

Convergence Effects of Clinical Introductory Practicum on Nursing Students

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Abstract

Background/Objectives: Clinical nursing practice is very important in the nursing education curriculum. The purpose of this study was to identify the convergence effects of clinical introductory practicum on nursing students.

Methods/Statistical analysis: Collected data were analyzed using SPSS / WIN 22.0 program. The general characteristics of the subjects were analyzed using descriptive statistics. T-test and ANOVA were used to analyze, Nursing professionalism, Self-efficacy, Clinical competence by the general characteristics, and sheffe's test was used for post-hoc test. Differences in the variables pre and post clinical introductory practicum of the subjects were analyzed by paired t-test. The correlations between variables were analyzed by Pearson's Correlation Coefficient.

Findings: This study was conducted pre and post clinical introductory practicum for 3rd grade nursing students. Collected data from 93 students who were voluntarily agreed to participate in the study. Data collection period was from December 20, 2017 to February 10, 2018. Nursing professionalism differed by religion ($t=-2.84$, $p=.006$), thinking about nursing at entrance ($t=2.45$, $p=.016$), thinking about a job as a nurse ($F=3.00$, $p=.035$). Self-efficacy differed by school achievement ($t=11.43$, $p<.001$), major satisfaction ($F=9.93$, $p<.001$), thinking about nursing at entrance ($t=2.19$, $p=.031$). Clinical Competence differed by thinking about nursing at entrance ($t=2.66$, $p=.009$), thinking about a job as a nurse ($F=8.76$, $p<.001$). After clinical introductory practicum, nursing professionalism ($t=5.17$, $p<.001$), self-efficacy ($t=3.16$, $p=.002$), and clinical competence ($t=.352$, $p=.001$) were increased. Clinical competence was positively correlated with nursing professionalism ($r=.636$, $p<.001$) and self-efficacy ($r=.423$, $p<.001$).

Improvements/Applications: It can be used to help adaptation by connecting the school education and the clinical practicum so that the nursing students can reach the nursing goals well.

Keywords: Clinical Introductory Practicum, Nursing Students, Nursing Professionalism, Self-efficacy, Clinical Competence

1. INTRODUCTION

The purpose of nursing education is to foster nurses equipped with competence to carry out practical work required to nurses[1]. The nursing education courses consist of knowledge, technique, and practice education. Clinical practice is an important opportunity through which the knowledge and techniques to be equipped with as candidate nurses can be integrated at and applied to clinical sites, and it is an essential educational course to nurture values, attitudes, and confidence of the profession as a nurse[2].

Clinical practice is performed at the site of nursing, not in a lecture room or in a practice room. However, it is not easy to apply the knowledge and techniques learned thus far to the clinical sites. Therefore the students experience anxiety, stress, tension, fear, and burden due to the unfamiliar clinical environment and changed role through the clinical practice[3]. They also experience some confusion in their identity or feel helplessness[4]. The negative clinical practice experience of the students can be connected to the decline of confidence and increase in anxiety and stress on the future clinical practice. It can also be connected to giving up studying, the skepticism of students' major, and decline of confidence towards nursing performance, and may affect future career decision. The view of nursing professionalism works as a standard of conviction and attitude towards the job as a nurse. The positive nursing professionalism elevates satisfaction with nursing job, and enables professional and independent nursing performance[5]. It is formed and develops through clinical practice experience by which nurse's job performance can be observed[6].

Self-efficacy means the degree of confidence towards student's own nursing competence that a student has[7]. Students having high self-efficacy, actively participate in the clinical practice, and they can efficiently play their roles[8]. Therefore it is important to properly motivate and assign roles so that they can adapt to clinical practice and promote self-efficacy with positive practice experiences. Clinical competence means an ability to efficiently play one's role by integrating the knowledge, techniques, and attitudes that they have learned[9]. Nursing education aims to achieve and improve clinical competence required at clinical sites after graduation of nursing school[8]. Consequently, interest in and efforts for various and effective methods through which students' clinical competence can be improved are necessary for nursing education development[10].

In nursing education, there were diverse studies, as clinical practice is important[10,11]. However, researched on program development for a variety of introduction to the clinical field and on the confirmation of the effect is lacking[5]. The clinical introductory practicum is to improve confidence and self-efficacy in the practice required for clinical practice. In addition, it is an important process for applying and integrating major knowledge and nursing skills, and integrating the core competencies of nurses such as self-esteem and nursing professionalism. So this study tries to check the nursing students' nursing professionalism, self-efficacy, and clinical competence change and level by applying an introductory clinical practicum program.

