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Attitudes of nurses toward the care of older adults and associated socio - demographic factors: a descriptive cross-sectional study at Teaching Hospital, Jaffna

A. M. Hazeem^{1*}, M. K. I. Mathuska¹, L. Kamalarupan² and K. Thanujanan³

Abstract

Background It is important to give more emphasis to elderly care as the population is aging. Nurses play a vital role in caring for older adults. This study aimed to assess the attitude of nurses toward caring for older adults at Teaching Hospital Jaffna; to examine nurses' attitudes while caring for adults, maintaining patient rights, and communicating with older adults; and to determine the association between socio-demographic factors (age, gender, ethnicity, religion, work unit, work experience, and educational qualification).

Methods A hospital-based descriptive cross-sectional study was conducted among nurses at Teaching Hospital Jaffna, with data collection carried out from July to August 2024, following ethical approval on 27 June 2024. A total of 232 nurses were selected, of whom 216 participated and completed the questionnaire. A pre-designed and validated self-administered questionnaire was used to collect data. SPSS 25 software was used for data analysis. Descriptive analysis was used to assess nurses' attitudes, and the Chi-squared test was used to identify associations between socio-demographic factors and the attitudes.

Results Out of the 232 nurses who were selected for the study, 216 participated and completed the questionnaire, yielding a response rate of 93.1%; the analysis was conducted using the data obtained from these 216 participants. Participants' ages ranged from 25 to 57 years old. The majority were female (70.4%). Nearly half identified as Sri Lankan Tamil (52.8%) and Hindu (47.7%). Over half (63.9%) had fewer than five years of experience. More than three - quarters were diploma holders (78.2%). A total of 90.3% (95% CI: 85.6%–93.6%) of nurses demonstrated a positive attitude, while 9.7% (95% CI: 6.4%–14.4%) showed a negative attitude, based on a 50% cut-off value. The mean attitude score was 29.46 out of a maximum of 35, corresponding to 84.2%. A statistically significant relationship ($p < 0.05$) was found between attitude and current ward/unit and higher education qualifications.

Conclusions Although a high proportion of nurses were classified as having a positive attitude (90.3%) toward care of older adults, this finding should be interpreted with caution due to the use of a 50% cutoff and potential response

*Correspondence:
A. M. Hazeem
hazeem199802@gmail.com

Full list of author information is available at the end of the article



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bias. The results indicate generally favorable attitudes; however, variation in specific aspects of care suggest the need for continuous training and professional development in geriatric nursing.

Keywords Attitude, Care of older adults, Nurses, Teaching Hospital Jaffna

Introduction

Patients aged 60 years and above are defined as ‘older adults’ according to the World Health Organization, and globally this population is projected to reach 2.1 billion by 2050, emphasizing the urgent need for age-friendly healthcare systems [1]. Older adults are more likely to experience multiple chronic health conditions; have issues related to polypharmacy; require additional supports to complete activities of daily living; and, compared to their younger counterparts, use health care services more frequently [2]. In Sri Lanka, the increasing population of older adults presents a significant challenge to the healthcare sector in meeting their needs. Nurses play a vital role in caring for older adults requiring medical attention [3]. However, nurses face obstacles in providing care to geriatric patients due to limited physical facilities and technical equipment in hospitals, care-related issues arising from patients’ physical limitations, administrative problems, and communication difficulties with patients, their families, or caregivers [4]. These challenges can influence nurses’ attitudes toward caring for older adults. Various factors can impact one’s attitude. The quality of care nurses provide is linked to their attitudes toward older adults. Personal experiences with the elderly or education can affect nurses’ attitudes, having both positive and negative effects [5]. Research shows that many factors can influence a nurse’s attitude toward older adults. Recent studies have identified geriatric education, clinical exposure, workplace environment, and professional competencies as important influencing factors [6–8]. These factors include demographic characteristics such as age [9], gender, ethnicity, religion [10], work unit [11], work experience [12] and higher education qualifications [13]. In many healthcare settings, workload and staffing shortages also affect the quality of care provided to older adults. Despite the growing ageing population and the important role of nurses in elderly care, limited evidence is available regarding nurses’ attitudes toward caring for older adults in the Northern Province of Sri Lanka. In particular, no studies have comprehensively examined how socio-demographic factors influence nurses’ attitudes in this setting, highlighting an important research gap.

This study was guided by the following research questions: What are the attitudes of nurses toward the care of older adults, and how are these attitudes associated with selected socio-demographic factors at Teaching Hospital Jaffna.

