

## Research Article

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# Attitude of Nurses towards Care of Elderly People in Tribhuvan University Affiliated Teaching Hospitals of Kathmandu Valley

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## Abstract

**Background:** Nurses play an essential role in the provision of health services and health promotion for the elderly people. This study aims to find out the attitude of nurses towards care of elderly people in Tribhuvan University (TU) affiliated teaching hospitals of Kathmandu valley, Nepal.

**Methodology:** A descriptive cross-sectional study was conducted among 236 nurses working in TU affiliated teaching hospitals in Kathmandu. Data was collected proportionately from four hospitals using semi structured questionnaire and “Multifactor Attitudes Questionnaires (MAQ)” for assessing attitude of nurses towards care of elderly. Data was entered in EpiData version 3.1 and analyzed using IBM SPSS version 16. Descriptive as well as inferential statistics namely Kruskal-Wallis and Mann-Whitney test were used for analyzing data.

**Results:** The overall response rate was 98% (236 out of 240 nurses). The mean age of participants was 28.74 ±7.43 years. The mean attitude score with standard deviation was 63.63±6.12 showing positive attitude of nurses in overall in MAQ scores of range 20 to 120 (mean being 60). Attitude towards elderly among nurses was found to be associated with their age, working hours and qualification. These factors should be considered in nursing education to improve their attitude towards care of elderly people.

**Keywords:** Attitude, Nurse, Care, Elderly, Kathmandu

Tweetable Abstract:

## Introduction

The proportion of elderly population is continuously increasing globally due to decline in overall death rate, decline in fertility and sustained improvement in survival [1]. Worldwide, there are estimated 8.5% (617 million) people aged 65 years and over and expected to rise to 17% of world's population by 2050 [2]. In Nepal, the elderly population accounts for about 8.1 percent of the total population [3].

Ageing is a pattern of life changes that occurs as one grows older. It is also considered as the natural process. There may be three major causes for the growth of ageing population – firstly the increasing life expectancy, secondly is the decreasing fertility and lastly is migration. Both the developed and developing countries of the world are experiencing population ageing and there is growing concern about population ageing in the world [4]. The ageing population is one of the most challenging problems of modern societies which have a direct impact upon public health and social care systems [5]. More than half of the elderly populations, 414 million, live in Asia. At this rate, in the year 2050, older people will outnumber young people all over the world for the first time [6]. In Nepal, a majority (over 60%) of the elderly population are in their sixties [7].

Increase in the aging population can have direct impact on

healthcare, since elderly population tends to have disproportionately more chronic illnesses and disabilities. In general, a multi-disciplinary team approach using gerontology and geriatric expertise is required in order to provide high-quality care to the ageing population. To provide high-quality care, future healthcare systems are increasingly in need of more knowledgeable nurses in order to meet the specific healthcare needs of older people [8].

Nurses are the primary caregivers for many older persons, and because of the uniqueness of their profession, their role is of great importance in designing, implementing and evaluating health care of older adults in primary, hospital, and long-term care [9]. Although their role in providing care to the elder patient is critical, studies show that some nurses and nursing students lack adequate knowledge about ageing, and do not possess the competencies or attitudes necessary for providing quality care to older persons [10,11].

Attitude is considered as a settled opinion or way of thinking; behavior reflecting this and perception as an interpretation or impression based on one understandings of something. Attitude plays as internal stimuli for certain action towards objects [12]. The quality of care provided for older people is directly related to attitudes of health care professionals. Negative attitudes towards

older people have the potential to adversely affect the quality of aged care, so it is important that health personnel approach the care of older people with a positive attitude [13,14]. If nurses have a poor attitude toward older adults, this can seriously impact the care provided and the ability to staff an aged care workforce. Such concerns will arise in many folds in the coming decades given the current rate of ageing population growth [15]. Ajzen and Fishbein's "Theory of Reasoned Action" suggests that attitudes can influence individual's behavior and that people with a positive attitude towards anyone will have more positive thoughts about them [16]. Therefore, assessing attitude of nurses towards care of elderly people will be helpful to generate evidence which could be useful in improving geriatric care. The objective of the study was to find out the attitude of nurses towards care of elderly people in TU affiliated teaching hospitals of Kathmandu valley.

