

# Effect of an Educational Module on the Community Nursing Students' Attitude and Intention to Work with Elderly Population

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## Abstract:

### Purpose:

This study aimed to determine the effect of an educational module on the attitude of community nursing students toward the elderly population and Intention to work with them

### Methodology:

The study was conducted in the College of Nursing, Jeddah, at the King Saud bin Abdul-Aziz University. All the students enrolled in the community health nursing course in Spring semester 2016, Fall semester 2016/2017 were recruited in the study. A mixed design was used to fulfill the study objectives. Quasi-experimental design was adopted to conduct the study. All students filled the questionnaire before and after exposure to the elderly module. For Qualitative exploratory design, in-depth interview was used in data collection.

The questionnaire consisted of three parts: The first part included the basic sociodemographic data like age, residence, marital status, birth order. The second part included The University of California Los Angeles Geriatrics Attitude (UCLA-GA) scale, the third part included the student experience and willing to work with older people.

### Findings:

Nearly two-thirds of the students stated that they intended to work with the elderly after graduation. The mean attitude was higher in the single students who lived outside Jeddah, lived in the extended family. The students who had an elderly relative who lived with their families had more positive attitude toward the elderly. The nursing students who had a positive intention to work with an elderly increased as well as their acceptance of elderly institutionalization after attending the module.

**Keywords:** *Elderly, Attitude, Intention to work, Nursing students.*

## Introduction

Population aging is one of the most complex phenomena facing the modern societies, the phenomenon refers to the proportionally larger share of the older people in the total population. The share of the older population in the worldwide population increased from 9 percent in 1994 to 12 percent in 2014 and is expected to reach 21 percent by 2050 based on the United Nations report 2014.

World health organization in 2011 reported that the number of older population aged 60 or more has almost doubled between 1994 to 2014 and, is expected to increase to reach 1.5 billion in 2050, with most of the increase in developing countries, as compared to estimated 542 million in 2010. In the past two decades, the age structure of the world's population has been changed due to declining fertility and mortality. In this respect WHO relates the rapid increase in the older population size to different factors including changing the main cause of death from communicable diseases to chronic diseases. These chronic diseases include hypertension, high cholesterol, arthritis, diabetes, heart disease, cancer, dementia, and congestive heart failure. The major chronic conditions that have a great effect on older people, especially in developed countries are heart disease, stroke, and cancer (WHO 2011).

Saudi Arabia is currently facing unclear territory in relation to the magnitude of its older people. There has been considerable change in age structure of the Saudi population due to two main factors which are a decrease in the fertility rate as well as increase the life expectancy.

According to Saudi Arabian Monetary Agency 2015 and United nation report 2012. the aging people in Saudi Arabia is entering a new stage reaching its highest ever rate. for example, the percentage of people aged 60 years or more is projected to reach 25% of the total population in 2050. Thus, there will be more than 10 million people aged 60 or more by 2050. Moreover, the percentage of older people aged 80 years or more is expected to reach 4% of the total population by 2025 constituting about 1.6 million residents.

As an Arabic Islamic country elderly people in Saudi Arabia enjoy a great degree of respect and appreciation, for example, older people usually are treated and addressed by low soft voices and are not called by their naked names. In addition, some behaviors are not accepted by young people in the presence of older people such as smoking cigarettes or chewing gum, having drinks or food before them. In homes, an older person's views usually prevail and usually dictates to one of the family members to provide needed care and to look after them and satisfy their needs. Furthermore, Islamic religion advocates that Muslims should respect, appreciate and value older people. The Saudi older people expect to be treated in a respectful manner anywhere including healthcare facilities (Al-Shahri MZ, 2002, AlSenany S 2014).

Globally, increasing aging population is currently considered as one of the most important issues facing the health care system and often regarded as the main cause of upward pressure on health care costs. Since, It is well known that with advanced age, the possibility of developing multiple health problems and chronic diseases will increase which increase the demand for healthcare resources especially in hospitals and long-term facilities. Health trends of the older population are complicated. Some countries reported a less severe disability than in the past, but in general, there is noticeable increase in mild disability and functional impairment among this population (Garza A 2016, Rechel B, Doyle Y, Grundy E, McKee M. 2009). The capability of older population to maintain their health and being independent depends on many factors including the provision of a supportive environment, proper planned living conditions, accessibility to economic resources, and effective health care (Lovell 2006).

Increase the number of the older population around the world. ,indicate the significant increase demand for nurses as nurses are the main professionals that deal and provide care for older people in different settings including hospitals, geriatric institution or even at homes. Nurses have a crucial role as health care providers and they have a unique position that influences the quality of the care given to this group. Nurses have various functions that can affect the health and wellbeing of older people such as educator, direct care provider, restorative, counselor, and advocate for their rights (Kaur S 2014, RCN 2004).

In order to fulfill these roles, nurses need to have a great amount of knowledge and skills including communication, assessment, advanced care planning skills.

They should provide support to older people with a decline in their cognitive ability including issues such as lifelong treatment, desired setting for care and death. It is expected that nurses will be caring for people with chronic and disabilities for future years rather than the current highlighting on providing acute care (Grady 2011).

The care provided by nurses is affected by their knowledge, experience, and skills. However, attitudes of nurses and future nurses (nursing students), have a great influence on the quality of caring for these senior citizens ( Turgay AS 2015).

