

Effects of a Psychiatric Nursing Clinical Practice Program Using Situation-Oriented Case-Based Learning: A Qualitative Study

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Abstract

Psychiatric nursing is a specialty where nursing students experience many difficulties in applying what they have learned in theory to clinical practice. Therefore, a situation-oriented case-based strategy is required to help them overcome the limitations of psychiatric nursing clinical practice and reduce their burden. This study aimed to measure the effectiveness of a psychiatric nursing clinical practice program using situation-oriented case-based learning. Participants comprised 63 nursing students in psychiatric nursing classes. The students were asked to create a scenario of interaction between a nurse and patient based on a case study. Empathy, therapeutic communication ability, and attitudes toward mental illnesses were measured. We analyzed the effectiveness of the program by comparing changes in the nursing students' empathy, therapeutic communication ability, and attitude toward mental illness after the program. The participants showed significant increases in empathy and therapeutic communication abilities. However, there were no significant changes in attitudes toward mental illnesses. Based on the results of this study, it is expected that situation-based learning will be effective for students who have difficulties in certain aspects, such as COVID-19, or where there are limited clinical practice opportunities, such as psychiatric nursing.

Keywords: Situation-Oriented Case-Based Learning, Psychiatric Nursing Practice Program, Case-Based Learning, Nursing Student

1. INTRODUCTION

Nurses communicate with various people in clinical settings, such as health care professionals and patients, to understand the health of patients [1]. In this context, the ability to communicate effectively is a significant competency required by nurses [2]. For nursing students who want to become registered nurses or specialize in different fields of nursing, communication skills can significantly influence their relationship with patients, clinical coordinators, and team members [3]. Communication ability is a competency that involves systematically and continuously collecting data and communicating this information when evaluating and understanding the patient's health status in the assessment stage, which is the first step in the nursing process [2]. The Korean Accreditation Board of Nursing Education [4] includes therapeutic communication skills through verbal and non-verbal interactions as a primary nursing competency that Korean nursing students must

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possess upon graduation. Therefore, nursing courses and programs require curricula to enhance communication skills.”

Most subjects in the Korean Nursing Licensing Examination combine theory and practice, and nursing students encounter various cases in clinical settings [5]. Students participating in clinical practice acquire the core competencies required by nurses based on the theoretical and academic foundations of each subject in the practice process [6]. In particular, psychiatric nursing provides holistic care to individuals with mental disorders or behavioral problems; consequently, psychiatric nurses require exposure to various cases and experiences because the communication methods and patient characteristics differ from those of the general public. Attitudes toward patients with mental illnesses are important environmental factors that determine the prognosis of treatment and rehabilitation [7]. Attitudes are organized according to individual experiences, and these experiences influence individual responses to determine or change the direction of behavior [8,9]. Furthermore, nurses use themselves as therapeutic tools to spend time with patients [10], and their attitudes are reflected in the quality of nursing care and affect the future treatment of patients [11,12]. In this context, nurses’ positive attitudes toward mental illness helped increase their self-esteem and find meaning in life. In contrast, negative attitudes can interfere with the patient’s therapeutic process [13].

People with mental disorders may communicate differently than ordinary people and it is necessary to understand and sympathize with their behavior and communication methods. Empathy is a concept that reflects the ability to understand, feel, and communicate with others’ inner experiences or psychological states, as if they were one’s own. [14]. People with little empathy are more likely to find it challenging to understand and consider other people’s emotions and circumstances [15-17]. Empathy is significant in the ability to understand others and can be cultivated by suppressing harassing or aggressive behavior [18,19]. Thus, it is important to express empathy toward others in psychiatric nursing.

