

Knowledge and Attitude Regarding Care of Elderly Among Nursing Students: An Indian Perspective

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Received date: January 15, 2014, Accepted date: May 03, 2014, Published date: Mar 09, 2014

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Abstract:

There is proportionate increase in the health problems along with increase in elderly population in India. Nurses need to be well equipped with knowledge and should also have a positive attitude regarding elderly care. The current cross sectional study was undertaken with an objective to assess the knowledge and attitude of nursing students regarding care of elderly. Using purposive sampling technique, 267 undergraduate nursing students were enrolled in the study. A pre validated self-administered questionnaire was used to assess the knowledge and attitude of nursing students regarding elderly care. The knowledge questionnaire consisted of 28 multiple choice questions with one right answer. Total score was further categorized as poor, average and good as per the score obtained by the subjects. The attitude was assessed on a Likert five-point scale, ranged from 'strongly agree' with 5 score to 'strongly disagree' with 1 score. It consisted of 16 items. The total score was further categorized as unfavorable, neutral and favorable attitude as per the scores obtained. Majority (95.5%) of the subjects were females. Mean age (yrs) \pm SD was 22.61 ± 3.31 with the range of 19-48 yrs. More than half (53.9) were from urban locality. Only 29.2% were staying with the grandparents. Mean knowledge score \pm S.D. was 22.10 ± 2.91 , with the range of 9-27. Around two third (76.4) were in the good category of knowledge score. Mean attitude score \pm S.D. was 60.38 ± 8.95 with the range of 22-78. 64.6% were in the positive category of attitude. Knowledge and attitude were positively correlated.

Keywords: Knowledge; Attitude; Nursing students; Elderly care

Introduction

The percentage of elderly population is continuously increasing globally due to decline in overall death rate, decline in fertility and sustained improvement in survival. Worldwide, there are estimated 605 million people aged 60 years and above [1,2]. One out of every ten persons is 60 years or above. By 2050, this number is expected to be one out of five of 60 years or older and by 2150, one out of three persons will be 60 years or older [3]. As the age advances, there is decline in physical functions of the elderly. It leads to a loss of independence and the person become susceptible to both the acute and chronic health problems. In general, most organ systems demonstrate an age-related decline of about 0.5% per year [4]. As the people become aged, the patterns of diseases that they suffer and die from also changes. Different studies show varied results in the morbidity pattern [5-10]. The various risk factors for reduced physical function in elderly people, as identified in longitudinal studies, relate to comorbidities, physical and psychosocial health, environmental conditions, social circumstances, nutrition, and lifestyle [11,12].

Many more people thus need some kind of help for the problems caused by the diseases towards the end of life. Thus, the increased life expectancy rather has an element of morbidity and disability linked with it. Older people's continuing care needs are met in a variety of settings, including their own home, supported housing, residential care, a nursing home or hospital. Under the influence of modernization, the size and structure of families have undergone dramatic changes especially in India. Nuclear families are replacing the joint families. Families have become smaller, more dispersed and

varied. This has affected the family care and support available to the aged persons to a certain extent.

So, the current demographic and health utilization trends strongly indicate a rapidly increasing demand for nurses who are well qualified to care for older adults. There is a growing need for motivated nurses to provide care for older people. Nurses have a pivotal role as providers of care to the older people and are in a unique position to influence the quality of care. Various functions of nurses that can contribute to the optimum health and overall wellbeing of the older people include supportive, restorative, educative, life-enhancing and managerial [13]. 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 [14].

Because of these demographic changes, it is expected that nearly all nursing students will predominately have to work with older people after completing their primary education. Thus it is essential that nursing students are adequately prepared for taking care of this growing population [15]. Several studies investigating the nursing students' knowledge and attitudes toward care of older people and their willingness to work with them have been conducted in various countries. The majority of these studies have concluded that most nursing students have little knowledge and interest in working with older people [15-17]. But, there is scarcity of data regarding the topic under study in India. So, the current study was undertaken with the objective to assess the knowledge and attitude of nursing students regarding the care of elderly.