Acquired knowledge and increased opportunity for clinical practice can assist students in becoming more comfortable and proficient in conducting health-related tasks with clients across the lifespan including older age. Attitudes and interpersonal relationships improve the nursing students' confidence in caring for this special population. Lambrinou E describe attitude as "reflection of the individual perception towards a human being, an object or a condition, which is developed by the person's experiences and defines his or her reactions". Attitude is composed of three parameters: knowledge, emotions, and the way of acting. These three parameters could be changed ( Lambrinou E 2009).

Lovell M. 2006 stated that nursing students will be faced with the challenging task of caring for this elderly population. This may be affected by personal beliefs, values, culture, experience, or observations. Their perceived attitudes toward the gerontology field will make it difficult to recruit the nurses required in this area. Several factors such as culture, age, gender, education, experience and previous relationships with older people, have been studied and seem to influence nurses' attitudes toward older people (Potter G 2013).

Education can have either a positive or negative influence on nurses' attitudes. It is the main variable that has been found to make a significant and consistent positive difference to overall levels of knowledge and on changing social influences about aging in a positive direction. High level of knowledge on gerontological nursing, as well as experience on older people's care, seems to influence positively nurses' attitudes towards older people. Clinical experience with older people of nursing students seems also to be very important in shaping students' orientation towards nursing them (King BJ 2013, Goeldlin AO 2014)

Responding to the current need of nurses having a professional level of knowledge and skills to care for older people, several nursing educational institutions create gerontological nursing specialty, and they include a specific course for this vulnerable group of population in their curricula. The current acute shortage of qualified Saudi nurses in hospitals and healthcare centers dictates an urgent review of the kingdom's present and future nursing training, especially in the field of gerontological nursing ( Al Senany 2013,2014).

Several studies have assessed the nursing students' attitudes towards older people and reported conflicting results. Although some researches have revealed positive attitudes of students towards older people

(Usta YY 2012, Ozer ZC 2014, Baumbusch 2012), others have shown that they have negative attitudes (Liu YE 2013, Haron Y 2013, Rachel W 2008)

Lambrinou 2009 stated in his study on the Greek nursing students that the attitudes towards older people were more positive in final year students in comparison to first-year students. A longitudinal study by Happell (2002) which examines the attitudes of undergraduate nursing students in Australia reports that working with older people is the least preferred area of practice for students. Potter G ( 2013) concluded that the factors leading to this attitude include negative perception towards the elderly, poor value placed on senior citizens and the negative stereotypes linked to the adverse care of the older adult. The attitude towards this population can be improved with high-quality, intentional interaction through clinical training and comprehensive education. (Kaur S ET AL 2014).

Students' preconception and prejudice towards older people can affect their future career choice, Sunari S 2012 in her study compare between British and Saudi nursing students to explore similarities and differences in their intentions towards working with older people. The results of this comparison revealed similarities in the poor intention of working with older people in general between Saudi nursing students and British nursing students. However, in an Egyptian and Jordanian study conducted by Eltantawy SH 2013, Hweidi IM 2006, students showed a high score of intent to care for the elderly and they had a positive attitude toward them.

Nurses' attitudes and knowledge of aging may affect their expectations about their working lives and the ways in which they care for and approach their clients. Therefore, education, including gerontological nursing, is an important issue in the nursing profession. In addition, the literature review emphasized that in the education of nurses, the goal-directed experience of care of older people is recommended in order to create positive attitudes towards and interest to work with older people among students( Koh LC 2012).

Hanson 2014 in his systematic review stated that reasons for these negative attitudes are numerous, including main lack of knowledge level of the aging process and gerontology.

Educational interventions designed to change attitudes and increase knowledge about older adults have been studied in several types of research. These studies proved that interventions may improve nursing and medical students' attitudes. Educational interventions can be designed to increase knowledge, impart skills, as well as to improve attitudes, and is possible that educational interventions composing of both theoretical and practical part may be more effective at improving student attitudes toward the elderly ( Jansen 2004, King BJ 2013, Goeldlin et al 2014)

The number of studies on the attitudes of the future nurses regarding aging is quite limited in Saudi Arabia and their main objectives were to assess the attitude without studying the effect of educational intervention on changing this attitude (Al Senany S 2011).

Understanding how attitudes and preferences change over time and how new graduates make choices about where they will work is vital. To further explore the role of teaching a senior module in changing nursing students' attitudes toward and preference to work with older adults.

### **The aim of the Study:**

This study aimed to determine the effect of an educational module on on the attitude of community nursing students` toward the elderly population and Intention to work with them

### **Specific Objectives:**

1. Assess the attitude of nursing students towards the elderly population
2. Explore the intention of nursing students to work with the elderly population
3. Determine the relationship between the attitude of nursing and the intention to work with the elderly population
4. Identify the effect of an educational module on nursing students' attitudes towards elderly population
5. Identify the effect of an educational module on nursing students' intention to work with the elderly population

### **Materials and Methods:**

The study was conducted in the College of Nursing, Jeddah, at the King Saud bin Abdul-Aziz University. The College offers two undergraduate (Baccalaureate) Programs in Nursing Science: the first is known as Stream I, catering for high school graduates. The second is known as Stream II, catering for university graduates who wish to join Nursing as a second career.

The education duration is four academic years divided into eight levels.

