

Knowledge about Elderly Care and Its Relation to Ageism Attitude among Undergraduate Nursing Students

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Abstract Background: There is an increase in the health problems associated with increasing in elderly population worldwide. As nursing students are the future health care providers, their positive attitudes towards elders and adequate knowledge of elderly care would improve the quality of provided services. **The aim:** of the present study was to investigate knowledge about elderly care and its relation to ageism attitude among undergraduate nursing students. **Design:** A descriptive research study was used. **Setting:** this study was conducted at faculty of Nursing-Minia university. **Subjects:** All available nursing students (320 students) at fourth academic year, and data was collected in December, 2017. **Tools:** Three tools were utilized; first one covered personal data of the studied sample, the second one was the Ageism Attitude Scale (AAS), and the last one was knowledge questionnaire sheet about care of elderly people. **Results:** The majority of Minia university nursing students have lack of knowledge regarding care of elderly people and held negative attitude toward them, also there was a significant correlation between nursing student's knowledge about elderly care and their ageism attitude, in which nursing student's knowledge about elderly care was significantly affect their ageism attitude. **Conclusion:** Nursing students of Minia university have unsatisfactory level of knowledge regarding elderly care and demonstrate negative attitude toward them. **Recommendation:** Nursing faculties seek Gerontological nursing as a separate specialty and providing evidence-based Gerontological nursing education programs is urgently needed in order to change nursing students stereotypes and negative attitudes toward elderly people, and to meet the challenge of care for them.

Keywords: ageism attitude, elderly people, gerontological nursing, knowledge, nursing students

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1. Introduction

The ageing population is a main issues that facing international health care systems currently. With increasing aged population, there is an increased likelihood of developing health problems which consequently increase the demand for health care resources. Globally, the number of aging people (60 years and over) is expected to increase from 600 million to 2 billion between 2000 and 2050 [1]. Central Agency for Public Mobilization and Statistics (2018) indicated that the total population of Egyptian people were 94.8 million, elderly people (60 years and more) represents 7% of total population in Egypt and expected to reach 12% by 2030 [2].

Many of health problems that affect older adults are chronic diseases and requiring gentleness and continues nursing care in order to promote health, maintain well-being enhance recovery from the illness, adaptation with disability, and helping them adapt more successfully with

aging process [3]. Therefore, nurses must have sufficient knowledge and skills, demonstrate appropriate attitudes toward older people, and prepared well to meet the challenges of caring for this rapidly increasing segment of population [4].

Ageism is a discrimination against elderly people includes negative attitudes and stereotyping against people because of their age, as viewing all elderly people are dependent, frail persons, cannot or should not participate in societal activities, and should not be given equal opportunities afforded to others [5]. Discrimination against elders in health care settings is considered a growing and ignored problem that most commonly done by young people, and can results in lack of provided medical and nursing care, decreased access to services, as well as altered dignity and respect for older adults [6].

Many published articles showed that ageism attitude associated with negative consequences on both physical and mental health of aged population. As older people who have feelings of being a burden, less valuable, and not accepted or respected from the society are at greater

risk for depression and social isolation and do not recover well from illnesses as young adults [7].

Caring of aged population requires sufficient level of knowledge and skills related to gerontology, as knowledge about normal ageing process and expected changes as (physiological, psychosocial, functional, and cognitive changes), common health needs, chronic problems and its care, as well as applying the concept of health promotion for older adults in order to provide individualized care plan, prevent functional decline and help them to maintain health as long as possible [8].

1.1. Significance of the Study

The incidence rate of acute and chronic illness increases with aging. It was found that elderly people (65 yrs. and more) currently represents as 65% of hospital stays, and have four times of hospital admissions when compared to young adults, account for 26% of all physician office visits, 38% of emergency room visits, 85% of home health care visits, and 90% of residents in nursing homes. These percentages are expected to increase as the aged population is increasing [9].

There are several related literatures illustrated that there is a lack of educational training programs focusing on Gerontological nursing for all categories of nurses who working with older people and the given healthcare for older adults has been severely threatened by the negative stereotypic attitudes and misconceptions of nurses, with 63% of elders expressing an unmet health need [10,11]. Hence focusing on Gerontological nursing education, as well as clinical, research and leadership opportunities for all nursing students is fostering positive attitudes towards older adults, improving the quality of provided care, and stimulates interest in geriatrics as a career choice [12].

