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#### Effects of participatory learning teaching in gerontological nursing practicum course on attitudes towards older people among nursing students\*

#### บทความวิจัย

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#### บทคัดย่อ

ทัศนคติของผู้เรียนมีอิทธิพลต่อผลลัพธ์การเรียนรู้ และรูปแบบการเรียนการสอนที่แตกต่างกันอาจมีผลต่อทัศนคติของผู้เรียน การวิจัยกึ่งทดลองนี้มีวัตถุประสงค์เพื่อศึกษาผลของการเรียนรู้อย่างมีส่วนร่วมต่อทัศนคติของผู้เรียน โดยการเปรียบเทียบความแตกต่างของทัศนคติของนักศึกษาต่อผู้สูงอายุก่อนและหลังได้รับการเรียนการสอนแบบมีส่วนร่วมในวิชาปฏิบัติการพยาบาลผู้สูงอายุ กลุ่มตัวอย่างเป็นนักศึกษาหลักสูตรพยาบาลศาสตรบัณฑิต ชั้นปีที่ 3 คณะพยาบาลศาสตร์ มหาวิทยาลัยขอนแก่น จำนวน 93 คน เครื่องมือวิจัยเป็นแบบสอบถามทัศนคติต่อผู้สูงอายุไทย วิเคราะห์ข้อมูลด้วยสถิติ Paired Sample t-test ผลการศึกษาพบว่าค่าเฉลี่ยคะแนนทัศนคติต่อผู้สูงอายุเพิ่มขึ้นอย่างมีนัยสำคัญทางสถิติหลังการเรียนการสอนแบบมีส่วนร่วม ทั้งค่าเฉลี่ยคะแนนทัศนคติโดยรวม ( $t = 4.032, p = 0.000$ ) ค่าเฉลี่ยคะแนนทัศนคติจากข้อความเชิงบวก ( $t = 2.041, p = 0.044$ ) และค่าเฉลี่ยคะแนนทัศนคติจากข้อความเชิงลบ ( $t = 4.248, p = 0.000$ )

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#### Abstract

Learners' attitudes have affected learning outcomes. Several learning methods might influence learners' attitudes differently. This quasi-experimental study aimed to examine effects of the Participatory Learning Teaching (PLT) on students' attitudes by comparing the difference of the attitudes towards older people before and after participating in PLT in Gerontological Nursing Practicum Course. The subject was 93 third-year nursing students of Faculty of Nursing, Khon Kaen University. The research instrument was 'the

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initial cross-cultural assessment of attitudes toward the elderly Thai version'. Paired sample t-test was used to analyze data. The results showed that mean scores of the attitudes towards older people after PLT was significantly higher than those before PLT in overall ( $t = 4.032$ ,  $p = 0.000$ ), positive ( $t = 2.041$ ,  $p = 0.044$ ), and negative ( $t = 4.248$ ,  $p = 0.000$ ) items of the questionnaire.

**keywords:** participatory learning teaching, nursing student, attitudes, gerontological nursing practicum

## Introduction

Gerontological nursing is an essential course for BNS program. However, due to the nature of BNS program which aims to produce general nurse, gerontological nursing has only six credits in the program. The students will practice this subject for the first time when they reach their 3<sup>rd</sup> year. However, caring of older people is different from caring for other age groups due to changes in aging process. These changes can lead to difficulties for older people in many aspects that need specific assistant and care, for example, activity of daily living, communication, social and financial abilities. Several studies reported that young people including nursing students have negative attitudes toward older people.<sup>1-3</sup> They stereotyped older people as being passive, frustrating, boring, fragile, depressed, lonely and useless.<sup>1,4-5</sup> In addition, studies found that attitudes of the health care teams and nursing students towards older people related directly to the quality of care provided for older people<sup>6-7</sup> and stereotype affected on quality of practice in negative way.<sup>8</sup> In Thailand, previous study found that nursing students of private international university had moderate level of attitudes toward older adults.<sup>9</sup> Another study indicated that nursing students who had positive attitude towards older people obtained better nursing skills and age-friendly nursing care behaviors.<sup>10</sup> This means that negative attitude is the major barrier in

provision quality care for older people, therefore, teaching and learning for the nursing students should include strategies to promote positive attitudes and reduce negative attitudes towards older people in order to provide good quality of nursing care.

