

*Original Research Article*

# Knowledge, Attitudes and their Predictors towards Elderly Care among Undergraduate Nursing Students at University of Lahore Teaching Hospital, Lahore

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## Abstract

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The number of old age population has increased. According to our health care system nurses are the important care providers to old age people with acute and chronic diseases. Purpose of this study was to assess the knowledge, attitude and their predictors towards elderly care among nursing students in the University of Lahore Teaching hospital, Lahore. This study aimed to assess the knowledge, attitudes and predictors towards elderly care among nursing's students in university Lahore teaching hospital. Descriptive cross sectional study was done. Students who were full time willing to participate in this study by signing consent were included. The students that did not want to participate excluded from my study. Sample size of n=239 undergraduate students of nursing were taken by using convenient sampling. Likert scale base self-administered questionnaire was used for collection of data. Data protection of the participants was made sure throughout the study by keeping participants identity confidential. Data were analyzed using software SPSS (statistical package for social science studies) version 21. Student's knowledge and attitudes were analyzed by frequencies, mean, median and through standard deviation. The findings of the research show that mean age was 1.171±2.21 years ranges from 18- above 32. 43.3% (n=101) were male while 57.7(n=138) were female respondent in which 37.2%(n=89) were belongs to age group of 18-22 years.26.8%(n=64) of the participants were belongs to the age of 23-27years.13.4%(n=32) were belong the age group of 28-32 years and 22.6%(n=54) participants were belongs to the age group of above 32 years. Mostly students have less information and bad approaches regarding care of older people. Respondents had insufficient knowledge and approaches to ward experience of elderly care during clinical practices. Institutions were connected with the knowledge whereby type of living in the whole family was associated with attitudes. Living with old age peoples at home was connected with both excellent knowledge and positive attitude.

**Keywords:** Knowledge, Attitude, Elderly, Elderly care

## INTRODUCTION

There are numerous body functions that start to turn down when a person grows old. The metabolic rates

decrease by 7% after the age of 30 and after 10 years (Kaur et al., 2014). Digestion and the immune system

becomes less organized, bones become fragile and scrawny; these declines in body functions make older people more vulnerable to disease and illness. It affects blood circulation which becomes less proficient, the processes like cell distribution, development and renovation get postponed and muscle strength diminishes. To meet the health care needs of old age people, a group of health care capability is required (Bashir, 2017)

Burdens of services of health care providers will cultivate to increase the suspected rise in life expectancy. Health care workers who have knowledge and experience regarding care for older people is anticipated that there will be a shortage later (Vida and Idosos, 2014). Family caregivers are unavailable to care for elderly people. In this era due to the social expansion, people have less time to spend it with elderly people and it is an alarming situation (Elias et al., 2015)

According to the World Health Organization, the world's population is aging. Numbers and sizes are rising speedily of people aged 60 years and beyond according to demographic changes. In 1950, the world's percentage of aging people has enlarged from 8% in 2013, it got to 12% while foretelling to 19% in the year 2050 (World Health Organization, 2017).

Over 95% of elderly people of Thailand are hypertensive (HT) (41%), Osteoarthritis (9%), stroke (12.4%), Coronary artery disease (7.4%), and diabetes mellitus (18%) (Strategy and Planning Division, 2015). As the population of old age people is rising, it has negative impacts on the health program such as increasing demand for health reliance and facilities. In the future for a dynamics aging society, literacy system and defensive measures can support to reform the public health and its difficulties (Knodel et al., 2015).

In the region of Sub-Saharan Africa, 46 Million older people lived there and in 2050 this number is estimated to be more than triple to 165million (United Nations, 2016)

The total population above age 60 are roughly 2.7 million (6%) in Tanzania (DHS, 2015). In the availability of health care facilities and advancement in technology, snowballing sampling technique is used and in developed or underdeveloped countries due to the availability the life expectancy of people has increased (Jahan, 2016). Nurses are at the frontline in providing care to the people as stated by Tanzania health care system. Specific knowledge and skill is required in nursing to care for the elderly people (Mattos et al., 2017).

Newly certificated staff and nursing students are not in good shape to work with elderly people on the report of various research outcomes. Gerontology nursing is not considered positively, studies revealed the attitude of

nursing students to their quality of work in specific areas of nursing (Salami, 2018). Pediatric nursing and midwifery are the most favorites and rated highly while the preference of nursing students to work with old age patients was less convenient. Therefore it is very important that nursing students will prepare for the care of old age population (Naja et al., 2017)

There are rare studies on this topic, the good performance of nursing services on the care of older people totally depends on the training of nursing students who will build up confidence and become specialists in geriatric nursing (Mansouri et al., 2017)

With a vision that today's nursing students are the future of health care providers, as nursing educators, we must evaluate our student's "attitudes and knowledge towards the care of aged people. For being competent, the characteristics of nurses who will be standing by to serve in the gerontology field can be predicted to have good knowledge and positive attitudes toward elderly care.

Community should recognize and take part in the valuable worth of elders to persuade people, family as mentioned in the 2<sup>nd</sup> National Plan on The National Committee on the elderly, a plan was established on it. For reliance, older individuals long term care is beneficial. Long term care is the service for reliant people with chronic circumstances as stated by the World Health Organization (2017).

To develop a positive attitude toward the care for elderly people, it is important to prepare nurses when they are in college, subjects associated with gerontology in their course and sufficient skills will help them to have better understanding about older adults (Salami, 2018).

## Significance

There is a significant rise in human life expectancy over the years due to continuing improvement in the healthcare system together with better-quality technology and socio-economic growth relating to disease and injury. This study will provide adequate information that strengthens preventive programs that promote elderly care and knowledge and practice. This study will be useful for developing and planning in elderly care schemes. It opens the door for other researchers to conduct study and practices regarding elderly care.

## Purpose of the study

The purpose of this study was explored and develops the current knowledge, attitudes and predictors towards

elderly care among nursing's students in university Lahore teaching hospital.

### **Research Objectives**

To assess the knowledge, attitudes and predictors towards elderly care among nursing's students in university Lahore teaching hospital.

### **Research question**

What are the knowledge, attitudes and predictors towards elderly care among nursing's students in the University of Lahore teaching hospital?

