# KNOWLEDGE AND ATTITUDE TOWARD THE CARE OF THE ELDERLY AMONG UNIVERSITY OF BOHOL NURSING STUDENTS

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## ABSTRACT

Knowledge refers to the information acquired through formal or informal education, as well as the comprehension and abilities gained through education or experience. Attitude refers to how an individual thinks and feels, and how they behave toward others or objects. The elderly constitute a growing proportion of the Philippine population and of hospital admissions. Assessing nursing students' knowledge and attitudes toward caring for older adults is essential to the provision of high-quality care. This study employed a quantitative correlational research approach to determine whether a relationship exists between the variables Knowledge and Attitude among Level 3 and Level 4 regular students at the University of Bohol. Respondents completed the Demographic Profile, Knowledge of the Aging Process, and Attitude toward the Care of the Elderly

questionnaires. The respondents were highly knowledgeable about the aging process and had a Positive Attitude toward older adults. Correlational analyses showed that the respondents' demographic profile (age, sex, and year level) and their knowledge and attitudes were not correlated. It was shown that there is no relationship between the variables, Knowledge and Attitude. This suggests that knowledge and attitudes alone may not directly correlate with nursing students' care for older adults.

## INTRODUCTION

According to the World Health Organization, by 2030, 1 in 6 people worldwide will be aged 60 or over. The number of people worldwide aged 60 years or older will double by 2050 (World Health Organization, 2025). The population of older people has also been increasing in the Philippines. According to the 2015 census of population and housing by the Philippine Statistics Authority, people aged 65 and over accounted for 4.8 percent of the population. This age group has significantly increased in the 2022 census, comprising 5.4 percent (5.86 million). The Philippine POPCOM, or the Commission on Population, also reported that in 2020 (Commission on Population and Development, 2022).

Filipinos aged 60 years and older accounted for 9.2 million (8.5%) of the total population nationwide (Commission on Population and Development, 2022). Aging is an inevitable process, and caring for an older adult requires vigilance, as their overall health may change markedly within the next few hours. Their immune defenses decline with age, making them susceptible to a wide range of diseases. Nurses require the knowledge and skills to assist older adults with a broad range of nursing care issues, including chronic conditions and progressive or protracted frailty in physical and mental functions, as well as palliative care (Bickford, 2018). Hence, this will help them grasp the whole range of nursing practice with older adults, cultivate more positive attitudes toward them, and learn nursing interventions to improve health and wellness.

The Care of Older Adults subject has been influenced by and shaped by Martin Fishbein and Icek Ajzen's Theory of Reasoned Action, the Attitude-Behavior Process Model by Fazio (2005) and Fazio, Powell, & Herr (1983), and Jean Watson's Theory of Human Caring. Martin Fishbein and Icek Ajzen's Theory of Reasoned Action (TRA), formulated in 1967, asserts that attitudes and behaviors are related: a person's behavior is influenced by their intention to perform the behavior. In contrast, the Attitude-Behavior process model proposed by Fazio and colleagues (Fazio, 1986; Fazio, Powell, & Herr, 1983) suggests that a person's attitudes can direct behavior even when they are not consciously considered or deliberated. The process model holds that a person's attitude toward a particular object leads them to describe the event as either pleasant or unpleasant and to act on this feeling or impulse. To interact with and provide care to older adults, nurses, especially student nurses, need

to understand their unique needs. Through Watson's Caring Theory, the development of a care plan is enhanced to assist older adults in maximizing their life satisfaction and in developing an authentic caring relationship that promotes holistic well-being. Nursing students will need to make a conscious effort to retain human compassion in their clinical, administrative, educational, and/or research practice if we regard caring as the heart of nursing.

A systematic review by Hanson (2014) highlighted that the global population of older adults is increasing and that deficits in basic care, including care for older adults, result from negative attitudes among staff nurses. Hanson concluded that both nurses and nursing students can exhibit negative attitudes toward older adults, thereby affecting the quality of care. Negative attitudes toward aging have numerous causes, including limited knowledge of the aging process and gerontology.

Another systematic review by Liu, Norman, and While (2013) found that the global population is aging. It is well known that older adults are more susceptible to disease than younger adults. They are often visited at the hospital due to their chronic diseases and disabilities that led them to seek medical care. This review analyzed international research on registered nurses' and student nurses' attitudes toward older adults, along with the underlying variables. Responses regarding attitudes toward registered nurses and student nurses have varied from positive to negative since 2000. Potential indicators of outcomes included age, gender, and educational level; however, none were consistent predictors. However, positive attitudes toward caring for older adults are driven by knowledge about aging and a preference for working with older adults.