Methods

Study sample and procedures

This was a hospital-based descriptive cross-sectional study. The Teaching Hospital in Jaffna is located in the northern province of Sri Lanka. The study was conducted in selected wards where older adults are generally admitted for care. A total of 26 wards and 10 units were included in the study. A total of 449 nurses were recruited for the study from these selected wards and units at Teaching Hospital Jaffna, and those on maternity leave and long-term leave were excluded. The sample size of the study was estimated by using Daniel’s formula $N = Z^2 p(1-p)/d^2$. The proportion value (p-value) is taken as 0.162, based on the attitude level of nurses from previous study done in Sri Lanka [3] as 16.2%. The estimated sample size was 232. A list of nurses and their distribution across wards and units was obtained from the Matron’s Office of Teaching Hospital, Jaffna. Participants were selected using a simple random sampling technique, with proportional allocation based on the number of nurses in each ward and unit. Of the 232 nurses selected, 216 completed the questionnaire and were included in the final analysis.

Ethical approval was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Jaffna. Data collection commenced only after obtaining ethical approval. The study information was clearly communicated to participants, and written informed consent was obtained before data collection.

Measurement

A self-administered questionnaire was used to gather data. The questionnaire was initially developed in English based on the study objectives and relevant literature. It was developed by the researchers as no single standardized or validated questionnaire fully matched the objectives of this study. To ensure suitability for the local context, it was translated into Sinhala and Tamil by independent bilingual experts, and the translated versions were then back-translated into English to ensure conceptual equivalence and clarity. Content validity for the Sri Lankan population was confirmed through review by a panel of experts in nursing and geriatric care, and necessary modifications were made. A pre-test of the questionnaire was conducted among ten nurses from a similar setting (Base Hospital Tellippalai) to assess clarity, feasibility, and the time required to complete the instrument. More than 90% of participants reported that the questionnaire was clear and understandable, and no modifications were necessary based on the pre-test findings.

The questionnaire required approximately 25–30 min to complete. This process ensured that the questionnaire was understandable and feasible for the main study population. Reliability was assessed using Cronbach's alpha, which yielded a value of 0.82, indicating good internal consistency. The questionnaire consisted of two sections: Section I – socio-demographic characteristics, and Section II – attitudes of nurses toward older adults.

Data was collected from nurses in selected wards and units at Teaching Hospital Jaffna. Data collection was carried out without disrupting their routines or privacy. Written consent was obtained from the participants after providing a clear explanation of the study. They were encouraged to ask questions or express doubts about the study, and those questions were answered by the researchers. The completed questionnaires were collected from the participants on the same day.

Statistical analysis

The data was entered and analyzed using IBM SPSS version 25.0 (Statistical Package for the Social Sciences) based on the research problems, objectives, and variables. The participants' attitude toward older adult care was categorized as either positive or negative based on their total scores for Section II. There are 35 questions. Each item in the attitude questionnaire was scored as 1 for a correct response and 0 for an incorrect response. The total attitude score ranged from 0 to 35, with higher scores indicating more positive attitudes. Specifically, participants received 1 point for agreeing with positively worded statements and for disagreeing with negatively worded statements; all other responses scored 0. The total attitude scores were converted into percentage scores and categorized into positive and negative attitudes using a 50% midpoint. As no validated cut-off exists for this instrument, the 50% threshold was used as a pragmatic classification approach rather than a clinically validated standard [14]. However, this arbitrary cut-off may overestimate the proportion of positive attitudes and should be interpreted with caution. Future studies should consider using validated scales or alternative methods such as median-based or quartile-based categorization, or performing sensitivity analyses with different thresholds to improve robustness.

The data were analyzed using means and standard deviations. Descriptive statistics were used to summarize the data. The Chi-square test was used to assess associations between socio-demographic variables and nurses' attitudes. To meet the assumptions of the chi-square test, categories with small cell frequencies (expected counts < 5) were combined prior to analysis. Example -Sinhalese and Sri Lankan Moors were combined into one category because only two participants responded from the Moors group. Due to small cell frequencies,

post-diploma and degree categories were combined for analysis; however, their original distribution was diploma (78.2%), degree (19.9%), and post-diploma (1.9%). Confidence intervals (95% CI) were calculated for key proportions to provide more precise estimates. Where expected cell counts were less than 5 or zero, Fisher's exact test is recommended; however, Chi-square test results are reported.

Results

Socio-demographic characteristics

Out of 232 participants, the response rate was 93.1% ($N=216$). Participants' ages ranged from 25 to 57 years, with a mean age of 31.65 years ($SD=6.232$). Most of them (54.2%) were under 30 years old. More than two-thirds are female (70.4%). Nearly half identified as Sri Lankan Tamil (52.8%) and Hindu (47.7%). Among the total participants, 18.1% worked in medical wards. Regarding experience, over half (63.9%) had fewer than five years of experience. The majority had a diploma (78.2%), while 19.9% had a degree, and 1.9% held post-diploma qualifications.

