Knowledge and attitudes regarding elderly care among nursing schools students at Fakous city

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Abstract

Background: Older adults are the fastest growing demographic world-wide Knowledge of aging is necessary for nursing students who will be future elder care providers. **Aim of study:** was to assess the Knowledge and attitudes regarding elderly care among nursing students at Fakous city. **Subjects and Methods: Research design:** A descriptive design was used. **Setting:** The study was conducted at nursing schools at Fakous city in Sharkia governorate. **Subjects:** A convenience sample of 180 students. **Tools of data collection:** Two tools were used **Tool (1)** a structured interview questionnaire; it was composed of two parts: Part I: demographic data of students, Part II: The Palmore Facts on Ageing Quiz. **Tool (2)** The Kogan's Attitudes toward Old People Scale (KAOPS). **Results:** More than two thirds of the students were from rural areas. Also about 85.0% and 75.0% of the students had unsatisfactory level of general and social knowledge regarding elderly care,76.7% and 73.3 % of the students had unsatisfactory level of their psychological and physical knowledge regarding elderly care. Additionally, 69.4% of the studied students had negative attitude towards Older People care, while, 30.6% of them had positive attitude. **Conclusion:** unfortunately, the results revealed unsatisfactory level of knowledge, negative attitudes of the nursing students toward older people care , there was highly statistically significant positive correlation between total student`s knowledge about elderly care and their attitude. **Recommendations:** Further study especially qualitative studies should be conducted to further explore factors that influence knowledge, and attitude towards the care of the older adult.

Key words: Attitudes, Elderly care, Knowledge, and Nursing students.

Introduction:

The world population is ageing and this problem is emerging over the past few years and it is expected to be a major issue in the near future. There are several factors leading to the increase in ageing population globally which include the increase in life expectancy, decreased fertility rate, the advancement in medical field and the increase in education standard worldwide [(1)] .

Egypt is the most populous country in the Middle East and the second most populous on the African continent after Nigeria. The population of Egypt represents 1.20 percent of the world´s total population which arguably means that one person in every 84 people on the planet is a resident of Egypt. One of the main features of the Egyptian population over the last few decades is the gradual increase in the absolute and relative numbers of older people. This trend is expected to continue over the next decades [(2)].

The growing number of elderly carriages a thoughtful challenge of health care system especially for nurses, so the nurses must be prepared to meet the challenges of caring for this rapidly increasing segment of population and be aware of the characteristics of aging population. Our nation's health care is significantly in need of more gerontologically trained nursing students who plan to be care providers [(3)].

With the increasing of ageing population and associated chronic illness as well decrease physical functionality and increase in dependency, the need for

nurses with right, adequate knowledge and skill will also be on the increase, and exert an effort to assess nurses' knowledge toward caring of elderly people in health care settings [4].

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 [5].

Attitudes toward aging may be serious for alteration and survival. Attitudes may subsidize to perceived maladaptive performances among the aged, some of which may lead to premature death. Negative views of aging, life in general, and oneself may result in an elderly people's reluctance or failure to seek required services, health care, or other types of assistance. Negative attitudes of elderly people may affect others in their surroundings, who in turn may feel free to respond negatively to or ignore elderly people [6].

Nursing student's attitudes toward the elderly are an essential element in determining the quality of care they provide. Nurses are integral members of a multidisciplinary team involved in the care of the elderly. Because of inexperience with old age and vulnerability to social stereotypes of the old, many college students have been targeted for education programs designed to produce attitudinal change [7].

Significance of the study:

The nursing school student today will be in the future the actual nurse so they need well preparation about elderly care so, this study aimed to assess the Knowledge and attitudes regarding elderly care among nursing students at Fakous city.

Aim of the study:

The aim of study was to assess the Knowledge and attitudes regarding elderly care among nursing students at Fakous city.

Research Questions:

I. What are the knowledge regarding elderly care among nursing school students?

II. What are the attitude regarding elderly care among nursing school students?

Subjects and methods:

Research design:

A descriptive design was used

Study setting:

The study was conducted at the nursing's schools in Fakous city, Sharkia Governorate.