1.2. Aim of the Study

The aim of this study was to investigate knowledge about elderly care and its relation to ageism attitude among undergraduate nursing students.

1.3. Research Questions

1. What is the undergraduate nursing students' knowledge about elderly care?
2. What is the undergraduate nursing students' attitudes toward older people?
3. If there is a relation between nursing students' knowledge about elderly care and their ageism attitude?

2. Subjects and Methods

2.1. Design

A descriptive design was utilized in this study.

2.2. Setting

This study was carried out in Minia university- Faculty of Nursing.

2.3. Subjects

All available baccalaureate nursing students (320 students) at the 4th grade of academic year of (2017-2018). Subjects inclusion criteria were; male and female nursing students, all newly nursing students at fourth academic year and students who agree to participate.

2.4. Instruments of Data Collection

I. Personal data questionnaire: A semi structured questionnaire was developed by the researcher and covered personal data of the sample such as; (name, age, sex, residence).

II. The Ageism Attitude Scale (AAS) which was developed by Vefikulucay and Terzioglu, 2011 [13] to determine young people's (aged 18–25 yrs.) attitudes towards ageism. The Scale contains 23 item which subdivided into three subscales are; (Restricting life of elderly, Positive ageism and Negative ageism).

- The scale items are scored on a 5-point Likert scale. The items including negative attitude sentences (1, 3, 5, 10, 11, 12, 14, 15, 16, 17, 18, 19, 21, 22) were reversely coded. The highest score for the scale was "115" and the lowest was "23." Higher overall scale scores shows positive attitudes towards ageism and lower scores indicates negative participants' attitudes.
- Scoring system for (AAS) 5-point Likert scale was (1 totally disagree, 2 disagree, 3 not sure, 4 agree and 5 totally agree).

III- Self-reported questionnaire sheet consisted of 28 multiple choice questions with one right answer which developed by Kaur et al., 2014 [14] has been used to identify student's level of knowledge about elderly care. Total score was further categorized as satisfactory and unsatisfactory level of knowledge according to participant's responses (60% and more of right answers was considered satisfactory knowledge).

2.5. Procedure for Data Collection

The data was collected at the end of the second semester (in December 2017) on all accepted baccalaureate nursing students of 4th academic year to ensure that all nursing students attended and finished the Gerontological curriculum. Researcher met the participants after their approval was given in their classroom during suitable time according to lectures schedule, completing the questionnaire forms took around 20- 30 minutes, after that it was recollected again by the researcher.

2.6. Ethical Consideration

Ethical approval was sought from the faculty of nursing Research Ethics Committee, The purpose of the study was explained to the students and an oral consent was taken for participation in the study. The investigator assured the voluntary participation and confidentiality to each student who agreed to participate.

2.7. Tools Validation

Instruments were reviewed and tested for validity by 5 experts in psychological and gerontology nursing specialty to

ascertain relevance and completeness. The internal consistency of the questionnaires was calculated using Cronbach's alpha coefficients. Test-retest was used. The Cronbach's alpha of the questionnaires was 0.91 which indicated good reliability. Whereas, Cronbach's alpha of Likert scale was 0.89 indicated good reliability.

2.8. Pilot Study

A pilot study was conducted at the beginning of the study, it included (10%) of the total sample, which represents (32) student, to assess the tools for clarity and applicability and to estimate the time needed to fill the sheet. Based on the results of pilot study there is no modifications were done,, so the pilot sample was included in the total sample.

2.9. Statistical Analysis

Data was coded, entered and analyzed using the Statistical Package for Social Science (SPSS) software package version 21. Frequency and percentage distribution were used to present qualitative data. Mean and standard deviation, t-test, Pearson correlation coefficient were used to study the relationship between variables. Statistical significance was considered at the (0.05) level.

3. Results

Table 1: Showed frequency distribution of the studied sample according to demographic profile. It was found

that mean age of the participants was (21.40+0.71) with highest range between 20-22 year. More than half of the studied sample (62.5%) were females and residing in rural areas (68.8%). Almost of participants belonged to Islam religion and were single (88.1% and 98.8%) respectively.

