

A systemic review of literature in clinical practice research for nursing students

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Abstract

This study is an attempted content analysis study to analyze recent studies on clinical practice of nursing college students to identify problems with clinical practice and provide evidence for desirable clinical practice. For data collection, a total of 14 papers published in academic journals between 2017 and 2021 were selected. The analysis method was performed according to the systematic review reporting guidelines presented by Cochrane Collaboration and the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) group. As a result of the analysis, two themes, Four sub-themes, and seventeen concepts were derived, and the clinical practice study of nursing college students showed the necessity of standardized clinical practice protocol regulations for nursing college students and respect for patient human rights. Based on the above research results, it is proposed to prepare a nursing and clinical practice protocol that can clearly present the role of nursing college students during clinical practice.

Keywords: *Clinical Practice study, Content analysis, Nursing student, Protocol*

1. INTRODUCTION

The number of enrolled students in nursing universities in Korea exceeded 90,000 in 2016, including outside the quota, and the number of students majoring in nursing is expected to continue to increase [1]. Recently, with the development of science and medical technology around the world, human life expectancy has increased rapidly, and people's interest in their health and health needs have increased very much. In addition, expectations for nurses are not only for helping doctors, but also for quality nursing as a nursing profession [2]. The goal of nursing education is to cultivate professional nurses with professional knowledge and qualitative nursing performance skills to solve health problems of nursing clients [3]. The nursing department of university that fosters nurses is operated based on essential basic nursing science knowledge to professionally nurse the needs of medical clients. Looking at nursing subjects, they are largely divided into nursing knowledge theory subjects for becoming nurses and clinical education subjects for acquiring skills that can be used in actual nursing situation [4]. Clinical education in the nursing department is more important than theoretical education. Nursing students are receiving education to improve practical adaptability by applying nursing theory learned in school to clinical sites [5]. The purpose of clinical practice education is to develop independent, self-determining critical thinking that creates professional skills, knowledge, and self-confidence as a nurse [6]. Nursing students not only have the opportunity to integrate overall nursing knowledge and

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practice through clinical practice education, but also learn problem-solving, decision-making, organization, and viewing management skills by applying communication and basic nursing skills in practice [7]. Such clinical practice education can be said to be a training process for appropriate nursing activities as a clinical nurse after graduation. However, it is reported that nursing students are experiencing various practical difficulties during the actual clinical practice process [8]. Looking at recent research papers on nursing and clinical practice since 2017, studies have been conducted focusing on the characteristics, safety, conflict, and communication of nursing students adapting to clinical practice. Specifically, it is as follow; in 2017, the relationship between the personality/behavior type and clinical practice stress patterns and coping methods of nursing college trainees [9]. Relationship between empathy, communication, and clinical practice stress of nursing students [10], a comparative study on the stress, depression, and self-efficacy of nursing students: focusing on the type D personality group and the non-type D personality group [11], factors affecting the activities of nursing students in clinical practice education [12], perception and psychological conflict of infection control through observation and performance of infection control activities of nursing students who have experienced clinical practice [13], in 2018, a phenomenological study on the communication experience of nursing students during clinical practice [14], effects of the working environment, emotional labor, and work stress of nurses perceived by nursing students who experienced clinical practice on the career identity of nursing students [15], in 2019, predictive factors of safety accidents during clinical practice for nursing students, the moral anguish of psychiatric practice [16], the moral anguish of psychiatric practice safety management training needs have been studied, and 2021, nursing students' clinical practice experience was qualitatively studied [17].

As described above, the research of nursing professors mainly made efforts to efficient clinical practice of students based on what nursing college students experienced in clinical practice. However, such a study was conducted on the premise that nursing college students could do all clinical practice. In fact, it cannot be considered that there are few studies when field training was not performed due to the recent pandemic infection. In the COVID-19 situation, clinical practice was almost impossible, but in the nursing curriculum, the suddenly prepared online practice was carried out as a desperate measure. Non-face-to-face practice at Korean universities mainly consisted of video simulations that had already been made in the United States [18]. In 2021, JA Kim published a study on maternal nursing online practice experience that conducted non-face-to-face practice in [18]. This study is a phenomenological analysis of the experience of nursing students in non-face-to-face classes in difficult delivery situations to observe in the practice field, and according to the research results, the participating students experienced a more detailed delivery process and had time to organize their thoughts. Recently, the delivery rate in Korea is very low, so the number of obstetrics and gynecology hospitals is physically very short supply, and the delivery cases to be rare, so it is actually difficult to practice to clinical maternal nursing practice. Therefore, learning the postpartum processes through simulation would have been very helpful for students. However, this study seems difficult to represent the whole as a field of nursing.