Study subjects:

Sample size and sampling technique:

A convenience sample composed of all nursing schools students (180); included the students on the three grades at the two schools. The technical secondary School of nursing in Fakous included 80 students (26, 27, 27 students at first, second and third academic year, respectively) and Sherief Omar school of nursing in fakous contained 100 students (36, 37, 27 students at first, second and third academic year, respectively.

Tools of data collection:

The tools used for collecting data of the present study were divided based on two tools:

Tool I: Structured interview questionnaire:

It was developed by the investigator after reviewing the related national and international literature. It was written in a simple Arabic language to suit the understanding level of the study subject. It entails two parts as the following:

Part I: Demographic data of students that include: age, class, reside, fathers' and mothers' educational level, fathers' and mothers' job, type of hostel, number of family member, number of rooms in the house, family income, the condition of the house and family health care settings.

Part II: The Palmore Facts on Ageing Quiz.

It was adapted from Palmore [8] and modified by the investigator and translated into an Arabic language after reviewing the related literature and reviewed by supervisors. It was used to assess the students' knowledge regarding elderly care such as (geriatric age, population of elderly people, changes with aging.) The questionnaire consisted of 50 closed ended questions in form of true or false. It consists of four domains included:

I.   Physical information.
II.   Psychological information.
III. Social information.
IV.   General information.

Scoring system:

A scoring system was followed to assess the students' knowledge related to elderly care. The Questionnaire was contained of 50 questions, the total scores of these questions were 50 grades, the correct answer was scored as single point and the incorrect answer was scored as a zero. These scores were summed and were converted into a percent score.
It was classified into 2 categories:
- **Satisfactory** level of knowledge ≥ 60%
- **Unsatisfactory** level of knowledge < 60%.

Tool II: The Kogan's Attitudes toward Old People Scale (KAOPS)

It was adapted from Kogan [9] and modified by the investigator and translated into an Arabic language after reviewing the related literature and reviewed by supervisors. It was used for assess the students' attitude regarding elderly care such as (wiser with aging, living with old people and get set in their ways and are unable to change.)

Scoring system:

A scoring system was followed to assess the students' attitude regarding elderly care. The scale was contained of 34 questions, the total scores of the scale were 170 grades, The scale was measured the students' attitudes regarding elderly care on a 5 point Likert scale; Strongly Agree, Agree, Neither, Disagree

and Strongly Disagree. Each item was scored by a fixed 5-point Likert-type format where: "Strongly Agree" was coded as 5, "Agree" as 4, "Neither" as 3, "Disagree" as 2, and "Strongly Disagree" as 1. The scoring was reversed for negative statements. These scores were summed up and were converted into a percentage score.
It was classified into 2 categories:
- **Positive** attitude ≥ 60%.
- **Negative** attitude< 60%.

Content validity & reliability:

It was ascertained by (3) experts from nursing and medical staff. Their opinions elicited regarding the format, layout, consistency, accuracy and relevancy of the tool. All recommended modifications were applied. Reliability analysis by measuring of internal consistency of the tool through: Cronbach's Alpha test. Cronbach's Alpha for Structured questionnaire format = 0.784 and Cronbach's Alpha for The Kogan's Attitudes toward Old People Scale (KAOPS) = 0.890

Fieldwork

The investigator first met with the students at the previously mentioned settings, explained the purpose of the study after introducing herself and the students were interviewed individually to collect the baseline data using in the study tools. This interview took about 25 to 30 minute. The field work lasted for 3 months from the beginning of September 2019 to end of November 2019. The data were collected two days a week for every academic year of the both schools during their practical days (Sunday & Monday for the students of the 3rd academic year, Tuesday & Wednesday for the students of the 2nd academic year, and Wednesday & Thursday for the students of the 1st academic year) from 10:30 am to 12:30 pm. The time used for finishing the questionnaire ranged between 20 - 30 minutes for each student. The questionnaire was filled by the students themselves.