The researchers, who have supervised students in the Gerontological Nursing Practicum Course clinical practice, concerned about improving of attitudes towards older patients among nursing students. Numbers of credits in the BNS program and student's background could be hindrance, and extra preparation was needed for improvement of students' attitudes in order to achieve learning outcomes and course expectation. PLT allows sharing of experience and discussion, which promotes students' abilities to learn from various points of views. It builds relax cooperative class atmosphere that can enhance student's confidence in thinking and behaving. Learning by own self encourages creativity and innovative development. This might help students gain more understanding of older people and awareness on individualization that accumulated from their whole life learning experiences. Therefore, the researchers were interested in using PLT to promote attitudes towards older people among students attending the Gerontological Nursing Practicum Course. The findings of this study will be benefit for future planning of teaching and learning for clinical practice in gerontological nursing.

## Purpose

The purpose of this study was to examine the effects of PLT in Gerontological Nursing Practicum Course on attitudes towards older people among nursing students.

## Conceptual framework

Participatory learning teaching (PLT) was applied as a conceptual framework of the study. PLT is a method of active learning and requires interactions between learners and learners, as well as learners and teachers. Key components of PLT, the conceptual framework for providing teaching and learning activities, are experiential learning and group process. PLT gains high satisfaction from learners. Reflection and discussion process lead to more understanding and positive conceptualization. It includes trial and error in building relationship with others, application of learning to solve problems and cope with stress from activities. Students can link this learning to their life skills and have self-development for happy living in society.<sup>11</sup>

## Methods

The quasi-experimental research applied the One-Group Pretest-Posttest design to test the effectiveness of PLT on attitudes towards older people. Sample were 93 full time 3<sup>rd</sup> year nursing students of Faculty of Nursing, Khon Kaen University who registered in Gerontological Nursing Practicum Course in second semester of academic year 2016. The researchers recruited participants by explaining and answering questions related to the study in the class. Only students who were willing to participate in the study were recruited. Students were also

informed that they had their right to withdraw from the study anytime with no effect on their study in the course. The study obtained ethic approval as exemption research from research committee of Faculty of Nursing, Khon Kaen University (No. 0459).

## Instrument

Instrument for data collection was 'the initial cross-cultural assessment of attitudes toward the elderly Thai version'.<sup>12</sup> This Likert rating scale questionnaire comprised of 40 items: 20 positive items and 20 negative items. The positive items were scored from 1 to 5, whereas the negative items were scored in the opposite direction from 5 to 1.<sup>12-13</sup> Content validity of the questionnaire was 0.98 and reliability coefficient was 0.85. This study followed the tool developer guideline that used scatter plot to group the attitudes. The cut point of positive and negative attitudes was 3 as it was median score for 1 to 5. Four areas in the graph indicated four types of attitudes as follows:

- 1) Area in upper left indicated high scores of positive items but low scores of negative items, which referred to conflicting attitude.
- 2) Area in upper right indicated high scores of positive and negative items, which referred to positive attitude. This attitude group is the best and the most expectation in caring for older people.
- 3) Area in lower left indicated low scores of positive and negative items, which referred to negative attitude. This attitude group is worst for caring of older people
- 4) Area in lower right indicated low scores of positive items but high scores of negative items, which referred to Blasé attitude.