## Methods

A cross-sectional study was performed in all four TU affiliated teaching hospitals in Kathmandu Valley. They were Tribhuvan University Teaching Hospital (Maharajgunj), Manmohan Cardio Thoracic Vascular and Transplant Center (Maharajgunj), KIST Medical College and Hospital (Imadol) and Shree Birendra Hospital (Chhauni).

The study populations were all the nurses working in the TU affiliated Teaching Hospitals of Kathmandu Valley. At least six months of working experiences was considered as inclusion criteria. The sample size of the study was 240 considering 50% prevalence, 95% confidence limit, 6% margin of error and 995 finite population size and 14% non-response and calculated using n4studies [17]. For sampling, the researcher first listed out the all total available nurses (995) who fulfill the eligibility criteria from each TU affiliated teaching hospitals. Then, the required number of samples (240) for each hospital were selected randomly proportionate to the number of nurses working in the hospital.

This study was carried out as partial requirement of Master of Psychology under Faculty of Humanities in Tribhuvan University and approved by research committee of psychology department of Tri-Chandra Multiple Campus. The study participants were explained about the aim of the study and written informed consent was obtained prior to their participation. Permission were obtained from the study hospitals and self-administered questionnaires were distributed to the nurses of four hospitals who were conveniently available to researcher on the period of data collection in their hospital during regular duty hours with taking permission of concerned authority. The answering time for questionnaire was 30-35 minutes. Participation was voluntary and they were allowed objecting their participation at any point of study period. The filled questionnaire was collected on convenience of the study participants.

The tool for the study contained questionnaire related to socio-demographic and Multifactor Attitudes Questionnaires (MAQ) for assessing attitude of nurses towards care of elderly. The MAQ is a standard tool originally developed by Dr. Angela which has been used widely to explore the attitude of nurses' towards working with older people [18]. The tool MAQ includes 20 statements. For each statement, participant was required to respond on a five-point Likert scale: 1= strongly agree, 2= agree, 3= unsure, 4= disagree, and

5= strongly disagree. Seven of the 20 statements were positive and remaining 13 were negative statements. The negative score was reversed, such that higher score for each statement indicates a more positive attitude versus a lower score indicates a more negative attitude. A total MAQ score ranging from 20 to 100 was obtained by adding all of the scores from the 20 statements.

All data was compiled, classified, coded manually by researcher in the same day of data collection then data was entered into EpiData version 3.1 and exported into SPSS version 16 for further analysis. First of all, data was analyzed by using descriptive statistics. Then inferential statistics namely Kruskal-Wallis and Mann-Whitney test were used at 5% level of significance to analyze the association between background variables and attitude of nurses towards care of elderly people.

## Results

The overall response rate was 98% (236 out of 240 nurses). The participants were from age 20 to 58 years and the mean age was  $28.74 \pm 7.43$  years. Similarly, 51.7% were married, 52.5% of the participants lived in nuclear family and 91.1% followed Hinduism. Similarly 40.3% of participants had Bachelor in Nursing Science as their educational qualification and majority (89.4%) of participants worked for 48 hours per week. Similarly, one fourth (25.8%) participants had more than 10 years of work experience in caring for people. Most (84.7%) of the participants were currently involved in care of elderly people. Similarly, majority (58.1%) of the participants had experience of living with elderly person. (Table 1)

The mean attitude score with standard deviation was  $63.63 \pm 6.12$  in overall in MAQ scores of range 20 to 120 (mean of scale score being 60). The highest mean score was obtained in resources domain ( $15.68 \pm 1.86$ ) and the lowest mean score was obtained in working environment domain of MAQ. Among individual items, highest score was for 'Care of older people as a specialist subject should be given more curriculum time in the training of health care professionals' (mean= $4.41 \pm 0.67$ ) and the least score was obtained for 'There are too many routine tasks in care of older people' (mean= $2.02 \pm 0.76$ ) (Table 2). The calculated value of Cronbach's alpha for 20 items MAQ was 0.711 showing appropriate internal consistency in measurement of attitude.