Pilot study:

A pilot study was carried out on 10% of the study subjects to test applicability, feasibility, practicability of the tools; and then the necessary modifications were done according to the results of pilot study this sample wasn't included of the total sample.

Administrative and ethical considerations:

The investigator obtained all needed official permissions through letters addressed from the Faculty of Nursing explaining the study objectives and procedures. Approval of the study protocol was secured from the research ethics committee in the Faculty of Nursing, Zagazig University. An informed oral consent was obtained from each participant before collecting any data and after explanation of the study aim in a simple and clear manner to be understood. Participants were informed about their rights to refuse or withdraw from the study at any time without giving any reason. Data were confidential and not used outside this study without participant's approval.

Statistical analysis:

Data collected from the studied sample was revised, coded and entered using Personal Computer (PC). Computerized data entry and Statistical analysis were fulfilled using the Statistical Package for Social Sciences (SPSS) version 22. Data were presented using descriptive statistics in the form of frequencies, percentages. Chi-square test (X^2) was used for comparisons between qualitative variables. Spearman correlation measures the strength and direction of association between two ranked variables and the Significance of the results:

  I. Highly significant at p-value < 0.001
  II. Statistically significant was considered at p-value < 0.05
  III. Non-significant at p-value > 0.05

Results:

Table (1) shows that the mean age of the students was 16.12± 3.19 year. Also, there was 45.6% and 38.3% of their fathers and mothers had secondary education and primary education, respectively. Concerning job, 47.8% and 63.9% of the studied students' fathers and mothers were employee and housewife, respectively.

Figure 1 illustrates that 68.9% of the study subject were from rural areas while about 31.1% of them were from urban areas.

Table (2) displays that, there was highly statistically significant positive correlation between total student`s knowledge about elderly care and their attitude. This means when the total student`s knowledge about elderly care increased, their attitudes regarding elderly care will be increased also.

Figure 2 illustrates knowledge score of the study subjects. The figure reveals that about 85.0% and 75.0% of the students had unsatisfactory level of general and social knowledge regarding elderly care, while only 15.0% and 25.0% of them had satisfactory knowledge regarding the same types of knowledge, respectively . Additionally, the figure showed that 76.7% and 73.3 % of the students had unsatisfactory level of their psychological and physical knowledge regarding elderly care, meanwhile; only 23.3% and 26.7% of them were satisfactory knowledgeable regarding the same types of knowledge, respectively.

Figure 3 shows that, 77.8% of the studied students had unsatisfactory level of knowledge regarding elderly care by the Palmore Facts on Ageing Quiz. While, 22.2% of them had satisfactory level of knowledge.

Figure 4 shows that, 69.4% of the studied students had negative attitude towards older People care, while, 30.6% of them had positive attitude.

Discussion:

Regarding to the demographic characteristics, the finding of the current study revealed that, more than one third of the studied students their age ranged between 16-<17 years, the mean of age was 16.12±3.19 year. As regard to

classroom, more than one third of them were at second year.

In relation to residence and type of hostel, the results of the current study indicated that more than two thirds of the studied students residing in rural areas. Also more than three quarters of them live in their ownership house. This finding might attributed to the setting of data collection in Fakous city at El-Sharkia governorate which characterized by its agricultural nature and most of its cities are rural areas.

These results approved with the study performed by Mohammed & Omar [11] in Minia who carried out their study to assess knowledge about elderly care and its relation to ageism attitude among undergraduate nursing students and stated that more than three fifth of the studied sample residing in rural areas and more than three quarters of them live in their ownership house.

In relation to the educational level of the studied students' fathers and mothers under study, it was found that, less than half of the studied students' fathers had secondary education and more than one third of the studied students' mothers had primary education.

These results supported with the study done by Faronbi et al, [12] in Nigeria who conducted study about Perception knowledge and attitude of nursing students towards the care of older patients, and academic engagement", and mentioned that less than half of the studied students their fathers had secondary education and more than one third of their mothers had primary education.