Materials and Methods

This was a cross sectional study carried out at National Institute of Nursing Education, PGIMER, Chandigarh, India. The institution runs both the postgraduate and the undergraduate nursing programs. Using purposive sampling technique, 267 undergraduate nursing students willing to participate were enrolled in the study. A pre validated self-administered questionnaire was used to obtain the data. The questionnaires were developed by the researchers after extensive literature review. The content validity was established by circulating the tool among the experts. Information was obtained regarding socio demographic data of the study subjects, their knowledge (28 multiple choice questions with one right answer) and attitude regarding care of elderly. The attitude was assessed on a Likert five-point scale, ranging from 'strongly agree' to 'strongly disagree'. All items were scored from 1 to 5, where 5 stand for 'strongly agree' and 1 for 'strongly disagree'. It consisted of 16 items. The total score was further categorized as unfavorable, neutral and favorable attitude as per the scores obtained. Total Knowledge score was also categorized as poor, average and good as per the score obtained by the subjects i.e. 9-14, 15-20, and 21-27 respectively. An informed consent was obtained from each subject. They were assured that the collected data would be used only for the research purposes, and that their decision to withdraw or refuse to participate will not have any impact on their studies.

The protocol was approved by ethics review committee of National Institute of Nursing Education. Data was collected as per the availability of the class. The routine of academic program was not disturbed. It took around 20-30 minutes by study subjects to fill the questionnaire. SPSS version 16 was used to analyze the data. Both descriptive (mean, S.D., range) and inferential statistics (Pearson Correlation test) was used. Probabilities of $p < 0.05$ were assumed as statistically significant.

Results

Demographic profile of the subjects

The mean age of study subjects was 22.61 ± 3.31 with range of 19-48 years. Majority were females (95.55%), belonged to Hindu religion (63.3%) and were residing in urban localities (53.9%). 46.3% of study

subjects had per capita income in between Rs 500-5000/month (Table 1)

Variables		n (%)
Age (yrs)		
19-23	Mean \pm SD: 22.61 ± 3.31 Range: 19-48	206(77.1)
24-30		053(19.8)
31-36		005(01.9)
≥ 37		003(01.2)
Gender		
Male		012(04.5)
Female		255(95.5)
Religion		169(63.3)
Hindu		078(29.2)
Sikh		001(00.4)
Muslim		019(07.1)
Christian		
Habitat		
Urban		143(53.9)
Rural		124(46.1)
Per capita income (Rs)		
500-5000	Mean \pm S.D: 7662.09 ± 499.3 Range: 500-30000	123(46.3)
5100-10000		100(37.4)
10100-20000		041(15.4)
Above 20000		003(01.1)

Table 1: Demographic profile of the subjects (N=267).

Items	n (%)
The client is helped to develop positive self concept and improved feeling of control by encouraging positive comments about self and give positive feedback about his/her accomplishment.	260 (97.4)
The trauma in elderly can be prevented by keeping the bed in low position and side rail up as well as adequate lighting.	259 (97.0)
Average caloric requirement in elderly is 1800 calories.	256 (95.9)
The fear and anxiety related to inability to perform usual roles and to live independently can be reduced by maintaining a calm, unhurried, confident manner while interacting with client.	254 (95.1)
Increase the physical mobility/activity tolerance in elderly by keeping supplies and personal articles within reach and use energy saving techniques.	251 (94.0)
The urinary continence in elderly can be regained by performing perineal exercises and fixing a toileting schedule.	249 (93.3)
Client can be made adjusted to changes in the family role and structure by encouraging verbalization of feelings about changes in the client and effect of these on family structure.	249 (93.3)
The elderly people avoid to go to the doctor because of the fear of diagnosis of an unknown illness.	246 (92.1)
Sound sleep can be encouraged in elderly by restricting visitors during rest period and provide care in groups.	246 (92.1)