A qualitative study by de Guzmán, Ching, and Romero (2013) explored elderly care within the Filipino family context and emphasized the cultural importance of caregiving and intergenerational responsibility. Their findings highlight that attitudes toward older adults are shaped not only by clinical knowledge but also by family values and social expectations, which may influence nursing students' perspectives toward geriatric care.

Due to its impact on current healthcare systems, the aging population consumes substantial healthcare services. Nurses must be knowledgeable and skilled in caring for older adults and maintain a positive attitude toward them to ensure a sufficiently equipped workforce. The study "Knowledge about Aging and Attitudes Towards Caring for Older People Among Undergraduate Nursing Students in The Western Cape" by Twagiramariya (2018) examines undergraduate nursing students' knowledge of aging and attitudes toward caring for older people.

Results revealed that, although there were notable disparities across year levels, students typically held an optimistic attitude toward older persons and had moderate knowledge. After graduation, it was found that just over half of respondents reported planning to work with older adults. The study recommended that nursing students receive better instruction in caring for

elderly patients.

A study by Faronbi et al. (2017) found that respondents' attitudes and knowledge were not significantly correlated. Accordingly, the majority of respondents held positive attitudes toward older people and had good knowledge of how to care for them; however, two of the variables investigated did not meet the $p < 0.05$ significance level. Knowledge and attitudes toward caring for older adults are crucial for understanding nursing students' views of older adults and for assessing the extent of their perceptions and preferences regarding care and services. In addition, it aims to identify nursing students' levels of knowledge and attitudes toward aging, and to examine whether these correlate with their attitudes toward caring for older adults. It is essential to investigate nursing students' knowledge and attitudes toward caring for the elderly, as they constitute a growing share of both the Philippine population and hospital admissions. Doing so is also a major factor in directing nursing education toward providing optimal care for older adults, particularly in clinical settings. Despite several international and local studies examining nursing students' knowledge and attitudes toward elderly care, limited research has focused on students enrolled in private universities in the Central Visayas region, particularly in Bohol. This study addresses this gap by examining the relationships among knowledge, attitudes, and selected demographic variables among nursing students at the University of Bohol, thereby contributing context-specific evidence to geriatric nursing education in the Philippines.

## RESEARCH METHODOLOGY

This study used a quantitative correlational research design to examine the relationship between Knowledge and Attitude. A quantitative correlational research design was deemed appropriate as the study aimed to determine the presence and degree of relationship among variables without manipulating them. This design enables objective measurement of associations among knowledge, attitudes, and demographic characteristics among nursing students. The study was conducted at the University of Bohol, a private, advanced education foundation located at Dr. Cecelio Putong Road, Tagbilaran City, 6300 Bohol, Philippines. A total of 145 randomly selected officially enrolled nursing students for SY 2022-2023, from level 3 sections Opal, Garnet, and Peridot, and level 4 sections Diamond, Sapphire, and Amethyst. excluded were level 1 and 2 nursing students, as well as irregular nursing students from levels 3 and 4.

To evaluate the degree of knowledge and attitude, the researchers' used a modified questionnaire adapted from the standard tool used in the study of Oyetunde, Ojo, Ojewale (2013) "Nurses' attitude towards the care of the elderly: Implications for gerontological nursing training" and "Knowledge about Elderly Care and Its Relation to Ageism Attitude among Undergraduate Nursing Students" by Mohammed and Omar (2019). The

questionnaire used in the study comprises three parts. The first part concerns the respondents' demographic profile, including age and sex. The second part of the questionnaire pertains to the respondents' Knowledge of the aging process. The tool consisted of 18 items, each rated on a 5-point Likert-type scale ranging from 5 (Totally Agree) to 1 (Totally Disagree).