According to the job of the studied students' fathers and mothers, it was found that, less than half of the studied students' fathers were employee and less than two third of the studied students' mothers were housewife. Also one third of the studied students their family incomes were not enough.

These results might be despite economic conditions, there are other motives that drive women to not work, which is mothers takes care of her home and her children, therefore they didn't work. These results supported with the study done by Reynaldo et al, [13] in United States who conducted study about Knowledge of and attitudes toward climate change and its effects on health among nursing students, and mentioned that half of the studied students their fathers were employee and mothers were not work. Also slightly more than one third of them their family incomes were not enough.

Likewise this current research found that, more than half of the studied students their number of family members ranged between 4-6 members. Moreover, half of them their number of rooms in the house ranged between 3-5 rooms. Also, more than half of the studied students their crowding index 1-<2.These findings might be related to the sitting of the majority of the studied students in rural areas in Fakous city. These results agreement with the study achieved by Aldeib & Saied [14], who carried out a study to assess effect of an educational intervention on nursing students, Tanta, Egypt and mentioned that more than half of the studied students their crowding index 1-<2.

Concerning the total knowledge of the nursing students regarding elderly care, the finding of the current study demonstrated that more than three quarters of the studied students had unsatisfactory level of knowledge regarding elderly care. These findings might be related to the insufficiency of studying geriatric curriculum at nursing schools, as there is no separate Gerontological nursing specialty and geriatric course within the curriculum; and it is not independently separated from general medical–surgical courses, so the chance of students to have sufficient . Actually, Geriatric nursing as a specialty is still in an infancy stage in Egypt. Even there is no separate subject on elderly care in the undergraduate and post graduate nursing curricula in all nursing schools. The topic of geriatric care is incorporated and taught to the students along with other nursing subjects such

as medical surgical nursing and advanced nursing practice.

These results supported with the study done by Ghimire et al, [16] who found that the undergraduate nursing students in the Kathmandu Valley of Nepal displayed a relatively low level of knowledge. Also, Duggan et al, [17] reported Lack of knowledge and interest in the issue of older people care among the students shared in their research.

On the contrary of these results, Kengnal et al, [18] in India, Reynaldo et al. [13] in United States, and Faronbi et al., [12], in Nigeria who reported that the participants had good knowledge towards the care of the older adults. Additionally, Kaur et al., [19] added in their Indian research among nursing students that most of the subjects had good knowledge regarding care of elderly.

Cultivation of positive attitudes towards older adults and specialized knowledge about aging and the health care needs of older adults are of utmost priorities for nurses. It has been suggested that attitudes can influence an individual's behavior and that people with a positive attitude towards anyone will have more positive thoughts about them. Additionally, attitude towards the older people is considered as an important factor in providing them care, Kaur et al., [19].

Concerning total attitude regarding elderly care, the finding of the current study demonstrated that more than two thirds of the studied students had negative attitude towards older people care. Although this fact did not reflect our culture especially in 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 , but that negative findings might be related to there is no enough opportunity of geriatric clinical training areas and also, the

hospitals where these nursing students go for nursing practice, there are no separate units/wards for the older people. The elderly people are admitted and being provided care along with other adult patients in the wards.

On other hand, the results of positive attitudes of the one thirds of subjects could be explained by the fact that all of the participants in the present study were female and females especially in the Egyptian situations are the one who take for each and every member of the family, another thing is that the culture of joint family is still prevailing in Egypt, and this increases the bond amongst the family members.

These results in the present study were supported with the study done by Mohammed & Omar [11] in Egypt and Jang et al, [20] in California who stated negative attitude toward the elderly people of their studied subjects. But in difference with the current findings, many studies done by Hsu & Ling [21] in China, Kengnal et al., [18] in India, Yilmaz, & Ince [22] in Turkey, Faronbi et al, [12] in Nigeria, Kaur et al., [19] in India and also Eltantawy [3] in El-Mansoura city in Egypt found that the studied students had positive attitudes towards elderly care in the studies they done.