Attitude of nurses towards older adults while caring for them

The participants were given two options for each statement, namely, agree and disagree. The majority of them (88%) expressed that they were satisfied while caring for older adults. In this study, 50% of participants reported that care should be prioritized for children and younger adults, suggesting a potential age-related bias in care. This finding indicates that, despite the overall positive attitude observed, certain ethical aspects of equitable care across age groups may still be compromised. Almost all the participants (96.8%) felt that it was essential to provide quality care to older patients. Additionally, except for 19%, others agreed that quality care remains important even for the older adults at the end of life or the patients with disorientation conditions. Nearly one quarter of the population expressed a negative attitude and they felt irritable while caring older adults with cognitive impairment. They also displayed empathy and compassion towards the patients, which in turn resulted in making good decisions during critical conditions. The distribution of responses regarding attitudes while caring for older adults is presented in Table 1.

Attitude of nurses to maintain the patient's rights (dignity, privacy, individuality, confidentiality, respect, minimal disturbance, and decision-making)

Almost all of them (99.5%) agreed that older adults should be treated with dignity and respect. Maintaining privacy and confidentiality are fundamental rights for everyone. Many of them (92.1%) agreed that it is

Table 1 Distribution of nurses' attitude toward older adults care by domain (caring, patients' rights and communication)

Domain	Statement	Agree N (%)	Disagree N (%)
Caring for older adults	I am satisfied while caring for the older adults	190 (88%)	26 (12%)
	In my opinion, prioritized care should be given to the children and younger adults rather than older adults	108 (50%)	108 (50%)
	In my opinion, prioritized care should be given as per the needs of the patient	189 (87.5%)	27 (12.5%)
	In my opinion, it is essential to provide quality nursing care to all older adults	209 (96.8%)	7 (3.2%)
	In my opinion, it is not essential to provide quality nursing care to older adults since they are at the end of life	42 (19.4%)	174 (80.6%)
	In my opinion, quality nursing care should be given to the older adult, even if they come with a disorientation condition.	175 (81%)	41 (19%)
	I feel that it is very irritating to care for older adults who have any cognitive impairment.	52 (24.1%)	164 (75.9%)
	I feel emotionally connected to older adult patients under my care	190 (88%)	26 (12%)
	I believe interdisciplinary collaboration is important in delivering comprehensive care to older adult patients.	189 (87.5%)	27 (12.5%)
	I feel empathy and compassion while caring for older adults	201 (93.1%)	15 (6.9%)
	I feel that we have to make good decisions when older adult patients are in critical condition	207 (95.8%)	9 (4.2%)
	I feel that caring for older adults is annoying for me	30 (13.9%)	186 (86.1%)
Patients' rights (dignity, privacy, etc.)	In my opinion, older adults should be treated with dignity and respect.	215 (99.5%)	1 (0.5%)
	I believe that providing independence and autonomy is important in caring for older adult patients.	188 (87%)	28 (13%)
	I feel that it is important to provide individualized care to the older adult patients.	176 (81.5%)	40 (18.5%)
	My opinion is that normally older adults do not have any shyness when touching their body parts or exposing them.	43 (19.9%)	173 (80.1%)
	My opinion is that it is not important to maintain privacy with clothes or screens while caring for older adults.	26 (12%)	190 (88%)
	My opinion is we do not worry much about the cultural aspects of the older adults while caring for them.	37 (17.1%)	179 (82.9%)
	I feel that it is not important to consider the personal hygiene and grooming of the older adult patients.	35 (16.2%)	181 (83.8%)
	I feel that it is enough to consider only the basic needs of the older adults.	37 (17.1%)	179 (82.9%)
	In my opinion, we should be very careful when giving medications to older adults.	197 (91.2%)	19 (8.8%)
	In my opinion, it is not that important to follow the five rights while caring for the older adult patients.	27 (12.5%)	189 (87.5%)
	It is not important to maintain their personal information confidentially.	17 (7.9%)	199 (92.1%)
	It is not important to get a written consent form from the older adults while doing any special procedures.	32 (14.8%)	184 (85.2%)
	It is not necessary to consider the pain of the older adults.	26 (12%)	190 (88%)
	I feel it is essential to do the nursing measures for older adults without disturbing their rest and sleep.	187 (86.6%)	29 (13.4%)
Communication with older adults	I feel that, if any belongings of elderly adults are not in good condition, they can be discarded without their permission to make the ward clean.	28 (13%)	188 (87%)
	I feel comfortable while communicating with older adults	152 (70.4%)	64 (29.6%)
	I feel that it is very stressful to communicate with older adults who are having any sensory alterations.	94 (43.5%)	122 (56.5%)
	I feel nurses have to listen carefully and patiently to whatever they communicate about their conditions.	190 (88%)	26 (12%)
	In my opinion, nurses should use various techniques to minimize the barriers to communication with the older adult patients.	208 (96.3%)	8 (3.7%)
	I feel that if there are any barriers to communicating with older adults, it is only an option to communicate with the older patient with their relatives or caregivers.	123 (56.9%)	93 (43.1%)
	I felt that it was important to provide a thorough explanation about discharge planning with patients and their families.	201 (93.1%)	15 (6.9%)
	I feel that it is not important to get opinions from older adult patients or relatives while caring.	45 (20.8%)	171 (79.2%)
	I am very much conscious that we never do any physical or verbal abuse while caring for them.	200 (92.6%)	16 (7.4%)

