ORIGINAL RESEARCH

Knowledge and Practice Level of Nurses Towards Geriatric Care and Its Associated Factors in Selected Public Hospitals in Wolaita Zone, Southern Ethiopia 2022

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Introduction: Geriatric care expertise encompasses the theoretical and practical understanding of providing care for older adults. This knowledge is acquired through the education and experience of healthcare practitioners. Recognizing the knowledge and practice level in this field is highly critical for improving its quality. Nevertheless, there is a dearth of research concerning the knowledge and practice levels of nurses involved in geriatric care in Ethiopia.

Objective: To determine the knowledge and practice level of nurses towards geriatric care and its associated factors in selected public hospitals in Wolaita Zone, Southern Ethiopia, in 2022.

Methods: A cross-sectional study was carried out in selected public hospitals, focusing on nurses working in adult nursing facilities. An interviewer-administered questionnaire was implemented to evaluate the knowledge and practice level of nurses in geriatric care. Based on the collective responses of the participants, the levels were categorized as either good or poor. A binary logistic regression model was utilized to evaluate the effects of independent variables on the outcome variables.

Results: Overall, 57.2% and 45.3% of the study participants had good knowledge and practice levels in geriatric care, respectively. Educational level, years of experience, and participation in geriatric nursing education were significantly associated with nurses' knowledge of geriatric care. Nurses' knowledge level towards geriatric care and having training on geriatric care were significantly associated with nurses' level of practice of geriatric care.

Conclusion: Considering the insufficient knowledge and practice of geriatric care among nurses, it is imperative for hospital administrators to offer frequent training opportunities and integrate essential geriatric care education into the nursing curriculum.

Keywords: aging care, caregivers, factors, nursing care

Introduction

Old age is a time when permanent physiological, temporal, mental, and social changes occur; role losses are experienced; and the system's adaptation to the environment declines.[1] Aging is not a disease but a period of life characterized by a progressive biological process of growth and development that leads to a reduced ability to survive and adapt.[2] According to World Population Aging, geriatric people are people aged 65 years and older.[3] People in Ethiopia are considered to be older if they are aged 65 years or older and is also official retirement age.[4] Geriatric nursing is a branch of nursing care that specializes in the care of the older aged individuals by providing comprehensive nursing care and

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combining the basic nursing process with specialized knowledge of aging. It was developed by the American Nursing Association (ANA) in 1969 and revised in 2001.[1]

Geriatric care is multidimensional, and includes physical, emotional, spiritual, and social care.[5] The services covered include skilled nursing care, assisted living facilities, long-term care, and home care. The care mainly focuses on the aging process; promoting, restoring, and optimizing health and functionality; improving safety; disease and injury prevention; and facilitating rehabilitation for older adults.[6] The growing number of older people poses major challenges for the healthcare system, especially for caregivers who are the primary caregivers who provide primary care to older people and deal with the acute and chronic diseases of the geriatric age group.[7]

Worldwide, especially in Africa, older people suffer from more complex health problems associated with old age, and they usually attend healthcare facilities.[8] Approximately 75% of older adults suffer from at least one chronic disease, and 77.5% of them are in hospitals for medical treatment. Eye problems, high blood pressure, diabetes mellitus, heart disease, arthritis, and hearing problems are the most common conditions in older adults.[9,10] Geriatric care requires nurses to possess specific knowledge and skills.[7] Evidence from different countries suggests that nurses have a limited geriatric knowledge. Low- and middle-income countries in Asia, the Middle East, and particularly sub-Saharan Africa may lack the specialized and appropriately skilled staff and facilities needed to provide comprehensive care for the elderly.[11] Consequently, it is critical for institutions to concentrate their efforts on this population segment.[12] Progressive nursing practices, as well as interdisciplinary approaches, can help meet the needs of older adults across the continuum of care.[13] Evidence-based practice is a strategic part of today's healthcare delivery, but it is particularly challenging to implement it in geriatric care.[14]

Studies conducted in different countries showed that nurses have limited knowledge and practice level in caring for geriatric patients like as Nigeria (40%),[15] Saudi Arabia (14%),[7] Ghana (88.7%)[16] and Zanzibar (82.6%).[17] In Ethiopia, it was found that most caregivers, around 57.30% of them have little knowledge of caring for older adults.[18] The provision of geriatric care requires specialized skills and is a discipline that is challenging to meet its staffing needs.[19] Nurses' knowledge and practice of caring for older patients has a significant impact on patient outcomes by reducing hospital stays, reducing readmission rates, and increasing patient's and families' satisfaction.[18–21]

