20.7)	20 (16.5)	10 (8.3)	1 (8)
Confident around people with ADRD.	6 (5)	23 (19)	26 (21.5)	36 (29.8)	19 (15.7)	11 (9.1)	0 (0.0)
Comfortable touching people with ADRD.	6 (5)	14 (11.6)	26 (21.5)	24 (19.8)	7 (5.8)	36 (29.8)	8 (6.6)
Uncomfortable being around them*	7 (5.8)	56 (46.3)	13 (10.7)	23 (19)	12 (9.9)	8 (6.6)	2 (1.7)
Not very familiar with ADRD*	7 (5.8)	21 (17.4)	15 (12.4)	28 (23.1)	16 (13.2)	31 (25.6)	3 (2.5)
Would avoid an agitated person with ADRD*	10 (8.3)	69 (57)	8 (6.6)	24 (19.8)	4 (3.3)	6 (5)	0 (0.0)
Feel relaxed around people with ADRD.	4 (3.3)	46 (38)	20 (16.5)	31 (25.6)	7 (5.8)	12 (9.9)	1 (8)
Feel frustrated because I don't know how to help *	4 (3.3)	48 (39.7)	16 (13.2)	31 (25.6)	16 (13.2)	5 (4.1)	1 (0.8)
Cannot imagine caring for someone with ADRD*	18 (14.9)	65 (53.7)	9 (7.4)	15 (12.4)	7 (5.8)	7 (5.8)	0 (0.0)

*Negative statement

ADRD indicates Alzheimer's Disease and Related Dementia

SD= strongly disagree, D= Disagree, SiD= Slightly disagree, N= Neutral, SiA= Slightly Agree, A= Agree, SA= Strongly Agree.

Most of the nursing students (44.6 %) that it is important to know the past history and majority 47.9 agreed that we can do a lot to improve the lives of people with ADRD (Table 5).



Table 5

Attitude of Nursing students on Knowledge of Dementia

n= 121

Statements	SD	D	SiD	N	SiA	A	SA
	No.	No.	No.	No.	No.	No.	No.
	(%)	(%)	(%)	(%)	(%)	(%)	(%)
People with ADRD can be creative.	2 (1.7)	24 (19.8)	12 (9.9)	36 (29.8)	19 (15.7)	26 (21.5)	2 (1.7)
Every person has different needs.	3 (2.5)	7 (5.8)	4 (3.3)	13 (10.7)	76 (62.8)	18 (14.9)	0 (0.0)
Like having familiar things nearby.	2 (1.7)	11 (9.1)	9 (7.4)	18 (14.9)	20 (16.5)	44 (36.4)	17 (14)
Important to know the past history.	3 (2.5)	7 (5.8)	1 (0.8)	2 (1.7)	9 (7.4)	54 (44.6)	45 (37.2)
Possible to enjoy interacting with them	1 (0.8)	10 (8.3)	4 (3.3)	20 (16.5)	26 (21.5)	44 (36.4)	16 (13.2)
They can enjoy life.	2 (1.7)	19 (15.7)	10 (8.3)	10 (8.3)	16 (13.2)	41 (33.9)	23 (19)
They can feel when others are kind to them.	1 (0.8)	11 (9.1)	8 (6.6)	23 (19)	15 (12.4)	40 (33.1)	23 (19)
I admire the coping skills of people with ADRD.	2 (1.7)	14 (11.6)	7 (5.8)	25 (20.7)	18 (14.9)	32 (26.4)	23 (19)
We can do a lot to improve the lives of people with ADRD.	3 (2.5)	2 (1.7)	2 (1.7)	9 (7.4)	9 (7.4)	58 (47.9)	38 (31.4)
Difficult behaviours may be a form of communication.	7 (5.8)	10 (8.3)	8 (6.6)	23 (19)	22 (18.2)	38 (31.4)	13 (10.7)

ADRD indicates Alzheimer's Disease and Related Dementia

SD= Strongly Disagree, D= Disagree, SiD= Slightly Disagree, N= Neutral, SiA= Slightly Agree, A= Agree, SA= Strongly Agree

The mean knowledge score was 15.64 and the mean attitude score of nursing students on dementia was 95.61 (Table 6).