important to maintain their personal information confidentially. Many of them (80.1%) understand that older adults also may be shy when touching the body parts or exposing them, and they recognized the importance of maintaining privacy for older adults while caring for them (88%). Many of them (82.9%) have the right concept that considering only the basic needs of the older adults is not sufficient; it is also important to look at the personal hygiene and grooming (83.8%) of the older adult

patients. The majority of them (88%) recognized that alleviating the pain is also essential to consider for the older adults since it may cause many adverse outcomes such as disturbed sleep, depression, anxiety, etc. Most of the participants (85.2%) understand the importance of obtaining consent from older patients, whether in general or for specific procedures. They also focus on providing individualized care for them (81.5%). One's personal belongings are valuable for them even if they are not in

good condition; that is a concept many of them have (87%). The detailed responses regarding attitudes toward maintaining patients' rights are presented in Table 1.

Attitude of the nurses related to communication with older adults

Nearly 70% of the nurses stated that they felt comfortable while communicating with elders. However, 43.5% of them stated it is very stressful to communicate with older adults who have any sensory alterations. The majority (88%) realized that nurses should listen carefully and patiently while communicating with older adults. Also, the majority (96.3%) believe that barriers of communication with older adults shall be broken by using various techniques of communication. Even though 56.9% have an idea that if there are any barriers to communicating with older adults, it is only an option to communicate with the older patient with their relatives or caregivers. More than 90% of participants (93.1%) agreed that providing thorough explanations about discharge planning to patients and families is essential when caring for older adults. The majority of the participants (92.6%) were conscious that they never use physical or verbal abuse while caring for them. The distribution of responses regarding communication with older adults is presented in Table 1.

Distribution of attitude score of the study population (N = 216)

In this study, 90.3% ($N=195$; 95% CI: 85.6%–93.6%) of nurses displayed a positive attitude, while 9.7% ($N=21$; 95% CI: 6.4%–14.4%) showed a negative attitude toward the care of older adults. The mean attitude score was 29.46 (out of a maximum possible score of 35), corresponding to 84.2%, indicating generally favourable attitudes. However, this classification is based on a 50% cut-off point, which may overestimate the proportion of positive attitudes.

Relationship between socio-demographic factors and nurses' attitudes toward caring for older adults at Teaching Hospital Jaffna

There is no statistical significance between age and attitude. Most male (89.1%) and female (90.8%) participants had more positive attitudes than negative ones. In this study, gender had no significant association ($p=0.696$) with the attitude level of the participants. Positive attitudes were recorded in the majority of participants belonging to ethnic groups such as Sri Lankan Tamils (86.8%), Sinhalese, and Sri Lankan Moors (94.1%). Here, Sinhalese and Sri Lankan Moors were combined into one category because only two participants responded from the Moors group. Additionally, ethnicity ($p=0.072$) did not significantly influence the attitude levels. With regard to religion, participants from groups identified as

"Hindu," "Buddhist," and "Christian and Islam" showed positive attitudes of 85.4%, 95.7%, and 90.0%, respectively. We combined Christian and Islam into one category because few participants responded under each. In this study, religion had no significant association ($p=0.053$) with attitude levels. When examining the relationship between attitude and care of older adults in relation to the wards and units where participants currently work, we categorized medical wards, surgical wards, and intensive care units & accident and traumatic intensive care units as three categories, as older adults are mainly treated in these units. The remaining wards and units were grouped under other categories. In this study, the current ward/unit showed a significant association ($p=0.033$) with attitude levels. Looking at work experience groups, participants with "below 5 years" and "5 years and above" of experience showed positive attitudes of 89.1% and 92.3%, respectively. We combined the 5–10 years and above 10 years categories into a single "5 years and above" category because few participants responded from each group. Work experience did not significantly impact the attitude level of the participants ($p=0.449$). A positive attitude was observed in most participants from higher education groups, specifically the Diploma (87.6%) and Post-Diploma and Degree (100%) groups. Although post-diploma and degree categories were combined for statistical analysis, the original distribution included 19.9% degree holders and 1.9% post-diploma holders. The highest educational qualification of the nurses ($p=0.011$) was found to have a statistically significant association with the participants' attitude. Some categories, such as intensive care units, had small cell counts with no negative responses, which may affect the robustness of the statistical analysis. The association between socio-demographic factors and nurses' attitudes toward caring for older adults ($N=216$) is presented in Table 2. Some categories, such as intensive care units and the post-diploma/degree group, contained zero counts in the negative attitude category, violating the assumptions of the Chi-square test regarding minimum expected cell frequencies. Consequently, these results should be interpreted with caution.