Despite the fact that nurses are on the frontline of geriatric care in hospitals, their knowledge and practice level in geriatric care have not been adequately studied and there is no well-organized geriatric nursing care in the Ethiopia. Therefore, this study aimed to assess the knowledge and practice levels of nurses towards care of geriatric patients and associated factors in selected public hospitals. To improve patient care, nurses could find it useful to use the study's findings for evaluating their knowledge and practice of geriatric care and the factors that are associated with it. It would have important implications for public health policymakers, hospital managers, and other stakeholders to devise appropriate strategies that can improve nurses' knowledge and practice levels to ensure quality care for geriatric patients.

Materials and Method
Study Setting, Design, and Period
A cross-sectional study was conducted among nurses working in the adult units of selected public hospitals in the Wolaita zone, Southern Ethiopia. The study took place between April and May 2022.

The Wolaita Zone is an administrative area within the South Ethiopian region, bordered by the Gamo zone to the south, Dawuro to the west, Kambata zone and Tambaro specialized woreda to the northwest, Sidama Region to the east, and Oromia Region to the northeast. Wolaita Sodo serves as the administrative hub for both the South Ethiopian Region and the Wolaita Zone, situated approximately 328 km from Addis Ababa, the capital city of Ethiopia. The total area of the Wolaita Zone spans 4208.64 km^2. The Wolaita zone comprised of eight public hospitals (one comprehensive specialized and seven primary hospital) and 68 health centers. A total of 3790 healthcare workers were dedicated frontline care providers for the patients, with 1656 of them being nurses.

Population

This study encompassed all nurses who were employed in the adult care units of public hospitals in Wolaita. Study participants were selected through a random sampling method from the pool of nurses working in various adult care units, including adult inpatient units, adult outpatient departments, adult emergency outpatient departments, intensive care units, adult operating rooms, ophthalmic units, psychiatric units, and oncology units. Nurses who were on annual leave, maternity leave, or sick leave during the data collection period were excluded from the study.

Sample Size Determination and Sampling Technique

To determine the sample size for the first objective, we employed the single population proportion formula, taking into account the proportion of nurses' knowledge level (57.3%) regarding geriatric care from a previous study.[18] For the second objective, the sample size was calculated using Open Epi version 3.0, considering three predictor variables (year of experience, level of education, and having ever lived with older people) from the aforementioned study. The final sample size, determined to be 290, was the largest among all the previously calculated values. It was obtained by considering the factor "ever lived with older people" as the predictor variable.

Out of the eight public hospitals in the Wolaita Zone, four hospitals (WSUCSH, Boditi, Bele, and Bitena primary hospitals) were selected at random. A proportionate number of study participants were then allocated to each hospital, taking into account the number of nurses working in adult units at each respective hospital. The allocation of participants to each unit was carried out in also a proportional manner, considering the number of nurses in each ward or unit. Subsequently, study participants were randomly selected from the total number of nurses assigned to each unit.

Study Variables

The outcome variables of the study encompassed the level of knowledge and practice exhibited by nurses in relation to geriatric care. An 18-item dichotomous scale (yes/no) question was used for evaluation of the knowledge level, and a 9-item dichotomous scale question was used to measure the practice levels of nurses. The mean score of the participants was computed, and those individuals who obtained a score equal to or higher than the mean score on the knowledge-related questions were considered to have a good level of knowledge. Likewise, those obtaining a score equal to or higher than the mean score in practice-related questions were regarded as demonstrating a good level of practice.[5,18] The study incorporated independent variables encompassing sociodemographic factors, personal factors, and institution-related factors.

Data Collection Tools and Procedures

An interviewer-administered questionnaire was used to assess the knowledge and practice levels of nurses in providing geriatric care. This questionnaire, derived from the renowned KOP-Q instrument, consisted of purposeful inquiries. These inquiries aimed to evaluate the participants' knowledge of geriatric patient care, including the impact of the aging process on anatomical and physiological changes ("Will the aging process result in anatomical and physiological changes?" - Yes/No), the acknowledgement of the significance of consistent and suitable nutrition for older adults ("Is it important for elderly individuals to have regular and appropriate meals?" - Yes/No), and the recognition of the need for regular physical exercise among elderly individuals ("Is regular exercise necessary for older adults?" - Yes/No).