In the college curriculum plan, no specific course dealing with elderly (gerontological nursing ). The final level students (level 8) are enrolled in Community health nursing and health education course (5 credit hours) which

empower them to care for different types of the population including elderly people. The course composed of several modules including school health, home health care, primary health care, elderly care.

The elderly module enables the nursing students theoretical and clinically to deal with older people. It includes 3 hours lecture and 5 clinical days in different settings including senior institution, homes, and primary health care clinics.

The module aims to provide the foundation for competent and compassionate care of older adults through didactic and experiential components including the following objectives:

- Acquire knowledge of the demography and epidemiology of aging
- Recognize the scientific basis of geriatric nursing
- Develop foundational competencies in performing important aspects of a geriatric assessment including cognitive, functional, physical assessments.
- Assess and manage a geriatric patient from a multidisciplinary point of view.
- Recognize and appreciate physiologic diversity and its clinical significance in elderly patients.
- Establish the interactions between medical diagnoses, functional impairment, and medications.
- Interact with patients and their caregivers using a bio-psychosocial approach.
- Develop a clear understanding of important basic ethical principles governing care of elderly patient.
- Become an advocate of successful aging;
- Explore healthcare services for the elderly and healthcare

### **Research design**

A mixed design was used to fulfill the study objectives. Quasi-experimental design was used. No control group was recruited, one group (the experimental) was assessed before and after conducting the module. The purpose of this qualitative exploratory descriptive study was to examine the influence of specific geriatric on nursing students in the provision of care to older adults. Hypothesis: The attitude of nursing students toward older people, as well as their intention to work with older people, will be positively improved after the introduction of the elderly module.

### **Sample Size:**

For quantitative: All the students enrolled in the community health nursing course in Spring semester 2016, Fall semester 2016/2017 were recruited in the study. A total number of students who agreed to participate in the study was 49 students. For qualitative, The researcher started with 4 participants who were willing to participate in the study. The sample size increased until data saturation was reached at 20 students. Convenient sampling technique was utilized to recruit the study subjects.

### **Research instruments and data collection:**

A structured, hand-delivered and self-administered questionnaire was used for data collection. All students filled the questionnaire before and after exposure to the elderly module.

The tool consisted of three parts:

**The first part** included the basic socio demographic data like age, residence, marital status, birth order.

**The second part included** The University of California Los Angeles Geriatrics Attitude (UCLA-GA) scale (Reuben DB1998) consists of a mixture of 14 positively and negatively worded questions answered on a 5-point Likert scale ranging from "Strongly disagree (1 point)" to "Strongly agree (5 points)" and a rating of 3 points indicating a neutral response.

Scores were calculated, in which scores on negatively worded statements were reversed before being added to scores on positively worded statements to produce a total score. The reliability of the attitudes scale was measured by calculating the statistic, the Cronbach coefficient alpha was 0.73.

The titles and minimum/maximum scores of the four subscales are as follows

“social values (min: 2–max: 10), 1, 13  
medical care (min: 4–max: 20) 7, 8, 11, 12  
compassion (min: 4–max: 20) 3, 6, 9, 14,  
resources distribution (min: 4–max: 20)”. 2, 4, 5, 10

The total attitude score comprises of a composition of these four scales. The minimum score is 14 while the maximum score is 70 and the higher the score is, the more positive their attitude is. The third part included the student experience and willing to work with older people. Once the students were recruited and agreed to participate in the study and signed the consent form, they were asked to fill the study's questionnaire The

researchers distributed the research questionnaire to the students before and after the module and gave them the essential instructions to fill it.

### Qualitative

The researchers used in-depth interviews as a data collection method for the qualitative aspect. The researchers have chosen in-depth interviews since it permits in-depth exploration of particular topics or experiences and are, therefore, a useful method of interpretive inquiry. They also foster eliciting each participant's interpretation of his or her experience. The interviewer seeks to understand the topic and the participant has the relevant experience to shed light on it (Charmaz, 2006). The in-depth interviews were tape recorded with the permission of the participants to allow the researchers to concentrate on the interview at hand rather than making copious notes.

### Data Management

The statistical analysis of numerical data was conducted by using SPSS, version 20 software. Descriptive statistics (i.e., frequency and percentages or mean scores and standard deviation) and inferential statistical methods (Paired t-test and t-test independent samples) was applied. A significant level of  $P = .05$  was used with the cutoff point for the scales.

### Ethical Considerations:

Prior to implementation of the study, ethics approval was obtained from the Research Committee at the College of Nursing-Jeddah, and the necessary authorities of the College of Nursing. The researchers provided assurance to all the participants that they are under no obligation to participate in the study and can withdraw at any time. Confidentiality, privacy, and anonymity was maintained by ensuring that the questionnaires and interview transcripts are anonymous and data will not be able to trace them back to individuals. Informed consent (written) was obtained from the participants. In addition, the in-depth interviews was conducted in an area that ensures privacy for the participants. Further to this, the in-depth interviews was tape recorded with the permission of the participants.