### **Study design**

It is a descriptive cross-sectional study with the design of quantitative approach. This design helped the researcher to get an image of the current existences about knowledge, attitudes and their predictors of nursing students in the University of Lahore Teaching Hospital towards care of elderly people.

### **Study Population**

The study population was under graduate nursing students in the University of Lahore Teaching Hospital, Lahore.

### **Study Setting**

Setting of the study was University of Lahore Teaching hospital, Lahore.

### **Target population**

Target population was undergraduate nursing students of University of Lahore Teaching hospital, Lahore.

### **Sample size**

Slovin's sampling formula was used to find the sample size of the study population. The study sample was 239.

### **Sampling Method**

A convenient sampling method was used for this study. It was the easiest and the most convenient method of recruiting the sources of the primary data for research.

### **Inclusion Criteria**

Nursing students who were willing to participate in the study.

The participants were undergraduate nursing students. Participants who wanted to provide elderly care.

### **Exclusion Criteria**

All those students of nursing who were sick.

All those nursing students who were not present at the time of data collection.

Participants who did not agree to participate in the study.

### **Data Collection Plan**

Data collection plan is one of the main sources to collect data. A self-administered questionnaire was used to collect data from the study participants. The permission was taken from the participant through consent form. They were given time and a free hand to complete and return it. The participants were not allowed to communicate with each other so as not to copy and share answers, this is because of the nature of research objectives.

### **Research tool**

A well-structured close ended questionnaire and Likert scale were adopted. The questionnaire consisted of two parts. The first part explained the consent form and demographic data of the participants which includes age, gender and residency. The second part of the questionnaire was explaining the questions regarding knowledge and attitudes of the care of old age people. Two tools were adopted from the previous studies; attitudes of the nursing student were evaluated by using the scale of Kogan approaches toward old people (ATOP) developed by Professor Nathan Kogan (1961). It was 4 point Likert scale ranging from strongly agree, agree, disagree and strongly disagree with a total of 23 statements.

## Data Analysis

Data was analyzed by SPSS version 21. The study was descriptive cross-sectional study and all the descriptive statistics were obtained through the SPSS software. Percentage, frequency, mean, median and standard deviation was implemented for data analysis.

## Ethical consideration

Approval was taken from the Ethical Review Board Committee of The University of Lahore and the relevant Head of Department (HOD) by way of permission letter from the department of Lahore School of Nursing for conduct research. Sufficient amounts of information of research were provided to participants with the help of permission and this was achieved through a consent form attached on the top of the questionnaire. Permission was taken from all the participants and free hands were given to the participants to take part in the study or refused to participate. Participants also have the right to mention their name or not. Confidentiality was reflected on by informing participants. Data of the participants will be useful only for research purposes. The right of participants was protected by the Nuremberg Code of Ethics.

## Time Framework

The study was approximately 3-4 month, from September 2020 to December 2020.

## Descriptive Statistics

Table 1 shows the demographic characteristics of the participants and 239 participants were involved in the study. It shows that 42% (n=101) were male and 57% (n=138) were female. 37%(n=89) of participants belonged to 18-22years age group, 26% (n=64) of participants belonged to 23-27years of age group, 13% (n=32) of participant belonged to 28-32years age group, 22%(n=54) participants belonged to above 32 years of age group. Most prominent group was 18-22years old participants. 45% (n=108) of the participants were from rural areas and 54% (n=131) of the participants were from urban areas.

Table 1 shows the distribution of participants by marital status. 56% (n=134) of the participants were single, 13% (n=32) of the respondent were widowed,

11% (n=27) of the participants were divorce, and 19% (n=46) of the participants were married.

Out of 239 participants, majorities of the respondents were not living with their grandparents. 47.7% (n=114) of the participants were living with their "mother, father, and their siblings, 10.0% (n=24) of participants were living in hostels and on their own. 26.8% (n=64) of the participants were living with their "mother, father, grandparents, and siblings". 11.7% (n=37) of the participants were living with their "grandparents, aunts, uncles and cousins. These are the main reasons the younger generation have less interaction with old age people and no information about their care.

## Knowledge towards aging

The distributions of respondents in table 2 describe the knowledge regarding old age peoples. 58% (n=139) of the participants were saying "yes" elderly people aged 60 plus were living in their home while 41% (n=100) of the participants were saying "NO". The statement show that majorities of the participants were living with their elderly people. 73% (n=73) were saying "No" experience of caring for older people (60+years) before joining this nursing course while 26% (n=64) of participants were saying "yes" they have experience about it before joining nursing course.

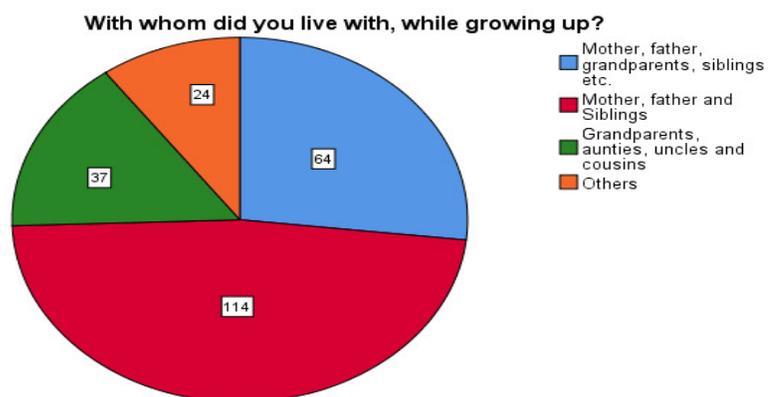
In the above table, question 3 show that maximum number of the participants 29% (n=71) "were experience caring for older family member". 26% (n=63) of the participant had "experience from visiting nursing home". 24% (n=59) of the participants had "experience from voluntary work". 19% (n=46) of the participant had "experience from working as support work". Question 4 show that 31% (n=76) of the respondents were "getting in touch with people aged 60 plus daily".15% (n=36) of the participants were "getting in touch with people aged 60 or 60 plus twice a week". 20% (n=50) participants were "weekly get in touch with people aged 60 or above".16% (n=39) of the respondents were "Once a month get in touch with people aged 60 or above".15% (n=38) of the participant were "Never come in contact with people aged 60 or above".