Table 6

Mean and Standard Deviation of each domain of Knowledge and Attitude on Dementia among Nursing Students

n=121

Variables	Mean± SD	Confidence Interval	Score Range
Overall Knowledge Score	15.64±2.45	(15.20,16.08)	9-22
Life impact	2.23±0.64	(2.12,2.35)	
Risk Factor	2.67±1.22	(2.45,2.89)	
Symptoms	1.58±1	(1.40,1.76)	
Treatment and Management	2.28±0.87	(2.12,2.43)	
Assessment and Diagnosis	2.74±0.82	(2.59,2.89)	
Care giving	2.26±1.04	(2.07,2.45)	
Course of Disease	1.85±0.86	(1.69,2)	
Overall Attitude score	95.61±12.90	(93.29,97.94)	52-121
Comfort	44.33±6.68	(43.20,44)	
Knowledge	51.28±9.37	(49.59,52.96)	

There was no any significant difference in knowledge score with age, residence, religion, types of family, family history of dementia and cared patient with dementia (Table 7).

Table 7

Difference in Knowledge score with Background Variables

n=121

Variables	No.	Mean	SD	t -value	p- value
Age (in Years)					
< 20	78	15.35	2.23		
≥20	43	16.16	2.76	-1.735	0.085
Residence					
Urban	80	15.85	2.31		
Rural	41	15.24	2.70	1.287	0.201
Religion					
Hindu	95	15.60	2.22		
Others (Buddhist, Muslim, Christian)	26	15.80	3.21	-0.310	0.759
Types of family					
Nuclear	100	15.65	2.44		
Joint	21	15.61	2.59	0.052	0.958
Family history of dementia					
Yes	3	13.66	4.04		
No	118	15.69	2.41	-1.417	0.159



Cared patient with dementia					
Yes	81	15.66	2.32		
No	40	15.60	2.73	0.140	0.889

There was no any significant difference in attitude score with age, residence, religion, types of family, family history of dementia and cared patient with dementia (Table 8).

Table 8

Difference in Attitude score with Background Variables

n=121

Variables	No.	Mean	SD	t -value	p- value
Age (in Years)					
< 20	78	95.07	12.98		
≥20	43	96.60	12.85	-0.622	0.535
Residence					
Urban	80	95.72	12.26		
Rural	41	95.41	14.23	0.125	0.901
Religion					
Hindu	95	94.85	12.75		
Others (Buddhist, Muslim, Christian)	26	98.42	13.31	-1.253	0.213
Types of family					
Nuclear	100	95.34	12.10		
Joint	21	96.95	16.49	-0.519	0.605
Family history of dementia					
Yes	3	84.33	28.36		
No	118	95.33	12.40	-1.543	0.126
Cared patient with dementia					
Yes	81	95.51	13.45		
No	40	95.82	11.87	-0.122	0.903

No statistically significant correlation was found between knowledge and attitude toward dementia among nursing students ($p < 0.05$) (Table 9).

**Table 9**

Relationship between Knowledge and Attitude on Dementia among Nursing Students
n=121

Variables	Correlation coefficient*	p-value
Knowledge	-0.012	0.892
Attitude		

*Pearson Correlation Coefficient

Discussion

The present study findings show that the mean knowledge score on dementia of nursing students was 15.64 out of 30. In contradictory, a study conducted among first and final year medical students of Kathmandu, Nepal shows mean score of 19.06 in final year students (Sharma et al., 2018). The study conducted among nurses of India with knowledge score of 19.50 (Strøm & Engedal, 2019). The study conducted in China among Community health professional shows knowledge score i.e., 19.70 (Wang et al., 2018). Another study conducted in China among medical and nursing students shows that the overall mean knowledge score was 19.49 which was considered as poor knowledge on dementia (Wang & Xiao, 2020). The study conducted among 122 nursing students of India among 3rd and 4th year shows that the mean knowledge score was 17.80 and 15.80 respectively. Various studies show low knowledge on dementia of nursing students (Sunaryo et al., 2020, Lim et al., 2021). In contradictory to present study, a study conducted in South Korea shows good knowledge among nursing students with knowledge score of 10.26 out of 12 using the Korean version of the Dementia Knowledge Questionnaire (Shin et al., 2015).

The mean attitude score of the study conducted in India among 3rd and 4th year nursing students was 97.8 and 92.1 respectively (Poreddi et al., 2015). The present study demonstrated higher attitude score of 95.61 than 4th year nursing students. Similarly, the study conducted in Malaysia among nurses shows attitude score of 98.99 which was considered as positive attitude towards dementia (Lim et al., 2021). The study conducted in Indonesia shows the mean attitude score of 99.60 which was also considered as positive attitude among nursing students towards dementia (Sunaryo et al., 2020). Similarly, the study conducted in India among nurses shows mean attitude score of 107 which was also considered as positive attitude towards dementia (Strøm & Engedal, 2019).