As psychiatric nursing is focused on people who need special care, such as the mentally ill, there are fewer options in gaining experience through cases and clinical practice institutions than in other nursing fields. Although there are various institutions, such as mental health welfare community centers and mental hospitals with locked rehabilitation wards, it is not easy for nursing students to gain experience in clinical practice because of difficulties in managing trainees and patient symptoms. In addition, infection prevention and management have become crucial owing to the COVID-19 pandemic. As a result, mental hospitals with closed wards do not accept trainees, making it more difficult to secure a location to practice mental health nursing. To solve these problems, various methods, such as metaverse applications and standardized patients, are being used to find ways for nursing students to gain experience and practice.

Among these methods, situation-oriented case-based learning (CBL) is a learner- or student-centered learning approach that analyzes and discusses practical cases, such as clinical cases [20]. CBL actively encourages student participation based on cases and can enhance the interaction between students and instructors [21]. In particular, the theoretical knowledge obtained from textbooks in classrooms can now be applied to patients [22]. Students also prefer CBL to problem-based learning because it is more focused and has more opportunities for clinical application [21]. CBL has been reported to increase students’ ability to cope with situations, learning interest and motivation, and communication skills [23,24]. Studies on nursing students in Korea have also reported improved learning motivation and attitude, communication ability, problem-solving ability, and nursing performance [25-27].

Therefore, it is necessary to explore the effects of situation-oriented CBL on enhancing core competencies, such as communication skills, and communicating with patients who need special care in psychiatric nursing. It will also provide three-dimensional educational opportunities for nursing students in psychiatric nursing, where access to cases is limited. This study investigated changes in communication ability, empathy, and attitudes toward mental illness according to.

1.2 Purpose

This goal of this study is to apply situation-oriented CBL to nursing students and to validate its effectiveness. The specific objectives of this study are as follows:

- 1) Investigate the effect of situation-oriented CBL practice education on the empathy level of psychiatric nursing students.
- 2) Investigate the effect of situation-oriented CBL practice education on the therapeutic communication ability of psychiatric nursing students.
- 3) Investigate the effect of situation-oriented CBL practice education on the attitude toward mental illness of psychiatric nursing students.

2. METHODOLOGY

2.1 Participants

This study used a single-group pretest-posttest experimental design to compare the effects of situation-oriented CBL on psychiatric nursing students in clinical practice. The participants were 63 third-year nursing students at a four-year university in G city and had completed human relations, communication, and psychological nursing theory courses. The sample size was calculated using G* Power 3.1.9.7. The minimum sample size required was 45 participants to verify the differences in pretest-posttest scores based on a significance level of .05, power of .95, and an effect size of .5. A total of 63 nursing students were enrolled, considering a dropout rate of approximately 30% [28].

2.2 Situation-oriented case-based learning psychiatric nursing practice program

Based on four cases of caring for patients with alcoholism, schizophrenia, bipolar disorder, and conduct disorder, a situation-oriented case module was developed with five steps to explore nursing assessment and nursing performance in each clinical practice (Figure 1).

[Step 1] Select cases and details.

The results of surveying diseases that nursing students were interested in exploring in greater depth during their psychiatric nursing theory classes were as follows: schizophrenia, depressive disorder, bipolar disorder, personality disorder, and material disorder. Based on these results, situation-oriented cases were prepared for schizophrenia, bipolar disorder, alcoholism, and conduct disorder.

[Step 2] Prepare questions

The learning goals were chosen from the Korean Academy of Psychiatric and Mental Health Nursing, and the scenarios were prepared based on situations encountered in clinical settings by referring to a study by Choi and Ko [29]. They were also revised and improved based on the advice of a psychiatric nurse practitioner. The questionnaire included five to six unstructured questions necessary for mental assessment, changes in the patient's situation, quick identification of safety, ability to explore appropriate responses, accurate decision-making, and inferring performance. Only questions with a CVI of 0.9 or higher were selected after two psychiatric nursing professors confirmed the content validity. Questions related to the treatment environment in inpatient and local community settings were prepared based on expert opinions.