In question 5 of my study, mostly participants show less interest in the care of old age people. 57% (n=138) were saying "No and only while 42% (n=101) of the participants were saying "yes" they have already cared for elderly persons age 60+ in your clinical nursing.

Question 6 shows that maximum participants 55% (n=133) were saying "No" knowledge about the aging or the elderly, while 44% (n=106) of the participants were saying "yes". Question 7 shows that 14% (n=35) of the

**Table 1.** Demographic characteristics of the participants (N=239)

SR# No	Statement	N	%	Mean ±S.D	
1	<b>Gender</b>				
	Male	101	42.3%	.495±1.58	
	Female	138	57.7%		
Total	239	100%			
2	<b>Age</b>				
	18 - 22 Years	89	37.2%	1.171±2.21	
	23 - 27 Years	64	26.8%		
	28 -32 Years	32	13.4%		
	Above 32 Years	54	22.6%		
Total	239	100%			
3	<b>Residential</b>				
	Rural	108	45.2%	.499±1.55	
	Urban	131	54.8%		
Total	239	100%			
4	<b>Marital Status</b>				
	Single	134	56.1%	1.202±1.94	
	Widowed	32	13.4%		
	Divorce	27	11.1%		
	Married	46	19.2%		
Total	239	100%			
5	<b>With whom did you live with, while growing up?</b>				
	Mother, father, grandparents, siblings etc.	64(26.8%)	64	26.8%	.906±2.09
	Mother, father and Siblings	114(47.7%)	114	47.7%	
	Grandparents, aunties, uncles and cousins	37(11.7%)	37	15.5%	
	Others	24(10.0%)	24	10.0%	
	Total		239	100%	
		24(10.0%)			



**Figure 1.** Demographic Analysis

**Table 2.** Respondents' Knowledge in the care elderly (N=239)

SR# NO	Variables	N	%	Mean	Median	S.D
1	<b>Are there any elderly people aged 60+ living in your home?</b>	139	58%	1.42	1.00	.494
	a. Yes	100	41%			
	b. No	239	100%			
	Total					
2	<b>Did you have any experience of caring older people (60+yrs) before joining this Nursing Course?</b>	64	26.8%	1.73	2.00	.444
	a. Yes	175	73.2%			
	b. No	239	100%			
	Total					
3	<b>Where did you experience that care?</b>					
	a. Caring for older family member	71	29.7%	2.33	2.00	1.099
	b. Voluntary work	63	26.4%			
	c. Visiting Nursing home	46	24.7%			
	d. Working as a support worker	46	19.2%			
	Total	239	100%			
4	<b>How often do you come in contact with people aged 60 or over?</b>					
	a. Daily	76	31.8%	2.69	3.00	1.462
	b. Twice a week	36	15.1%			
	c. Weekly	50	20.9%			
	d. Once a month	39	16.3%			
	e. Never	38	15.9%			
	Total	239	100%			
5	<b>Have you already cared for elderly person age 60+ in your clinical nursing practice?</b>					
	a. Yes	101	42.3%			
	b. No	138	57.7%	1.58	2.00	.495
	Total	239	100%			
6	<b>Do you have any knowledge about the ageing or the elderly?</b>					
	a. Yes	106	44.4%			
	b. No	133	55.6%	1.56	2.00	.498
	Total	239	100%			
7	<b>Where did you get that knowledge?</b>					
	a. School	35	14.6%	2.34	2.00	.883
	b. Nursing College	199	49.8%			
	c. Family and friends	54	22.6%			
	d. Media	31	13.0%			
	Total	239	100%			
8	<b>Which factor do you think can have the greatest influence on nursing student's knowledge towards the care of elderly people?</b>					
	a. Teaching content of Gerontology Nursing	68	28.8%			
	b. Past experience with older people	77	32.2%	2.39	2.00	1.255
	c. Attitudes of nursing teachers as role model	51	21.3%			
	d. Peer groups	19	7.9%			
	e. Other	24	10.0%			
	Total	239	100%			
9	<b>Elderly person's height</b>					
	a. Does not change	38	15.9%	2.38	2.00	.875
	b. Only appears to change	98	41.0%			
	c. Tends to decline	78	32.6%			
	d. Depends on their level of activities	25	10.5%			
	Total	239	100%			

Table 2. Continue

10	<b>As compared to younger persons, the elderly (60+ yrs) are limited in their activities more often by which the type of illness?</b>					
	a. Acute Illness	46	19.2%	2.47	2.00	1.003
	b. Cold and Flue	78	32.6%			
	c. Infections	71	29.7%			
	d. Chronic Illness	44	18.4%			
	Total	239	100%			
11	<b>Which type of illness do the elderly have less frequently than younger persons?</b>					
	a. Acute illness	30	14.6%	2.50	2.00	.939
	b. Cold and Flue	90	37.7%			
	c. Infection	74	31.0%			
	d. Chronic illness	40	16.7%			
	Total	239	100%			
12	<b>In the elderly, Lung capacity tends to:</b>					
	a. Increase	49	20.8%	2.42	2.00	1.034
	b. Decrease	89	37.2%			
	c. Remain the same	52	21.0%			
	d. This has never been determined	49	20.0%			
	Total	239	100%			
13	<b>Liver size decrease after the age of:</b>					
	a. 50	31	13.0%	2.67	3.00	.981
	b. 60	74	31.0%			
	c. 70	77	32.2%			
	d. 80	57	23.8%			
	Total	239	100%			
14	<b>Compared to young people, cardiac output and recovery time among the elderly is</b>					
	a. Much higher and faster	52	21.8%			
	b. Moderately higher and faster	55	23.0%	2.63	3.00	1.126
	c. About the same	61	25.5%			
	d. Lower and Slower	71	29.7%			
	Total	239	100%			
15	<b>In the elderly subcutaneous tissue and elastic fibers tend to:</b>					
	a. Increase	53	22.2%	2.28	2.00	.967
	b. Decrease	99	41.4%			
	c. Remain the same	53	22.2%			
	d. This has never been determined	34	14.2%			
	Total	239	100%			
16	<b>Compared to person under 60, sleep patterns among the elderly are:</b>					
	a. Steadily increasing	44	18.2%	2.49	2.00	1.016
	b. The same	84	35.8%			
	c. Disturbed	62	25.0%			
	d. Steadily decreasing	49	20.0%			
	Total	239	100%			
17	<b>Compared with younger persons, the elderly have</b>					
	a. More injuries at home	43	18.0%			
	b. About the same number of injuries at home	71	29.7%	2.54	3.00	.999
	c. Fewer injuries at home	79	33.1%			
	d. Twice the number of injuries at home	46	19.2%			
	Total	239	100%			