Nursing college students' combination of theory and practice is essential and has a desirable theoretical basis for nursing studies, but as mentioned above, the clinical field in Korea is not satisfied compared to the rapidly increasing number of nursing students. Due to the recent unexpected COVID-19 outbreak, the clinical practice field has been extremely reduced, and no one can guarantee that there will be a situation where clinical practice will not be possible again. However, as mentioned above, even though clinical practice is very important education in nursing, which is a practical science, the word non-face-to-face practice is contradictory in itself. It can be said that it is the main task of a professor in the department of nursing to foster equal learning as a nurse.

Therefore, this researcher judged that it is urgent to examine, analyze, and synthesize the clinical practice fields studied so far in order to secure the continuity and efficiency of clinical practice.

2. METHODS

2.1 Research purpose

The purpose of this study is to analyze the domestic papers on clinical practice of nursing college students within the past 5 years to prepare the operational status of clinical practice and improvement plans.

2.2 Selection of analysis target

Nursing department clinical practice-related papers published in domestic literature were searched for domestic literature published from January 2017 to December 2021. Databases such as the Korean studies information Service System (KISS), the national assembly library, the national digital science library NDSL, and the research information sharing service (RISS) papers published in Korea were searched using the keyword 'nursing and clinical practice'. Of the 31 papers, a total of 14 were selected, excluding those in which only abstracts were published, preliminary research studied, qualitative studies, degree theses, and non-nursing related studies.

2.3 Research Design

This study is a content analysis study to prepare the operational status of clinical practice and improvement plans by analyzing domestic papers. The data collection period was from April 1 to April 20, 2022. The literature to be finally analyzed in this study is based on the Cochrane collaboration's systematic review handbook [19] and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) group's systematic review reporting guidelines carried out [20]. Systematic literature review went through a rigorous and objective research process, including systematic and comprehensive literature search, selection of literature based on pre-set inclusion/exclusion criteria, and assessment of the risk of bias for the selected literature. In systematic literature review, as in other studies, two researchers independently selected literature to increase the accuracy and objectivity of clinical experts, methodologists, and statisticians in the relevant field. The details of the research process are as follows (Fig. 1).

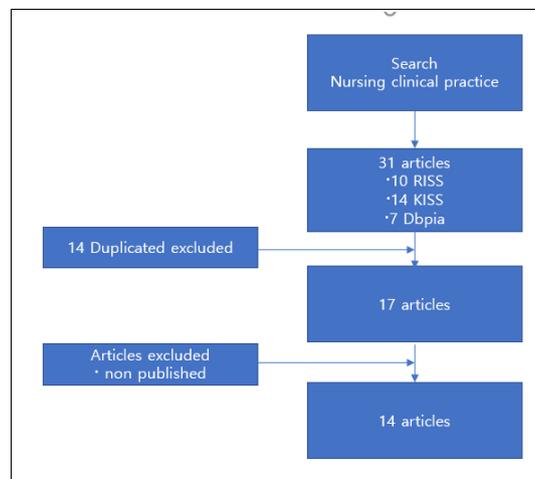


Figure 1. Research process

3. RESULT

This study is a methodological study systematically examining domestic literature related to nursing department clinical practice according to PRISMA recommendation. A total of 14 papers to be analyzed were published over the past 5 years from 2017 to 2021. Clinical practice-related research variables in papers published in the last 5 years are active practice, nursing students' personality, behavioral type, clinical practice stress, depression, self-efficacy, clinical practice stress, infection control awareness, psychological conflict, clinical course perception, and practical training environment, communication experience, work environment perceived by trainees, emotional labor, work stress, and career identity [Table 1]. The purpose of this study was to explore how clinical practice was described in clinical practice-related studies of nursing college students. As a result of repeating the process of extracting topics by repeatedly reading the contents related to clinical practice expressed in the recent study, 2 themes (standardized clinical practice protocol for nursing college students, respect for patients' human rights), 4 sub-themes, and 17 the concepts were derived. As a result of this study, the clinical practice of nursing college students expressed in this study was 'absence of a standardized protocol for clinical practice', as shown in [Table 2].