**Regarding the correlation between student`s knowledge and their attitude about elderly care,** the present study revealed that there was highly statistical significant positive correlation between total student`s knowledge about elderly care and their attitudes. This could be explained as knowledge increase, and then the attitudes become more positive.

These results supported with the study done by Bahadir-Yilmaz, [23] in Turkey about the relationship between nursing students' professional values and their attitudes towards the elderly people, who emphasized that negative attitudes scores of nursing students decreased with the increased level of knowledge regarding elderly care. Also, Kaur et al.,

[19] reported in their Indian study among nursing students that there was a significant correlation between knowledge and attitude regarding care of elderly (r=0.1); as knowledge increases the attitude became more positive.

Conclusion:

Based on the results of the present study; the study can be concluded that, unfortunately, the results revealed unsatisfactory level of knowledge, and negative attitudes of the nursing students toward older people care in nursing schools at Fakous City. Also, there was highly statistically significant positive correlation between total student`s knowledge about elderly care and their attitude. This means when the total student`s knowledge about elderly care increased, their attitudes regarding elderly care will be increased also.

Recommendation:

Based on the study findings, the following recommendations can be deduced:

I.   Gerontological training should be introduced into nursing curricula with meaningful service-learning components in nursing schools

II.   Further study especially qualitative studies should be conducted to further explore factors that influence knowledge, and attitude towards the care of the older adult.

Table (1): Demographic characteristics of the studied nursing schools students, (n=180).

Demographic characteristics	N	%
Age (year)		
15-<16	56	31.1
16-<17	63	35
17 – 18	61	33.9
Mean SD 16.12± 3.19		
Fathers' educational level		
Illiterate	18	10
Read and write	26	14.4
Primary education	40	22.2
Secondary education	82	45.6
University / Postgraduate education	14	7.8
Mothers' educational level		
Illiterate	23	12.8
Read and write	28	15.6
Primary education	69	38.3
Secondary education	50	27.8
University / Postgraduate education	10	5.5
Father's job		
Employee	86	47.8
Not employee	50	27.8
Free business	38	21.1
Professional (Doctor - Lawyer - Engineer)	6	3.3
Mothers' job		
Employee	49	27.2
Housewife	115	63.9

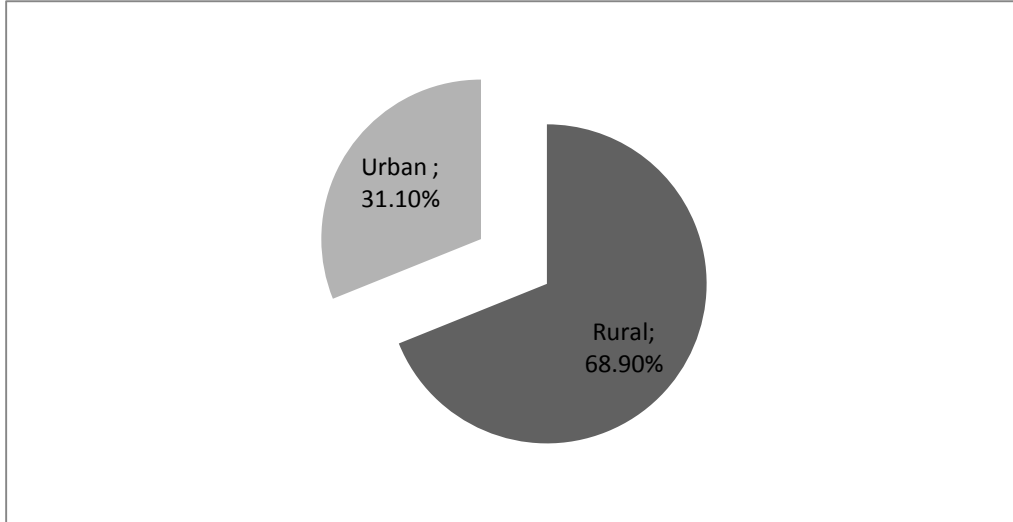|		
Business	12	6.7
Professional (Doctor - Lawyer - Engineer)	4	2.2