Table 2. Continue

18	<b>Compared to young people, the majority of elderly are able to adapt to change:</b>					
	a. Less easily	56	23.4%	2.27	2.00	.947
	b. Easily	89	37.2%			
	c. More easily	67	28.0%			
	d. About the same	27	11.3%			
	Total	239	100%			
19	<b>As a healthy person reaches old age, his or her voluntary participation in organizations usually:</b>			2.34	2.00	1.037
	a. Raises	61	25.5%			
	b. Remain the same	75	31.4%			
	c. Unknown	63	26.4%			
	d. Declines vividly	40	16.7%			
	Total	239	100%			
20	<b>The elderly who reduce their activeness tend to be</b>					
	a. Happier	51	21.3%	2.45	2.00	1.011
	b. Not as happy as those who remain active	71	29.7%			
	c. Better adjust than those who remain active	76	31.8%			
	d. Healthier	41	17.2%			
	Total	239	100%			
21	<b>Compared to persons under age 60, rates of criminal activities victimization among the elderly are:</b>					
	a. Higher	58	24.3%	2.41	2.00	1.061
	b. Steadily increase	72	30.1%			
	c. About the same	62	25.9%			
	d. Lower	47	19.7%			
	Total	239	100%			
22	<b>Compared to younger persons, the elderly</b>					
	a. Have more fear of crime	53	22.2%	2.47	2.00	1.052
	b. Have the same fear of crime	69	28.9%			
	c. Have less fear of crime	68	28.5%			
	d. Have no fear of crime	49	20.5%			
	Total	239	100%			
23	<b>Sickness is a part of normal aging process</b>					
	a. Yes	129	54.4%	1.46	1.00	.499
	b. No	110	46.6%			
	Total	239	100%			
24	<b>When checking blood pressure of the elderly the nurse needs to know that systolic blood pressure tend to rise because of:</b>					
	a. High cholesterol level in the elderly body	26	10.9%	2.70	3.00	.936
	b. Loss of elasticity of arteries of the elderly	73	30.5%			
	c. Reduction in blood pump	87	36.4%			
	d. Dementia	53	22.2%			
	Total	239	100%			
25	<b>Alcoholism is a very big problem among elderly</b>					
	a. Yes	148	61.9%	1.38	1.00	.487
	b. No	91	38.1%			
	Total	239	100%			
26	<b>Elderly are abused and neglected</b>					
	a. Yes	121	50.9%	1.49	1.00	.501
	b. No	118	49.1%			
	Total	239	100%			

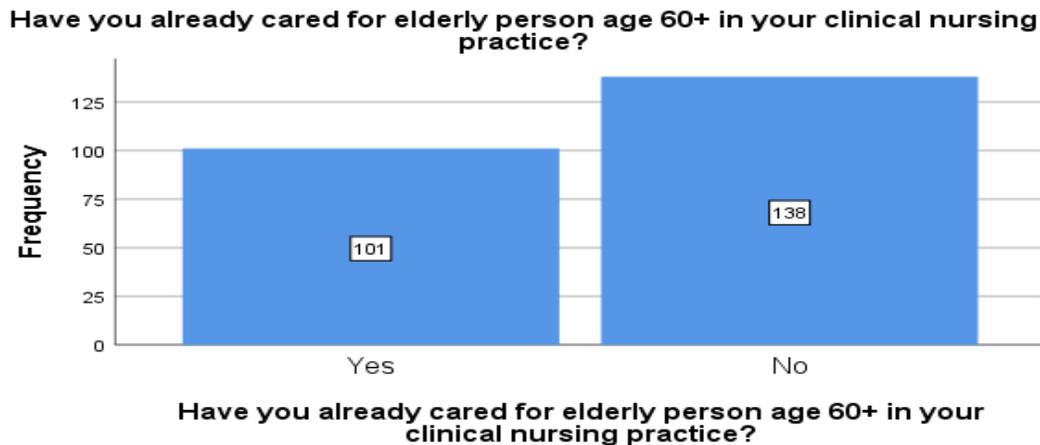


Figure 2. Knowledge in the elderly care

participants were “getting the knowledge from school”. 49% (n=119) of the participants were “getting the knowledge from nursing college”. 22% (n=54) of the participants were “getting the knowledge from family and friends”. 13% (n=31) of the participants were “getting the knowledge from the media”. Question 8 shows the perception that 28% (n=68) of the participants were “thinking that teaching content of gerontology nursing has the greatest influence on nursing student’s knowledge towards the care of elderly people”. 32% (n=77) of the participants were “thinking that previous experience with older people have the greatest change on nursing student’s knowledge”. 21% (n=51) of the participants were “thinking that the approach of nursing teachers as role model have the greatest influence on nursing student’s knowledge. 7% (n=19) of the participants were “thinking that peer groups have the greatest influence on nursing student’s knowledge”. 10% (n=24) of the participants were “thinking that others have the greatest influence on nursing student’s knowledge”.

Question 9 describes the perception of participants, 15% (n=38) said “elderly person’s height does not change”. 41% (n=98) of participants said “they only appear to change”. 32% (n=78) of participants said “they tend decline”. 10% (n=25) of participants said they “depends on their level of activities”.

Question 10 shows that 19% (n=46) of the participants said “acute illness limits the activities of elderly (60 years) as compared to younger persons”. 32% (n=78) of the participants said “cold and flu limits the activities of elderly (60years) as compared to younger persons”. 29% (n=71) of the participants said “infection limits the activities of elderly (60 years) as compared to younger persons”. 18 (n=44) of the participants said “chronic illness limits the activities of elderly (60 years) as

compared to younger persons”.