The factors significantly associated with attitude towards care of elderly were age, qualification, and working hour ( $p < 0.05$ ). (Table 3 and 4)

**Table 1: Socio-demographic Characteristics of the participants (n=236)**

| Characteristics                       | Number            | Percentage |
|---------------------------------------|-------------------|------------|
| <b>Age in years</b>                   |                   |            |
| Below 25                              | 64                | 27.1       |
| 25-29                                 | 102               | 43.2       |
| 30 and above                          | 70                | 29.7       |
| Mean $\pm$ SD= $28.74 \pm 7.43$ years | Range:20-58 years |            |
| <b>Types of family</b>                |                   |            |
| Nuclear                               | 124               | 52.5       |
| Joint& Extended                       | 112               | 47.5       |

|  |     |       |   |              |             |                    |  |
|--|-----|-------|---|--------------|-------------|--------------------|--|
| <b>Ethnicity</b>                           |     |       |   |              |             |                    |  |
| Privileged caste (Brahmin/Chhetri/Thakuri) | 80  | 33.9  | As older people become increasingly old they become more irritable, touchy and unpleasant.  | 2.14         | 0.897       |                    |  |
| Janajati                                   | 134 | 56.8  | The thought of being old worries me.  | 2.59         | 1.093       |                    |  |
| Dalit                                      | 22  | 9.3   |   |              |             |                    |  |
| <b>Religion</b>                            |     |       | <b>Resources</b>  | <b>15.68</b> | <b>1.86</b> | <b>15.44-15.91</b> |  |
| Hinduism                                   | 215 | 91.1  | Working with older people can be very depressing.   | 3.53         | 1.076       |                    |  |
| Other than Hinduism                        | 21  | 8.9   | Care of older people should be taught by specialists  | 3.56         | 1.076       |                    |  |
| <b>Marital Status</b>                      |     |       | Working in care of older people could be described as both challenging and stimulating.   | 4.19         | 0.766       |                    |  |
| Married                                    | 114 | 48.3  | Care of older people as a specialist subject should be given more curriculum time in the training of health care professionals.     | 4.41         | 0.668       |                    |  |
| Unmarried                                  | 122 | 51.7  |   |              |             |                    |  |
| <b>Educational Qualification</b>           |     |       | <b>Working Environment</b>  | <b>10.69</b> | <b>1.61</b> | <b>10.48-10.89</b> |  |
| Certificate Nursing                        | 80  | 33.9  | In general, working conditions in Care of Older People are not conducive to recruiting and retaining staff.                         | 2.36         | 0.919       |                    |  |
| Bachelor and above                         | 156 | 66.1  | I feel that older people are cared for in inadequate and depressing settings.   | 2.08         | 0.882       |                    |  |
| <b>Working hours</b>                       |     |       | If care of older people wards had better resources it would be easier to attract staff.   | 4.24         | 0.872       |                    |  |
| 42 hours per week                          | 25  | 10.59 | There are too many routine tasks in care of older people.   | 2.02         | 0.763       |                    |  |
| 48 hours per week                          | 211 | 89.40 |   |              |             |                    |  |
| <b>Duration of Working Experience</b>      |     |       | <b>Professional Esteem</b>  | <b>12.02</b> | <b>2.48</b> | <b>11.70-12.33</b> |  |
| < 3 years                                  | 82  | 34.7  | People working in care of older people are deemed to have a lower professional status than those who work in high technology areas. | 2.75         | 1.185       |                    |  |
| 3-10 years                                 | 93  | 39.4  | On the whole there is a lack of career advancement in care of the older person.   | 2.92         | 1.119       |                    |  |
| >10 years                                  | 61  | 25.8  | I feel the less experienced and most out-of-date doctors and nurses seem to work in care of older people.                           | 3.35         | 1.075       |                    |  |
| <b>Working Ward</b>                        |     |       | I have chosen to/would consider a career in geriatric medicine/nursing.   | 3.02         | 0.976       |                    |  |
| High Dependent Ward                        | 76  | 32.2  |   |              |             |                    |  |
| Special Ward                               | 55  | 23.3  | <b>Specialist Status</b>  | <b>12.75</b> | <b>2.27</b> | <b>12.45-13.04</b> |  |
| General Ward                               | 105 | 44.5  | A qualified nurse/doctor does not need to have specialist training in order to deliver excellent care for older people.             | 3.39         | 1.182       |                    |  |
| <b>Perceived Workload</b>                  |     |       |   |              |             |                    |  |
| High workload                              | 105 | 44.5  |   |              |             |                    |  |
| Satisfactory and low work load             | 131 | 55.5  |   |              |             |                    |  |
| Presence of elderly in home                | 137 | 58.1  |   |              |             |                    |  |
| Studying Geriatric Course                  | 157 | 66.5  |   |              |             |                    |  |
| Currently Involved in care of Elderly      | 200 | 84.7  |   |              |             |                    |  |