## Knowledge

| Scale | Symbol | Descriptive Value | Meaning | Interpretation |
|---|---|---|---|---|
| 5 | TA | Totally Agree | I strongly agree with the statement | Very knowledgeable |
| 4 | A | Agree | I agree with the statement | knowledgeable |
| 3 | MA | Moderately Agree | I moderately agree with the statement | Moderately knowledgeable |
| 2 | D | Disagree | I disagree with the statement | Slightly knowledgeable |
| 1 | TD | Totally disagree | I strongly disagree with the statement | Not knowledgeable |

The third part of the tool focused on nurses' attitudes toward caring for older adults and comprised 8 questions. The instrument used a 4-point Likert-type scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree) to measure respondents' attitudes toward the care of the elderly.

## Attitude

| Scale | Symbol | Descriptive Value | Meaning | Interpretation |
|---|---|---|---|---|
| 4 | A | Agree | I agree with the statement | Very good attitude |
| 3 | MA | Moderately Agree | I moderately agree with the statement | good attitude |
| 2 | D | Disagree | I disagree with the statement | Poor attitude |
| 1 | TD | Totally disagree | I strongly disagree with the statement | Very poor attitude |

In assurance with the quality of the data, the validity of the tool was checked, and it revealed a Cronbach's alpha result of, respectively, which will indicate acceptable internal consistency as shown below:

## Cronbach's Alpha Results

| Knowledge and Attitudes towards the Care of the Elderly | Cronbach's Alpha Values |
|---|---|
| Knowledge | .779 |
| Attitudes | .713 |

**Data Gathering Procedures.** The researchers selected respondents from the College of Nursing's level III and level IV students. The researchers secured an Ethics Clearance from the University of Bohol Ethics Review Board (UB-ERB). Upon issuance, the approval to conduct the study was guaranteed and signed by the University of Bohol Vice President for Academics and the Dean of the UB College of Nursing. Simple Random sampling was used to identify the respondents who met the inclusion criteria. A modified questionnaire was used to obtain accurate data and responses from respondents. Negatively stated questions were reverse-coded. Upon approval, the researchers distributed the questionnaires via Google Forms. The researchers created group chats in which the identified students participated. The identified respondents were given the study's goal before being asked to participate. After respondents consented to participate in the survey, they completed the questionnaire. The gathered data were statistically analyzed and interpreted. The researchers maintained confidentiality upon receiving the essential information, ensuring that the collected data was used solely for research purposes.

**Ethical Considerations.** The University of Bohol's Ethics Committee conducted an ethics assessment of the proposed research design. Consent was obtained from the Vice President of Academic Affairs and the Dean of the College of Nursing to grant the authorization for the study to be conducted. The purpose of the research and information about the respondent's participation and the data collection process were provided in the form to obtain the respondent's informed consent. Participation in the study was entirely voluntary, and respondents were free to refuse to answer any questions they deemed personal or uncomfortable. They were also allowed to withdraw without penalty, and this will not affect their academic evaluations. Privacy and confidentiality were strictly observed throughout the study. The collected data was used solely for the research and was not shared outside the research team. The researchers did not request respondents' names; therefore, no information was attributed to any particular respondent, and only the researchers had access to the survey. There are no significant potential risks to the research other than the possibility that the respondent may deem some information personal. A copy of the study's findings will be sent to the respondents for future use. The researchers' contact information was also provided to respondents for any questions regarding the study.

## RESULTS AND DISCUSSION

The data revealed that the majority of respondents are aged 20-24. One hundred sixteen (116) are females, and twenty-nine (29) are males. Most of the respondents are from the third level, which comprises eighty-two (82) nursing students. In the study by Toygar and Kardakovan (2020), the results revealed that nursing students' attitudes toward older adults are influenced by their gender, year in school, caregiving experience, and living with an older

relative.

**Level of Knowledge about the Aging Process.** Table 2 presents the respondents' levels of knowledge about the aging process. The data revealed a composite mean of 4.51, indicating that respondents were rated "very knowledgeable" about the aging process. Although respondents were rated as very knowledgeable based on the composite mean, this finding reflects self-reported knowledge and may not fully capture actual clinical competence in geriatric care. Respondents are very knowledgeable that "the aging process will lead to anatomical and physiological changes" (WM 4.83). Aging is associated with changes in dynamic biological, physiological, environmental, psychological, behavioral, and social processes. Some age-related changes are benign, such as graying hair; others result in declines in sensory function and in activities of daily living, and increased susceptibility to and frequency of disease, frailty, or disability.