### Results:

Table 1 Demographic profile of the studied students

		Number (49)	percent
Age		22.24 ± 2.26	
Marital status	single	45	91.8
	married	4	8.2
Residence	Inside Jeddah	34	69.4
	Outside Jeddah	15	30.6
Father's age		51.51 ± 19.57	
Father's education	Primary	15	30.6
	Intermediate	12	24.5
	Secondary	12	24.5
	University	10	20.4
Mother's age		45.7143 ± 13.41	
Mother's education	Primary	16	32.7
	Intermediate	7	14.3
	Secondary	15	30.6
	University	11	22.4
Father's employment	employer	14	28.6
	free work	7	14.3
	retired	24	49.0
	other	4	8.2
Mother's employment	housewife	35	71.4
	employer	14	28.6
Financial position	less than average	1	2.0
	average	32	65.3
	excellent	16	32.7
Family type	nuclear	39	79.6
	extended	10	20.4

Table 1 described the demographic profile of the studied students. The mean age of the students was  $22.24 \pm 2.26$  years old, the majority of students were single and only 8.2 % of them were married. 69.4% of them lived inside Jeddah (a city in Saudi Arabia)

The mean age of the students' fathers were  $51.51 \pm 19.57$  while their mothers' mean age was  $45.7143 \pm 13.41$ . Regarding the parents's education, nearly the fifth of the fathers and mothers had a university education. In relation to their employment, nearly half of the fathers were retired, and 71.4% of the mothers are housewives.

The financial position of the majority of the student's family was either average or excellent as reported by the students. 79.6% of the students lived with nuclear families.

Table 2 Experience of studied students with an elderly relative

		Number	Percent
Presence of elderly family member	Yes	31	63.3
	No	18	36.7
Living arrangement(n=31)	With the family	27	87.1
	alone	4	12.9
Activities of Daily Living (ADLs) (n=31)	Requires no assistance	22	71.0
	Some assistance needed	8	25.8
	Complete assistance needed	1	3.2
Caring family member (n=31)	children	24	77.4
	Grandchildren	2	6.5
	wife	5	16.1
Student act as an elderly caregiver	Yes	16	32.7
	No	33	67.3
Institutionalization of elderly	Not agree	18	36.7
	Agree	31	63.3
Reasons for agreement:	if the home caregiver is not available	15	48.4
	If the elderly need special care	12	38.7
	If the elderly care is considered as a family burden	4	12.9

Table 2 portrayed the experience of studied students with an elderly relative(their family members over 65 (elderly)). Nearly two-thirds of students had an elderly family member. The majority of them lived with their families, while 12.9 % of them lived alone.

70% of the students stated that their elderly relative required no assistance in their daily living activities like bathing, eating. Nearly one-quarter of the students stated that their elderly relative requires some assistance. More than three-quarter of the students reported that the caregiver was their relative's children.

Nearly one-third of the students disagreed about the institutionalization of the elderly, the unavailability of caregiver was the reason for acceptance of 48.4% of the students, nearly more than one third mentioned that they agree if the elderly need special care, while 12.9% stated that if the elderly care was considered a family burden, they agree about their institutionalization.

The students express their experience as elderly caregiver either positively or negatively.

'It was a great experience'

'beautiful and amazing experience'

'I cared for my grandfather, that experience change my life and my feelings, this experience makes me more understanding for older people, it was a nice, beautiful and so strong experience'

While in negative experience one student stated:

'I cared for my grandmother during her hospitalization period, it was a bit hard because of the age gap, and I didn't know what she needs, and how I can care for her. She didn't say if she is in pain or discomfort, hence, it was hard to care for her.

Table 3 Intention to work with the elderly population

	Number	percent
Intention to work yes	32	65.3
No	17	34.7
Reason for intention (32)		
Elderly life experience	12	37.5
Human and religious reasons	20	62.5
The reason for non- intention(17)		
- Need more time	5	29.4
- Frustration from excess workload with an unsatisfactory outcome	1	5.9
- Negatively affect my emotion	11	64.7

Table 3 described the students' intention to work with the elderly. Nearly two-thirds of the students stated that they intended to work with the elderly after graduation. Their reasons were for human and religious factors (62.5%) and to benefit from the elderly life experience (37.5%). The reasons for had no intention included the negative effect on their emotions (64.7%), need more time in caring (29.4%) and one student stated their frustration from excess workload with an unsatisfactory outcome.

When asking them about their intention to work with the elderly, we receive the following responses

- Yes, I will work depending on the place
- Yes, if I have a choice
- Maybe but not as a professional, but as a volunteer
- I don't, maybe after the internship, I will settle my mind

And they stated their reasons for non acceptance in the following statements:

- Nurses have to know a lot of knowledge about resources and caring centers, also nurses may fell depressed by the lack of resources or lack of social roles of elderly and typical stereotyping
- Maybe the nurse will face some difficulties in dealing with older peoplebecause they have so many needs and special care
- Stress, they need a lot of work.
- Tiredness, stress, and patience.
- Older people may not accept any advice from us
- The feeling toward them is the most thing that can challenge me.

Table 4 shows the mean Scores on Items of the attitude of studied students using UCLA-GA Scale. The scale total score mean was  $48 \pm 5.188$ , the highest mean was related to the compassion theme following statement '. It is interesting to listen to old people's accounts of their past experiences''  $4.5102 \pm 0.73944$ .

Regarding the lowest mean was related to the same theme to the following statement: ''As people grow older, they become less organized and more confused. '' equaled  $2.9388 \pm 0.85167$ . The mean score of the attitude scale was  $3.4286 \pm .37058$ .