Dehydration can be prevented in elderly by assessing skin turgor, mucous membrane and urine output.	246 (92.1)
Bed sores in elderly is prevented by keeping the skin clean and dry and the bed linens wrinkle free & dry.	244 (91.4)
Nursing concentration directed to at health promotion in elderly are primarily focused on providing a sense of control over health problem.	238 (89.1)
Memorizing capabilities of elderly person is affected due to structural changes in brain.	233 (87.3)
The care can be provided to the elderly with altered sensory perception by reducing environmental noise and speak louder and slowly with a non verbal cues when appropriate.	224 (83.9)
The constipation in elderly can be prevented by maintaining proper position, privacy and adequate ventilation, encourage to relax while attempts to defecate.	222 (83.2)
The anatomical areas most often affected by the development of pressure sores in elderly are iliac crest, and ischial tuberosities.	220 (82.4)
Balance and risk for falls are assessed in elderly by Get-up and go test instrument.	198 (74.2)
The anxiety related to the unfamiliar environment of hospital can be reduced by orienting the client to the hospital environment and explain all the diagnostic procedure to the client and the relative.	190 (72.3)
When checking the blood pressure of an elderly, the nurse needs to know that systolic blood pressure tends to rise with aging because of loss of elasticity of arteries.	188 (70.4)
The urinary retention in elderly can be prevented by avoiding suppression of urge to urinate, provide privacy, assume normal position, run water and pour water over perineum.	182 (68.2)
The advice can be given to diminish the pain and discomfort due to degenerative changes in joint cartilage is to go for mild exercises & gentle circular motion and avoid weight bearing exercise.	174 (65.2)
The nurse is working with older clients in a long term care facility. The activities performed by the nurse fosters reminiscence among these clients is 'Having story telling hours'.	170 (63.7)
Adequate nutrition can be maintained in elderly by assisting client to choose foods/fluids to provide nutritional needs as well as his/her preferences.	151 (56.6)
Among the given theories, one theory explains the psychosocial development aspect 'integrity versus despair' is Erickson's theory.	125 (46.8)
Person is considered elderly above the age of 65years.	121 (45.3)
Orientation, memory, attention, language, recall are tested in elderly by the use of Folstien mini- mental status instrument.	099 (39.1)
We age because of wear and tear of important organs by continuous functioning.	092 (34.5)
The adequate respiratory function can be maintained in elderly by instructing the client deep breathing exercises.	048 (18.0)

Table 2 a: Knowledge regarding care of elderly among the nursing students (correct response).

Categorization of knowledge score		n%
Poor (9-14)	Mean ± S.D:22.10 ± 2.91 Range: 09-27	001 (00.4)
Average (15-20)		062 (23.2)
Good (21-27)		204 (76.4)

Knowledge regarding care of elderly

Table 2a shows the correct responses given by the subjects regarding care of elderly for the various questions in descending order. For majority of the questions, more than 80% of the subjects gave the correct answer. Mean knowledge score was 22.10 ± 2.91 with the range of 09-27. Most of the subjects (76.4%) had good knowledge regarding care of elderly. 23.2% of subjects had average knowledge. Only 0.4% of subjects had poor knowledge regarding care of elderly (Table 2b).

Table 2b: Mean score and categorization of knowledge score regarding care of elderly (Maximum attainable score: 28).

Items	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
In India, there is an urgent need to understand the health and disease profile of elderly and their care by nurses.	15 (5.6)	2 (0.7)	8 (3.0)	120 (44.9)	122 (45.7)
Health needs of elderly are different from other age group population.	15 (5.6)	9 (3.4)	8 (3.0)	131 (49.1)	104 (39)

Elderly are more prone to fall ill.	14 (5.2)	3 (1.1)	32 (12)	136 (50.9)	82 (30.7)
Elderly are the burden on the family and the society.	186 (69.7)	37 (13.9)	21 (7.9)	8 (3.0)	15 (5.6)
Elderly are abused/neglected.	28 (10.5)	27 (10.1)	63 (23.6)	125 (46.8)	24 (9.0)
Alcoholism and drug is a problem among elderly.	30 (11.2)	79 (29.6)	107 (40.1)	41 (15.4)	10 (3.7)
We need to focus on social support to elderly.	7 (2.6)	9 (3.4)	17 (6.4)	141 (52.8)	93 (34.8)
There is the need to establish more special geriatric clinic.	12 (4.5)	5 (1.9)	8 (3)	112 (43.8)	125 (46.8)
There is a need to promote elderly health by routine health check-ups, organizing health camps and health education	11 (4.1)	4 (1.5)	2 (0.7)	106 (39.7)	144 (53.9)
There is a need for mobile clinics to reach the elderly population staying in rural/remote areas.	12 (4.5)	7 (2.6)	17 (6.4)	99 (37.1)	132 (49.4)
Elderly who are unable to perform activities of daily living should be provided care, love, sympathy and assistance in the performance of the activities by the family members.	11 (4.1)	6 (2.2)	11 (4.1)	83 (31.1)	156 (58.4)
It is more interesting to work in an elderly people ward rather working in other wards.	8 (3.0)	21 (7.9)	115 (43.1)	102 (38.2)	21 (7.9)
Many elderly tends to behave like a child.	10 (3.7)	27 (10.1)	77 (28.8)	120 (44.9)	33 (12.4)
Many elderly bore by narrating their past experiences.	27 (10.1)	96 (36)	94 (35.2)	47 (17.6)	3 (1.1)
It is difficult to understand and convenience to elderly.	10 (3.7)	97 (36.3)	76 (28.5)	76 (28.5)	8 (3.0)
Elderly may be cheerful and may have a good sense of humour.	6 (2.2)	30 (11.2)	71 (26.6)	132 (49.4)	28 (10.5)

Table 3a: Attitude regarding care of elderly among nursing students.

