

## Improving the interpersonal competences of head nurses through Peplau's theoretical active learning approach

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### KEYWORDS

Leadership;  
Teaching;  
Interpersonal;  
Peplau;  
Active learning

### Abstract

**Background:** Effective interpersonal skills are essential for head nurses in governing and managing their work units. Therefore, an active learning strategy could be the key to enhance the interpersonal competences of head nurses.

**Purpose:** This study aimed to investigate the effects of Peplau's theoretical approach of active learning on the improvement of head nurses' interpersonal skills.

**Method:** This study used a pre-experimental design with one group having pretests and post-tests, without control group. A total sample of 25 head nurses from inpatient units of a well-known private hospital in Jakarta was involved in the study. Data were analyzed using the paired *t*-test.

**Results:** The results showed a significant increase in head nurses' knowledge following the training to strengthen their interpersonal roles ( $P = .003$ ). The results also revealed significant increases in the head nurses' skills in playing the roles of leader ( $P = .006$ ), guardian ( $P = .014$ ), and teacher/speaker ( $P = .015$ ). Nonetheless, the results showed no significant increases in the head nurses' skills in playing the roles of counselor ( $P = .092$ ) and stranger ( $P = .182$ ).

**Conclusions and recommendations:** Training in strengthening the interpersonal roles of head nurses significantly increased the head nurses' knowledge and skills. The results of the study suggested the continuation of active learning strategies to improve the interpersonal abilities of head nurses. Furthermore, these strategies could be used to build the abilities of head nurses in other managerial fields.

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## Introduction

It is crucial for head nurses to have excellent interpersonal skills. There is ample evidence showing the importance of interpersonal skills in achieving an organization's goals. One study indicated the vital role of head nurses is providing continuous support and direction for their staff in implementing infection prevention and control programs<sup>1</sup>. Another study showed that a close rapport between head nurses and their staff could improve their working performance<sup>2</sup>. In fact, support and motivation from head nurses would encourage better discipline of their staff members in developing their knowledge and abilities<sup>3</sup>. Accordingly, interpersonal skills encompass the characteristics needed by head nurses at every activity level, including providing guidance, being a role model, and evaluating the work performance of nurses.

The ability of head nurses to understand nurses' behaviors requires a theoretical approach to nursing. The application of Peplau's theory, which is highly pertinent to interpersonal relationships, could help patients to cooperatively engage in their own nursing care<sup>4</sup>. In addition, Peplau's theory about interpersonal relation could be applied to change particular behaviors, including improving the cognitive, affective, and psychomotor abilities of the staff or patients<sup>4</sup>.

Peplau's theory of interpersonal relations could be applied by head nurses to guide, motivate, and supervise their staffs. The application of Peplau's theory would benefit head nurses while providing supervision by playing the roles of a speaker/information resource, teacher, counselor, guardian, stranger, and leader<sup>5</sup>. These roles could help head nurses improve their interpersonal skills which are aimed at developing favorable behaviors<sup>6</sup>.

In order to change nursing staff behaviors, it is important for head nurses to cultivate interpersonal skills. Capacity building is one of the keys for assuring that head nurses can gain these skills. Training, as one of the capacity building activities, could help head nurses to ameliorate their knowledge and abilities in leadership and interpersonal relationships in accordance with organizational needs<sup>7</sup>. Furthermore, training could raise head nurses' awareness and change their knowledge from the state of not knowing to the state of knowing<sup>8</sup>.

To date, most forms of training have tended to be tedious and not very interactive. Traditional training methods put the responsibility of learning entirely on the teacher; hence, only a one-way communication is developed<sup>9</sup>. Also, the training focuses on knowledge enhancement instead of balancing the focus on both improving the knowledge and improving psychomotor abilities<sup>10</sup>.

Training with active learning methods could effectively improve both the knowledge and psychomotor abilities of head nurses in interpersonal relationships. The use of active learning methods would be helpful for head nurses in integrating reflective and critical thinking based on evidence-based nursing<sup>11</sup>. Moreover, the mixture of reflective and active learning methods could assist head nurses in finding possible solutions to meet the needs of their staff members and deal with their shortcomings<sup>12</sup>.

Training with active learning methods is essential to improve the application of Peplau's theory of interpersonal relations. This study had the potential to enhance the head

nurses' interpersonal knowledge and skills by initiating training with active learning methods. The module/materials generated in this study could be the resource for improving the interpersonal skills of head nurses in any health-care facility. Furthermore, the study provided meaningful information about the effects of Peplau's theoretical approach of active learning on the improvement of head nurses' interpersonal skills.

