

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Knowledge, Attitude, and Practice of Nurses in Elderly Care and Need for Analysis of Geriatric Care Service in Tertiary Care Hospital Belgavi, Karnataka – A Descriptive Study

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ABSTRACT

Background: The major aim of the research was to determine the treating caretaker's understanding, Attitude as well and Practice in the care of older people receiving therapeutic attention, the study also identified the parameters that influenced the attitude of the Nurses and the low nurse-patient ratio which can show major impact in the care provided by attending nurses those who are involved in treating elderly people visiting Tertiary Care hospital in Belagavi Karnataka.

Aims:

To assess the knowledge, attitude, and practice of nurses towards the care of geriatric patients in tertiary care hospitals.

To assess the need for analysis of geriatric care services in tertiary care hospitals.

Setting and Design: This study was conducted at tertiary care hospital in Belagavi with a descriptive study design.

Methodology: The study involved 290 responses with a sample size of 287 healthcare Nursing faculty from tertiary care hospital. The data was collected using systematic selection and a pre-structured questionnaire. The data was analyzed using SPSS 30.0 software. A descriptive approach was used to assess the knowledge, attitude, practice, and need for geriatric care services, as well as the association between KAP scores of nurses with selected socio-demographics was analyzed.

Results: The study showed that among 290 responders, the majority of participants were female (66.2 %) as compared to male participants (33.8%). Of the participants with good knowledge (76.9%), wherein the attitude most participants agreed that they feel good taking care of elderly people (70%), which overall showed positive responses towards elder care. Whereas, the Practice of Nurses was good (67.6%). Also, the majority of the participants agreed that inadequate staffing might result in an unimaginable workload hence proper staffing was required, the majority of the 165 staff agreed and 112 strongly agreed that hospitals should have special Geriatric wards.

Conclusion: The Majority of the Participants showed good and positive knowledge, attitude, and practice, having unimaginable workload if inadequate staffing which might increase the stress among the staff for better and effective elderly care the hospital should require special training, having special Geriatric wards better quality of care to the patients.

Keywords: Geriatric care, Understanding, Attitude, Practice, Elderly care, Caregivers, quality patient care, Long Term Care Facility Survey.

Introduction

The population is a worldwide phenomenon as well and the quantity of persons over 60 has been steadily increasing worldwide as reported by the NITI along with a declining birth rate of fewer than 20 and improving lifespans of more than 70 years. Indian division for the execution of the national statistics office with programs and data developed the national program for senior citizens from a figure of 24.7 million in the year 1961 enumeration to an estimated 137.9 million and 158.7 million in the 2022 and 2025 counts respectively the number of older adults has grown making up 11.1% of the total population. ^[18-19]

India has some of the globe's most rapidly expanding people, including a growing proportion of senior people aged 60 and up, respectively, whereas the median lifespan at origin for men and females in the years 2006–2011 had been 65.65 and 67.22 decades.^[25]

Using the general public that a greater comparatively youthful in Indians continue to be on track for becoming a nation with the second-highest quantity of elderly individuals globally based on the World Health organizations WHO 2015 worlds provide an update on old age or wellness along with projects of the percentage of people in the world who are 60 or older are almost two times from the year 2015 and the year 2050. ^[19]

This increase as people age leads to a rise in the need for prolonged caring because older people's functional abilities are declining depending on the situation a range in between relatives as well as other skilled or untrained nurses can provide prolonged caring in official or unstructured settings through giving various kinds in qualified assistance formal prolonged care facilities LTCFS including caregiving facilities and assisted living facilities enable loved ones to assist them elderly relatives and accommodate its local evolving demands, who are or have been at danger of a substantial or continuous loss of inherent capability. ^[11]

The major aim of the research was to determine the treating caretaker's understanding of the care of older people receiving therapeutic attention way that attending Nursing staff treat elderly people visiting the hospital and influences their behaviours and also shows how much knowledge they have provided this type of care the study also looks at a variable which may impact on ratio among nurses and patient, which could further efficiency therapeutic attentions are given to all every older patients^[5]

Since there is a greater opportunity for mankind to innovate the healthcare system with fresh concepts and these viewpoints that would successfully raise various wards (Geriatric Units) for specialized care of elderly patients.