The students express their feeling and attitude about the elderly in the following statements:

- I feel a sense of blessing, warmth, in addition to great responsibility toward them in engaging them in social activities and any needed care
- I loved them and their stories
- I feel good because I learned from them, they are nice and give experience to me
- I am always happy and satisfied
- I feel I have to learn from them

- I feel sad
- I feel so sad, they need a lot of care and social support
- Ifeel it is a burden to deal with them as I feel that when a person grows older, he become more sensitive and more prone to be hurt easily.

Table 4 — Mean Scores on Items of the attitude of studied students using UCLA-GA Scale

Items	Mean	Standard Deviation
<b>Social values</b>		
1. Most old people are pleasant to be with.	4.2857	1.25831
13. In general, old people act too slowly for modern society.	3.1633	1.00720
<b>Medical care:</b>		
7. Elderly patients tend to be more appreciative of the medical care they receive than are younger patients.	4.0204	.72139
8. I believe that taking a medical history from elderly patients will frequently be an ordeal.	3.7143	1.27475
11. Treatment of chronically ill old patients is hopeless*.	3.5510	1.15580
12. Old people don't contribute their fair share towards paying for their healthcare. *	3.0000	.70711
<b>Compassion:</b>		
3. If I have the choice, I would rather see younger patients than elderly ones.*	2.9388	.96627
6. As people grow older, they become less organized and more confused.	2.9388	.85167
9. I tend to pay more attention to and have more sympathy towards elderly patients than younger patients.	4.0000	.81650
14. It is interesting to listen to old people's accounts of their past experiences.	4.5102	.73944
<b>Resource allocation:</b>		
2. The government should reallocate money from the care of the elderly to research on Major communicable diseases or pediatric diseases.*	3.7959	1.24130
4. It is society's responsibility to provide care for its elderly persons.	4.3673	.80865
5. Medical care for old people uses up too much human and material resources.	3.3878	1.01686
10. Old people, in general, do not contribute much to society. *	3.2245	.96318
Total	48.0000	5.18813
Mean total	3.4286	.37058



Table 5 Correlation between the attitude of the studied students about the elderly population and their demographic profile.

	Pre	
	Paired t-test	percent
Student's age	-.044*	
Father's age	.218	
Mother's age	.164	
	Mean	Independent t-test
Marital status		0.44
- Single	3.4333±.38023	
- Married	3.2619±.17976	
Residence		.380
- Inside Jeddah	3.4048 ±.35538	
- Outside Jeddah	3.5214±.43259	
Family type		.236
- Nuclear	3.3866±.38289	
- Extended	3.5238 ±.33358	
Elderly family member		.131
Yes	3.50 ±.39684	
No	3.3056 ±.29072	
Family arrangement		.848
live with family	3.4877 ±.36224	
live in separate	3.1964 ±.42301	

Table 5 shows the correlation between the attitude of the studied students about the elderly population and their demographic profile. A negative relation was found between the student's age and their attitude (t-test = -0.44), however, no relation was found between the student's demographic profile including the father and mother's age, student's marital status, residence, or their family type. The mean attitude was higher in the single students who lived outside Jeddah, lived in the extended family. The students who had an elderly relative who lived with their families had more positive attitude toward the elderly.

Table 6 Mean of the attitude of the studied students about the elderly population prior to and after the implementation of the module

	Pre		Post		T-test
	Mean	Standard deviation	Mean	Standard deviation	
Social	3.7245	.81689	3.7551	.66240	.830
Medical	3.2959	.48054	3.4235	.46827	.178
Compassion	3.6582	.49920	3.5306	.48582	.245
Resource distribution	3.1837	.55381	3.3469	.57694	.157
Total attitude	3.4286	.37058	3.4796	.32275	.499

Table 6 shows a comparison between the mean attitude of the studied students about the elderly population prior to and after the implementation of the module. The mean attitude of the scale and the themes increased after the module implantation except for the compassion theme. No significant difference was found between the attitude of the studied student's pre and post the module.

When asking the students about the effect of the elderly module on their attitude, they all agree about the positive effect of the module.

The following responses were obtained:

- Yes, it affected me, I learned information regarding older people, some of it I didn't know and how the aging process affects older people in a different aspect
- Before the module, I thought that they are very depressed and it difficult to deal with them, but after the module and dealing directly with them I realized I was wrong
- Very effective, it changed my attitude and perception toward them
- Yes, it will help in dealing with older people in the future

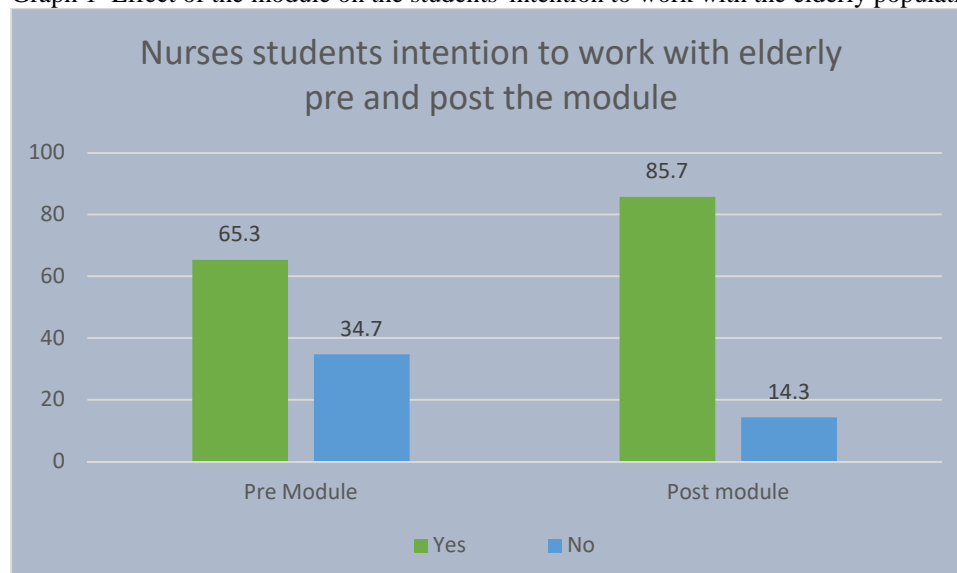
- Yes, of course, the senior module provides us with the knowledge empowered by scientific theories, in addition, the clinical exposure gave us a sight to the local reality and what is lacking and what are the needed interventions