## Method

This study used a quasi-experimental design of a single group pretest and post-test without control group, and it aimed to examine the effects of Peplau's theoretical approach of active learning to strengthen the interpersonal roles of head nurses. The study was conducted at the Bunda General Hospital of Jakarta, Indonesia because the hospital has a clear organizational structure and established standards for the head nurses. The study was conducted from December 2015 to May 2016. The sample population was the head room nurses at one private hospital in Jakarta. There were two sample targets, 25 head nurses and 30 activities of head nurses, and two instruments, a questionnaire to explore respondents' knowledge related to interpersonal relationship and an observation sheet. A total sample of 25 head nurses was admitted to the study using the following inclusion criteria: head nurses who agreed to participate in the program and who also agreed to implement the interpersonal roles.

The data were obtained using the accidental sampling technique on 30 observations, both before and after the strengthening program. The variables were the knowledge and skills of head nurses in implementing Peplau's interpersonal roles, including the variables of such roles as leader, stranger, guardian, counselor, speaker, and teacher.

The strengthening program using active learning in this study was carried out in three phases: orientation, identification, and implementation and strengthening (resolution). The orientation phase was done through the needs assessment and the signing of the informed consent. During this initial stage, the researchers would also develop a module for trainings. The second phase was done using a cognitive pretest of 16 multiple-choice questions. Training programs conducted by the researchers using active learning of case-based learning, Gibbs self-reflection, and self-directed learning were used. A module of interpersonal skills was distributed to participants prior to the training. Lastly, the strengthening (resolution) phase consisted of assessing the competence of the head nurses using the observation sheet and arranging the follow-up plans.

The framework of the study is illustrated in Figure 1.

The data were collected by the researchers before and after the strengthening program. An observation sheet tested for its content validity by nursing experts was the instrument used. A univariate analysis was performed for the characteristics of the head nurses with a central tendency method. Meanwhile, the knowledge and skills of the nurses were examined using statistical analysis by means of a paired *t*-test. Prior to its onset, this study was approved by the committee of ethics of the Faculty of Nursing, Universitas Indonesia.

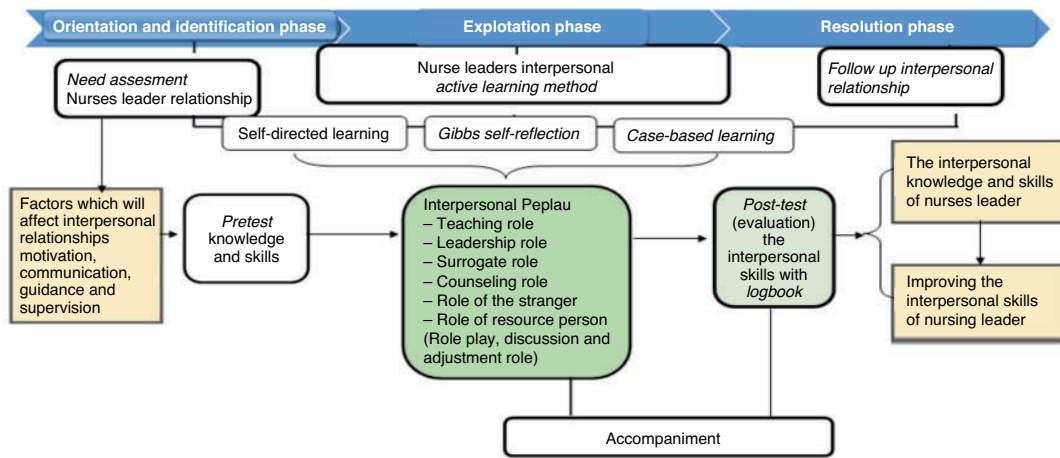


Figure 1 Framework of the study.

Results

The results of the study presented the interrelationships of head nurses' knowledge and skills in interpersonal roles before and after participating in the strengthening programs using Peplau's theoretical approach of active learning.

The mean value of head nurses' knowledge after the strengthening programs was 7.45 higher than that prior to the training. The analysis, furthermore, showed that the increase was significant ( $P = .003$ ) (Table 1).

Nevertheless, increases of mean values were found in all interpersonal skills after the strengthening program (third observation), and, despite that results, the scores were apt to remain stable or decline in the last observation. The mean score of skills in playing the role of leader was 43 before the strengthening program (first observation), increased to 60 after the program (third observation), and increased again to 85 in the last observation. Meanwhile, the mean score of skills in playing the role of stranger was 68 before the program, increased to 81 after the implementation, and dropped to 75 in the last observation (Figure 2).

Surprisingly, the findings demonstrated significant increases in the mean values of the head nurses' skills in playing the role of leader ( $P = .006$ ), guardian ( $P = .014$ ), and teacher/speaker ( $P = .015$ ). However, there were no significant increases in the mean values of the head nurses' skills in playing the roles of counselor ( $P = 0.092$ ) and stranger ( $P = .182$ ) (Figure 3).