The questionnaire also contained evaluative inquiries concerning practical aspects, including the promotion and facilitation of sufficient dietary intake for elderly individuals ("Do you actively encourage and support appropriate dietary intake for older adults?" - Yes/No) and the provision of guidance or encouragement for regular physical exercise among elderly patients ("Do you engage in teaching or promoting regular physical exercise for older patients?" - Yes/No).[5]

Furthermore, the questionnaire encompasses sociodemographic factors like age, gender, marital status, and educational background. It also covers personal aspects such as years of experience, whether the nurse resides with elderly individuals (yes/no), and their willingness to communicate with elderly patients or their family regarding care (yes/no). Additionally, institutional factors related to the type of working unit, adequacy of space (yes/no), availability of geriatric care guidelines/policies (yes/no), and professional factors like specialized geriatric care training (yes/no), exposure to geriatric care content during nursing studies (yes/no), and following geriatric care guidelines/policies (yes/no).

Four nurses and four supervisors (one per hospital) were involved in data collection and supervision, respectively. The data collection procedure spanned one month.

Data Quality Assurance and Analysis

The questionnaire was pretested at Tebela Primary Hospital to check for clarity, consistency, and coherency. One day training was provided to data collectors and supervisors on the objective of the study, contents of the tool, and how to maintain the confidentiality and privacy of the study subjects. Up until the point of data collection, the primary investigator and supervisor often verified the accuracy and consistency of the data. The data were entered into Epi data version 4.6 then exported into SPSS window version 25.0 for further analysis. Categorical variables are expressed as frequencies and percentages and continuous variables were compiled as the mean, median, standard deviation (SD), and interquartile range (IQR). The chi-square assumption test was used for categorical variables. Multicollinearity was checked using a variation inflation factor (VIF = 1.25). A binary logistic regression model was used to estimate the strength of the association between independent and outcome variables. In the bivariate analysis, variables with $p<0.25$ were included in the multivariate analysis to control for confounders. Model fitness was checked using the Hosmer-Lemeshow goodness-of-fit test for logistic regression ($\chi^2 = 8.6$, $p = 0.51$). The results were interpreted in terms of an adjusted odds ratio (AOR) with 95% confidence intervals, and variables with p-value < 0.05 in multivariable analysis were considered statistically significant.

Result

Socio-Demographic, Personal, and Institution Factors

Out of 290 participants, 285 took part in the study, yielding a rate of 98.2%. The gender distribution showed that 51.6% identified as male, and a 61.8% of the participants were aged between 21 and 30 years. The respondents had a mean age of 30.86 ± 6.015 years. In terms of their working units, 44.2% of the participants were employed in inpatient departments (IPD) of hospitals. (Table 1). Among the study participants, 31% of participants received geriatric care training, while 60% reported living with an elderly person (Table 2).

Table 1 Socio-Demographic Factors of Nurses Working in Adult Care Units of Selected Public Hospitals of Wolaita Zone, Southern Ethiopia, 2022

Variables	Category	Frequency	Percentage
Gender	Male	147	51.6
	Female	138	48.4
Age in years	21–30	174	61.0
	31–40	93	32.6
	>40	18	6.3
Marital status	Single	100	35.1
	Married	185	64.9
Level of education	Diploma	52	18.2
	BSc degree	218	76.5
	Masters	15	5.2
Year of experience	1–5	101	35.4
	6–10	110	38.6
	>10	74	26.0
Type of working unit/ward	OPD	58	20.4
	IPD	126	44.2
	ICU	18	6.3
	EOPD	40	14.0
	OR	43	15.1

Abbreviations: EOPD, Emergency Outpatient Department; ICU, Intensive care Unit; IPD, Inpatient Department; OPD, Outpatient Department; OR, Operation Room.