**Table 2: Descriptive Statistics of Multifactorial Attitude Statement among Participants (n=236)**

| Statements   | Mean         | S.D         | C.I                |
|--|--------------|-------------|--------------------|
| <b>Ageism</b>  | <b>12.47</b> | <b>2.35</b> | <b>12.16-12.77</b> |
| Older people should have access, if appropriate, to medical and surgical procedures regardless of age. | 4.33         | 0.954       |                    |
| On the whole, communicating with older people can be very frustrating                                  | 3.41         | 1.070       |                    |

|  |              |             |
|--|--------------|-------------|
| On the whole, people who work in care of the older person are enthusiastic about their work.                           | 3.56         | 0.890       |
| Working with older people is more demoralizing that working in high technology areas                                   | 3.31         | 1.036       |
| Other health care professionals do not seem to appreciate that care of the older person is a highly skilled specialty. | 2.49         | 1.000       |
| <b>Mean attitude score in MAQ</b>  | <b>63.63</b> | <b>6.12</b> |

**Table 3: Association of Attitude with Socio-demographic Characteristics of the participants**

| Socio-demographic Characteristics  | Attitude Score Median (Q3-Q1) | Test score | p-value |
|------------------------------------|-------------------------------|------------|---------|
| <b>Age in years</b>                |                               | KW: 11.59  | 0.003*  |
| Below 25                           | 61 (57-66.5)                  |            |         |
| 25-29                              | 66 (60-69)                    |            |         |
| 30 and above                       | 65 (61-69)                    |            |         |
| <b>Ethnicity</b>                   |                               | KW: 2.31   | 0.315   |
| Privileged caste group             | 66 (60.5-68)                  |            |         |
| Janajati                           | 64 (59-68)                    |            |         |
| Dalit                              | 62 (57-67)                    |            |         |
| <b>Religion</b>                    |                               | MW: 2191   | 0.823   |
| Hinduism                           | 64 (59.5-68)                  |            |         |
| Other than Hinduism                | 63 (60-68)                    |            |         |
| <b>Marital status</b>              |                               | MW: 6273   | 0.193   |
| Unmarried                          | 64 (59-68)                    |            |         |
| Married                            | 65 (61-68)                    |            |         |
| <b>Family type</b>                 |                               | MW: 6757   | 0.721   |
| Nuclear                            | 64 (59-68)                    |            |         |
| Joint and extended                 | 64.5 (60-68)                  |            |         |
| <b>Presence of elderly in home</b> |                               | MW: 5998   | 0.129   |
| Yes                                | 65 (60-68)                    |            |         |
| No                                 | 63 (59-67)                    |            |         |

\* Statistically significant

MW: Mann-Whitney test, KW: Kruskal-Wallis test

**Table 4: Association of Attitude with Educational and Work related Characteristics of the Participants**

| Characteristics                      | Attitude score Median (Q3-Q1) | Test score | p-value |
|--------------------------------------|-------------------------------|------------|---------|
| <b>Qualification of Participants</b> |                               | MW: 4707.5 | 0.002*  |