Discussion

On average, the knowledge of the head nurses increased after the strengthening programs of the interpersonal roles

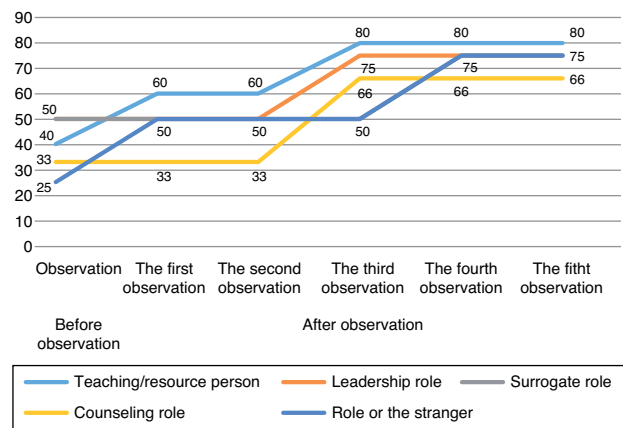


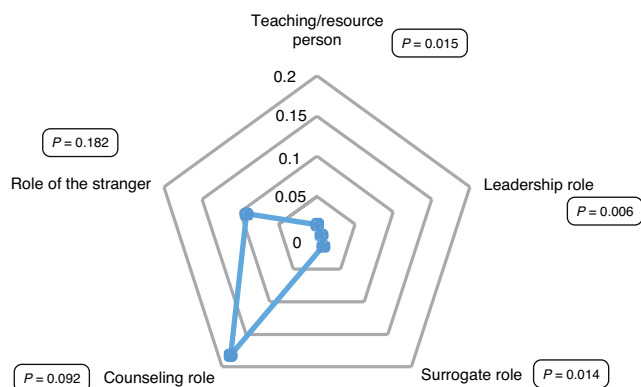
Figure 2 Mean values of head nurses' skills in the interpersonal relationships (n = 30).

using Peplau's theoretical approach. The increased knowledge of the head nurses is a process of active learning using self-directed learning, Gibbs self-reflection, and case-based learning techniques.

Active learning would facilitate the processes of knowledge discovery, problem-solving, and analysis, as well as providing a demonstration of learning experiences<sup>13</sup>. In health-care facilities, active learning activities to promote manpower development might include participation, repetition, transfer, feedback, reflection, and case studies<sup>14</sup>. Small group discussions assisted by facilitators to address specific issues and identify possible solutions are often used. In active learning, discussions would provide opportunities to learn new behaviors, while the delivery of the material

Table 1 Mean values of head nurses' knowledge in interpersonal relationships (n = 25)

Strengthening	Mean	Diff	SD	95%CI	P
Pre-strengthening	7.00	7.45	.816	5.70-8.30	.003***
Post-strengthening	14.45		.957	12.73-15.77	



**Figure 3** The ability of interpersonal role the head space with the Peplau theoretical approach.

would help learners understand the particular roles to be performed<sup>15</sup>.

The strengthening programs in the study employed Gibbs self-reflection and self-directed learning methods. These methods were performed by the head nurses sharing their experiences in implementing the standard operating procedures (SOPs) of the personal protective equipment (PPE) in their units. The steps helpful describing the events and feelings, evaluating, analyzing, concluding, and planning future actions. These learning methods would be helpful for the head nurses to better understand the challenges found in the workplace and improve self-control<sup>16</sup>. Moreover, one study stated that the Gibbs learning cycle is a systematically structured process involving emotions and thoughts<sup>17</sup> that provides insights useful to build the intended behaviors.

The findings of this study demonstrated that the active teaching and learning process using Gibbs self-reflection, case-based learning, and self-directed learning significantly increased the mean scores of head nurses' knowledge and skills in the interpersonal roles. The results were consistent with those reported in other studies. As an evaluation method, the Gibbs reflective learning approach effectively increased the knowledge of the head nurses. Likewise, a study in Jordan showed that the integration of practice and evaluation helped the respondents in acquiring new knowledge<sup>18</sup>.

In addition to resulting in knowledge improvement, the strengthening programs using active learning methods improved the head nurses' skills in playing the roles of leader, guardian, and teacher. This result was consistent with one study which proved that self-directed learning during the first clinical practice of Saudi nursing and medical students in hospitals significantly improved their patient safety competences, discussing the problems faced while doing demonstrations, and drawing the possible solutions for future challenges. In the same study, the self-directed learning included reviewing journals, demonstrating clinical skills with peers<sup>19</sup>. Another study in China showed that self-directed learning helped new nurses learn independently while aiming at developing their abilities in analyzing issues found in hospitals<sup>20</sup>.

To better understand the interpersonal competences, the strengthening program highlighted the importance of inter-

actions, eye contact, and information exchange between head nurses and their coworkers/subordinates during work and between the head nurses and the training instructors during the training. These activities could promote self-confidence and improve communication skills. In addition, the activities could enhance the personal and professional growth of the head nurses<sup>21</sup>.

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