Cheerful Freshman nursing students 4 tea 4 – 71 3 p 3 1 68 70 72 74 78
Indifferent
Depressed
Dislikable
Unfriently
Weak
Poor
Bad
Non-nursing students
0 0 0 0 0 0 0 0 0
Senior nursing students
Non-nursing students
71.5

PURPOSE
To evaluate the attitude of Japanese nursing and non-nursing students toward the elderly with dementia.
To investigate the effects of students’ background data on their attitudes shown.

METHODS
Design: Descriptive Study
Subjects: Convenience sample of 214 students with a mean age of 20.7 in a national university in Japan.
  - Assignments of the subjects into three groups:
    Group A (n=77) : Students receiving no formal health-related education and clinical experience training.
    Group B (n=60) : Freshman nursing students who have limited professional knowledge and no clinical experience with demented elderly people.
    Group C (n=77) : Senior nursing students who have profound nursing knowledge and clinical experience with the elderly.
Instruments: A semantic differential scale with 25 bipolar pairs of adjectives to explore the attitude.
  - Each score was added up to obtain an overall attitude score with possible range between 25 and 125.
Analyses:
  - Computed means and standard deviations for each attitude variable.
  - Examined group differences on each attitude variable using analysis of variance, ANOVA.
  - Examined the relationship between students’ demographic and personality variables and their attitude toward the elderly with dementia.

RESULTS
- The results of one-way ANOVA revealed the significant differences among those three groups, F(2, 208) =7.60, p=.001. Post Hoc comparisons using Tukey HSD procedure demonstrated the significant differences between senior nursing students and both non- and freshman nursing students (p<.003). Senior nursing students outscored their freshman peers and non-nursing students.

CONCLUSIONS
Senior nursing students who have more professional nursing knowledge and clinical interaction with elderly people with dementia had significantly more positive attitudes toward this group of people than non-
and freshman nursing students.
Both nursing and non-nursing students who have experiences of interacting with the demented elderly or participate in related voluntary activities generally tend to have more positive attitude toward this group of people.
Therefore, having sufficient knowledge about dementia and interacting experience may be of importance in understanding elderly. The results of this study will guide future educational design for both non-nursing and nursing students.

Figure 1. Comparison of Mean of the Overall Attitude Score among those three groups of students.

Figure 2. 4.3 Comparing students’ scores of 12 attitudes toward elderly with dementia.

Other results of analyses of relationships among demographic variables and level of empathy and scores of attitudes toward the elderly.
- The scores on the level of empathy and attitudes toward the elderly showed significant correlations (r=.26, p<.01).
- Students who had an experience of interacting with and volunteering for demented elderly had significantly more positive attitudes toward dem ented elderly than both non- and freshman nursing students.

REFERENCES
1) School of Biomedical Sciences, Nagasaki University, Nagasaki, Japan 2) Tamadiving, Kagoshima, Japan 3) Fukuoka Higashi Medical Center, Fukuoka, Japan 4) Tokyo Metropolitan Geriatric Hospital & Institute of Gerontology, Tokyo, Japan 5) Nagasaki University Hospital, Nagasaki, Japan

BACKGROUND
Population aging is a global trend. Japan in which 25% of the total population were 65 years or older in 2013 (Cabinet Office, 2014) is one of the most rapidly aging nations in the world.
- It is reported that more than half of the elderly people who require long-term care su ffer from dementia in Japan (Health, Labor and Welfare Statistics Association, 2011).
- Research showed that students studying in health care related fields in Japan usually demonstrate a relative higher level of feeling of sorrow or fear for the elderly with cognitive impairment (Okumura & Kuze, 2009).
- Health care workers’ attitude toward elderly people is found to influence the quality of nursing care provided to them (Shimizu, 2010); therefore, it may result in poorer quality of life for the elderly.

RESULTS
The scores on the level of empathy and attitudes toward the elderly showed significant correlations (r=.26, p<.001).
- For the 12 kinds of attitude, senior nursing students demonstrated significantly more positive attitude toward dem ented elderly than both non- and freshman nursing students.

CONCLUSIONS
Senior nursing students who have more professional nursing knowledge and clinical interaction with elderly people with dementia had significantly more positive attitudes toward this group of people than non-
and freshman nursing students.
Both nursing and non-nursing students who have experiences of interacting with the demented elderly or participate in related voluntary activities generally tend to have more positive attitude toward this group of people.
Therefore, having sufficient knowledge about dementia and interacting experience may be of importance in understanding elderly. The results of this study will guide future educational design for both non-nursing and nursing students.

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