Table 2: Revealed frequency distribution of the studied sample according to their knowledge about elderly care (28 items with one right answer) in an ascending order. In fact more than (70%) of the participants gave the incorrect answer.

Table 1. Demographic profile of the studied sample (n=320)

Characteristics	(N=320)	%
Age		
20-22 year	289	90.3
<23 year	31	9.7
Mean+ SD	21.40+0.71	
Sex		
Male	120	37.5
Female	200	62.5
Residence		
Urban	100	31.3
Rural	220	68.8
Religion		
Muslim	282	88.1
Christian	38	11.9
Marital status		
Single	316	98.8
Married	4	1.2
Academic year level		
4th year	320	100

Table 2. Frequency distribution of the studied sample according to their Knowledge about elderly care (28 item with one right answer)

Knowledge about care of elderly people (28 Items)	Correct answer	
	N	%
1. The score that indicate mild depression for elders according to geriatric depression scale is (7±3).	20	6.3
2. Orientation, memory, attention, language, recall are tested in elderly by the use of Folstien mini- mental status instrument.	37	11.6
3. We age because of wear and tear of important organs by continuous functioning.	38	11.9
4. Falling among elders can be prevented by balance exercises.	39	12.2
5. Increase incidence of orthostatic hypotension among older adults.	45	14.1
6. Basal metabolic rate declined with aging due to loss of lean muscles.	48	15.0
7. Health needs and physical examination of elderly are different from other age group population.	58	18.1
8. Balance and risk for falls are assessed in elderly by Get-up and go test instrument.	55	17.2
9. Recommended fluid intake for elderly people is 1500-200ml/day unless contraindicated.	60	18.9
10. Elderly people with diabetes, heart disease, thyroid, and hypertension more at risk for adverse effects of herbs.	76	23.8
11. Person is considered elderly above the age of 65years.	78	24.4
12. fish oil and Vitamin E are two basic nutrients that preventing progress of Alzheimer.	79	24.7
13. The average recommended calories for elderly people is 25-28 cal/kg/day	80	25.0%
14. Nursing concentration directed to at health promotion in elderly are primarily focused on providing a sense of control over health problem.	87	27.2
15. The care can be provided to the elderly with altered sensory perception by reducing environmental noise and speak louder and slowly with a nonverbal cues when appropriate.	94	29.3
16. The urinary continence in elderly can be regained by performing Kegel exercises and fixing a toileting schedule.	97	30.3
17. Encourage elders to use sensory aids and enhance extra time for communication with elderly people.	100	31.3
18. When checking the blood pressure for an elderly, the nurse needs to know that systolic blood pressure tends to rise with aging because of loss of elasticity of arteries.	109	34.1
19. Malnutrition, bed sores, and poor hygiene are signs of elderly neglect.	112	35.0%
20. Short term memory and attention span declined with aging.	113	35.3
21. Walking 30 minutes three days per week is the most recommended exercise for elders	118	36.9
22. Osteoporosis can be prevented among elderly people by adequate intake of calcium, regular exercises, estrogen replacement therapy for elderly women.	122	38.1
23. Nurse should teach hypertensive elderly patient on diuretics to encourage intake of fluid, food rich in potassium and closely monitoring for dehydration.	128	40.0
24. Nurse should focus on non-verbal communication skills with elderly people suffering from hearing deficits	135	42.2
25. Dehydration can be prevented in elderly by assessing skin turgor, mucous membrane and urine output.	143	44.7
26-The adequate respiratory function can be maintained in elderly by instructing the client deep breathing exercises	150	46.9
27-Promoting sleep pattern for elderly people by reducing napping throughout the day, limit caffeinated beverages, and relaxation techniques	152	47.5
28-The anatomical areas most often affected by the development of pressure sores in elderly are iliac crest, and ischial tuberosities.	154	48.1

Table 3. Categories of knowledge score and mean score of knowledge regarding elderly care among the studies sample (N=320). (Maximum attainable score: 28)