[Step 3] Select assignments

Through situation-oriented CBL, therapeutic communication scenarios were created to provide nursing interventions closely related to cases and situations encountered while practicing in the clinical field. Therapeutic communication techniques consist of listening, empathy, reflecting, and summarizing. The scenarios were prepared using two sheets of A4 paper.

[Step 4] Performance

The students participating in the study formed teams of no more than five or six people. They participated in 90 hours of practical training for two weeks, for a total of eight weeks. The team members analyzed the cases and found various ways to solve problems. During the problem-solving process that occurred twice a week, the instructors participated with each team and spent time answering questions about difficult aspects of the problem-solving process and provided feedback on scenario development.

[Step 5] Evaluation

A clinical practice conference class took place in week 1 where students gave presentations on the module exploration process for situation-oriented cases. During the practice conference in week 2, students presented therapeutic communication scenarios for the given cases and potential patients in clinical settings. During the debriefing process, the instructor helped the students understand the patients, commented on anything overlooked in the problem-solving process, and provided positive feedback on what went well. In the summary stage, the students discussed what they learned and felt throughout the learning process, discussed areas they could use in nursing, talked about performing nursing interventions, and prepared reflection journals.

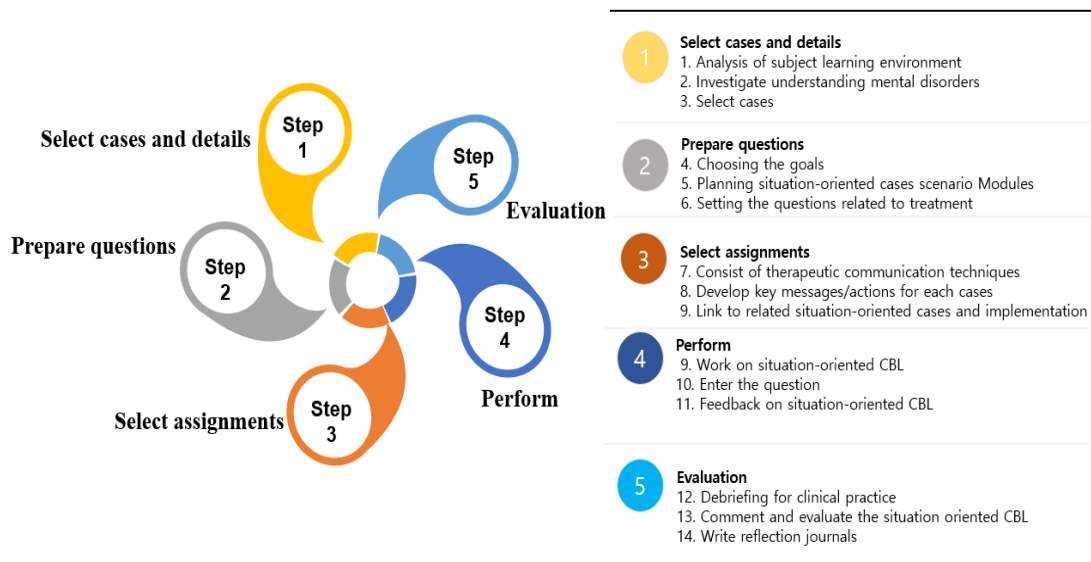


Figure 1. Situation-oriented CBL psychiatric nursing practice program process

2.3 Research tools

2.3.1 Empathy

Empathy was measured using a 2-point scale tool developed by Yeo [30] to measure the multidimensional concept of empathy. It consisted of 11 items on the cognitive, emotional, and social aspects of empathy. The higher the total score, the higher the empathy. The reliability was .872 in this study.

2.3.2 Therapeutic communication ability

A scale validated by Lee [31] was used to measure therapeutic communication skills. It consists of 49 items rated on a 5-point scale; the higher the score, the higher the communication ability. In this study, the reliability was .913.