Table 2 Profession and Institution Related Factors of Nurses Working in Adult Care Unit of Selected Public Hospitals of Wolaita Zone, Southern Ethiopia, 2022

Variables	Category	Frequency	Percent
Do you take training about care of elderly patients?	No	197	69.1
	Yes	88	30.9
Did you take geriatric care content in your nursing education (study)?	No	108	37.9
	Yes	177	62.1
Is the space adequate during elderly patients care?	No	146	51.2
	Yes	139	48.8
Do you live with elderly person?	No	114	40.0
	Yes	171	60.0
Do you follow any type of elders care guideline while you give caring elder patients?	No	158	55.4
	Yes	127	44.6
Do you like to communicate with elder patient or their family caregiver when you provide care for elder patient?	No	68	23.9
	Yes	217	76.1

Knowledge of Nurses Towards Geriatric Care and Associated Factors

Respondents' feedback indicated that 57.2% [95% CI: 51.2–63.2] of nurses had a good level of knowledge about the care of elderly patients (Figure 1). A bi-variable analysis revealed the following variables were associated with nurses' knowledge level: age, marital status, education level, years of experience, geriatric care training, living with elders, taking geriatric care content in nursing education, type of working unit, and adhering to elderly care guidelines. Finally, the variables listed above were subjected to multivariate analysis to identify the independent predictors of nurses' knowledge of geriatric patient care. Of the variables that were entered, level of education [AOR: 2.4; 95% C.I: 1.18–4.81], years of experience in nursing profession [AOR: 2.24; 95% C.I: 1.19–4.22] and taking geriatric care training [AOR: 2.9; 95% CI: 1.57–5.32] were identified as independent predictors of nurses' knowledge towards geriatric patient care (Table 3).

Practice of Nurses Towards Geriatric Care and Associated Factors

As per the respondent's feedback, 45.3% [95% CI: 39.2–51.3] of nurses have good practice level about care geriatric patients (Figure 2). In the bivariate analysis, age, marital status, level of education, years of experience, type of working unit, living with elders, undergoing geriatric care training, and nurses' knowledge of geriatric care were found to be
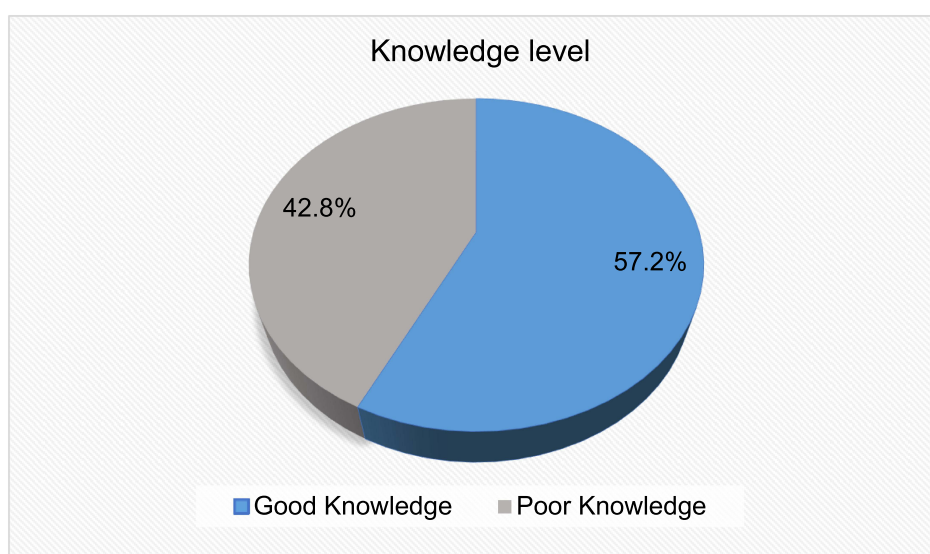

Figure 1 Knowledge level nurses towards geriatric care in selected public hospitals of Wolaita zone, Southern Ethiopia, 2022.

Table 3 Factors Associated with Nurse's Knowledge Level Towards Geriatric Care in the Selected Public Hospitals of Wolaita Zone, Southern Ethiopia, 2022