Discussion

Although 90.3% of nurses were classified as having a positive attitude toward caring for older adults, this finding should be interpreted cautiously because the classification was based on an arbitrary and non-validated 50% cut-off, which may overestimate positive attitudes. A study in Turkey reported 87% positive attitudes among nurses [15], and the slightly lower proportion compared to the present study may be due to differences in education and clinical exposure to geriatric care. Turkish nurses were mainly general hospital nurses, whereas this

Table 2 Relationship between socio-demographic factors and nurses' attitudes towards caring for older adults at Teaching Hospital Jaffna (*N* = 216)

Socio-demographic Factors	Category	Level of Attitude		Statistical Result
		Positive attitude <i>N</i> (%)	Negative attitude <i>N</i> (%)	
Age	Below 30 years	105(89.7%)	12(10.3%)	$\chi^2 = 0.083$ df = 1 p value = 0.773
	30 and above 30 years	90(90.9%)	9(9.1%)	
Gender	Male	57(89.1%)	7(10.9%)	$\chi^2 = 0.153$ df = 1 p value = 0.696
	Female	138(90.8%)	14(9.2%)	
Ethnicity	Sri Lankan Tamil	99(86.8%)	15(13.2%)	$\chi^2 = 3.247$ df = 1 p value = 0.072
	Sinhalese and Sri	96(94.1%)	6(5.9%)	
	Lankan Moors			
Religion	Hindu	88(85.4%)	15(14.6%)	$\chi^2 = 5.866$ df = 2 p value = 0.053
	Buddhist	89(95.7%)	4(4.3%)	
	Christian and Islam	18(90.0%)	2(10.0%)	
Currently working ward/unit	Medical wards	31(79.5%)	8(20.5%)	$\chi^2 = 8.739$ df = 3 p value = 0.033
	Surgical wards	31(88.6%)	4(11.4%)	
	Intensive Care Unit and Accident and Traumatic Intensive Care Unit	28(100%)	0(0.0%)	
	Other wards and units	105(92.1%)	9(7.9%)	
Working experience	Below 5 years	123(89.1%)	15(10.9%)	$\chi^2 = 0.573$ df = 1 p value = 0.449
	5 years and above 5 years	72(92.3%)	6(7.7%)	
Higher education qualification	Diploma	148(87.6%)	21(12.4%)	$\chi^2 = 6.469$ df = 1 p value = 0.011
	Post diploma and Degree	47(100%)	0(0.0%)	

study included nurses from various units, including ICU, which may provide more structured supervision and exposure to complex care. Differences between studies may also reflect variations in geriatric training, staffing levels, institutional policies, and cultural perspectives on elderly care. However, such comparisons should be made cautiously due to differences in study methods, measurement tools, scoring systems, and cut-off values. The present study applied a 50% cut-off, whereas other studies have used validated instruments with different thresholds, potentially influencing the reported prevalence of positive attitudes. Also, according to numerous studies [15–17].

Respondents' socio-demographic characteristics, including age and sex, were associated with attitudes toward caring for older adult patients. Education level, work experience, educational institution, and current work unit also influenced nurses' attitudes toward elderly care [2, 12]. A study in China reported a positive relationship between nurses' expertise and attitudes toward elderly care [18], other important factors affecting nursing care for older adults include education, experience, and training in geriatric care [19]. In this study, most participants were female, under 30 years of age, and diploma qualified. Educational level showed a significant association with nurses' attitudes. Similarly, studies conducted in Turkey and Israel reported higher participation among

nurses aged 20–29 years, with most participants being female, and that there was no significant association between gender ($p = 0.26$) and attitude level [20].

In the present study, nurses' current ward or unit was significantly associated with their attitudes toward caring for older adults ($p = 0.033$). Nurses working in medical wards showed the lowest proportion of positive attitudes (79.5%), whereas ICU nurses demonstrated the highest proportion (100%). This difference may be related to variations in workload, patient complexity, supervision, teamwork and clinical environment across hospital units. Medical ward nurses may experience heavier workloads, higher patient-to-nurse ratios, and less structured support, which could negatively influence their attitudes toward older adult care. In contrast, ICU nurses work in highly supervised and collaborative settings with continuous management of critically ill patients, which may enhance professional confidence and engagement in care. Previous studies have also reported that workplace environment and clinical setting influence nurses' attitudes toward patient care [21–23].