2.3.3 Attitude toward mental illness

Attitude toward mental illness was measured using the tool translated into Korean by Lee et al. [33], based on the Community Attitudes toward Mental Illness (CAMI) inventory developed by Taylor and Dear [32]. It consists of four subscales: authoritarianism (A), benevolence (B), social restrictiveness (S), and community mental health ideology (C). The scale includes 40 items on a 5-point Likert scale and is organized into four subscales.

2.4 Data collection

Data was collected from November 1 to December 16, 2016. Before participating, the process and procedure of the study was explained to third-year psychiatric nursing students. The participants were informed that they could withdraw from the study at any time and were assured anonymity and the confidentiality of the data. The study was conducted after obtaining written informed consent from the participants.

2.5 Data analysis

The collected data was analyzed using SPSS version 26.0. The general characteristics of the participants were analyzed in terms of numbers and percentages. A paired t-test was used to compare the effects on the participants' communication ability, empathy, and attitude toward mental illness, and the difference between the pre-test and post-test scores of each variable was analyzed using the t-test. The significance level (α) was $P < .05$.

3. RESULT

3.1 General characteristics

The average age of the nursing students was 24.37 years, and 49 of them had average GPAs (77.8%), 10 had high GPAs (15.9%), and 4 had low GPAs (6.3%). In terms of satisfaction with college life, 25 participants were very satisfied (39.7%), 32 were satisfied (50.8%), and 6 were dissatisfied (9.5%). Regarding levels of stress in college life, 12 students had average stress (19.0%), six had low stress (9.5%), and 45 had high stress levels (71.4%).

3.2 The effects of Psychiatric Nursing Practice Program Using Situation-Oriented Case-Based Learning

The empathy ($t=3.93$, $p<.001$) levels and communication ability ($t=2.48$, $p=.016$) scores of psychiatric nursing students who participated in situation-oriented CBL improved. However, while their attitude toward mental illness increased by 1 from 112.92 ± 4.11 to 113.92 ± 6.05 , it was not statistically significant ($t=1.18$, $p=.245$).

Table 1. Characteristics of the Subject (N=63)

Characteristics		n(%)	M ± SD
Age	22	5(7.9)	24.37 ± 3.93
	23	35(55.6)	
	24≤	23(29.5)	
Academic achievement	High	10(15.9)	2.32 ± .82
	Moderate	49(77.8)	
	Low	4(6.3)	
Satisfaction of college life	High	25(39.7)	3.30 ± .78
	Moderate	32(50.8)	
	Low	6(9.5)	
Stress of college life	High	45(71.4)	3.87 ± .96
	Moderate	12(19.0)	
	Low	6(9.5)	

Table 2. The effects of Psychiatric Nursing Practice Program Using Situation-Oriented CBL

Variables	Mean±SD			t	p
	Pretest	posttest	Difference (post-pre)		
Empathy	40.97±3.90	43.22±5.31	2.25±4.55	3.93	<.001
Therapeutic communication ability	176.84±16.27	182.08±17.65	5.24±16.80	2.48	.016
Attitude toward mental illness	112.92±4.11	113.92±6.05	1.00±16.80	1.18	.245

4. DISCUSSION

This study investigated changes in empathy, communication ability, and attitudes toward mental illness among nursing students according to situation-oriented CBL. Based on these results, we also attempted to prepare educational intervention plans to improve the clinical performance of nursing students in the future. When comparing the nursing students' communication ability, empathy, and attitude toward mental illness before and after situation-oriented CBL, communication ability and empathy increased significantly, but attitude toward mental illness did not decrease significantly.

First, the students' empathy scores increased significantly after situation-oriented CBL. Considering recent research results [16] that indicate empathy promotes social interaction as a factor that influences a person's communication ability and interpersonal relationships, a significant change in empathy scores appears to be

related to changes in communication skills. During the practice course, the students were instructed to prepare scenarios based on dialogue between nurses and patients. Through this process, they explored the difficulties experienced by patients, interacted with family members and healthcare professionals, and viewed the disease from the patients' perspectives rather than the nurses' perspectives. While preparing these scenarios, the students seemed to gain insight into the patients behavior and the difficulties they experienced; these experiences seem to increase empathy. Prejudice or discriminatory behavior toward people with mental disorders decreases as empathy increases [34]. From this point of view, situation-oriented CBL to elicit patient empathy will be essential in developing nurses' core competencies when treating patients in the future.