Table 7 Correlation between the attitude of the studied students about the elderly population and their intention to work with them prior to and after the implementation of the module

		Pre		T-test	post		T-test
		Number	percent		Number	percent	
Social	intended	3.8281	.90348	.227	3.7619	.61721	.862
	Not intended	3.5294	.59871		3.7143	.95119	
Medical	intended	3.3281	.48956	.525	3.4583	.47792	.205
	Not intended	3.2353	.47162		3.2143	.36596	
compassion	intended	3.6094	.47493	.353	3.5774	.46685	.099
	Not intended	3.7500	.54486		3.2500	.54006	
Resource distribution	intended	3.2344	.61545	.385	3.4048	.51783	.086
	Not intended	3.0882	.41402		3.0000	.81650	
Total mean	intended	3.4531	.40022	.530	3.5204	.32188	.029*
	Not intended	3.3824	.31333		3.2347	.20912	

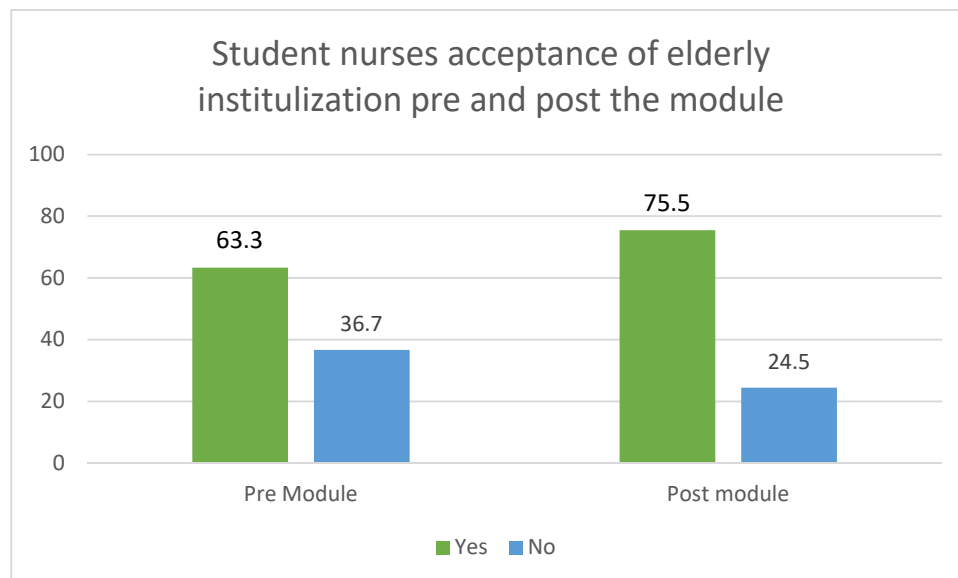
Table 7 shows the relation between the attitude of the studied students about the elderly population and their intention to work with them prior to and after the implementation of the module. The total mean attitude of students

Graph 1 Effect of the module on the students' intention to work with the elderly population



Graph 1 displayed the effect of the module on the students' intention to work with the elderly population. The nursing students who had a positive intention to work with an elderly increase from 65% to 85,7% after attending the module.

Graph 2 Effect of the module on the students' acceptance of institutionalization among the elderly population



Graph 2 portrays the effect of the module on the students' acceptance of institutionalization among the elderly population. The percentage of the students who accepted elderly institutionalization increased from 63.3% to reach 75.5%.

#### Discussion:

Increasing the aging population is one of the main issues facing healthcare systems all over the world. In the near future nurses will be faced with the responsibility of caring for this elderly population. Preparing nursing students to meet the health needs of an expanding elderly population is big challenge for nursing education. However, caring for elderly population are often seen by students as not attractive option, a perception, attitude that influence on their values that inform their future professional practice and carrier. (Koh Chan 2012

Attitude toward older population is a pattern of feeling, beliefs, and concepts that students had toward the elderly, this attitude may be either a positive or negative one.

In the present study, the students had slightly positive attitude toward elderly population with a total of 45.000 and mean of  $3.4286 \pm 0.37058$ . This results came in agreement with many studies such a study conducted by Gupta & Venkatraman at 2014 to assess the attitude of undergraduate dental students toward the geriatric population in India which revealed relatively positive attitude. In addition, another study was conducted by Aliye & Emel at 2015 who studied attitude toward the elderly among Turkish pharmacy students, they revealed slightly more positive attitude. Regarding nursing students' attitude, many studies revealed nearly similar results, such as study conducted by Kaur & Kumar at 2014 in India which studied the Knowledge and Attitude Regarding Care of Elderly Among Nursing Students, revealed more higher positive attitude.