### Experimental Intervention and Data Collection

All subjects were asked to complete ‘the initial cross-cultural assessment of attitudes toward the elderly Thai version’<sup>12</sup> (pretest), then the researchers applied 5 stages of PLT in the course as follows:

1) Experience stage: Assigned students to participate in Gerontological Nursing Department’s community services project. The project provided activities for cognitive training (on attention, short-term memory, visuospatial function, and executive function) for active aging in community. The activities were carried out every week for 5 weeks, approximately 2 hours for each time. Each student joined the activities according to their study rotation in the course. Participation in the project allowed students to learn from supervisors and practice various experiences with older people, such as approaching, communicating, giving information, leading group activities, providing health education. Supervisors acted as good role models in caring for older people with regards to expressing positive attitudes towards older people as well as applying knowledge and skills in providing comprehensive geriatric assessment and leading health promoting activities for older people. Supervisors also demonstrated good relationship and coordination with older people, their families and multidisciplinary in the community.<sup>14</sup> This based on knowledge suggesting that nursing students’ positive clinical experiences, with older adults and instructors who had positive attitudes towards older adults, strongly influence their attitudes.<sup>15-17</sup>

2) Reflection and discussion stage: Group discussion about learning lesson among students was

performed after they obtained experiences from joining the project in important theme, such as ‘humanized care for older people; individualized seniors with long life experience’, ‘physiological changes in older people’, ‘approaching older people’, ‘teaching older people’. These reflection and discussion could lead students to think critically and make key concepts in caring for older people.

3) Concept stage: Supervisors for each group facilitated their students to conclude key concepts and made emphasis on attitudes towards older people. After students obtained experiences and learnt about the key concept, they shared their knowledge with other groups via the Gerontological Nursing Subject Facebook Group.

4) Experimentation and application stage: Students provided individual health education and nursing care for older patients in the hospital.

5) Evaluation stage: Students had self-evaluated and discussed about the problems while giving care to older people with their supervisors, who would then suggest how to improve their care quality.

6) Repeat of all stages: All above stages were repeated continually after students gained each new clinical experience in caring for older patients until the course completion.

After the PLT intervention, students were asked to complete ‘the initial cross-cultural assessment of attitudes toward the elderly Thai version’<sup>13</sup> again (posttest).

### Data analysis

In this study, the independent variable was *PLT*. Dependent variable was *students’ attitudes*

towards older people, which was measure before and after participating in *PLT*. Paired Sample t-test was used for comparing the difference between scores of students' attitudes towards older people before and after participating in *PLT*. Significance was established at  $p < 0.05$

## Results

### 1. Students' attitudes towards older people before and after participating in *PLT*

#### 1.1 Comparison of mean scores of overall attitudes towards older people before and after participating in *PLT*

The results showed that mean score of students' overall attitudes towards older people increased from before (mean=149.06±14.14) to after (mean=158.41±15.76) participating in *PLT*. This increase was statistically significance ( $t = 4.032, p = 0.000$ ). (Table 1).

**Table 1.** Differences between mean scores of overall attitudes towards older people before and after participating in *PLT* (N=93)

Attitudes towards older people	Before Mean (S.D.)	After Mean (S.D.)	T-test	Sig.2-tailed
Positive items	85.17 (7.15)	87.23 (6.42)	2.041	.044*
Negative items	63.89 (10.40)	71.18 (11.88)	4.248	.000**
Total scores	149.06 (14.14)	158.41 (15.76)	4.032	.000**

\* $p < 0.05$ , \*\*  $p < 0.01$

#### 1.2 Comparison of mean scores of attitudes on positive items towards older people before and after participating in *PLT*

The result revealed that mean scores of attitudes on positive items towards older people was 85.17 (S.D = 7.15) before participating

in *PLT* and increased to be 87.23 (S.D = 6.42) after participating in *PLT* (Table 2), suggesting that students had higher positive attitudes on these items after *PLT*. This different was statistical significance ( $p = .044$ ) (Table 1).