RESEARCH METHODOLOGY

Setting and Design: This study was conducted at tertiary care hospital in Belagavi with a descriptive study design

Data Source: Primary data was gathered from nurses employed in different elder care facilities in a tertiary care teaching hospital in Belagavi north Karnataka

SAMPLING TECHNIQUE: Using a convenient sampling, Method.

RESEARCH SETTING: The above research surveyed caregivers working in HC staff to evaluate the caregivers' understanding mindsets also exercises regarding old people in a teaching hospital in Belagavi Karnataka India possessing ability with over 2400 beds space.

STUDY PERIOD:

October 2024 - March 2025 (6 Months)

STUDY POPULATION:

The population chosen to host this study are the hospital personnel, who are Nurses from all the different wards, of a tertiary care teaching hospital in Belagavi during the study period of 6 months, which is from September 2024 to March 2025

SAMPLE SIZE:

With a prevalence of 57.2% and using a 95% confidence level and 5% margin of error.

Calculated sample size using the following formula.

$$n = \frac{\left(z_{1-\alpha/2}\right)^2 p(1-p)}{d^2}$$

where, n = the minimum sample size,

 $Z_{1-\alpha/2}$ = standard normal variate (at 5% type 1 error (P<0.05) it is 1.96,

p = proportion of prevalence described by a previous study 57.2% (Kebede, C et al)

d = absolute error or precision (10%).

Since there is a fraction, round up to the nearest whole number. Therefore, the required sample size (n) is approximately 287.

INCLUSIVE CRITERIA:

- 1. Faculty member who was providing assisted care and staffed older adults care units as well as those who have ID cards and for becoming part of this research investigations
- 2. Engaged caretakers in this investigation had a minimum of six months of working skills and those who wanted to be a part of the investigation

EXCLUSION CRITERIA:

- 1. Novice nurses and interns.
- 2. Refusal to finish filling out the survey those who were not willing to participate were excluded.

RESULTS AND OBSERVATIONS

Table 1: Age group distribution of Nursing staff working in a Tertiary Care Teaching Hospital in Belagavi Karnataka.

Variables	n (%)
Age Group	
21 - 25	72 (24.8)
26 - 30	127 (43.8)
31 - 35	28 (9.7)
>=36	63 (21.7)

Table 1: The majority belong to the 26-30 age (43.8%), then the 21-25 age group (24.8%). Participants group 36 higher constitute 21.7%, at a minimum collective is 31-35 yrs (9.7%). Shows most of those polled are young adults.

Fig 1.1: Percentage distribution of Age Group

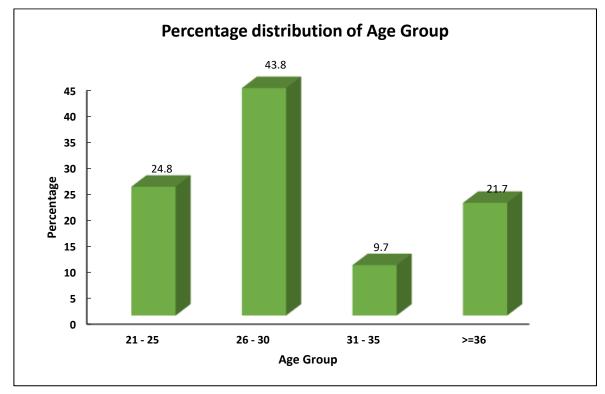


Table 2: Gender-wise distribution of Nursing staff working in a Tertiary Care Teaching Hospital in Belagavi Karnataka.

GENDER	n (%)
Male	98 (33.8)
Female	192 (66.2)

Table 2: Most of them were women 66.2% whereas men comprised 33.8% of the total indicating a higher representation of females in the surveyed population.