The respondents are also very knowledgeable that "there should be a thorough assessment and evaluation for effective care, which includes nutritional assessment even in an emergency" (WM 4.73). A thorough assessment and evaluation are essential for effective care in the elderly, as they improve clinical outcomes. Moreover, respondents are well aware that nurses should encourage hypertensive elderly patients to increase their fluid intake, consume more fruits and vegetables, and avoid salty and fried foods. The DASH diet is a dietary regimen designed to lower blood pressure. It is composed of a diet that is high in fruits and vegetables, whole grains, and lean proteins, and low in fats and limiting sugar. It is typically the dietary regimen prescribed for patients with hypertension and cardiovascular disorders (Craddick et al., 2003).

The respondents are least knowledgeable (WM = 4.19) about the statement that "fish oil and Vitamin E are two basic nutrients that prevent Alzheimer's disease". Evidence suggests that omega-3 fatty acids may act as protective factors against Alzheimer's disease and are particularly beneficial at disease onset (Canhada et al., 2018).

**Respondents' Attitude toward the Care of the Elderly**. The data reveal that the respondents have a "Very Good Attitude" toward the care of the elderly, with a composite mean of 3.30. Respondents have a very good attitude toward the idea that "caring for the elderly needs patience and empathy," with a WM of 3.9. The respondents also have a "very good attitude" regarding "the elderly deserve care just like other patients," with a WM of 3.89. Abdi et al. (2019) highlighted that developing effective solutions to address older adults' needs requires understanding their care and assistance requirements.

Furthermore, the respondents had a "very good attitude" toward the statement "elderly patients with terminal illnesses need spiritual care aside from nursing care," as well as toward the statement "I give attention and care to the elderly just like I care for my elderly parents," with a WM of 3.78. Spiritual care is significant to nursing professionals' efforts to deliver end-of-

life care, achieve holistic care, humanize death, and support a dignified end (García-Navarro et al., 2021).

The statement "the elderly are difficult to care for" had the lowest weighted mean among all items in Table 3 (WM = 2.01), indicating that respondents held a negative attitude toward it. It should be noted that negatively worded items were reverse-coded during analysis; thus, lower weighted means for these items reflect more positive attitudes toward elderly care rather than unfavorable perceptions. Caring for older adults can be complex due to physical, emotional, and cognitive changes (Oyetunde et al., 2013).

**Relationship between the Respondent's Profile and the Knowledge and Attitude.** Spearman's Rank Correlation and Pearson's Chi-Square Test were used to determine whether the variables were statistically significantly associated. The findings indicate that none of the selected demographic factors were significantly associated with either knowledge or attitudes toward aging (See Table 1).

Results revealed that respondents' age ($\rho$ = –0.013, $p$ = 0.881), sex ($\chi^2$ = 3.014, $p$ = 0.187), and year level ($\chi^2$ = 1.663, $p$ = 0.526) were not significantly associated with their knowledge of aging. Similarly, no statistically significant associations were found between respondents' age ($\rho$ = 0.046, $p$ = 0.581), sex ($\chi^2$ = 0.287, $p$ = 0.592), and year level ($\chi^2$ = 0.126, $p$ = 0.723) and their attitudes toward elderly care.

These findings suggest that respondents' knowledge and attitudes toward aging may be more strongly associated with factors beyond basic demographic characteristics. This aligns with the existing literature, which indicates that exposure to gerontology-related education, the quality of caregiving experiences, and cultural values often play a more substantial role in shaping perceptions of aging than age or sex alone. Moreover, the absence of a significant relationship between year level and knowledge or attitudes toward aging contrasts with assumptions that academic progression naturally leads to increased awareness and more positive attitudes. This finding is consistent with the work of Allan and Johnson (2009), who emphasized that mere advancement in academic standing does not guarantee improved attitudes toward older adults unless gerontological content is explicitly integrated into the curriculum. Without targeted educational interventions, students may retain age-related misconceptions regardless of their year level.

Overall, the lack of significant associations highlights the importance of educational content, experiential exposure, and societal narratives in influencing perceptions of aging. These results underscore the need for structured gerontological education and meaningful interactions with older adults to enhance both knowledge and attitudes toward elderly care, rather than relying on demographic variables as predictors.