**Table 2.** Mean scores and standard deviation (S.D.) of attitudes on positive items towards older people (n=93)

Opinion towards older people	Before PLT Mean (S.D.)	After PLT Mean (S.D.)
1. Be wise	4.08 (0.49)	4.09 (0.65)
2. Give guidance to young people	4.60 (0.53)	4.57 (0.56)
3. Think of consequences before acting	3.94 (0.67)	4.01 (0.67)
4. Have learnt the value of hard earned money	4.39 (0.68)	4.51 (0.67)
5. Have the best perspective about what is important in their lives	4.24 (0.76)	4.42 (0.61)
6. Understand a situation much better than younger people	4.03 (0.85)	4.02 (0.78)
7. Feel secure in life	3.68 (0.71)	3.69 (0.78)
8. Understand the world well from years of living	4.33 (0.65)	4.44 (0.62)
9. Have opportunities and times to make more useful tasks	3.85 (0.85)	4.06 (0.81)
10. Maintain and disseminate culture/ tradition	4.58 (0.56)	4.77(0.45)
11. Be more insight with their religion	4.45 (0.70)	4.61 (0.55)
12. Be aware of what is really important	4.09 (0.74)	4.35 (0.69)
13. Be dependable for younger people	4.32 (0.75)	4.23 (0.74)
14. Be kind and sympathetic	4.41 (0.61)	4.57 (0.52)
15. Be happiest when having their children visit on significant days	4.88 (0.33)	4.92 (0.27)
16. Be great role models for their grandchildren	4.46 (0.65)	4.57 (0.52)
17. Have good financial management	3.89 (0.79)	4.03 (0.73)
18. Be independent	4.06 (0.76)	4.26 (0.91)
19. Always willing to talk with others	4.23 (0.72)	4.42 (0.74)
20. Have experiences that are beneficial for later generations	4.61 (0.59)	4.68 (0.61)
Total	85.17 (7.15)	87.23 (6.42)

### 1.3 Comparison of mean scores of attitudes on negative items towards older people before and after participating in PLT

The findings showed that mean score of attitudes on negative items towards older people was 63.89 (S.D = 10.40) before participating

in PLT and increased to be 71.18 (S.D = 11.88) after participating in PLT (Table 3), indicating that students had higher positive attitudes on these items after PLT. This different was statistical significance ( $p < .0001$ ) (Table 1).

**Table 3.** Mean scores and standard deviation (S.D.) of attitudes on negative items towards older people (n=93)

Opinion towards older people	Before PLT Mean (S.D.)	After PLT Mean (S.D.)
1. Think, speak, and act slowly	2.31 (1.01)	2.53 (0.99)
2. Be grumbly and always repeat the same complaint	2.40 (0.82)	3.14 (0.97)
3. Be more likely to feel lonely	1.69 (0.72)	1.78 (0.98)
4. Not being beneficial but hindrance for others	3.97 (0.90)	4.39 (0.66)
5. Always need attention from others	3.44 (1.01)	3.98 (0.90)
6. Be hard to please	3.24 (0.93)	3.67 (1.06)
7. Be impatience	3.66 (0.85)	4.00 (0.94)
8. Be stingy	3.11 (0.98)	3.58 (1.05)
9. Be burden to family	4.06 (0.85)	4.38 (0.79)
10. Be stubborn	3.08 (1.02)	3.51 (0.97)
11. Be forgetful	2.29 (0.94)	2.58 (0.97)
12. Be difficult to learn new things and unable to keep up with the world	2.81 (0.99)	3.05 (1.03)
13. Be fussy	3.03 (0.91)	3.60 (0.91)
14. Be boring	3.99 (0.67)	4.39 (0.72)
15. Be dependent on others	2.82 (0.97)	3.17 (1.15)
16. Be irritable	3.33 (0.82)	3.92 (0.84)
17. Should stay in nursing homes	4.62 (0.66)	4.87 (0.45)
18. Always think that they know everything	3.39 (0.98)	3.89 (0.89)
19. Be unenthusiastic in socialization	3.55 (0.87)	3.89 (0.89)
20. Difficult to move or get around	2.53 (1.04)	2.86 (1.17)
Total	63.89 (10.40)	71.18 (11.88)