The highest educational qualification of the nurses ($p = 0.011$) showed a statistically significant association with the participants' attitude toward caring for older adults. Higher educational qualifications may improve nurses' knowledge, critical thinking, and evidence-based practice, contributing to more positive attitudes. In Sri

Lanka, most nurses working in government hospitals are diploma-qualified, and diploma nursing programs do not include geriatric nursing as a specialized subject or provide formal geriatric training. In contrast, degree-qualified nurses receive more comprehensive theoretical education, clinical exposure, and specialized training related to geriatric care. Therefore, the predominance of diploma-qualified nurses in the sample should be considered when interpreting and generalizing the findings to nurses with higher educational qualifications. However, this finding should be interpreted cautiously, because the number of participants with higher educational qualifications was relatively small. Previous studies have also reported that higher education levels among nurses are associated with improved attitudes toward caring for older adults [24–27].

This study found that nurses with degree-level education and those working in intensive care units (ICUs) demonstrated 100% positive attitudes toward older adult care. Higher educational qualifications may improve knowledge, critical thinking, and evidence-based practice, contributing to more favorable attitudes toward patient care. ICU nurses manage critically ill patients in highly supervised settings requiring continuous monitoring, interdisciplinary teamwork, and adherence to care standards, which may enhance clinical competence, confidence, and professional responsibility. In addition, ongoing training and practical experience in ICU settings may further improve nurses' knowledge and attitudes toward older adult care [28, 29]. Therefore, the positive attitudes observed in these groups may be related to higher education and specialized clinical exposure.

Although 90.3% of nurses were classified as having a positive attitude toward caring for older adults, this finding should be interpreted with caution. Notably, 50% of participants agreed that care should be prioritized for children and younger adults over older adults, indicating possible age-related bias in certain clinical situations. This suggests that an overall positive attitude score may not fully represent consistent attitudes across all aspects of care. Therefore, targeted educational interventions are needed to promote equitable and person-centered care regardless of age.

Consistent with these findings, previous studies have reported that approximately 54% of nurses assigned different priorities to older versus younger patients, reflecting age-related differences in care allocation. This suggests that, despite generally positive attitudes toward older adults, clinical judgment, patient-related considerations, or resource allocation may still influence prioritization decisions in practice [2]. Almost all participants (99.5%) agreed that older adults should be treated with dignity and respect, and in another study, they reported that 80% of nurses showed respect toward older adult

patients [2]. Privacy is a basic right for everyone. Most of them recognized the importance of protecting privacy for older adults when caring for them (88%). Pain can lead to negative outcomes such as depression, anxiety, sleep disturbances, and more, making it crucial to relieve older adults' pain. Most nurses (88%) had a positive view on this matter.

Despite generally positive attitudes, some challenges were identified in caring for older adults with complex needs. In this study, 43.5% of nurses reported that communicating with older adults who have sensory impairments was stressful, while 24.1% felt irritated when caring for those with cognitive impairment. These findings indicate that nurses may face difficulties when managing communication barriers or cognitive decline in older adults. Such issues may be related to limited geriatric communication skills, inadequate dementia care training, or reduced confidence in handling age-related conditions. Therefore, targeted educational programs and practical training may help improve nurses' competence, confidence, and attitudes toward caring for this vulnerable population.

In this study, good communication was identified as essential for providing genuine care. Effective communication improves when nurses show genuine concern through appropriate touch, tone, eye contact, empathy, and active conversation [30]. The discharge planning explanation protocol should be maintained by all nurses for patients and their families when they are leaving the hospital; in this case, the majority (93.1%) of nurses follow it effectively. Effective communication with older adults is associated with higher patient satisfaction, better adherence to treatment, and fewer adverse events, emphasizing its importance for both quality and safety of care. An integrative review by Rush et al. (2017) also reported that about three-quarters of nurses are involved in discharge planning, highlighting their key role in coordinating patient care [2].

Previous studies have shown that nurses' attitudes toward older adults are influenced by clinical experience, educational interventions, and cultural factors [31–33]. Recent evidence also indicates that specialized gerontological education and clinical exposure improve nurses' confidence, communication skills, and attitudes toward older adult care [6–8]. The increasing elderly population presents significant healthcare challenges due to complex physical, physiological, and social needs, and the quality of care may decline when nurses have insufficient knowledge, negative attitudes, or inadequate practice.

Limitation

Data collection was limited by time constraints and the availability and willingness of nurses, which may have affected sample representativeness. A self-administered

closed-ended questionnaire may have introduced response bias, particularly social desirability bias, where participants may have over-reported socially acceptable attitudes, potentially affecting the validity and precision of the findings. The 50% cut-off used to classify attitudes was arbitrary and non-validated, which may have over-estimated positive attitudes. In addition, no sensitivity analysis using stricter cut-off points (e.g., 70% or 80%) was performed, which may better reflect professional standards. Therefore, the proportion of nurses classified as having positive attitudes should be interpreted with caution.