Variables	Knowledge		COR (95% CI)	AOR (95%C)	p- value
	Poor	Good			
Age					
21–30	80	94	1.00	1.00	1.00
31–40	35	58	1.8 (1.1, 3.0)	0.9 (0.5, 1.8)	0.86
>40	7	11	3.2 (1.2, 8.5)	2.4 (0.4, 14.4)	0.35
Marital status					
Single	52	48	1.00	1.00	1.00
Married	70	115	1.8 (1.1, 2.9)	1.1 (0.6, 2.1)	0.67
Education					
Diploma	30	22	1.00	1.00	1.00
Degree	87	131	1.4 (0.7, 2.5)	2.5 (1.2, 5.0)	0.01
Master	5	10	8.2 (1.6, 41.5)	6.8 (1.2, 37.5)	0.03
Experience					
1–5	57	44	1.00	1.00	1.00
6–10	42	68	2.1 (1.2, 3.6)	2.2 (1.2, 4.2)	0.01
>10	23	51	2.9 (1.5, 5.4)	2.6 (1.2, 5.9)	0.02
Working unit					
OPD	19	39	1.00	1.00	1.00
IPD	56	70	0.6 (0.3, 1.2)	0.8 (0.4, 1.6)	0.5
ICU	9	9	0.5 (0.2, 1.4)	0.5 (0.1,1.7)	0.23
EOPD	23	17	0.4 (0.1,0.8)	0.5 (0.2, 1.3)	0.17
OR	15	28	0.9 (0.4, 2.1)	0.9 (0.4, 2.4)	0.93
Training					
No	97	100	1.00	1.00	1.00
Yes	25	63	2.4 (1.4, 4.2)	2.9 (1.6, 5.3)	0.00
Care education					
No	57	51	1.00	1.00	1.00
Yes	65	112	1.9 (1.2, 3.1)	1.5 (0.9,2.7)	0.11
Live with elderly					
No	54	60	1.00	1.00	1.00
Yes	68	103	1.4 (0.8, 2.2)	1.1 (0.6, 1.9)	0.70
Follow guideline					
No	73	85	1.00	1.00	1.00
Yes	49	78	1.4 (0.8,2.2)	1.1 (0.7,1.9)	0.63

Abbreviations: AOR, Adjusted Odds Ratio; COR, Crude Odds Ratio; EOPD, Emergency Outpatient Department; ICU, Intensive care Unit; IPD, Inpatient Department; OPD, Outpatient Department; OR, Operation Room.

associated with nurses' practice level of geriatric patient care. On multivariate analysis, nurses' knowledge level towards geriatric care [AOR: 2.2; 95% C.I: 1.28–3.80] and taking geriatric care training [AOR: 1.81; 95% C.I: 1.02–3.23], were found to be significantly associated with practice level of nurses about geriatric care (Table 3 and 4).

Discussion

This study assessed nurses' knowledge and practice level towards geriatric patient care and its associated factors in selected public hospitals in the Wolaita zone. The study revealed that 57.2% of nurses had good knowledge about geriatric patient care. This finding was consistent with a study carried out in the Swiss emergency department, which revealed 51.9% of participants had good knowledge about geriatric patient care.[20] However, it was higher than studies conducted in West Shoa zone (46.7%),[21] Bahir Dar (42.7%),[18] Addis Ababa (28.7%),[9] and Zanzibar 17.6%).[17] This
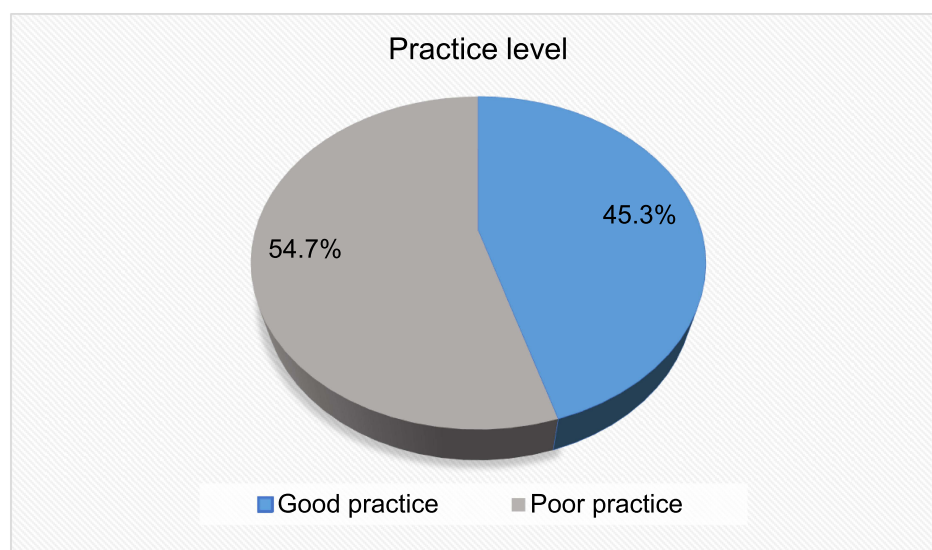
Figure 2 Practice level of nurses towards geriatric care in the selected public hospitals of Wolaita Zone, Southern Ethiopia, 2022.

variation might be due to a lack of training in geriatric care, differences in the level of education, differences in work experience, study time gaps, and differences in study settings.