Question 11 shows that 14% (n=35) of the participants said “acute illness is less frequent compared to younger persons”. 37% (n=90) of the participants said “cold and flu is less frequent compared to younger persons”. 31% (n=74) of the participants said “infection is less frequently in younger persons”. 16% (n=40) of the participants said “chronic illness is less frequent in younger persons”. Question 12 shows that 20% (n=49) of the participants said “in elderly, lungs capacity tends to increase”. 37% (n=89) of the participants said “in elderly, lungs capacity tends to decrease”. 21% (n=52) of the participants said “in elderly, lungs capacity tends to remain the same”. 20% (n=49) of the participants said “in elderly, lungs capacity has never been determined”.

Question 13 shows that 13% (n=31) of the participants said “Liver size decreases after the age of 50”. 31 5% (n=74) of the participants said “Liver size decreases after the age of 60”. 32% (n=77) of the participants said “Liver size decreases after the age of 70. 23% (n=23) of the participants said “Liver size decreases after the age of 80”. Question 14 shows that 21% (n=52) of the participants said “cardiac output and recovery time among the elderly is much higher and faster as compared to younger persons”. 23% (n=55) of the participants said “recovery time and cardiac output among the old age people is much moderately elevated and as compared to younger persons”. 25% (n=55) of the participants said “cardiac output and recovery time among the elderly is about the same as compared to younger persons”. 29% (n=71) of the participants said “recovery time and cardiac output regarding the elderly is lower and slower as compared to younger persons”. Question 15 shows that 22% (n=53) of the participants said “sleep patterns among the elderly increases as compared to person

under 60". 41% (n=99) of the participants said "sleep patterns among the elderly decreases as compared to person under 60". 22% (n=53) of the participants said "sleep patterns among the elderly remain the same as compared to person under 60". 14% (n=14) of the participants said "sleep patterns among the elderly has never been determined as compared to person under 60".

Question 16 shows that 18% (n=43) of the participants said "the elderly have more injuries compared to younger person". 29% (n=29) of the participants said "the elderly has about the same number of injuries at home as compared to younger person". 33% (n=79) of the participants said "the elderly has fewer injuries at home as compared to younger person". 19% (n=46) of the participants said "the elderly have twice the number of injuries at home as compared to younger person".

Question 17 shows that 23% (n=56) of the participants said "the majority of older people were able to change less easily as compared to young people". 37% (n=37) of the participants said "the most of older people were able to change easily compared to young people". 28% (n=67) of the participants said "the number of elderly people were able to adapt to change more easily as compared to young people". 11% (n=27) of the participants said "the majority of elderly population were able to remain same as compared to young people".

Question 18 shows that 25% (n=61) of the participants said "when a healthy person reaches aging stage, his or her controlled participation in organizations usually rises". 31% (n=75) of the participants said "when healthy person reaches old age, his or her participation in organizations remain the same". 26% (n=63) of the participants said "while a healthy person reaches old age, his or her deliberate participation in organizations is usually unknown". 40% (n=16) of the participants said "as a healthy person reaches old age, his or her intentional participation in organizations usually declines".

Question 19 shows that 29% (n=71) of the participants said "The old age people who decreased their energy are happier". 29% (n=71) of the participants said "the older adults who reduced their activeness were not as happy as those who remain active". 31% (n=31) of the participants said "ageing people who reduced their activeness were better adjusted than those who remain active". 17% (n=41) of the participants said "the old age people who reduced their activeness tend to be healthier".

Question 20 shows that 24% (n=58) of the participants said "the rate of criminal activities and victimization among the elderly are higher as compared to persons under age 60". 30% (n=72) of the participants said "the rate of criminal activities and victimization among the

elderly were steadily increased as compared to persons under age 60". 25% (n=62) of the participants said "the rate of criminal activities related to the old age people about the same rather than persons under age 60". 19% (n=47) of the participants said "the rate of criminal activities and discrimination related to the elderly are lower as compared to persons under age 60".

Question 21 shows that 22% (n=53) of the participants said "the elderly have more fear of crime as compared with younger persons". 28% (n=69) of the participants said "the elderly have the same fear of crime as compared with younger persons". 28% (n=68) of the participants said "the elderly have less fear of crime as compared with younger persons". 20% (n=49) of the participants said "the elderly have no fear of crime as compared with younger persons". Question 22 shows that 54% (n=129) of the participants said "Yes" sickness is a part of the normal aging process while 46% (n=110) of the participants said "No".

Question 23 shows that 10% (n=26) of the respondents said "blood pressure check of the old age people by the nurse rises because of high cholesterol level in the elderly body". 30% (n=73) of the respondents said "blood pressure of the elderly people rises because of the elasticity of arteries loss in the body of old age people". 36% (n=87) of the respondents said "when checking blood pressure of the older adults, the nurse needs to know that systolic blood pressure become rise because of reduction in blood pump in the elderly body". 22% (n=53) of the respondents said "when the blood pressure of the aged people were checked by nurse, they need to recognize that systolic blood pressure rises because of dementia in body of old age people". Question 24 shows that 61% (n=148) of the participants said "Yes" alcoholism is a very big problem among elderly". 38% (n=91) of the participants said "No". Question 25 shows that 50% (n=121) of the participants said "Yes" elderly are abused and neglected while 49% (n=118) of the participants said "No".

According to the data, question 1 of the table 3 show that 22% (n=53) of participants strongly disagreed with "most of the old age people who lived in housing with people of their own age". 27% (n=66) disagreed, 28% (n=67) agree, 22% (n=53) strongly agreed. Question 2 shows that 25% (n=60) of participants strongly disagreed with "most of the older people lived in housing that young people also live". 28% (n=67) agreed, 26% (n=63) disagreed, 20% (n=49) strongly agreed.