In addition, another two studies were found to be in line with the results of the present study, Turgay & Sahin's study at 2015 & Lambrinou at 2009 who revealed more positive attitude among final year students in comparison to first year.

This higher positive attitude score may be attributed to the nature of introducing elderly education to the students, maybe culture factors as well different type of scales used.

In relation to Arabic countries, **In Egypt, a study conducted at 2013** by Eltantawy showed a high positive attitude of the students toward elderly people which come in line with the results of the current study which may reflect the sharing of Arabic and Islamic culture, values, and beliefs.

**In Saudi Arabia** recent study was conducted at 2018 by a Elebiary & Elshenewy to assess nurses' knowledge and attitude toward caring of elderly people in health care settings. The results of the study indicate favorable and positive attitude among nurses toward elderly people, which strongly agree with the results of the current

study. This strong agreement reflects the social structure, values, beliefs, and culture of Saudi community since the older people are regarded with great admiration and respect.

The results of all the previously mentioned studied either in Arabic or Non- Arabic countries that reflect positive attitude toward elderly population among students in medical field either medical , pharmacy, dental or nursing students indicates that all of students who belong to medical field had sense of mercury, empathy, and energy for giving and support to vulnerable population such as elderly population as well as it stress the crucial role of geriatric education for under graduated in different medical schools especially nursing schools.

However, the result of current study came in contrast with a study conducted by Panmial P& Damulak, at 2015 in Malaysia to assess Attitude towards the Elderly among Healthcare Related Students in Malaysia which shows that overall negative attitude among students either medical or nursing. This discrepancy may be attributed to the fact that students in this study did not exposed to ant geriatric education or module.

**In relation to the factors affecting the attitude of the students toward elderly population**, the present study revealed that both the marital status, students` age, father`s age, family type, having elderly family member and residence affect the students attitude without significant correlation. Since the unmarried students, as well as the youngest students, had more positive attitude than married and older students, this results could be explained by the younger and unmarried students had more positive energy, they enjoy less responsibilities , they may lack contact with elder population, unrecognizing the difficulties that may face them in providing care for them , this explanation was supported by the study which conducted by Shen & Xiao in China at 2012 who reported that first year nursing students demonstrated better attitudes towards older people, when compared with other year level students . Another factor is father`s age, the result shows that the students who had older father had more positive attitude which is excepted since they develop more empathy, respect, and love through their daily living contact and care.

In relation to residency and type of family, the result of the current study shows that the students who live in extended family and students who live outside Jeddah develop more positive attitude toward elderly population, which may be due to living in extended family allow chance to contact with elder people, recognizing their needs , understands their feeling as will facilitate care providing, in addition living outside Jeddah mean living in rural like environment since more social contact , more extended families and more traditional culture , respect and valuing for elder people.

Students` preconception, attitude and stereotyping toward older population can affect their future career choices. Regarding the intention of the current study`s students toward working with elderly population, the results revealed that approximately two-thirds of them had intention to work with elderly. This came in accordance with many studies such as Shen & Xiao in China at 2012 who reported Working with older people` was ranked as the second to least preferred area by all year level of nursing students. Another study which conducted by Alsenany S and Al Saif at 2012 reported that nursing students on the Saudi BSN program hold favorable intentions towards work with older people in general. In addition, the same study shows that similarities in responses to most of the Statements about working with older people in general between Saudi and British nursing students. In addition, a study conducted in UK by McKinlay A & Cowan at 2003 shows that shows that Student nurses displayed positive intentions towards working with older patients.

On the other hand, in the current study, the main given reasons for having positive intention to work with elderly were acquiring elderly life experience and human and religious factors, these reasons are quietly excepted because it reflects the value and respect that loaded to elderly population in KSA and also it could be linked to the fact that about two thirds of the students in the current study are living with elderly relatives and one third of them acting as elderly caregiver. In addition, the students who had positive intention toward working with elderly had more positive attitude with no significant difference.

Whereas, a study conducted at 2016 by MJ & ML to study Nursing Students' Willingness to Care for Older Adults in Taiwan shows that nursing students had a positive intention to work with elderly, and the underlying factors of this positive intention were the length of time with older adults per week) and grandparents having served as caregivers during the students' childhood. The best predictor of nursing students' willingness to care for older adults was students' attitudes toward older adults ( $\beta = 0.38, p < .001$ )

However, A study conducted by Chua, Tan, & Merchant at 2008 to assess the attitude and willing to work with elderly among medical students in Singapore revealed that only one-third of the cohort was willing to consider a

career in Geriatric Medicine. While the females were significantly more likely to consider Geriatric Medicine as a potential career choice.

Concerning the Effect of the module on nursing students attitude, Rogan and Wyllie (2003) suggested that nurse education can help students to acquire the knowledge and skills and help them to develop a more positive attitude to meet the needs of older people.

IN Saudi Arabia, nursing education programs were developed to provide the knowledge, skills, attitudes and value of the role for those who have chosen to work in the nursing profession in order to be able to recognize each human being's uniqueness of mind, body and spiritual being and is dedicated to caring for human beings at any point in the life cycle.