Fig 2.1: Graphical Distribution of Gender

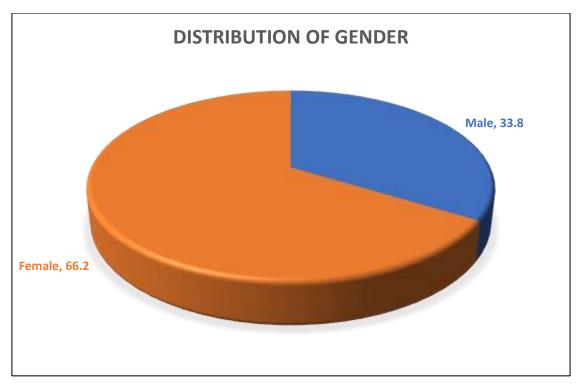


Table 3: Educational distribution of Nursing staff working in a Tertiary Care Teaching Hospital Belagavi Karnataka.

EDUCATION LEVEL	n (%)
GNM	136 (46.9)
Bachelor's Degree	146 (50.3)
Master's Degree	8 (2.8)

Table 3: The majority hold a Bachelor's degree (50.3%), followed by those with a GNM qualification (46.9%). Only a small proportion (2.8%) has attained a Master's degree. This indicates that most respondents have undergraduate-level education, with relatively few pursuing higher educations.

Fig 3.1: Graphical Distribution of Respondents by Education Level

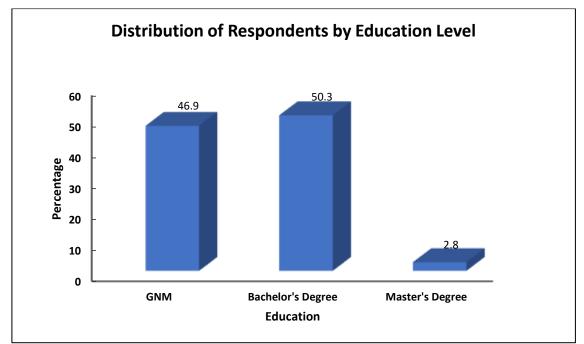


Table 4: Marital status of Nursing staff working in a Tertiary Care Teaching Hospital in Belagavi Karnataka.

MARITAL STATUS	n (%)
Single	158 (54.5)
Married	132 (45.5)

Table 4: The data shows that a larger proportion of respondents are single (54.5%) compared to those who are married (45.5%).

Fig 4.1: Graphical presentation of Marital Status Distribution of Respondents

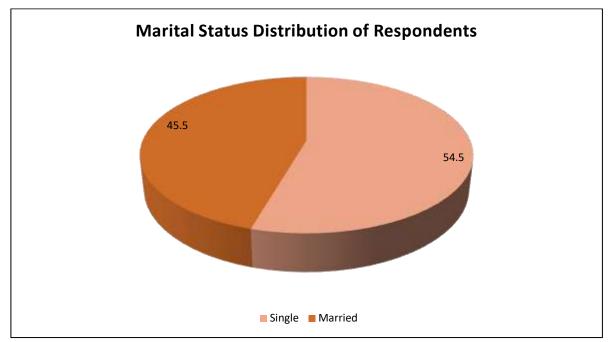


Table 5: Working Experience of Nursing staff working in a Tertiary Care Teaching Hospital Belagavi Karnataka.

YEAR OF EXPERIENCE	n (%)
Less than 5 years	162 (55.8)
5 to 10 years	84 (29)
More than 10 years	44 (15.2)

Table 5: Most of those surveyed (55.8%) had less than 5 yr of experience indicating a relatively young workforce whereas 29% had five up to ten years of experience while only 15.2% possess more than 10 years suggesting fewer highly experienced professionals in the group.