|   |                |            |         |
|---|----------------|------------|---------|
| Certificate Nursing                         | 61 (57-67)     |            |         |
| Bachelor and above                          | 66 (61-68)     |            |         |
| <b>Working hours per week</b>               |                | MW: 1443   | <0.001* |
| 42 hours                                    | 59 (53-62)     |            |         |
| 48 hours                                    | 65 (61-68)     |            |         |
| <b>Working Ward</b>                         |                | KW: 5.213  | 0.074   |
| High Dependent Ward                         | 64.5 (59.5-68) |            |         |
| Special Ward                                | 61 (58-67.5)   |            |         |
| General Ward                                | 65 (61-68)     |            |         |
| <b>Duration of Work Experience</b>          |                | KW: 1.798  | 0.407   |
| <3 years                                    | 64 (59-67)     |            |         |
| 3-10 years                                  | 65 (60-68)     |            |         |
| >10 years                                   | 65 (61-69)     |            |         |
| <b>Currently involve in care of elderly</b> |                | MW: 3001.5 | 0.112   |
| Yes   | 64.5 (60-68)   |            |         |
| No  | 61.5 (57-68)   |            |         |
| <b>Perceived work load</b>                  |                | MW: 6547.5 | 0.526   |
| A lot                                       | 64 (59-68)     |            |         |
| Satisfactory or low load                    | 65 (60-68)     |            |         |
| <b>Knowledge</b>                            |                | MW: 6411   | 0.296   |
| < Median Score                              | 64 (59-68)     |            |         |
| >Median Score                               | 65 (60.5-68)   |            |         |

\* Statistically significant

MW: Mann-Whitney test,

KW: Kruskal-Wallis test

## Discussion

Our study identified attitude of nurses in overall and on different 20 individual items in MAQ. The mean attitude score in our study participants was 63.63±6.12 which showed positive attitude of nurses in overall as MAQ score ranges from lowest 20 to highest 120 and mean being 60. This finding is similar to the findings of studies conducted among nursing students in Jordan, Taiwan and Saudi Arabia [13, 19, 20]. Mean score in our study was slightly lower than the mean scores reported among American, Scottish and Swedish nurses in which mean ranged from 66 to 69.21.

The highest mean for the statement in MAQ: 'Care of older people as a specialist subject should be given more curriculum time in the training of health care professionals' reveals that majority of the participants found this as important. Mean scores above or close to 4 were also found in 'Working in care of older people could be described as both challenging and stimulating', 'older people should have access, if appropriate, to medical and surgical procedures regardless of age' and 'on the whole, people who work in care of the

older person are enthusiastic about their work'. Similar findings were reported by Kydd et al for nurses and nursing students [21], and Swanlund and Kujath suggested that dynamic education and training would enhance nursing students' receptivity to the specialty [22].

Our study showed the significant association between attitude and higher age. This might be due to more experience and exposure to elderly care. This was also observed in the study done among Medical nursing students of Chung Shan Medical school of Taiwan [19]. Likewise, similar result was also found in a study done among the Turkish Nursing students [23]. The result of this study is also supported by the study done among nurses in Iran [24].

Moreover, this study also found the significant differences between attitude and higher qualification ( $p < 0.05$ ) where the most of participants had BNS as qualification. The significant association between attitude and qualification was also in line with the study done in Taiwan [19] and study done in United Kingdom [25]. Thinking and learning acquired by formal education at university might have played a role in shaping of attitude so affective domain in nursing curriculum should be focused.

There is also significant association between attitude and higher working hours ( $p < 0.05$ ) of the participants. Nurses working for long hours had better attitude towards elderly care. However, the underlying mechanism for this association is unclear as studies reported in literature are not consistent. A study done in 2012 in United Kingdom showed no significant differences result between attitudes of nurses towards care of elderly and working hours [25]. A further research focusing on working hours and attitude is required to establish this association.

Nurses working in general ward had higher attitude scores in current study. Our study could not show significant association between nurses' attitudes toward the elderly and working ward ( $p = 0.074$ ). A study done in Nigeria showed a significant association between them [24]. This might be due to chance or low power of our study to observe the association.

Further statistical analysis of this study data did not reveal any significant association and relationship between the attitude of the nurses and their knowledge of ageing towards care of the elder people. The non-significant association and relationship between attitude and knowledge observed in this study may be related to differences in sampling variability. Further large scale study in this environment will likely to throw more light to this.

## Conclusion

Most of participants had positive attitude and believed in care of older people as a specialist subject should be given more curriculum time in the training of health care professionals. Age of the participants, formal nursing education and working hours were associated with shaping the attitude of the nurses. These factors should be considered in nursing education to improve their attitude towards care of elderly people.

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