However, this finding was lower than the study conducted in Nigeria (60%),[15] Saudi Arabia (86%),[7] and Ghana (88.7%).[16] These variations might be due to differences in the type of facility and differences in the level of education and training, where most of the participants in the current study were less experienced with little or no geriatric education

Table 4 Factors Associated with Practice Level of Nurses Towards Geriatric Nursing Care in the Selected Public Hospitals of Wolaita Zone, Southern Ethiopia, 2022

Variable	Practice Level		COR (95% CI)	AOR (95%C)	p-value
	Poor	Good			
Age					
21–30	101	73	1.00	1.00	1.00
31–40	50	46	1.3 (0.8, 2.2)	1.1 (0.6, 2.1)	0.67
>40	5	10	4.7 (1.2,17.7)	2.9 (0.6,13.6)	0.17
Marital status					
Single	67	35	1.00	1.00	1.00
Married	89	94	2.0 (1.2,3.4)	1.7 (0.9,3.2)	0.10
Level of education					
Diploma	34	23	1.00	1.00	1.00
Degree	114	93	1.3 (0.7,2.5)	1.3 (0.6,2.6)	0.50
Masters	8	13	8.2 (1.6,41.5)	6.2 (1.1,34.9)	0.04
Knowledge level					
Poor	85	37	1.00	1.00	1.00
Good	71	92	3.0 (1.8,4.9)	2.2 (1.3,3.8)	0.00
Work experience					
1–5	60	41	1.00	1.00	1.00
6–10	62	48	1.1 (0.6,2.0)	0.9 (0.5,1.7)	0.75
>10	34	40	1.7 (0.9, 3.2)	1.1 (0.4,2.3)	0.94

(Continued)

Table 4 (Continued).

Variable	Practice Level		COR (95% CI)	AOR (95%C)	p-value
	Poor	Good			
Training taken					
No	119	78	1.00	1.00	1.00
Yes	37	51	2.1 (1.3, 3.5)	1.8 (1.1, 3.2)	0.04
Working unit					
OPD	27	31	1.00	1.00	1.00
IPD	65	61	0.8 (0.4,1.5)	1.1 (0.6,2.3)	0.71
ICU	11	7	0.5 (0.2,1.6)	0.7 (0.2, 2.4)	0.6
EOPD	30	10	0.3 (0.1, 0.70)	0.5 (0.2,1.3)	0.14
OR	23	20	0.7 (0.3,1.7)	10.9 (0.4, 2.1)	0.77
Living with elderly					
No	73	41	1.00	1.00	1.00
Yes	83	88	1.9 (1.2, 3.1)	1.4 (0.8, 2.5)	0.20

Abbreviations: AOR, Adjusted Odds Ratio; COR, Crude Odds Ratio; EOPD, Emergency Outpatient Department; ICU, Intensive care Unit; IPD, Inpatient Department; OPD, Outpatient Department; OR, Operation Room.

and training. However, in the previous study, respondents were geriatric specialized nurses in a better position to provide elder care.

Nurse's education level was significantly associated with their knowledge level towards geriatric care. Those nurses who had a degree level in the nursing profession were 2.5 times more likely to have good knowledge of geriatric care as compared with their diploma-level counterparts, and those who had a master's level in the nursing profession were 6.8 times more likely to have good knowledge of geriatric patient care than their diploma-level counterparts. This finding was consistent with the studies conducted in Ethiopia,[9,18,21] Nigeria,[22] and Egypt.[23] Those participants who had bachelor's degrees and above in the nursing profession were equipped with better professional knowledge regarding geriatric care than those with diploma-level qualifications since they learned more advanced courses, which might, in turn, improve their knowledge level of geriatric care. Geriatric patient care knowledge is gained through the theoretical and practical understanding of nurses' elderly care through experience or education.[24]

The study also revealed that years of work experience in the nursing profession were significantly associated with nurses' knowledge of geriatric care. Accordingly, those nurse participants who had 6–10 years of experience in the nursing profession were 2.2 times more likely to have good knowledge than those who had 1–5 years of experience in the nursing profession. Similarly, those nurses who had >10 years of experience in the nursing profession were 2.4 times more likely to have a good knowledge level than those who had 1–5 years of experience in the nursing profession. This finding was consistent with the studies conducted in Addis Ababa,[9] Bahr-Dar in North East Ethiopia[18] and West Shoa Zone, Oromia Region, Ethiopia. This is also similar to a study carried out in Korea, which revealed that the longer the duration of employment, the better the knowledge of geriatric care among nurses.[25] Nurses with longer years of experience may have a better chance of gaining access to up-to-date knowledge about geriatric care through their daily observations and practices. This suggests that gaining work experience is crucial for acquiring quality information and might enhance evidence-based practice.[21]