Moreover, some categories in the analysis, such as ICU nurses and participants with higher educational qualifications (post-diploma and degree holders), had very few or zero negative responses, resulting in small or zero cell counts. This violates Chi-square test assumptions regarding minimum expected frequencies and may reduce the reliability of statistical inference. Although category merging was done where appropriate, the use of Chi-square test may still limit the robustness of the results, and Fisher's exact test would have been more appropriate; however, Chi-square results were retained for consistency and interpretability. Finally, since the study was conducted in a single teaching hospital in Jaffna, the findings may not be generalizable to other hospitals or regions in Sri Lanka. In Sri Lanka, most nurses working in government hospitals are diploma-qualified, and diploma nursing programs do not include geriatric nursing as a specialized subject or provide formal geriatric training. In contrast, degree-qualified nurses receive more comprehensive theoretical education, clinical exposure, and specialized training related to geriatric care. Therefore, the predominance of diploma-qualified nurses in the sample should be considered when interpreting and generalizing the findings to nurses with higher educational qualifications.

Conclusion

Although a high proportion of nurses were classified as having positive attitudes, these findings should be interpreted cautiously due to methodological limitations and potential response bias. However, this overall classification should not be interpreted in isolation, as 50% of nurses indicated that care should be prioritized for younger adults over older adults, suggesting the presence of an underlying age-related bias despite the overall. Nurses' attitudes were significantly associated with the current ward or unit ($p=0.033$) and higher educational levels ($p=0.011$). Based on the findings from nurses at Teaching Hospital Jaffna, it is recommended that an in-service training program focusing on geriatric care be implemented for nurses in this hospital. Future studies

across multiple hospitals and regions are needed before generalizing these recommendations more broadly.

Abbreviations

THJ Teaching Hospital Jaffna
SPSS Statistical Package of Social Science

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Author contributions

A. M. Hazeem conceptualized and designed the study and drafted the manuscript. A. M. Hazeem and M. K. I. Mathushanka conducted data collection, data entry, and statistical analysis. L. Kamalarupan and K. Thanujanan supervised the study and critically reviewed the manuscript for important intellectual content. All authors read and approved the final manuscript.

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Data availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

Ethical clearance was obtained from the Ethics Review Committee, Faculty of Medicine, University of Jaffna, Sri Lanka (Approval No: 160th ERC-07; approved on 27 June 2024). The study was conducted in accordance with the Declaration of Helsinki (2013 revision). Written informed consent was obtained from all participants. Participation was voluntary, and confidentiality and anonymity were assured.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Author details

¹University of Jaffna, Jaffna, Sri Lanka

²Department of Nursing, Faculty of Allied Health Sciences, University of Jaffna, Jaffna, Sri Lanka

³CANE Hospice, Uduvil, Chunnakam, Jaffna, Sri Lanka

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References

1. World Health Organization. Ageing and health [Internet]. Geneva: World Health Organization; 2021. Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.
2. Rush KL, Hickey S, Epp S, Janke R. Nurses' attitudes towards older people care: An integrative review. *J Clin Nurs*. 2017;26(23–24):4105–16.
3. Rathnayake S, Athukorala Y, Siop S. Attitudes toward and willingness to work with older people among undergraduate nursing students in a public university in Sri Lanka: a cross-sectional study. *Nurse Educ Today*. 2016;36:439–44.
4. Miyata C, Arai H. Professional Behaviors of Nurses in Geriatric Health Services Facility in Japan. *Adv Aging Res*. 2019;8(6):129–38.