**Table 1.** *Relationship Between the Respondent's Profile and the Knowledge and Attitude (n = 145 )*

| Variables | Statistical Treatment Used | Test Value | P-value | Decision | Interpretation |
|---|---|---|---|---|---|
| Age and Knowledge | Spearman Rank Correlation | -0.013 | 0.881 | Failed to reject the null hypothesis. | There is no significant relationship between the variables. |
| Sex and Knowledge | Chi-Square Tests | 3.014 | .187 | Failed to reject the null hypothesis. | There is no significant relationship between the variables. |
| Year Level and Knowledge | Chi-Square Test | 1.663 | .526 | Failed to reject the null hypothesis. | There is no significant relationship between the variables. |
| Age and Attitude | Spearman Rank Correlation | .046 | .581 | Failed to reject the null hypothesis. | There is no significant relationship between the variables. |
| Sex and Attitude | Chi-Square Test | .287 | .592 | Failed to reject the null hypothesis. | There is no significant relationship between the variables. |
| Year Level and Attitude | Chi-Square Test | .126 | .723 | Failed to reject the null hypothesis. | There is no significant relationship between the variables. |

**Correlation between the Respondents' Level of Knowledge on the Aging Process and Attitude towards the Care of the Elderly.** Table 2 shows that the variables knowledge and attitude of the respondents towards elderly care obtained a computed value of .136 and a p-value of .102, indicating no significant relationship between the variables; thus, the null hypothesis is not rejected. This shows that the respondent's knowledge does not affect their attitude towards elderly care. A similar study by Faronbi et al. (2017) found that respondents' attitudes and knowledge were not significantly correlated. The lack of a significant relationship between knowledge and attitude suggests that the assumptions of the Theory of Reasoned Action and the Attitude–Behavior Process Model may not fully apply in this context. This may be attributed to affective and experiential factors, such as clinical exposure to elderly patients and culturally rooted values of respect for older adults, which can shape attitudes independently of cognitive knowledge.

**Table 2.** *Correlation Between the Respondent's Level of Knowledge on the Aging Process and Attitude Towards the Care of the Elderly ( n =145 )*

| Variables | Statistical Test Used | Test Value | P-value | Decision | Interpretation |
|---|---|---|---|---|---|
| Knowledge and Attitude | Spearman Rank Correlation | .136 | .102 | Failed to reject the null hypothesis. | There is no significant relationship between the variables. |

## CONCLUSION

The demographic profile of nursing students, specifically age, sex, and year level, does not significantly influence their knowledge and attitudes toward caring for the elderly. Regardless of these demographic variables, nursing students demonstrated comparable levels of knowledge and attitudes, indicating that these factors are not the primary determinants of preparedness for care of older adults. Moreover, the absence of a significant correlation between knowledge alone and more positive attitudes does not necessarily imply that knowledge alone is sufficient to produce them.

These findings do not support the assumptions of Fishbein and Ajzen's Theory of Reasoned Action and the Attitude-Behavior process model, which propose that behavior is influenced by knowledge and attitude (Fishbein & Ajzen, 1975). Instead, the results imply that other factors, such as experiential learning, emotional intelligence, and value formation within nursing education, may influence the relationship between attitude and knowledge in elderly care.

Nevertheless, the overall high level of knowledge and positive attitudes demonstrated by nursing students reflects a strong foundation in humanistic and caring principles. This supports Jean Watson's Theory of Human Caring, emphasizing compassion, empathy, and holistic care as essential components of nursing practice. The findings suggest that nursing students are adequately prepared to provide high-quality, patient-centered care to older adults, underscoring the effectiveness of nursing education in fostering the caring values essential to geriatric nursing practice.

## RECOMMENDATION

After evaluating the analysis and interpretation of the data and findings, the researchers present the following recommendations:

1. Nursing students should continuously enhance their knowledge and positive attitudes toward elderly care through geriatric-focused coursework, clinical exposure, and participation in interdisciplinary seminars, thereby developing essential skills and providing quality, patient-centered care to older adults.

2. Educational infographics on elderly care can reinforce essential information, particularly the do's and don'ts of caring for older

adults, to promote safe, effective, and compassionate nursing care.

3.  A comparative study is recommended that involves adolescents in the community and examines their perceptions of the elderly. In the demographic profile, socioeconomic status may be included alongside age, sex, and year level.

4.  Future researchers will use this study to investigate knowledge, practices, and needs in the care of the elderly, better understand the issues that arise in these areas, and offer evidence-based solutions. They will also extend the research findings to raise awareness of the role of future nurses in caring for the elderly and to serve as a reference for conducting a similar study.

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