Figure 1: Distribution of the study subjects according to their residence, (n=180).
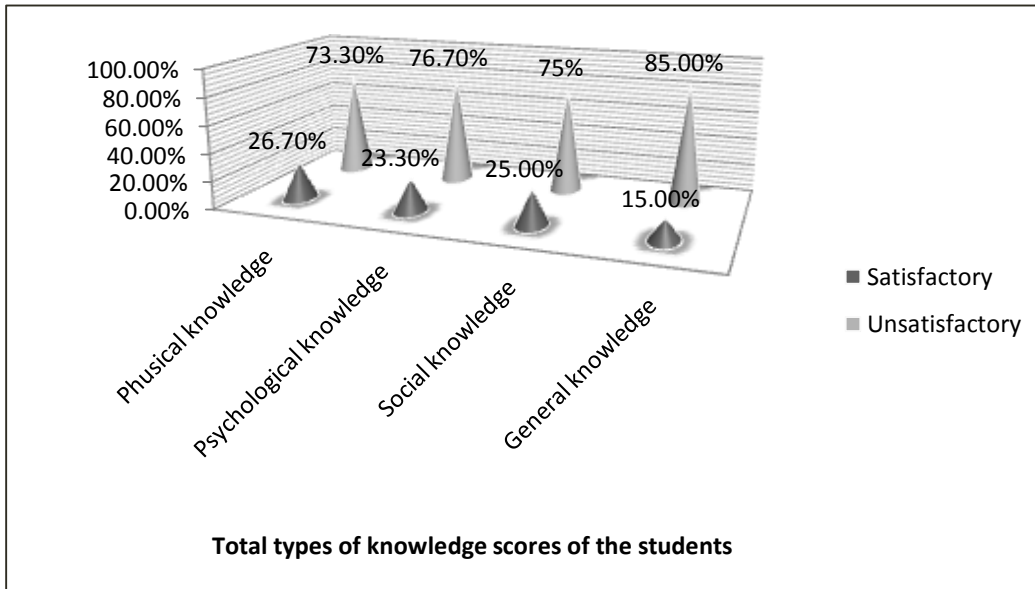