Table 1. Research variables and contents

Year	Variables	Methods	Contents
2017	Active practice	Correlation study	<ul style="list-style-type: none"> ● Emphasis on the role of practical educators ● Encounter with leading and independent nurses ● Emphasizes the need for a practical training course that allows sufficient discussion of issues to be considered
2017	Characteristics of nursing students. Behavioral patterns of nursing students.	Cross-sectional study	<ul style="list-style-type: none"> ● Prediction of clinical practice stress patterns through identification of personality and behavior type and suggest appropriate stress coping mechanisms for each type
2017	Clinic practice stress. Depression. Self-efficacy.	Cross-sectional study	<ul style="list-style-type: none"> ● Emphasize the preparation of intervention strategies by identifying the relationships between variables
2017	Clinical practice stress	Cross-sectional study	<ul style="list-style-type: none"> ● Emphasize the need for appropriate feedback as cognitive empathy, gender, and grade are major factors influencing clinical practice stress
2017	Infection control awareness	Focus group interview	<ul style="list-style-type: none"> ● In relation to infection control, it was reported that hygiene was not maintained due to the high-pressure atmosphere at the site, and that hand hygiene and fluid therapy were low in infection control.
2018	Thinking about a clinical career	Phenomenological study	<ul style="list-style-type: none"> ● Clinical practice is perceived as a place to go through a career without working for a long time ● Emphasizing the need for positive stimulation to raise the self-esteem of the nursing profession

2018	Clinical Practice Education Environment	Cross-sectional study	● Emphasis is placed on establishing an optimal clinical practice education environment as the clinical practice education environment affects the feeling of helplessness and self-efficacy related to practice.
2018	Communication experience	Phenomenological study	● Experience trauma due to negative communication with medical staff during practice
2019	Work environment, emotional labor, work stress, and career identity perceived by nursing students during clinical practice.	Cross-sectional study	● Emphasize that there was a positive correlation between the nurse's working environment and the nursing students' career identity
2019	Work environment perceived by nursing students, emotional labor, work stress, and career identity	Cross-sectional study	● Emphasize that there was a positive correlation between the nurse's working environment and the nursing students' career identity.
2019	Factors for predicting the occurrence of safety accidents	Cross-sectional study	● Practical performance, haste, and stress were found to be predictive factors for the occurrence of safety accidents in clinical practice
2019	Moral anguish during psychiatric clinical practice	Phenomenological study	● Moral anguish is the question of whether the situation must be suppressed, whether the nursing care performed is appropriate, the pity that the patient's rights are not respected, the feeling of being uncomfortable because I want to help the patient but not being able to help, how do I feel about my actions and words? Difficulty deciding what to do
2020	Mentoring before clinical practice	Program development	● As a result of applying practical counseling, video, and situational discussion program to the group for 2 days, learning attitude and self-confidence in performing nursing skills significantly increased
2020	Safety management training requirements	Cross-sectional study	● Emphasizes the development and application of programs to increase confidence in patient safety management and experience observation of medication accidents, patient identification errors, and infection-related accidents
2021	Clinical practice experience	In-depth interview	● Emphasis on the need to change practical education so that people can have confidence rather than fear