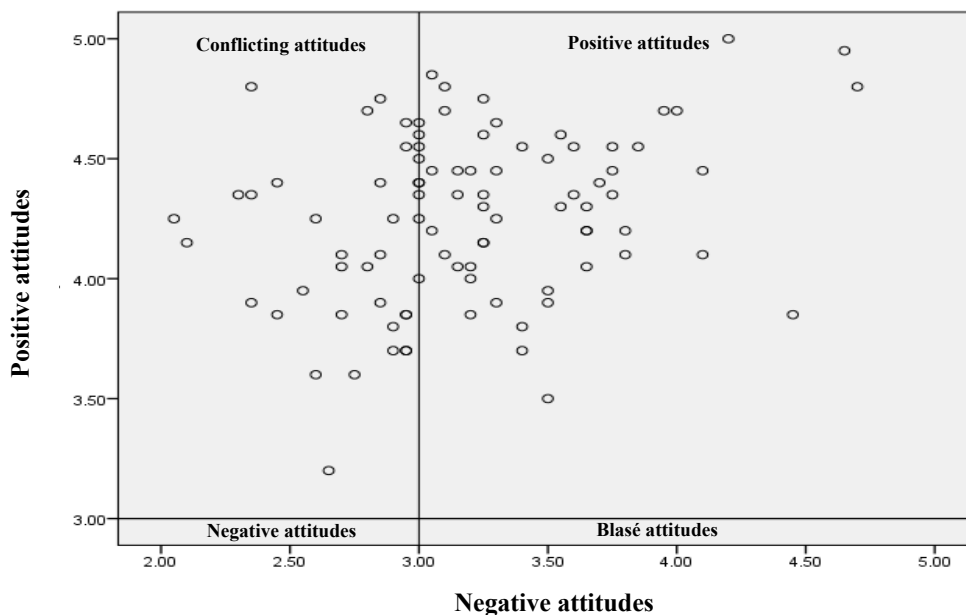
## 2. Changes of students' attitudes after participating in PLT

Attitudes towards older people in this study were classified to be positive, negative, conflicting, or blasé attitudes. Before participating in PLT, scores of the students' attitudes towards older

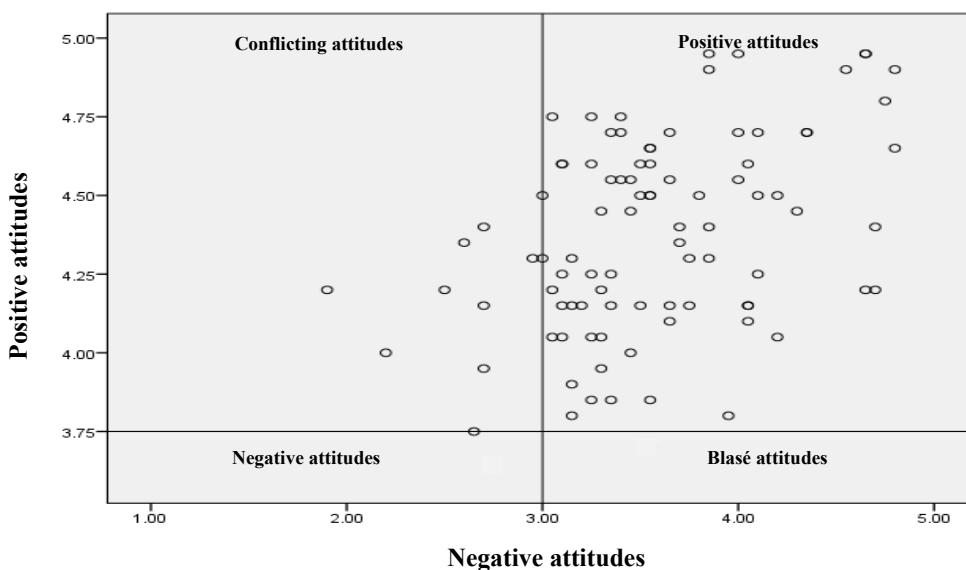
people were in the upper area of the graph, indicating that students had neither negative attitudes nor blasé attitudes. The distribution of scatter plot of scores at upper area, suggesting that students had positive attitudes or conflicting attitudes (Figure 1). After participating in PLT, scores of sample's attitudes had

changes with scatter plot still at upper areas of the graph, but there were more in upper right area than in upper left area. This indicated that sample had more positive and less conflicting attitudes towards older people (Figure 2). Number of students who had

positive attitudes increased from 53 (56.99%) to be 81 (87.10%), whereas number of students who had conflicting attitudes decreased from 40 (43.01%) to be 12 (12.90%) after PLT (Table 4).