The present study findings shows that 84.2 percent of nursing students answered correctly to the statement that the depression is particularly common among individuals living with Alzheimer's disease, only 33.1 percent answered correctly that Alzheimer's disease cannot be cured and 89.3 percent answered correctly that Alzheimer's disease is a type of dementia. These findings were almost similar to study of nursing students in India where 79.5 percent answered correctly to the statement that they were prone to depression and contradictory 55.7 percent of the nursing students answered to the statement that Alzheimer's disease cannot be



cured ,82.8 percent answered correctly that Alzheimer's disease is a type of dementia (Poreddi et al., 2015).

The present study findings have no statistically difference in knowledge and attitude score with background variables like age, residence, care of patient with dementia and family suffering from dementia. Contradictory to this finding, the study conducted in Indonesia shows correlation with knowledge on dementia and background variables like age and experience with caring patient and also with the attitude score and age (Sunaryo et al., 2020). Similarly, the study conducted in South Korea among nursing students shows correlation between knowledge and background variables like increase in grade; p -value= 0.001, experience in education on dementia; p -value= 0.01, previous experience in caring for patients with dementia during clinical practice was found to be significant, with a p -value of 0.001 based on the ANOVA test (Shin et al., 2015).

The present study has no statistically significant correlation between knowledge and attitude on dementia; Correlation Coefficient = -0.007, p -value =0. 941. Similarly, a study conducted in Malaysia among nurses shows no correlation with knowledge and attitude on dementia; Correlation Coefficient = 0.154, p -value = 0.122 (Lim et al., 2021). In contradictory, a negative correlation was found between knowledge and age; correlation coefficient = -0.323, p -value =0.01 in a study conducted in India among nursing students (Poreddi et al., 2015). A statistically significant correlation was found between knowledge and attitude on dementia; correlation coefficient = 0.379, p -value =0.001 in the study of China among community health professional where p -value was based on multivariate analysis of variance (Wang et al., 2018).

Conclusion and Recommendations

The study concludes that nursing students scored highest in assessment and diagnosis domain and least in symptoms domain of knowledge on dementia. Their attitude towards dementia is somehow positive. There was no statistically significant difference in knowledge and attitude score among background variables. There was no any correlation between knowledge and attitude on dementia. However, enhancing nursing students' knowledge while maintaining their positive attitude is essential to ensuring high-quality care for individuals with dementia.

The findings of the study highlighted the need for improved theoretical and clinical exposure in dementia care for nursing students. This can be accomplished by allocating more instructional hours to dementia care within mental health course units. Furthermore, further studies are necessary to evaluate the understanding and perspectives of undergraduate and postgraduate healthcare students to identify their learning needs and develop a more inclusive and interdisciplinary educational program for dementia care and management.