Fig 5.1: Distribution of Respondents by Years of Experience



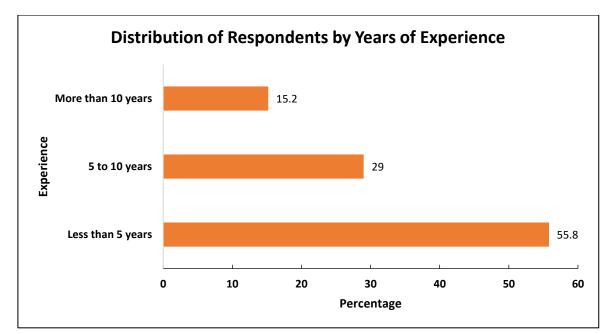
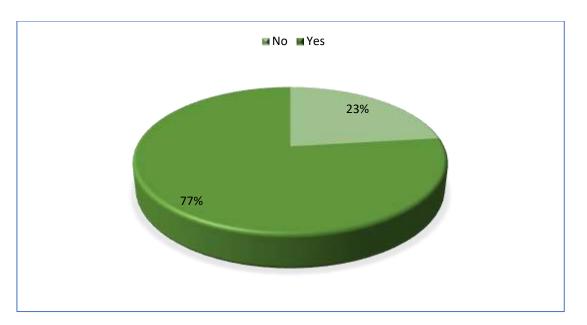


Table 6: Nurses' Awareness of Aging-Related Health Issues

Items	No (%)	Yes (%)
The decreased mental ability of elderly patients is often caused by the aging process and illness affects response to care.	13 (4.5)	277 (95.5)
The aging process will lead to anatomical and physiological changes?	6 (2.1)	284 (97.9)
Nutritional assessment should be an integral part of the clinical examination of elderly patients.	20 (6.9)	270 (93.1)
Patients with a cognitive disorder, such as dementia, are at increased risk for delirium.	111 (38.3)	179 (61.7)
Malnutrition may hurt a person's ability to think.	114 (39.3)	176 (60.7)
Older people are more sensitive to medication because their kidney and liver functions are declining.	52 (17.9)	238 (82.1)
Medication may cause geriatric problems such as memory deficits, incontinence, falling, and depression.	84 (29)	206 (71)
Pain medication should be administered to older people as little as possible, due to the possibility of addiction.	81 (27.9)	209 (72.1)

Table 6: Presents nurses' knowledge regarding the aging process and its impact on elderly patients. A vast majority (95.5%) recognize that decreased mental ability in elderly patients affects care. Almost all (97.9%) acknowledge that aging leads to anatomical and physiological changes. Most respondents (93.1%) agree that nutritional assessment is crucial for elderly patients. Regarding cognitive disorders, 61.7% recognize that dementia increases the risk of delirium, and 60.7% acknowledge the negative impact of malnutrition on cognitive function. A significant portion (82.1%) understand that older adults are more sensitive to medications due to declining kidney and liver functions. Additionally, 71% believe medication can cause geriatric issues like memory deficits and depression, while 72.1% agree that pain medication should be administered cautiously to avoid addiction.

Fig 6.1: Knowledge Awareness among Respondents



The graph shows a large number (76.9%) of responders have the specified understanding while a smaller portion (23.1%) lack it indicating a relatively high awareness level.

Fig 6.2: Knowledge Level Distribution

It shows that 76.9% of individuals have a "Good" level of knowledge, while 23.1% have a "Poor" level of knowledge.

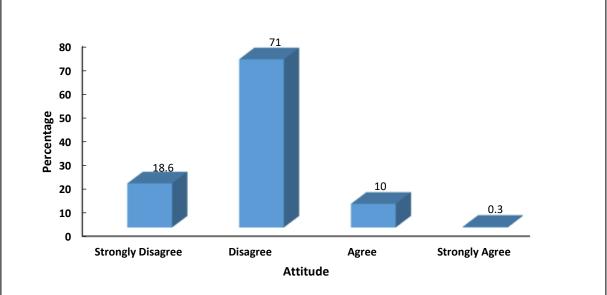
Table 7: A	Attitude of	Nurses	towards	Elderly	Care
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	Strongly Disagree	Disagree	Agree	Strongly Agree
Items	(%)	(%)	(%)	(%)
I feel good taking care of the elderly.	3 (1)	8 (2.8)	203 (70)	76 (26.2)
I prefer giving attention to younger patients than elderly ones.	45 (15.5)	156 (53.8)	62 (21.4)	27 (9.3)
The elderly are difficult to care for.	41 (14.1)	110 (37.9)	129 (44.5)	10 (3.5)
Time should not be wasted on elderly patients with terminal illnesses.	59 (20.3)	158 (54.5)	53 (18.3)	20 (6.9)
Some elderly look untidy and dirty and as such I do not like caring for them.	101 (34.8)	146 (50.3)	38 (13.1)	5 (1.8)
Caring for the elderly does not give room for other clients.	29 (10)	198 (68.3)	57 (19.6)	6 (2.1)
The elderly can provoke the caregiver	7 (2.4)	77 (26.6)	183 3.1)	23(7.9)