**Figure 1.** Scatter plots of scores on attitudes towards older people before participating in PLT



**Figure 2.** Scatter plots of scores on attitudes towards older people after participating in PLT



**Table 4.** Numbers of students with each type of attitude before and after participating in PLT (N=93)

Type of attitudes	Before participating in PLT		After participating in PLT	
	Mean	Numbers of students	Mean	Numbers of students
Positive attitude	157.2	53 (56.99%)	161.8	81 (87.10%)
Conflicting attitude	138.3	40 (43.01%)	135.7	12 (12.90%)
Negative attitude	-	0 (0%)	-	0 (0%)
Blasé attitude	-	0 (0%)	-	0 (0%)
Total		93 (100%)		93 (100%)

As the cut point of positive and negative attitudes was 3 (as it was median score for 1 to 5 of the questionnaire used to measure attitudes) and the questionnaire comprised 20 positive items and 20 negative items. Therefore, full scores on positive and negative items of the questionnaire were 100 for each and scores at less than or equal to 60 (low scores) indicated negative attitudes of students. The study findings revealed no student with low scores on positive items before and after PLT. Number of students who had low scores on negative items de-

creased from 40 before PLT to be 12 after PLT (Table 5). Averages changes of attitude scores in each student after PLT when comparing with before PLT were +2.05 and +7.29 for negative items and positive items, respectively. There was no student who changed attitudes from positive to be negative attitudes on positive items. Some students (7.53%) changed from positive to be negative attitudes on negative items, however, more students (37.63%) changed from negative to be positive attitudes on these items (Table 6).

**Table 5.** Numbers of students with high or low scores on positive and negative items before and after participating in PLT (N=93)

Scores	Before PLT		After PLT	
	Positive items	Negative items	Positive items	Negative items
High scores ( 61-100 = Positive attitudes)	93 (100%)	53 (56.99%)	93(100%)	81 (87.10%)
Low score ( ≤ 60 = Negative attitudes)	0 (0%)	40 (43.01%)	0 (0%)	12 (12.90%)
Total	93 (100%)	93 (100%)	93 (100%)	93 (100%)

**Table 6.** Comparison of attitudes before and after PLT in students on positive and negative items (N=93)

Positive items		Number of students (%)	Negative items		Number of students (%)
Before PLT	After PLT		Before PLT	After PLT	
Positive attitudes	Positive attitudes	93 (100%)	Positive attitudes	Positive attitudes	51 (54.84%)
Positive attitudes	Negative attitudes	0 (0%)	Positive attitudes	Negative attitudes	7 (7.53%)
Negative attitudes	Positive attitudes	0 (0%)	Negative attitudes	Positive attitudes	35 (37.63%)
Negative attitudes	Negative attitudes	0 (0%)	Negative attitudes	Negative attitudes	0 (%)
<b>Total</b>		<b>93 (100%)</b>	<b>Total</b>		<b>93 (100%)</b>

## Discussion

Before participating in PLT, half of subjects had positive attitudes, whereas others had conflicting attitudes towards older people. This result might be consistent with a Thai study, which revealed that proportion of nursing students who had high level, moderate level, and low level of attitudes toward older people were 23.9%, 53.6%, and 22.5%, respectively.<sup>9</sup> The result was also consistent with a study in Portuguese nursing students, which revealed negative attitudes towards older people among students.<sup>18</sup> This negative attitudes or feelings towards older people might be resulted from culture, value or personal belief, as well as information from various media and experiences.<sup>18</sup> In the reflection stage of PLT, some students reflected their negative attitudes before participation in PLT such as “I had cared my grandfather before. I thought he is stubborn because he did not listen to others,” “My older patient expressed frustration the same way as my grandparents.” Some expressed their conflicting attitudes such as “I love my grandfather but I cannot stay with

him because he keeps on complaining.”