Figure (2): Total types of knowledge of the students regarding elderly care by the Palmore Facts on Ageing Quiz, (n=180).
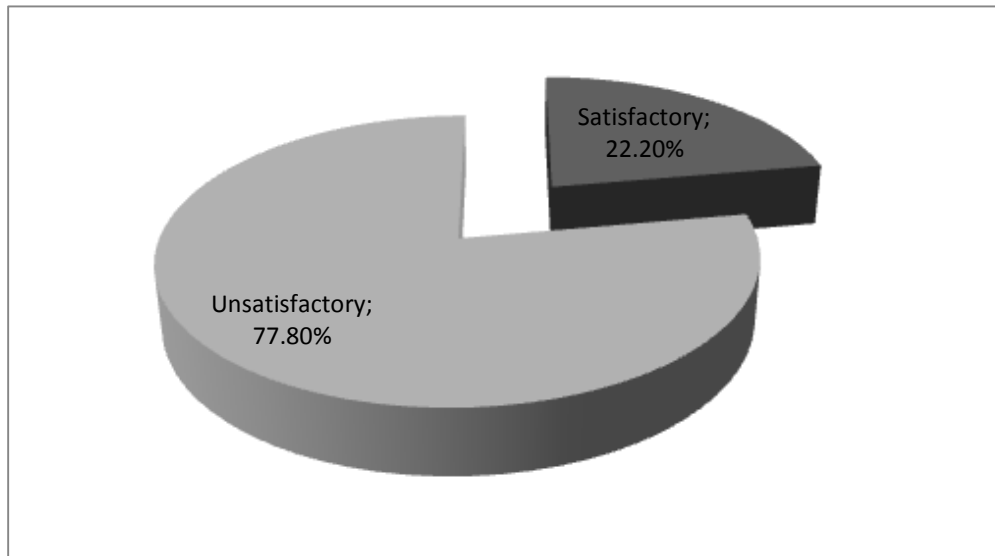
Figure (3): Distribution of the studied nursing students according to their total knowledge regarding elderly care by the Palmore Facts on Ageing Quiz (n=180).
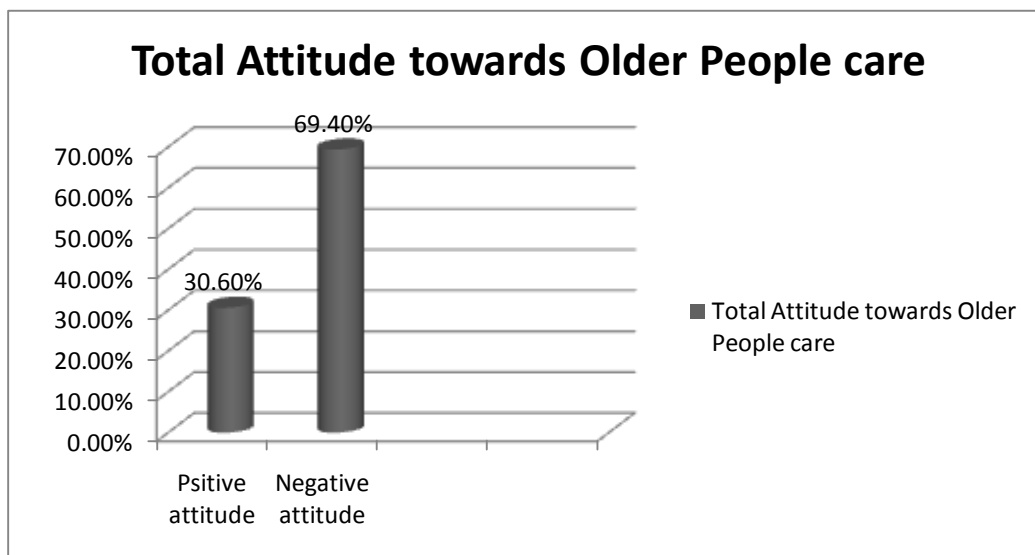

Figure (4): Distribution of the studied nursing student`s according to their total Attitudes towards Older People care (n=180)

Table (2): Correlation among the total student`s knowledge and their total attitude about elderly care.

Items	Total student `s attitude
Total student `s knowledge	r= 0.438 p= .000**

(*) Statistically significant at p<0.05--(**) highly significant at p<0.01

References:

1- Maung,T.M. and Phyu,H.P.: Co-Morbidities and associated factors among elderly Malaysians. IOSR Journal of mental and medical sciences.(2018) 17(12):68-74.

2- Dionigi, R. A.: I would rather die than live sedentary: Is the demonization of passive leisure creating a future generation of older people who will not accept 135 inactivity? Topics in Geriatric Rehabilitation.(2017) 33(3):156-161.

3- Eltantawy, S.H.: Relation between nursing students' knowledge of aging and attitude towards elderly people and their will and intent to work with the elderly. Journal of education and practice. (2013) 4(27): 125-136.

4- Medford-Davis, L. N., Eswaran, V., Shah, R. M., &
Dark, C.: The patient protection and affordable care act's effect on emergency medicine: a synthesis of the data. Annals of Emergency Medicine. (2015) 66(5): 496-506.

5- Gibbs, S. S., &Kulig, J. C.: "We definitely are role models": Exploring how clinical instructors' influence nursing students' attitudes towards older adults. Nurse Education in Practice. (2017) 26(1):74-81.

6- Naylor, M. D., Shaid, E. C., Carpenter, D., Gass, B., Levine, C., Li, J., and Williams, M. V.: Components of comprehensive and effective transitional care. Journal of the American Geriatrics Society. (2017) 65(6):1119-1125.