Second, the participants' communication ability scores increased significantly. (Communication skills reflect one's ability to communicate thoughts and feelings [3,35]). Nursing students meet and communicate with mental health patients at hospitals and in the community during psychiatric nursing clinical practice. In the case of nursing, clinical practice courses are conducted in parallel with each major, and an increasing number of studies have applied situation-oriented CBL to solve nursing problems in various clinical settings [3,36]. In this study, nursing students were divided into small groups to learn about patient cases related to substance addiction, schizophrenia, bipolar disorder, and conduct disorder through team activities. They were asked to find, select, and determine how to provide and apply nursing care according to changes in the patients' mental states in various situations. They also prepared scenarios by creating specific therapeutic communication dialogues with appropriate responses in clinical practice. In this study, learning how to communicate by exploring how to cope with problematic situations and directly applying the knowledge learned in mental illness theory classes to clinical practice was key to improving the nurses' communication ability.

Third, although there were no significant differences in attitudes toward mental illness before and after situation-oriented CBL, significant changes were found in the social restrictiveness subscale, which measures whether individuals with mental disorders have restricted social functions. The lower the score, the more restrictive the attitude. In this study, the social restrictiveness scale score increased significantly, contrary to the findings of Lee and Kwak [28] and Kim [37]. These results may have been attributed to the fact that the participants in this study encountered patients in closed wards, who were relatively more restricted than inpatients, during the clinical practical course. However, there was no significant change in the benevolence scale score. Kim [37] reported that benevolence does not easily change because it depends on the individual's personality rather than education [37]. During the short 2-week period of psychiatric nursing clinical practice, the students did not encounter enough cases to change their attitude, even if they completed the situation-oriented CBL clinical practice course. Therefore, it appears that the short training period may have acted as a factor influencing attitudes toward mental illness.

Psychiatric nursing education is a practical course that applies a multidisciplinary approach and requires clinical practice experience and the ability to solve cases in each situation, rather than providing a fixed answer. Owing to the nature of psychiatric nursing, it is necessary to think and reason about the subject's psychiatric situation from various angles. The results of this study suggest that the situation-oriented case-based approach of nursing students contribute to the empathy felt for patients and increased interpersonal communication skills through communication training, as the relationship between subjects and mental symptoms cannot be determined without dialogue. While this study intended to examine the changes before and after situation-oriented CBL, the results should be interpreted carefully because the pretest-posttest survey was conducted every two weeks. In addition, there may be limitations to generalizing the study results because it was conducted on nursing students in one area due to the convenience of sampling psychiatric nursing students; therefore, care must be taken to expand the research results.

5. CONCLUSION

This study investigated how situation-oriented CBL changed nursing students' communication abilities, empathy, and attitudes toward mental illness. Situation-based CBL was conducted for students who attended psychiatric nursing courses and participated in clinical practice, with pretest-posttest surveys conducted every two weeks. The students showed significant changes in their communication abilities and empathy. Although there was no significant difference in attitude toward mental illness scores before and after situation-oriented CBL, significant changes were found in the social restrictiveness subscale. There may be limitations in generalizing the results owing to the use of convenience sampling in recruiting psychiatric nursing students in one region. Although it is difficult to change psychiatric nursing students' attitudes toward mental illness in a short period of time, situation-oriented CBL was confirmed to be effective in enhancing communication skills, a core competency of nurses. Therefore, the results of this study demonstrate that situation-oriented CBL is an effective learning method for improving nursing students' empathy and communication skills.

CONFLICT OF INTEREST

The authors declared no conflict of interest.

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