The study also revealed training on geriatric care as another variable that was significantly associated with the knowledge level of nurses towards geriatric care: nurses who had been taking training about geriatric care were 2.9 times more likely to have good knowledge about geriatric care as compared with those who had not received training. This was consistent with a study on the quality of caregivers for the geriatric patient in long-term care institutions in Zhejiang Province, China, which showed that pre-employment training had a significant positive influence on respondents' knowledge of older care.[26] The goal of training is to help learners improve their competence, capacity, and performance. Training helps learners gain new knowledge and skills.[27]

The study revealed that 45.3% of nurses had good practice levels. This is higher than the study conducted in Iran (39%).[28] Similarly, a study in a Swiss emergency department indicated that practical skills were estimated to be in the mid-range or low,[20] which is lower than the current study finding. But the result of this study was much lower than the study conducted in Nigeria (81%).[5] These differences may be due to a lack of geriatric care training, educational level differences, work experience variation, study time gaps, and study setting differences.

As a result of the current study, taking geriatric care training was significantly associated with the practice level of nurses in geriatric care. Nurses who had been taking training about geriatric care were 1.8 times more likely to have a good practice level compared to those who did not take training. This result was in line with study carried out in Nigeria.[15] Giving geriatric care training to nurses helps them develop the basic skills of providing care for older adults with evidence-based, individualized, and coordinated team-based care. In order to improve trainees' knowledge, abilities, and performance, specialized training on the goals of geriatric patient care is necessary for effective geriatric patient care.[29]

In this study, nurses' knowledge level towards geriatric patient care was another variable that was significantly associated with their practice level in geriatric care. Accordingly, those nurse participants who have a good knowledge level about the care of older patients were 2.2 times more likely to have a good practice level compared to those who have a poor knowledge level. This finding is consistent with those of studies conducted in Korea,[25] Egypt,[23] and Canada.[30] In general, knowledge and competence are closely related since providing care for geriatric patients involves understanding the difficulties they face as well as complicated intervention techniques.[31] This is due to the fact that those who have good knowledge about the care of older patients understand more about the problems of older people, which might in turn enhance their skills.[32]

Conclusion and Recommendation

In general, this study has indicated that the knowledge and practice of nurses in relation to caring for geriatric patients are still insufficient. The educational attainment, years of experience, and participation in geriatric care training exhibited significant associations with the knowledge levels of nurses. Likewise, the knowledge level of nurses and their engagement in geriatric care training demonstrated significant associations with their practice level in the context of geriatric care.

Administrators of hospitals and the Zonal Health Office are advised to take proactive measures in offering nurses with regular training programs. It is recommended that geriatric care education be seamlessly integrated into the core nursing curriculum to enhance the knowledge and proficiency of nurses in regard to geriatric care.

Abbreviations

ANA, American Nursing Association; AOR, adjusted odds ratio; BSc, Bachelor of Science; EOPD, Emergency Outpatient Department; ETB, Ethiopian Birr; ICU, Intensive Care Unit; KOP-Q, Knowledge-About-Older-Patients – Quiz; MSc, Master of Science; OPD, Outpatient Department; OR, Operation Room; PACU, Post Anesthesia Care Unit; PH, primary hospital; SD, standard division; SNNPR, Southern Nation Nationality People Region; SPSS, Statistical Package for Social Science; SRS, Simple Random Sampling; UN, United Nations; WSUCSH, Wolaita Sodo University Comprehensive Specialized Hospital.

Data Sharing Statement

The data supporting the findings of this study are available upon reasonable request from the corresponding author.

Ethics Approval and Consent to Participate

Ethical approval was obtained from the Institutional Ethical Review Committee of Wolaita Sodo University, College of Health Science and Medicine, School of Nursing (reference number: 4/955/2022). Written informed consent was obtained from all participants for their participation after the objectives and nature of the study were explained. The confidentiality of the respondents was maintained throughout the research process by providing code identification to the participants instead of using their names. All methods were performed in accordance with the relevant guidelines and regulations.

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Disclosure

The authors declare no conflicts of interest regarding the publication of this article.

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