Categories of knowledge score	N	%
Unsatisfactory level of knowledge Mean±SD (5.73±4.49)	249	(72.8%)
Satisfactory level of knowledge Mean±SD (21.3±3.83)	71	(22.2%)
Mean score of knowledge	9.20±7.83	

Table 4. Scores of ageism attitude scale and its dimension among the studied sample (N=320)

Items	Negative attitude		Positive attitude		Mean ± SD
	N	%	N	%	
Total score of Ageism Attitudes Scale (AAS)	265	82.8	55	17.2	54.07±11.27
Subscales of AAS					
1-Restriction for elderly	290	90.6	30	9.4	20.31±4.13
2-Positive attitude	218	68.1	102	31.9	22.40±6.27
3-Negative attitude	298	93.1	22	6.9	11.34±3.54

Table 3: Displayed the categories of knowledge score and mean score of knowledge regarding elderly care among the studies sample. It was found that the most of studied sample (72.8%) had unsatisfactory level of

knowledge regarding care of elderly people with Mean knowledge score was (9.20 ± 7.83).

Table 4: Illustrated the scores of ageism attitude scale and its dimension among the studied sample. It revealed that the majority of the studied sample (82.8%) had negative attitude toward ageism. As well as Mean scores for the subscales of the AAS (restricting life of elderly, positive ageism, and negative ageism) were (20.31±4.13, 22.40±6.27 and 11.34±3.54) respectively showing negative attitudes for each dimension.

Table 5: Illustrated demographic profile of the participants and its relation to their knowledge about elderly care. There was a significant difference between knowledge and gender in which males have Mean knowledge score (8.51+7.92) versus (6.12+4.02) for females. As well as those residing in urban areas had more Mean knowledge score regarding elderly care (12.83+6.11) than those who resided in rural areas with (P=.000).

Table 6: Reflected demographic profile of the participants and its relation to their ageism attitude. There was a significant difference between Ageism attitude scale and (sex and place of residence). It was found that Mean of ageism attitude scale was increased among those who are males and those who residing in urban areas (56.00+13.65 and 67.39+8.6) respectively.

Table 5. Demographic profile of the participants and its relation to their knowledge about elderly care

Variable	Knowledge about elderly care			
	N	SD ±Mean	T/F	P
Age	20-22yrs (289)	7.28±6.01	2.50	.013**
	<23yrs (31)	4.51±4.18		
Gender	Male (120)	8.51±7.92	3.57	.000**
	Female (200)	6.12±4.02		
Residence	Urban (100)	12.83±6.11	15.8	.000**
	Rural(220)	4.37±3.38		
Religion	Muslim (282)	6.78±5.83	1.97	.049*
	Christian (38)	8.78±6.23		
Marital	Single(316)	7.01±5.92	.079	0.937
	Married(4)	7.25±5.12		

Table 6. Demographic profile of the participants and its relation to their ageism attitude

Variable	Attitude			
	N	SD ±Mean	T/F	P
- Age	20-22yrs (289)	54.52± 11.50	2.21	.028
	<23yrs (31)	49.84±7.73		
-Gender	Male (120)	56.00±13.65	2.39	.017**
	Female (200)	52.91±9.41		
-Residence	Urban (100)	67.39±8.61	23.6	.000**
	Rural(220)	48.01±5.80		
-Religion	Muslim (282)	53.88±11.39	0.80	0.423
	Christian (38)	55.45±10.39		
-Marital	Single(316)	54.03±11.27	.612	0.541
	Married(4)	57.50±12.47		

Table 7: Correlation between knowledge about elderly care and ageism attitude among the studied sample. It was found that there was significant positive correlation between knowledge level and attitude regarding elderly care (r =0.1). As knowledge increased the attitudes become more positive.

Table 7. Correlation between knowledge about elderly care and ageism attitude among the studied sample

Variable	Ageism Attitude	Correlation
Knowledge level	.838**	Pearson
	.000	Sig. (2-tailed)

4. Discussion

Today, older population rapidly increases worldwide, as well as characterized by unique physical, functional, psychological, and social needs that require professional healthcare providers who are competent in caring for older people, and having positive attitudes toward them. Nurses are at the forefront of providing care for this age group and the Gerontological nursing specialty today is rising with increasing elderly population.