Question 3 shows that 18% (n=45) participants strongly disagreed with "about the most elderly people, it is hard to figure out what makes them different". 31% (n=75) disagreed, 30% (n=72) agreed, and 19% (n=47) strongly agreed. Question 4 shows that 20% (n=48) of

Table 3. Respondents' attitudes toward elderly care(N=239)

SR#	No Statement	n	%	Mean	Median	S.D
1	<b>It will be better if most elderly people lived in housing with people of their own age.</b>					
	Strongly Disagreed	53	22.2%	2.50	3.00	1.069
	Disagreed	66	27.6%			
	Agreed	67	28.0%			
	Strongly Agreed	53	22.2%			
	Total	239	100%			
2	<b>It would be better if most elderly people lived in housing that also live young people</b>					
	Strongly Disagreed	60	25.1%	2.42	2.00	1.077
	Disagreed	67	28.0%			
	Agreed	63	26.4%			
	Strongly Agreed.	49	20.5%			
	Total	239	100%			
3	<b>There is something different about most elderly people: It is hard to figure out what makes them different.</b>					
	Strongly Disagreed	45	18.8%			
	Disagreed	75	31.4%	2.51	2.00	1.012
	Agreed	72	30.1%			
	Strongly Agreed	47	19.7%			
	Total	239	100%			
4	<b>Most elderly people are not different from anybody else.</b>					
	Strongly Disagreed	48	20.1%			
	Disagreed	70	29.3%			
	Agreed	64	26.8%			
	Strongly Agreed	57	23.8%	2.54	3.00	1.064
	Total	239	100%			
5	<b>Most elderly people are set in their ways and unable to change.</b>					
	Strongly Disagreed	52	21.8%	2.57	3.00	1.097
	Disagreed	61	25.5%			
	Agreed	64	26.8%			
	Strongly Agreed	62	25.9%			
	Total	239	100%			
6	<b>Most elderly people are capable of new adjustment when the situation Demands it.</b>					
	Strongly Disagreed	57	23.8%	2.54	3.00	1.118
	Disagreed	59	24.7%			
	Agreed	61	25.5%			
	Strongly Agreed	62	25.9%			
	Total	239	100%			
7	<b>People grow wiser with old age.</b>					
	Strongly Disagreed	56	23.0%	2.49	2.00	1.088
	Disagreed	64	26.1%			
	Agreed	64	26.0%			
	Strongly Agreed	55	23.9%			
	Total	239	100%			
8	<b>Most elderly people make the younger people "ill-at-ease or uncomfortable.</b>					
	Strongly Disagreed	63	26.4%			
	Disagreed	57	23.8%	2.49	2.00	1.133
	Agreed	59	24.7%			
	Strongly Agreed	60	25.1%			
	Total	239	100%			

Table 3. Continue

<b>9 It is foolish to claim that wisdom comes with old age.</b>					
Strongly Disagreed	62	25.9%			
Disagreed	63	26.4%	2.46	2.00	1.118
Agreed	57	23.8%			
Strongly Agreed	57	23.8%			
Total	239	100%			
<b>10 Most elderly people bore others by talking about the "good old days"</b>					
Strongly Disagreed	56	23.4%			
Disagreed	63	26.4%			
Agreed	62	25.9%	2.51	3.00	1.100
Strongly Agreed	58	24.3%			
Total	239	100%			
<b>11 Most elderly people past experiences are interesting.</b>					
Strongly Disagreed	58	24.3%			
Disagreed	56	23.4%	2.53	3.00	1.114
Agreed	65	27.2%			
Strongly Agreed	60	25.1%			
Total	239	100%			
<b>12 Elder people are really interesting to nurse.</b>					
Strongly Disagreed	56	23.4%			
Disagreed	62	25.9%	2.53	3.00	1.114
Agreed	59	24.7%			
Strongly Agreed	62	25.9%			
Total	239	100%			
<b>13 The older you are the easier it is to have good rapport with older people.</b>					
Strongly Disagreed	60	25.1%			
Disagreed	57	23.8%	2.52	3.00	1.133
Agreed	59	24.7%			
Strongly Agreed	63	26.4%			
Total	239	100%			
<b>14 Once you will work with older people it is difficult to get job Elsewhere.</b>					
Strongly Disagreed	58	24.3 %			
Disagreed	64	26.8%	2.48	2.00	1.099
Agreed	61	25.5%			
Strongly Agreed	56	23.4%			
Total	239	100%			
<b>15 Nurse work with older people because they cannot cope with high technology Care.</b>					
Strongly Disagreed					
Disagreed	60	25.1%	2.49	2.00	1.118
Agreed	60	25.1%			
Strongly Agreed	60	25.1%			
Total	59	24.7%			
	239	100%			
<b>16 Are you willing to take care of the elderly people age 60 or over as career Choice.</b>					
Strongly Disagreed	58	24.3%	2.49	2.00	1.111
Disagreed	64	26.8%			
Agreed	58	24.3%			
Strongly Agreed	59	24.7%			
Total	239	100%			
<b>17 Most elderly people seldom complain about the young generation's behavior.</b>					
Strongly Disagreed	61	25.5%			
Disagreed	58	24.3%			
Agreed	60	25.1%	2.50	3.00	1.126
Strongly Agreed	60	25.1%			
Total	239	100%			

Table 3. Continue

<b>18 Most elderly people make excessive demands for love and reassurance.</b>			
Strongly Disagreed	44	18.4%	
Disagreed	81	33.9%	
Agreed	67	28.0%	2.49 2.00 1.008
Strongly Agreed	47	19.7%	
Total	239	100%	
<b>19 A nice neighborhood is the one that has number old people living in it.</b>			
Strongly Disagreed	48	20.1%	
Disagreed	73	30.5%	
Agreed	56	23.9%	2.55 2.00 1.083
Strongly Agreed	62	25.9%	
Total	239	100%	
<b>20 If the elderly people expect to beloved they should eliminate their Irritating faults.</b>			
Strongly Disagreed			
Disagreed	45	18.8%	
Agreed	69	28.9%	2.58 3.00 1.010
Strongly Agreed	67	28.0%	
Total	58	24.3%	
	239	100%	
<b>21 Schools of nursing may be able to play a role in influencing student attitudes towards the care of elderly.</b>			
Strongly Disagreed	33	13.8%	
Disagreed	79	33.1%	2.60 3.00 .965
Agreed	78	32.6%	
Strongly Agreed	49	20.5%	
Total	239	100%	
<b>22 There is a need to promote by routine health checkups, elderly health camps and health education sessions.</b>			
Strongly Disagreed	40	16.7%	
Disagreed	76	31.8%	2.56 3.00 1.010
Agreed	71	29.7%	
Strongly Agreed	52	21.8%	
Total	239	100%	
<b>23 It will be interesting to work in a special ward for elderly rather than mix them with Others.</b>			
Strongly Disagreed	58	24.3%	2.45 2.00 1.087
Disagreed	68	28.5%	
Agreed	60	25.1%	
Strongly Agreed	53	22.2%	
Total	239	100%	