Table 7: Presents the responses of participants regarding their attitudes toward caring for the elderly. The majority (70%) of respondents agree that they feel good taking care of the elderly, while only a small percentage (3.8%) strongly disagree. Most participants (69.3%) prefer giving attention to younger patients rather than elderly ones. A significant portion (44.5%) finds elderly care difficult. A large majority (74.8%) disagree that time should not be wasted on elderly patients with terminal illnesses. More than 85% disagree with the notion that elderly individuals appear untidy and are unpleasant to care for. 78.3% disagree that caring for the elderly does not leave room for other clients. 71% believe that elderly patients can sometimes provoke caregivers.

Fig 7.1: Distribution of Attitudes among Respondents





The graph shows a significant majority of responders (71%) oppose while 18.6% totally disapprove only a small proportion agree (10%) or strongly agree (0.3%), indicating a predominantly adverse mindset toward the subject in question.

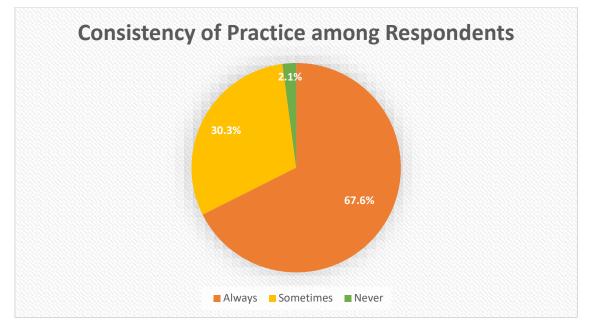
Items	Always (%)	Sometimes (%)	Never (%)		
I encourage the elderly to eat adequately and at times assist in feeding them	243 (83.8)	47 (16.2)	0 (0)		
I give prompt attention to elderly patients even in emergency	264 (91)	26 (9)	0 (0)		
I assess and evaluate the hygienic needs of elderly patients	236 (81.4)	54 (18.6)	0 (0)		
I assist the aged to take their drugs in time.	250 (86.2)	40 (13.8)	0 (0)		
I help the elderly to exercise properly	176 (60.7)	114 (39.3)	0 (0)		
I engage the elderly in lively discussions to help them stay socially stable	208 (71.7)	78 (26.9)	4 (1.4)		
Have you participated in any training courses or workshops with an emphasis on providing care for elderly patients?					
Yes	150 (51.7)				
No	140 (48.3)				
Does the provision of care for the elderly have established criteria or protoco	bls?				
Yes	218 (75.2)				
No	72 (24.8)				

Table 8: Nurses' Practice Towards Elderly Patients

Table 8: Highlights a practice among nurses in elderly care a majority consistently provide needed care such as feeding assistance (83.8%), prompt attention (91%), hygiene evaluation (81.4%), and medication support (86.2%). However, engagement in exercise (60.7%) and social activities (71.7%) is comparatively lower with some room for improvement regarding training 51.7% of caregivers have attended older adult care workshops while 48.3% have not suggested the need for more professional development opportunities additionally 75.2% acknowledge the presence of established elderly care protocols but 24.8% indicates a lack of such guidelines highlighting a need for standardization and awareness in geriatric care practices.

Fig 8.1: Consistency of Practice among Respondents





The data indicates that most respondents (67.6%) consistently follow the practice, while 30.3% engage in it occasionally. Only a small fraction (2.1%) does not practice it at all, suggesting a strong overall commitment.