5. Khagi BR, Maharjan SA, Bajracharya SL, Upadhyay R, Shrestha KB. Attitude of nurses towards care of elderly people in teaching hospitals of Kathmandu Valley. *Birat J Health Sci.* 2020;5(2):1022–6.
6. Solmaz T, Aslan TK. The association between nurses' gerontological competencies and attitudes toward older adults. *J Eval Clin Pract.* 2025;31(3):e70101. <https://doi.org/10.1111/jep.70101>.
7. Yanar AR, Çeçen Çamlı D. Nurses' own perceptions of old age and their attitudes towards their older patients: a cross-sectional study. *BMC Geriatr.* 2025;25:632. <https://doi.org/10.1186/s12877-025-06332-9>.
8. Lampersberger LM, Großschädl F, Lohrmann C. Nurses' attitudes toward older adults in long-term care: A cross-sectional study. *BMC Nurs.* 2024;23:850. <https://doi.org/10.1186/s12912-024-02503-w>.
9. Hweidi IM, Al-Hassan RM. Jordanian nurses' attitudes toward older patients in acute care settings. 2005.
10. Sharma B, Mani V, Zined R, Joshi P, Srivastava SP, Alhawati S, Pandey S. Attitude of Indian nurses towards importance of families in nursing care: A cross-sectional study. *J Clin Nurs.* 2024;33(5):1798–808. <https://doi.org/10.1111/jocn.16942>.
11. Topaz M, Doron I. Nurses' attitudes toward older patients in acute care in Israel. *Online J Issues Nurs.* 2013;18(2):98.
12. Oyetunde MO, Ojo OO, Ojewale LY. Nurses' attitude towards the care of the elderly: implications for gerontological nursing training. *Int J Nurs Midwifery.* 2013;5(1):1–5.
13. Pang R, Liu F, Li T. Professional values, ageism, attitudes and willingness towards geriatric care among nursing students in China: A multiple path analysis. *BMC Nurs.* 2025;24:162. <https://doi.org/10.1186/s12912-025-02815>.
14. Acharya K, Baral K, Chalise HN. Knowledge, attitudes, and practices regarding COVID-19 among people in Nepal: A cross-sectional study. *Front Public Health.* 2023;11:1213520. <https://doi.org/10.3389/fpubh.2023.1213520>.
15. Özdemir Ö, Bilgili N. Attitudes of Turkish nursing students related to ageism. *J Nurs Res.* 2016;24(3):211–6.
16. Nilsson A, Lindkvist M, Rasmussen BH, Edvardsson D. Staff attitudes towards older patients with cognitive impairment: need for improvements in acute care. *J Nurs Manag.* 2012;20(5):640–7.
17. Mansouri Arani M, Aazami S, Azami M, Borji M. Assessing attitudes toward elderly among nurses working in the city of Ilam. *Int J Nurs Sci.* 2017;4(3):311–3.
18. Liu X, Zheng J, Liu K, Baggs JG, Liu J, Wu Y, You L. Associations of nurse education level and nurse staffing with patient experiences of hospital care: a cross-sectional study in China. *Res Nurs Health.* 2019;42(3):234–44.
19. Moreira WC, de Carvalho ARB, Lago EC, Amorim FCM, de Alencar DC, Almeida CAPL. Training of nursing students in integrated care for the elderly. *Rev Bras Geriatr Gerontol.* 2018;21(2):186–93.
20. Adibelli D, Kiliç D. Difficulties experienced by nurses in older patient care and their attitudes toward the older patients. *Nurse Educ Today.* 2013;33(9):1074–8.
21. Hwang JI, Kim MJ, Lim JY. Nurses' attitudes toward older adults and related factors: A cross-sectional study in South Korea. *BMC Nurs.* 2020;19:56. <https://doi.org/10.1186/s12912-020-00417-x>.
22. Rodrigues RMA, Russo A, Sousa L, et al. Nurses' professional values and attitudes toward caregiving across clinical settings. *J Prof Nurs.* 2019;35(1):44–51.
23. Tay L, Chua WL, Ang E, et al. The influence of work environment on nurses' attitudes toward patient care in tertiary hospitals. *J Clin Nurs.* 2018;27(5–6):e1113–22. <https://doi.org/10.1111/jocn.14348>.
24. Liu YE, Norman IJ, While AE. Nurses' attitudes towards older people: A systematic review. *Int J Nurs Stud.* 2013;50(9):1271–82.
25. Abudu-Birresborn D, McCleary L, Puts M, Yakong V, Cranley L. Preparing nurses to care for older adults in lower and middle-income countries: A systematic review. *Nurse Educ Today.* 2019;73:121–34.
26. Lan X, Chen Q, Yi B. Attitude of nurses toward the care of older adults in China. *Journal of Transcultural Nursing.* 2019;30(6):597–602. <https://doi.org/10.1177/1043659619848056>.
27. Yakubu YH, Fuseini AG, Holroyd E. Nurses' attitudes towards older adults in Ghana. *Nurs Open.* 2022;9(4):2054–62.
28. Alqahtani MF, Alsharari AF, Albagawi B. ICU nurses' knowledge, attitudes, and practices related to patient care. *Nurs Crit Care.* 2018;23(6):321–7.
29. Wang CC, Liao WC, Kao MC, et al. The effect of education on nurses' knowledge and attitudes toward elderly care. *BMC Nurs.* 2020;19:64.
30. Tay LH, Hegney DG, Ang E. Factors affecting effective communication between registered nurses and adult cancer patients in an inpatient setting: a systematic review. *Int J Evid Based Healthc.* 2011;9(2):151–64.
31. Dinkins CS. Socrates Cafe for older adults: intergenerational connectedness through facilitated conversation. *J Psychosoc Nurs Ment Health Serv.* 2019;57:11–5.
32. Hahn SJ. So we basically let them struggle: Student perceptions of challenges in intergenerational service-learning. *J Intergenerational Relationships.* 2020;18(1):1–15.
33. Mattos MK, Jiang Y, Seaman JB, Nilsen ML, Chasens ER, Novosel LM. Baccalaureate nursing students' knowledge of and attitudes toward older adults. *J Gerontol Nurs.* 2015;41(7):46–56.

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