(Alsenany 2013)

Regarding the effect of senior module which include both clinical and theoretical competent on the attitude of the students toward older population, the results revealed slight improvement in the total attitude score with no significant change, while the more improvement in the attitude was observed in medical and resources distribution subscales, while compassion subscale was negatively correlated

These results could be explained by that the module provide the students with more holistic perspective of elderly population and practice-focused with strengthened links between theory and practice. In addition the module emphasizes the needs of older people for self-determination and the skills to meet the complex needs which may highly affected by lack of resources in the community.

while the compassion is hard to change because it may strongly related to culture, personal values and experience and may need more training and experience to be changed. The results of this study came in agreement with Jansen & Morse at 2004 who reported that exposure to geriatric content had displayed statistically significant improvements in attitude of the students over time. The statistical improvement may be related to long exposure since in this study the students were introduced to aging concepts in first-semester junior courses and additional content was integrated throughout the program.

Another study was conducted by Williams & Anderson at 2007 to assess Undergraduate nursing students' knowledge of and attitudes toward aging: Comparison of context-based learning and a traditional program revealed that, although there were no significant differences in knowledge and attitudes between fourth-year CBL and fourth-year traditional students.

These findings support the current study's results that an integrated curriculum may not significantly positively influence attitudes that are already positive. However a study conducted in Oman by Jahan F at 2015 to assess Knowledge, Attitudes and Perception of Medical Students about Elderly Patients before and after Implementation of a New Geriatrics Curriculum demonstrated that both students attitude, knowledge were significantly higher after completion of senior educational program over 8 weeks throughout the year which also assure that changing attitude to be significantly improvement need more time and training.

On the other hand, Panmial P. Damulak, at 2015 in Malaysia the students developed negative attitude while there was no exposure to geriatric module (54.1%).

Concerning the effect of senior module in the intention of the student to work with elderly population, the study shows that there is highly significant improvement of the student's intention after exposure to senior module either between those who had the intention to work before exposure or among those who had no intention before exposure. This result could be explained by the fact the underlying causes for the students who had no intention as the care of elderly need more time, unsatisfactory outcome and negatively affect emotion could be resolved to great extent after actual exposure and providing care in clinical settings as well as the causes for having intention may be prompted with the real experience and acquiring more knowledge about the aging process, needs, problems and effective role of the nurses dealing with elderly. also, It could be linked to improve in their attitude which reflect positively in their willingness to work with elderly.

This results came in agreement with Eltantawy's study at 2013 who reported that the students who had positive attitude toward elderly also have high score of intention to work with elderly. In addition, McKinlay & Cowan at 2003 demonstrated that Student nurses displayed positive intentions towards working with older patients and it strongly linked to their attitude addition a study conducted at 2016 by MJ & ML reported that The best predictors of nursing students' willingness to care for older adults were students' attitudes toward older adults.

Regarding the acceptance of current study`s students to the institutionalization of the elderly population. According to general authority for statistics 2017, number of Saudi elderly 65 and more constitute 4.19% of the total Saudi population. The Survey shows that (78,5 %) of the Saudi population (65+ years) with difficulties in physical functions are provided with services by the Ministry of Labor and Social Development. The types of most of such services are distributed in the following order: Financial services (83,8 %), in-kind services (9,3 %), other services (3,4 %), domestic care ( 2,1 % ), day-care ( 1 % ), and finally elderly shelter services ( 0,3 % ).

Number of elderly shelters (geriatrics homes) in KSA is 12 homes distributed all over the country governorates, however, Jeddah does not include governmental geriatric home but it include nongovernmental shelter homes which include elderly or nonelderly population who had no families to care of them from different expatriate nationalities with limited number of Saudi.

In the current study, number of students who accept institutionalization of elder population increased after implementation of the module as well as number of those who refuse the institutionalization decreases after implementation of the module without significant differences , this slight improvement may be explained by the fact that in Saudi Arabia the concept of joining elderly in shelter or elderly care home is hardly accepted because of many religious and cultural factors in which the older people regarded and treated with great degree of admiration and respect and affiliate the responsibility of caring of elderly to their family members. This justification was supported by the very low percentage of elderly who communicate with elderly home to reach only 0.3 %. In addition to the elderly population preference of care since in the study conducted by Karlin, Weil,&Felmban at 2016 who reported that the majority of the elderly in their study recognized family support as preferred method of support and the social support was reported as being provided by family members with little to no support from outside sources.

However this slight improvement in the acceptance rate may be attributed to the fact that the in the current study students were exposed to clinical training in nongovernmental geriatric home which include elderly with special health conditions, had no families and no social or economic support which may affect the student concepts that for many elderly with special needs , being enrolled in institution is better form of care and safety.

#### **Conclusion:**

Exposure to gerontological content has been shown to positively influence student`s attitude toward elderly population. Students who had positive attitude had more intention to work with elderly. Attitude of students is not only governed by their exposure to the educational module but also to their socio-demographic profile such as living with extended families or having elderly relatives.

#### **Recommendations :**

Based on the study results the following are recommended:

- Gerontological nursing course should be included each Saudi nursing curriculum in the senior level.
- All gerontological nursing course should give the students an opportunity to enhance their knowledge of aging as well as to acquire effective clinical experience in different elderly care settings.
- Furthermore qualitative researches should be conducted to get deep insight on the underlying factors affecting Saudi nurse`s attitude.

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