These negative attitudes could be changed after experiencing in taking care for older people.<sup>19</sup> Lee, Shin, & Greiner suggested that acquiring of knowledge about, gaining experience with, and realizing the importance of caring for older people made nursing students replace negative attitudes with more positive attitudes.<sup>20</sup> PLT in Gerontological Nursing Practicum Course led to changes of students’ attitudes as shown in their discussion and reflection on Gerontological Nursing Subject Facebook Group. Students suggested that their frequent eye contact and closely observe older people while health education made them understand older people. They realized that some older people were reluctant to ask questions because older people don’t want to disturb them, and their smiling face made older people feel comfortable to ask questions. They also expressed their concerns on older people’s culture and lifestyle in providing care.

The findings revealed that mean scores of attitudes towards older people of students had

increased significantly for overall mean score ( $t = 4.032, p = 0.000$ ), mean score on positive items ( $t = 2.041, p = 0.044$ ) and mean score on negative items ( $t = 4.248, p = 0.000$ ). These attitude changes among students might be explained by Active Participatory Theory, which suggested that changes in attitudes and behaviors can be achieved by provision of situation to create good co-operation in groups of people. The groups, that individual participated in, could affect their attitudes enormously.<sup>21</sup> Kim, Son & Algase found that communication with or exposure to older people could modified nursing students' attitudes towards older people.<sup>22</sup> In this study, students experienced caring for active older people in the communities and ill older people in the hospitals. Students also experienced in conducting health promotion project for active older people in rural north eastern Thai communities. These older people were friendly, were sincere, and respected students as health care providers. It indicated that having experiences in taking care of and being familiar with older people contributed to learning, interesting in, and respecting older people, which in turns, leading to development of positive attitudes towards older people.

PLT in Gerontological Nursing Practicum Course could promote students to learn, create new ideas, and share opinions. Opinion sharing on gerontological nursing, implementing knowledge into actual practice, and discussing about problems/ barriers in clinical practice contributed to mutual sharing and respect for different opinions among students in the groups. This was consistent with Duze's study results, which found that PLT was effective in developing positive attitudes towards the

course.<sup>23</sup> Students' positive attitudes towards the subject or interest in older people care/issues were found statistically significant correlated with knowledge related to older people, attitudes towards older people, willing to take care for older people, and intent to work with older people.<sup>24</sup>

Apart from improvement of students' attitudes towards older people, other additional outcomes also achieved. The course evaluation revealed high satisfaction with the course and students expressed that they met the course learning objectives. PLT motivated them to prepare knowledge for sharing, improved their presentation skills and leaderships, as well as created learning and critical thinking. They also gained experiences in screening and preventing/ delaying of dementia in older people. They had more understanding of principles and steps for conducting group activities in older people as well as were aware of individualized of the Thai seniors.

## Conclusion

The Gerontological Nursing Practicum Course provided opportunities for students to take care of older people admitting in hospitals and to conduct health promotion project for active older people, by Participatory Learning Teaching. It increased student's understanding of older people and modified student's negative attitudes towards older people. Positive attitudes towards older people are key principles in providing quality care for older people. Gerontological nursing education should focus on providing student positive clinical experiences in taking care of older people with different health conditions in different environments.

## Limitations

Data of this one-group pre-posttest study derived from third year student of Faculty of Nursing, Khon Kaen University, and therefore, generalization to other students and settings was limited. Learning outcomes of the present study was influenced by the application of participatory learning teaching and cannot compare these learning outcomes with other teaching-learning methods. In addition, this study focused on students' attitudes, which was personal perception, and thus, had inherent limitations.

## Acknowledgement

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