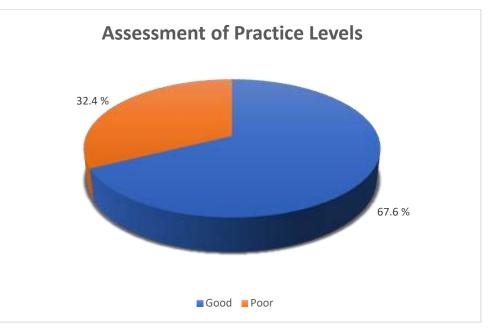


FIG 8.2: Assessment of Practice Levels

The data shows that 67.6% of individuals demonstrate good practice, while 32.4% exhibit poor practice.

Table 9: Effect of Low Nurse-Patient Ratio on the Care of the Elderly

Items	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)
Inadequate staffing can result in unimaginable workload and stress.	8 (2.8)	14 (4.8)	210 (72.4)	58 (20)
Inadequate staffing can result in a low standard of care.	17 (5.9)	88 (30.3)	146 (50.3)	39 (13.4)
Therapeutic conversations with elderly patients are greatly reduced when there is a shortage of staff.	7 (2.4)	90 (31)	173 (59.7)	20 (6.9)

Specific services such as assisted baths, and ambulation for an elderly patient could not be adequately provided with inadequate staffing	10 (3.4)	82 (28.3)	164 (56.6)	34 (11.7)
Shortage of staff affects the provision of adequate information and education to elderly patients.	12 (4.1)	62 (21.4)	182 (62.8)	34 (11.7)

Table 9: Demonstrates the substantial effects of insufficient personnel on elderly treatment a majority of caregivers (72.4%) agree that staff shortages lead to excessive workload and stress while 50.3% believe it compromises the standard of care furthermore 59.7% acknowledge that therapeutic conversations with elderly patients decrease due to staffing issues additionally 56.6% agree that specific services like assisted bathing and ambulation are compromised and 62.8% indicate that a staffing shortages have an impact on the provision of sufficient data education to elderly patients these findings highlights pressing wants for improved nurse-patient ratios ensure quality geriatric care.

Table 10: Factors Influencing the Attitude of Nurses Towards Care of the Elderly

Items	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)
Effective care of the elderly requires special training.	1 (0.3)	18 (6.2)	227 (78.3)	44 (15.2)
Hospitals should have special wards i.e. geriatric wards for effective care of the elderly.	2 (0.7)	11 (3.8)	165 (56.9)	112 (38.6)
The mental status of elderly patients affects their care and decision-making.	0 (0)	53 (18.3)	211 (72.8)	26 (9)
Elderly patients exhibit different behaviors that affect their care	2 (0.7)	53 (18.3)	214 (73.8)	21 (7.2)
It is difficult to persuade and convince reluctant patient about their care in the hospital	1 (0.3)	41 (14.1)	231 (79.7)	17 (5.9)

Table 10: Highlights key elements needed to shape caregiver attitudes while elderly care a majority (78.3%) agree efficient senior care necessitates specialized education and 56.9% assist the need for dedicated geriatric wards healthcare with 38.6% strongly agreeing moreover 72.8% of caregivers acknowledge the geriatric patients psychological wellness influences its focus and decision-making moreover 73.8% agree that older individuals exhibit behaviors can affect their treatment and 79.7% recognize difficulty of persuading reluctant older patients regarding their care those findings underscore need of specialized teaching designated treatment care facilities and enhanced communication methods used better elderly care.

Discussion

This research was descriptive in nature, focusing on nurses' understanding of attitudes and practices regarding the treatment of older patients. It also examined factors that can influence treatment, such as the ratio of staff to patients, which may affect the quality of care provided.

The study was conducted in teaching hospital in Belagavi, Karnataka, India. A total of 287 participants were included in the study, with 290 responses collected from nursing staff. A pre-structured questionnaire was used, the main objective of the study was to assess the nurses understanding of behaviours and skills in caring for elderly patients.