**Table 4.** Shows the descriptive analysis of demographic data, knowledge attitudes.

Variables	Median	Mean± S.D	Variance
Demographic data	7.4	1.51± 0.854	.755
Knowledge	52.038	55.95± .8885	.9733
Attitude	2.521	2.403± 1.082	1.1983

participants strongly disagreed with “most of the older people are not different from anybody else.” 29% (n=70) disagreed, 26% (n=64) agreed, 23% (n=57) strongly agreed. Question 5 shows that 21% (n=52) of

participants strongly disagreed with “most of the old people are set in their ways and unable to change”. 25% (n=61) disagreed, 26% (n=64) agree, 25% (n=62) strongly agreed. Question 6 shows that 23% (n=57) of

participants strongly disagreed with "most of the aged people were capable of new adjustment when the situation demands it". 24% (n=59) disagreed, 25% (n=61) agreed, 25% (n=62) strongly agreed. Question 7 shows that 23% (n=56) of participants strongly disagreed with "people who grow wiser in old age." 26% (n=64) disagreed, 26% (n=64) agree, 23% (n=55) strongly agreed.

Question 8 shows that 26% (n=63) of participants strongly disagreed with "most of the aging people make the younger people uncomfortable or ill-at-ease". 23% (n=57) disagreed, 24% (n=60) agreed, and 25% (n=60) strongly agreed. Question 9 shows that 25% (n=62) of participants strongly disagreed with "It is foolish to claim that wisdom comes with old age". 26% (n=63) disagreed, 23% (n=57) agreed, 23% (n=57) strongly agreed. Question 10 shows that 23% (n=56) of participants strongly disagreed with "most elderly people bore others by talking about the "good old days". 26% (n=63) disagreed, 25% (n=62) agreed, 24% (n=58) strongly agreed. Question 11 shows that 24% (n=58) of participants strongly disagreed with "most elderly people past experiences are interesting". 23% (n=56) disagreed, 27% (n=65) agreed, 25% (n=60) strongly agreed.

Question 12 shows that 23% (n=56) of participants strongly disagreed with "elderly people were really interesting to nurse". 25% (n=62) disagreed, 24% (n=59) agreed, and 25% (n=62) strongly agreed. Question 13 shows that 25% (n=60) of participants strongly disagreed with "It is to have good rapport with older people". 23% (n=57) disagreed, 24% (n=59) agreed, 26% (n=63) strongly agreed. Question 14 shows that 24% (n=58) of participants strongly disagreed with "Once you work with old age people, it is hard to get a job in another place". 26% (n=64) disagreed, 25% (n=61) agreed, 23% (n=56) strongly agreed. Question 15 shows that 25% (n=60) of participants strongly disagreed with "Nurse work with old age people because they cannot handle high technology care". 25% (n=60) disagreed, 25% (n=60) agreed, 24% (n=59) strongly agreed. Question 16 shows that 24% (n=58) of participants strongly disagreed with "you were willing as a career choice or taking care of the old age people". 26% (n=64) disagreed, 24% (n=58) agreed, 24% (n=59) strongly agreed. Question 17 shows that 25% (n=61) of participants strongly disagreed with "most of the old age people do not often complain about the young generations behavior". 24% (n=58) disagreed, 25% (n=60) agreed, 25% (n=60) strongly agreed. Question 18 shows that 18% (n=44) of participants strongly disagreed with "most of the old age people make extreme demands for love and comfort." 33% (n=81) disagreed, 28% (n=67) agreed, 19%

(n=47) strongly agreed.

Question 19 shows that 20% (n=48) of participants strongly disagreed with "a polite neighborhood is the one that has many old age people living in it". 30% (n=73) disagreed, 23% (n=56) agree, 25% (n=62) strongly agreed. Question 20 shows that 18% (n=45) of participants strongly disagreed with "the old age people wait for loved ones to get rid of their annoying faults". 28% (n=69) disagreed, 28% (n=67) agreed, 24% (n=58) strongly agreed. Question 21 shows that 13% (n=33) of participants strongly disagreed with "schools of nursing may be able to take steps in changing student attitudes towards the care of old age people." 33% (n=79) disagreed, 32% (n=78) agreed, 49% (n=58) strongly agreed. Question 22 shows that 16% (n=40) of participants strongly disagreed with "there is a need to promote routine health checkups, elderly health camps and health education sessions". 31% (n=76) disagreed, 29% (n=71) agreed, 21% (n=52) strongly agreed. According to the data, question 23 shows that 24% (n=58) of participants strongly disagreed to interested work in special ward for elderly rather than mix them with others, and 28% (n=68) disagreed, 25% (n=60) agree, 22%(n=53) strongly agreed.

## **Descriptive analysis**

### **Demographic**

For calculation of mean, median, S.D and variance, summed score were used with the purpose of conducting descriptive analysis of demographic data. Sample of 239 people were included for analysis purpose and the mean and standard deviation are (Mean=1.51, Variance=.755 and SD=.854)

### **Knowledge**

For calculation of mean, median, S.D and variance summed score were used with purpose of conducting descriptive analysis of knowledge. Sample of 239 people was include for analysis purpose mean and standard deviation are (Mean = 55.95, Variance = 0.9733 and SD = 0.8885)

### **Attitude**

For calculation of mean, median, S.D and variance summed score were used with purpose of conducting descriptive analysis of attitude. Sample of 239 people

were include for analysis purpose, mean and standard deviation are (Mean = 2.403, Variance = .1.1983 and SD = .1.082)

## DISCUSSION

This chapter is discussing the most important result of this study whose main purpose was to evaluate information, approaches and predictors of nursing students towards the elderly care.