Results of this study showed that mean age of the participants was (21.40±0.71) with highest range between 20-22 year. More than half of the studied sample (62.5%) were females and residing in rural areas (68.8%), this was in consistent with [15], who stated that the average age of participated students was 21.02 ±1.70, and (% 62.1) of them were female.

As regarding knowledge level of participants regarding care of elderly people, it was founded that more than (70%) of answers were incorrectly, and the most of studied sample (72.8%) had unsatisfactory level of knowledge regarding care of elderly people with Mean knowledge score was (9.20 + 7.83), this finding was in accordance with [16] who found that mean score of participants' knowledge about aging was (10.69 ± 11.13) indicated insufficient level of knowledge. Also it was in agreement with the results of [17] who demonstrated that nursing students in the 3 major universities in Saudi Arabia had poor knowledge regarding aging and care of elderly. But it was inconsistent with the findings of [18] who reported that the fourth-grade students' knowledge and attitudes towards the elderly are more positive than the first-grade ones.

Although all studied sample of this study were at fourth academic year who already completed the geriatric course, they have unsatisfactory knowledge regarding care for elderly people. Researchers view that there is a real problem in the Faculty of Nursing - Minia University, and explained that this findings may be related to several factors; firstly there is no separate Gerontological nursing specialty and geriatric course is not independently separated from general medical –surgical courses, so there is no enough opportunity for students to have sufficient theoretical and clinical geriatric hours. Second; geriatric clinical training areas as (nursing homes, and geriatric clubs) is little, which negatively affects the chances of training for providing care for elderly people.

As regarding to nursing students' ageism attitude toward elderly people, the majority of the studied sample have negative attitude toward the elderly people. Although this fact did not reflect our culture especially in Upper Egypt, that respect the elderly and take their point of view seriously; but this finding may be related to lack of knowledge and education about aging, hard living conditions, and changing family structure cause value lost towards the elderly and considering care for them as a burden on the family. This Finding was against results of previous studies conducted by [7,19] who found that the nursing students have positive attitude and low negative discrimination toward elderly. Also it was unlike [20] who found that nursing students had more positive attitudes than medical students toward older adults.

While our findings were on line with [21] who demonstrated that nursing students had lower AAS total scores and held negative attitude toward aged persons. Also it were supported by the study of [22] which conducted on employed nursing students at 7 different health care settings, and reflected that they had less positive attitudes towards the elderly, however the findings of [23] illustrated that medical students had more positive attitudes towards the elderly people in comparison to nursing students.

The current study demonstrated that there were significant differences between male and female regarding ageism attitude. Males had more score of AAS and knowledge versus females, these results are supported by [24] who displayed that young females had negative attitudes against elderly individuals. While was inconsistent with findings of [25] who reported that female students have a positive attitude towards the elderly versus male students and discussed that the female students are affected by woman's role of caring.

Also results of this study revealed that urban nursing students have more knowledge score and AAS score than rural nursing students. This fact was in agreement with the study of [11] who determined that ageism was lower in collectivistic societies when compared to individualistic societies.

In addition the current study showed that there was a significant positive correlation between knowledge level and attitude regarding elderly care. As knowledge increase the attitudes become more positive; this finding was supported by the results of [26,27] who found that negative attitudes scores of nursing students decreased with the increased level of knowledge regarding elderly care.

5. Conclusions

In light of the above findings, it can be concluded that nursing students of Minia university have unsatisfactory level of knowledge regarding elderly care and demonstrate negative attitude toward them, which in turn need greater effort toward the preparation of nursing students, with the provision of integrated skills and knowledge in the care of older people.

6. Recommendations

- Nursing faculties seek Gerontological nursing as a separate specialty, and providing evidence-based Gerontological nursing education programs is urgently needed in order to change nursing students stereotypes and negative attitudes toward elderly people, and to meet the challenge of care for them.
- More researches should be done to further investigate and determine the factors influencing student attitudes toward care of older adults.
- Effective use of mass media and social media in order to raise awareness and to change negative attitudes and stereotypes toward ageing.
- Online Gerontological courses are needed to motivate the students and increase their interest in elderly care.

- Increase in clinical settings for Gerontological practice in order to give a chance for nursing students to be more contact with care for an elders.

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