Table 2. Clinical Practice-Related Research Topics for Nursing College Students

Theme	Sub-theme	Concepts
Standardized clinical practice protocol regulation for nursing college students	● The role of practical educators.	<ul style="list-style-type: none"> ● Practice stress ● Appropriate feedback ● High-pressure atmosphere ● Practical performance
	● The clinical practice mentoring	<ul style="list-style-type: none"> ● Fear ● Situational Discussion ● Performance Confidence Enhancement ● Predictable Situations
Respect for patient's human rights	● medical accident experience	<ul style="list-style-type: none"> ● Practice results ● Haste ● Stress ● Helplessness ● Aftereffects of practice
	● The Role of Nursing College Students	<ul style="list-style-type: none"> ● Image of a nurse ● Respect ● Want to help ● Feel uncomfortable

4. DISCUSSION

This study tried to identify the topics related to clinical practice and suggest the right direction for development based on the research contents of the last 5 years through research analysis on clinical practice in the domestic nursing department.

In the 2017 study, a study was conducted that emphasized the role of practical educators in clinical practice of nursing students. It was determined that nursing students met with leading and independent nurses through clinical practice, and observed during clinical practice. The necessity of a practical training course in which sufficient discussion is made during clinical practice guidance on one issue was emphasized.

In addition, an effort was made to identify the clinical practice stress patterns that occur according to the individual characteristics and behavioral types of nursing college students, and to present a stress coping mechanism suitable for each type of nursing college students and to prepare an intervention strategy. During this period, there was a lot of interest in clinical practice, emphasizing the factors of clinical practice stress and the need for appropriate feedback. In a different direction of research, it was stipulated that the high-pressure atmosphere in the clinical field was the cause of the failure to comply with infection control that occurred during clinical practice, and this is also considered to be a stress of clinical practice. In other words, the research of nursing scholars in 2017 showed that the main research task was to deal with the stress that arises as a student as a student during clinical practice, and to deal with it appropriately.

In the 2018 study, a qualitative study was conducted for a deeper understanding of the place of clinical practice from the perspective of nursing college students. As a result of the study, it is reported that nursing college students are aware that clinical practice is a place that goes through a career without working for a long time, and the researcher who pointed out this problem emphasized the need for positive stimulation to raise the pride of nursing professionals. Until 2018, it was found that the helplessness arising from the clinical practice education environment of nursing students had an effect on the self-efficacy of nursing college students, and accordingly, it was emphasized to establish an optimal clinical practice education environment.

In addition, nursing college students reported longing for the image and respect of professional nurses in communication with medical personnel, and emphasized that negative experiences through clinical practice changed to passive attitudes rather than asserting their opinions, and experienced aftereffects of clinical practice. In other words, rather than being flexibly adjusted to changes in the clinical practice field, the 2018 study of nursing scholars seems to have been conducted to predict friction with a new generation of nursing students while adhering to the existing stubborn clinical environment.

In the 2019 study, the predictors of the occurrence of clinical practice accidents in nursing college students were mainly dealt with, and the predictors of the occurrence of accidents were analyzed as factors such as practical performance, hurry, and stress. In addition, moral anguish arising during clinical practice was dealt with, and moral conflicts arising from new interpersonal relationships experienced as prospective medical personnel in the hospital environment were the main focus of the study. In other words, I experienced conflict about the attitude of medical personnel toward patients, such as whether the nursing performed by the patient is appropriate, the situation in which the patient's rights are not respected, the discomfort of wanting to help the patient, and the difficulty of determining what to say.

In the 2020 study, in order to increase the efficiency of clinical practice, nursing scholars began to pay attention to the importance of mentoring before clinical practice, and to highlight the importance of preventing accidents and safety management that may occur during clinical practice. In other words, it was reported that the learning attitude and confidence in nursing skills increased significantly after clinical practice, and the development and application of programs to enhance patient safety management was emphasized based on the observation of medication accidents, patient identification errors, and infection-related accidents.

In a recent 2021 study, an in-depth interview was conducted on clinical practice experience, emphasizing that practice education should be changed so that people can have more confidence than fear to become a professional nurse.

Based on the above research results, I would like to make the following recommendations.

First, the role of nursing college students during clinical practice should be clearly presented and a protocol should be prepared based on that role.

Second, related research is proposed to develop standardized systematic practical education contents suitable for the practice protocol of nursing college students.

Third, research related to desirable changes in nursing department clinical practice education is suggested.

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