The study had shown that nursing students in University of Lahore Teaching hospital, Lahore showed a deficiency of basic knowledge of the social, physical, and psychological changing of elderly people. In response to the question, majorities of the participants 57% (n=138) were saying "No" they did not already care for elderly people aged 60+ in your clinical nursing. While just 42% (n=101) of the participants were saying "yes" they have already cared for elderly people aged 60+ in your clinical nursing. The mean of this question was 1.58. Another study was conducted in Saudi Arabia by Mansouri in (2017) who found that nursing students of Saudi Arabian have deficient knowledge related to elderly care.

In response to this question, maximum of the participants 55% (n=133) were saying "No" knowledge about the aging or the elderly, while 44% (n=106) of the participants were saying "yes". Another study was done by (Samira, 2008) who found that those nursing students who had a specific course of gerontology nursing in their curriculum had enough knowledge compared to those students who had no knowledge on specific courses on gerontology nursing.

In response to this question, 28% (n=68) of the participants were "thinking that teaching content of gerontology nursing have the greatest influence on nursing student's knowledge towards the care of elderly people". 32% (n=77) of the participants were "thinking that the earliest times experience with old age people have the greatest change on knowledge of nursing student's". 21% (n=51) of the participants were "thinking that attitudes of nursing teachers as role model have the greatest influence on nursing student's knowledge. 7% (n=19) of the participants were "thinking that peer groups have the greatest influence on nursing student's knowledge". 10% (n=24) of the participants were "thinking that others have the greatest influence on nursing student's knowledge". Bassah conducted another study from Cameroon in (2018) and showed that nursing students have excellent awareness regarding care of the aged peoples and their diseases. This had been strongly influenced by their one year course in the field of nursing gerontology.

14% (n=35) of the participants were "getting the knowledge from school". 49% (n=119) of the participants were "getting the knowledge from nursing college". 22% (n=54) of the participants were "getting the knowledge from family and friends". 13% (n=31) of the participants were "getting the knowledge from the media". The findings were compared from another study that was done in Kenya and it showed that private schools present much better in academics than public schools (Rong, 2017).

Majorities of the participants 57% (n=138) were saying "No" they did not already care for elderly people aged 60+ in clinical nursing. 42% (n=101) of the participants were saying "yes" they had already care for elderly people aged 60+ in clinical nursing. The results of this study were corresponding with another study which showed that knowledge of nursing students care of elderly people can rise by having more hours of clinical practice rotation in geriatric units (Huda, 2018).

31% (n=76) of the respondents "daily come and get in touch with people of age 60 or over". 15% (n=36) of the participants "twice a week get in touch with people of age 60 or over". 20% (n=50) of participants "weekly get in touch with aged people 60 or above 60". 16% (n=39) of the respondents "once a month get in touch with people aged 60 or above 60". 15% (n=38) of the participant "never come and make contact with people age 60 or over". Other findings have common results compared to study done by Tao and McRoy (2015). This could be because of regular contact with elderly people and solving their problems in the hospital leads to increased knowledge of the exacting action.

Distribution of the respondents according to their life, while growing up, 26.8% (n=64) of the participants lived with their "mother, father, grandparents, and siblings". 47.7% (n=114) of the participants were living with only their "mother, father, and their siblings". 11.7% (n=37) of the participants were living with their "grandparents, aunties, uncles and cousins, and 10.0% (n=24) of participants were living with others. As it is supported in the study done by Sandra Paul (2016) who suggested that living in a family with older people in it has a great influence in developing knowledge on their health. Growing up in an extended family, this factor also showed that it can increase the knowledge of a person towards the care for elderly.

24% (n=59) of the respondents agreed, and 25% (n=62) strongly agreed with "Elder people are really interesting to nurse". On the aspect of approaching nursing students towards care of elderly people, they had shown positive approaches towards care of old age peoples. The results show encouraging and agreeable attitudes among nursing students in University of Lahore

teaching hospital; Lahore only (48%) respondents had negative attitudes. Another study had discovered positive attitudes of the nursing student regarding elderly care with (64.6%) of the participants.(Kaur et al., 2014)These results are the similar as the finding from the study done in Nigeria province they had shown that nursing student had positive approaches regarding care of older adults with a score of (70.7%) positive response. Faronbi et al (2017)

24% (n=58) disagreed, 25% (n=60) agreed, 25% (n=60) strongly agreed. "Mostly old population not often complains about the young generations behavior". While with this statement, 49% of the respondents disagreed. On the other hand, another study conducted by Hickey (2017) claimed that attitudes are prone by a lot of reasons including socialization matters such as a student's spiritual belief and their particular values.

## CONCLUSION

In this study, we were assessing the knowledge, attitudes, and their predictors towards elderly care among undergraduate nursing students which involved 239 nursing students. Nursing students already embrace an encouraging knowledge and attitudes towards caring for old age peoples and this condition had been powerfully influenced by social backgrounds and culture as well as family and women's accountabilities. This research concludes that most of the participants had their own knowledge, attitude and their predictors regarding care for elderly people. Knowledge of the participants were insufficient to some extent and some of the participants have a little bit knowledge about care for old age people. This is due to lack of teaching contents regarding gerontology nursing in their existing set of courses.

## RECOMMENDATIONS

This study found insufficient knowledge, attitudes and their predictors regarding elderly care in undergraduate students of nursing. Most of the participants don't know the appropriate care for their grandparents whom they lived. We should continue to make an impact on our good culture of joint families and positive attitudes towards care for old age peoples to the coming generation. It is recommended that attention should be given to include gerontology courses in the basic nursing curriculum. Nurses should specialize in elderly care and get better quality care for old age people. These facilities can increase scope of professional improvement, job satisfaction, increased motivation in the form of rewards,

continued education in gerontology nursing, attract more nursing students to this field and get a better status of work with older people .

## LIMITATIONS

The sample size was small due to limited resources. Therefore its findings cannot be generalized to the whole population.

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