7- Jafari, M., Rafiei, H., Nassehi, A., Soleimani, F., Arab, M., &Noormohammadi, M. R.: Caring for dying patients: Attitude of nursing students and effects of education. Indian Journal of Palliative Care. (2015) 21(2): 192-197.

8- Palmore, E. B.: The facts on aging quiz: A handbook of uses and results: Springer Publishing Co. (1988)

9- Kogan, N.: 'Attitudes toward old people: the development of a scale and an examination of correlates. The Journal of Abnormal and Social Psychology. (1961) 62(1):44.

10- Giardina-Roche, C., and Black, M.: Attitudes of diploma student nurses toward adult clients. Journal of Nursing Education. (2016) 29(5): 208-214.

11- Mohammed, R., and Omar, A.: Knowledge about Elderly Care and Its Relation to Ageism Attitude among Undergraduate Nursing Students. American Journal of Nursing. (2019) 7(1):73-78.

12- Faronbi, J., Adebowale, O., Faronbi, G., Musa, O., and Ayamolowo, J.: Perception Knowledge and Attitude of Nursing Students towards the Care of Older Patients, International Journal of Africa Nursing Sciences. (2017)7(1):37-42.doi: http://dx.doi.org/10.1016/j.ijans.2017.06.004

13- Reynaldo, R., Cruz, J., Alshammari, F., Obaid, K., Rady, H., Qtait, M., et al: Knowledge of and attitudes toward climate change and its effects on health among nursing students: A multi-Arab country study. In Nursing forum. (2018) 53(2): 179-189.

17- Aldeib, A., and Saied, S.: Dengue fever awareness: effect of an educational intervention on nursing students. Tanta, Egypt. Environmental Science and Pollution Research. (2020) 4(1): 1-9.

15- Meriç, M., Ergün, G., Pola, G., Dölek, M., ToturDikmen, B., and Dal Yılmaz, Ü.: Relationship Between Nursing Students' Attitudes Toward Elderly Discrimination and Opinions About Home Care Services. Home Health Care Management & Practice. (2019) 31(4): 219-223.

16- Ghimire, S., Shrestha, N., Callahan, K., Nath, D., Baral, B., Lekhak, N., et al: Undergraduate nursing students' knowledge of aging, attitudes toward and perceptions of

working with older adults in Kathmandu Nepal. International Journal of Nursing Sciences. (2019) 6(2): 204-210.

17- Duggan, S., Mitchell, E., and Moore, K.: 'With a Bit of Tweaking…we Could Be Great'. An Exploratory Study of the Perceptions of Students on Working With Older People in a Preregistration BSc (Hons) Nursing Course. Int J Older People Nurs. (2013) 8(3): 15-207.

18- Kengnal, P., Holyachi, S., and kumar, A.: knowledge and attitude of the nursing students towards elderly in Davangere, Karnataka. J of Research Gate. (2017) 23(4): 12-44.

19- Kaur, S., Kumar, K.P., Kaur, B., Rani, B., Ghai, S., and Singla, M.: Knowledge and Attitude Regarding Care of Elderly Among Nursing Students:An Indian Perspective. J Nurs Care. (2014) 3(1):3-22. DOI: 10.4172/2167-1168.1000161.

20- Jang, I., Kim, Y., and Kim, Y.: Nursing Students' Willingness to Care for Older Adults. Int'l J. Soc. Sci. Stud. (2019) 7(1):1-10.

21- Hsu, M.H., and Ling, M.H.: Nursing students' attitudes towards older people and future career choices in Macao: A pilot study. Journal of Nursing Education and Practice. (2019) 9(2):10-19.

22- Yilmaz, M., and Ince, F.: Relationship between nursing andelderlycareStudents' attitude toward ageism. Belitung Nursing Journal. (2017) 3(4): 281-296.

23- Bahadir-Yilmaz, E.: The relationship between nursing students' professional values and their attitudes towards the elderly people: A cross-sectional study. Nurse education today. (2018) 70(1):8-12.