Categorization of attitude	Mean ± SD: 60.38 ± 8.95 Range: 22-78	n (%)
Negative (22-40)		014 (05.3)
Neutral (41-59)		078 (30.1)
Positive (60-78)		175 (64.6)

Table 3b: Mean score and categorization of attitude score regarding care of elderly (Maximum attainable score: 80)

Attitude regarding care of elderly among the nursing students (Table 3 a and 3 b)

Table 3a shows attitude of the nursing students regarding care of elderly in details. Most of the subjects (64.6%) had positive attitude regarding care of elderly. 30.1% subjects had neutral attitude. Only 5.3% had negative attitude regarding care of elderly. Mean attitude score was 60.38 ± 8.95 with the range of 22-78 (Table 3b).

Correlation between knowledge and attitude

There was a significant correlation between knowledge and attitude regarding care of elderly ($r=0.1$). As knowledge increases the attitude became more positive (Table 4).

		Attitude	Knowledge
Attitude	Pearson Correlation	1	.155*
	Sig. (2-tailed)		0.011
	N	267	267
knowledge	Pearson Correlation	.155*	1
	Sig. (2-tailed)	0.011	

	N	267	267
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Table 4: Correlation between knowledge and attitude

Correlation is significant at the 0.05 level (2-tailed).

Discussion

There is tremendous rise in the elderly population worldwide. Since nursing students are the future care providers for the aged population, understanding their attitude and knowledge towards elderly is vital. The current study was conducted to elucidate the attitude and knowledge of nursing students regarding care of elderly.

Geriatric nursing as speciality is still in an infancy stage in India. Even there is no separate subject on elderly care in the undergraduate and post graduate nursing curricula. 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. The hospital 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. Even then, the students in the current study demonstrated fairly good level of knowledge and attitude towards care of elderly people. However, in other studies, the mean knowledge score regarding aging has been reported to be 11.13 (46.37%) and 14 (56%) among the nursing students [18,19]. Lack of knowledge and interest in the issue of older people care has also been reported by Deltsidou A et al[20]. Duggan S et al has recommended to evaluate and revise the contents of the courses to ensure that the knowledge, skills and attitudes required to work with older people are accorded appropriate value and attention [21].

There was a significant correlation between knowledge and attitude regarding care of elderly in the current study. As knowledge increases the attitude became more positive. This could be explained by the fact that majority of the participants in the present study were female and females especially in the Indian situations are the one who take for each and every member of the family and have also been shown to be more positive attitudes toward older people than males. As the number (male vs females) in the current study was not comparable, so statistically no comparison was made. Another thing is that the culture of joint family is still prevailing in India, and this increases the bond amongst the family members. It has been documented that attitudes influence an individual's behavior and people with a positive attitude towards anyone have more positive thoughts about them [14]. Attitude towards the older people is considered as an important factor in providing them care. The positive attitude among nursing students toward older people has also been documented by other studies [22,23]. In the current study around 60% of the subjects strongly agreed that elderly are not the burden on the family and the society. They were of the opinion that there is a need to promote elderly health by routine health check-ups, organizing health camps and health education. Elderly who are unable to perform activities of daily living should be provided care, love, sympathy and assistance in the performance of the activities by the family members.

However, Oyetunde et al have reported that nurses have a negative attitude towards the care of the elderly even though they displayed a fairly good knowledge of geriatric care. It has been suggested that effective care of the elderly requires special training, provision of geriatric ward, adequate staffing to reduce stress and improve quality

care. There is need for continuing education on quality care to improve nursing practice in the care of the elderly [24]. If students are provided with the relevant education, they can deliver quality care and develop positive attitudes in caring for older people in their professional practice [25,26].

The limitation of this study is that it is confined to the population of nursing students at one institute only. Therefore, these findings cannot be viewed as a good representation of all nursing students.

Conclusion

In light of the above findings, it is concluded that nursing students have good knowledge and positive attitude regarding care of elderly. Because of the demographic transition, it is suggested that consideration should be given to the inclusion of more structured gerontology courses in the basic nursing curriculum. This study could be replicated to larger sample and in different settings to generalize the findings. This study may help the nursing educator to plan for increasing interest of nursing students by encouraging discussion related to the elderly, present their problems and emphasize the positive aspects of aging.

Competing Interests

The authors declare that they have no competing interests.

Acknowledgement

The authors would like to thank all nursing students who participated in this study.

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