References

- Carpenter, B. D., Balsis, S., Otilingam, P. G., Hanson, P. K., & Gatz, M. (2009). The Alzheimer's Disease Knowledge Scale: development and psychometric properties. *The Gerontologist*, 49(2), 236-247. DOI: <http://dx.doi.org/10.1093/geront/gnp023>
- Dementia Australia. (2017). *Agitation and aggression*. Available from: <https://www.dementia.org.au/living-dementia/mood-and-behaviour-changes/agitation-and-aggression>
- Eccleston, C. E., Lea, E. J., McInerney, F., Crisp, E., Marlow, A., & Robinson, A. L. (2015). An investigation of nursing students' knowledge of dementia: A questionnaire study. *Nurse Education Today*, 35(6), 800-805. DOI: <http://dx.doi.org/10.1016/j.nedt.2015.02.019>
- Gurung, M., Thapa, N., Khadka, M., Karki, T. B., & Neupane, D. (2020). Access the Quality Service of Ganeshman Singh Memorial Hospital and Research Center. *Nepal Journal of Multidisciplinary Research*, 3(3), 51-63.
- Jha, A., & Sapkota, N. (2013). Dementia assessment and management protocol for doctors in Nepal. *Journal of the Nepal Medical Association*, 52(189). DOI: <https://doi.org/10.31729/jnma.567>
- Lim, C. K., Ching, C. W., Jun, L. J., & Yun, L. (2021). Level of Knowledge and Attitude on Dementia Care Among Nurses. *The Malaysian Journal of Nursing (Mjn)*, 13(2), 3-7. DOI: <https://doi.org/10.31674/mjn.2021.v13i02.001>
- Mahat, D., Neupane, D., & Shrestha, S. (2024). Quantitative Research Design and Sample Trends: A Systematic Examination of Emerging Paradigms and Best Practices. *Cognizance Journal of Multidisciplinary Studie*, 4(2), 20-27.
- Michalowski, B., Xie, F., Eichler, T., Hertel, J., Kaczynski, A., Kilimann, I., Teipel, S., Wucherer, D., Zwingmann, I., Thyrian, J. R., & Hoffmann, W. (2019). Cost-effectiveness of a collaborative dementia care management-Results of a cluster-randomized controlled trial. *Alzheimer's & Dementia: the Journal of the Alzheimer's Association*, 15(10), 1296–1308. DOI: <https://doi.org/10.1016/j.jalz.2019.05.008>
- Nepal, S., & Sapkota, N. (2018). Prevalence of Dementia among Elderly Patients attending Psychiatry OPD of Tertiary Care Hospital and its Association with Socio Demographic Variables. *Journal of Psychiatrists' Association of Nepal*, 6(1), 12–17. DOI: <https://doi.org/10.3126/jpan.v6i1.21766>
- O'Connor, M. L., & McFadden, S. H. (2010). Development and psychometric validation of the dementia attitudes scale. *International Journal of Alzheimer's disease*, 2010. DOI: [10.4061/2010/454218](https://doi.org/10.4061/2010/454218)
- Pathak, K. P., & Gaire, T. (2020). Dementia in Nepal: Early recognition knowledge, management barriers and practices of registered nurses—A pilot study. *Journal of Gerontology & Geriatric Research*, 9(3), Article 512. DOI: <https://doi.org/10.35248/2167-7182.20.9.512>
- Poreddi, V., Carpenter, B. D., Gandhi, S., Chandra, R., & GandhiSuresh BadaMath, S. (2015). Knowledge and attitudes of undergraduate nursing students toward dementia: An Indian perspective. *Investigacion y Educacion en Enfermeria*, 33(3), 519–528. DOI: [10.17533/udea.iee.v33n3a16](https://doi.org/10.17533/udea.iee.v33n3a16)
- Sharma, R., Sharma, S. C., Pradhan, S. N., Chalise, P., & Paudel, L. (2018). Knowledge of Alzheimer's Disease Among Medical Students of a Medical College. *JNMA; Journal of the Nepal Medical Association*, 56(211), 666-669. DOI: <https://doi.org/10.1155/2020/6173217>



- Shin, J. H., Seo, H. J., Kim, K. H., Kim, K. H., & Lee, Y. (2015). Knowledge about dementia in South Korean nursing students: a cross-sectional survey. *BMC Nursing*, 14(1), 1-7. DOI: <https://doi.org/10.1186/s12912-015-0116-4>
- Shrestha, S., & Tranvåg, O. (2022). Dementia care in Nepalese old age homes: Critical challenges as perceived by healthcare professionals. *International Journal of Older People Nursing*, 17(4), e12449. DOI: <https://doi.org/10.1111/opn.12449>
- Strøm, B. S., Engedal, K., & Andreassen, L. (2019). Nursing staff's knowledge and attitudes toward dementia: a pilot study from an Indian perspective. *Dementia and Geriatric Cognitive Disorders Extra*, 9(3), 352-361. DOI: <https://doi.org/10.1159/000502770>
- Sunaryo, S. R. A., Saifullah, A. D., & Mulyani, S. (2020). Knowledge and attitudes toward people with dementia among nursing students in Yogyakarta, Indonesia. *Belitung Nursing Journal*, 6(6), 196-202. DOI: <https://doi.org/10.33546/bnj.1178>
- Thumbowila, C. L., Fathimath, F., Randeniyage, S., & Sameera, A. G. L. A. (2021). Knowledge and practices of dementia among nurses in a private healthcare institute in Sri Lanka. <http://ir.lib.ruh.ac.lk/xmlui/handle/iruor/8159>
- Wang, Y., Xiao, L. D., & Huang, R. (2020). A comparative study of dementia knowledge, attitudes and care approach among Chinese nursing and medical students. *BMC Medical Education*, 20(1), 1-9. DOI: <https://doi.org/10.1186/s12909-020-02365-1>
- Wang, Y., Xiao, L. D., Luo, Y., Xiao, S. Y., Whitehead, C., & Davies, O. (2018). Community health professionals' dementia knowledge, attitudes and care approach: a cross-sectional survey in Changsha, China. *BMC Geriatrics*, 18(1), DOI: <https://doi.org/10.1186/s12877-018-0821-4>
- World Health Organization (2023), Dementia. Available from: <https://www.who.int/news-room/fact-sheets/detail/dementia>
- World Health Organization. (2021). Global status report on the public health response to dementia. World Health Organization. Available from: <https://www.who.int/publications/i/item/9789240033245>