Finding of the study

The study examined the sociodemographic characteristics of the participants. Most participants were female, with 192 females (6.2%) and 98 Males (33.8%), as shown in table 2 and figure 2.1. In comparison, a previous study conducted by Mitike H et al, found a higher proportion of male participants -243 males (53.9%) and 208 females (46.1%).^[2]

The study estimated that most of the nurses were younger, falling within the age of 21-25 years. A majority of participants held bachelor's degree (50.3%) as shown in Table 1. In comparison, as previous study performed by Kebede C et al. reported that 218 participants (76.5%) of respondents held bachelor's degrees.^[3]

The knowledge of the respondents revealed that a large proportion (76.9%) lacked adequate knowledge, indicating a relatively low level of awareness (as shown in Fig 6.2). In a previous study conducted by Oyetunde MO et al. the feedback on knowledge was analysed using bivariate analysis and found that 69% of respondents had inadequate knowledge.^[1]

The attitude of the respondents showed a positive trend, with 71% reporting that they felt good about taking care of the elderly. They disagreed with the statement like preferring to give attention to younger patients rather than elderly ones shown in Table 7. However, in previous attitude-based study, 275 participants (61%) were reported to have an unfavourable attitude towards caring for elderly patients.^[2]

The study showed that most nurses (67.6%) had good practices in caring for elderly patients, while 32.4% had a poor practice level (as shown in Table 8, Fig.8.1). In comparison with another study conducted by Udo HI et al. found that most medical staff in Uyo Metropolis only occasionally provided treatment for elderly patients.^[9]

Hence Continuing education and training are essential to improve nursing practice in elderly care. ^[1,2]

The majority of respondents (78.3%) believed that effective senior care required specialized education. About 79.7% recognized how difficult it was to convince older patients to accept care. These results emphasized the need for special training programs in facilities that treat older adults. In a previous study, 80% of respondents agreed that specific training was the key factor influencing their attitude and approach to elderly care. ^[1]

The study showed 72.4% of nurses agreed that staff shortages led to increased workload and stress shown in table 9. A previous study also found that over 90% of caregivers believed poor care was linked to stress and heavy workload caused by staff shortages. They also agreed that having enough staff improved job satisfaction, quality of work and overall happiness.^[1]

CONCLUSION

Most of the Respondents showed better knowledge, attitude, and practice level of understanding, also most of the participants said the aging process leads to anatomical and physiological changes. However, in this study education level significantly impacts knowledge with bachelor's degree holders displaying greater expertise. This suggests that higher education contributes positively to knowledge in elderly care.

This study also showed that the practice of the nurses and patient ratio might also affect the standard of care if the a shortage of staff, an unimaginable workload inadequate staffing which might increase the stress among the staff the study suggests that for better and effective elderly care the hospital should provide special training to the employees, as well as for better-specialized care providing for the great outcome the hospital must have Geriatric wards for elderly patients.

LIMITATIONS OF THE STUDY

- 1. This study was a descriptive study that included single health faculty considered, less comparison study among the locals in India made local comparison and discussion challenging. Which was carried out in the southern part of India.
- 2. The other Nurses working in different Units such as the Paediatric unit in the study were not included. Nevertheless, future studies should be conducted on the KAP of nurses of gerontological care.

RECOMMENDATIONS

As derived from the interpretation of data and conclusion following recommendations are made:

- 1. The Healthcare policymakers can take part in providing regular training programs for the Nursing staff working in the tertiary teaching Hospital.
- 2. The hospital should develop more reassessments for evaluating regularly the KAP for the better and more efficient performance of the individuals.
- 3. The Government should develop more standard Guidelines for better Nursing quality of care for the elderly.

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ACKNOWLEGEMENTS

The author is thankful to both reviewers for their valuable suggestions and guidance. I also appreciate the help from department heads and the encouragement from my family and friends throughout this research.

ETHICAL APPROVAL

This study was approved by the Ethics committee, Under Reference number. MDC/JNMCIEC/359. Informed consent was obtained from all participants prior to data collection

CONFLICTS OF INSTEREST

The authors have no conflicts of interest to declare.

FUNDING

No fundings was received for the study.