2. METHODS

2.1. Research Design

This study is an experimental study of one- group pretest-posttest design to investigate the convergence effect of clinical introductory practicum on nursing students.

2.2. Participants &Data Collection

This study was conducted pre and post clinical introductory practicum for 3rd grade nursing students. Collected

data from 93 students who were voluntarily agreed to participate in the study. Data collection period was from December 20, 2017 to February 10, 2018.

2.3. Instrument

2.3.1. General characteristics

The general characteristics were 9 items including age, gender, religion, school achievement, medical workers in family members, major satisfaction, thinking about nursing at entrance, thinking about nursing at now, thinking about a job as a nurse

2.3.2. Nursing professionalism

The existing measurement tools were used[12]. The 29 items were composed of 5 points scoring of 'strongly agree = 5 points', 'agree = 4points', 'normal = 3 points', 'disagree = 2points', 'strongly disagree = 1 point' scale. It has five sub-areas, professional self-concept, social awareness, nursing expertise, role of nursing system, identity in nursing. The higher score means more positive nursing professionalism. Reliability analysis showed Cronbach's α coefficient was .91.

2.3.3. Self-efficacy

The existing measurement tools were used[13]. The 45 items were composed of 5 points scoring of 'strongly agree = 5 points', 'agree = 4points', 'normal = 3 points', 'disagree = 2points', 'strongly disagree = 1 point' scale. It has two sub-areas, general self-efficacy, social self-efficacy. The higher score means more positive self-efficacy. Reliability analysis showed Cronbach's α coefficient was .82.

2.3.4. Clinical competence

The existing measurement tools were used[14]. The 23 items were composed of 5 points scoring of 'strongly agree = 5 points', 'agree = 4points', 'normal = 3 points', 'disagree = 2points', 'strongly disagree = 1 point' scale. It has five sub-areas, nursing process, nursing skills, education/cooperation, interpersonal relationship/communication, professional development. The higher score means more positive clinical competence. Reliability analysis showed Cronbach's α coefficient was .96.

2.4. Data Analysis

Collected data were analyzed using SPSS / WIN 22.0 program. The general characteristics of the subjects were analyzed using descriptive statistics. T-test and ANOVA were used to analyze, nursing professionalism, self-efficacy, clinical competence by the general characteristics, and sheffe's test was used for post-hoc test. Differences in the variables pre and post clinical introductory practicum of the subjects were analyzed by paired t-test. The correlations between variables were analyzed by Pearson's Correlation Coefficient.

3. RESULTS AND DISCUSSION

The general characteristics of participants in this study as shown in Table 1. Their average age was 20.5 ± 1.14 . The most frequent gender was female 82.8%, without religion 58.1%. School achievement was 'moderate' 72.0%, medical workers in family members was 'no' 68.8%. The most frequent major satisfaction was 'common' 58.1%, thinking about nursing at entrance was 'positive' 58.1%, thinking about nursing at now was 'neutrality' 51.6%, thinking about a job as a nurse was 'a guaranteed job' 59.1%.

Difference of Variables according to the general characteristics as shown in Table 1. Nursing

professionalism differed by religion ($t=-2.84, p=.006$), thinking about nursing at entrance ($t=2.45, p=.016$), thinking about a job as a nurse ($F=3.00, p=.035$). Self-efficacy differed by school achievement ($t=11.43, p<.001$), major satisfaction ($F=9.93, p<.001$), thinking about nursing at entrance ($t=2.19, p=.031$). Clinical Competence differed by thinking about nursing at entrance ($t=2.66, p=.009$), thinking about a job as a nurse ($F=8.76, p<.001$).

Table 1: General Characteristics and Variables according to the General Characteristics (N=93)

Characteristics	Categories	n(%) or M(SD)	Nursing Professionalism		Self-Efficacy		Clinical Competence	
			M(SD)	t or F(p)	M(SD)	t or F(p)	M(SD)	t or F(p)
				Scheffe		Scheffe		Scheffe
Age(yrs)	Range 19-25	20.5(1.14)						
Gender	Male	16(17.2)	3.67(0.57)	0.27(.789)	3.15(0.36)	0.64(.524)	3.50(0.60)	0.53(.598)
	Female	77(82.8)	3.64(0.39)		3.08(0.40)		3.44(0.43)	
Religion	Yes	39(41.9)	3.50(0.40)	-2.84(.006)	3.09(0.41)	-0.02(.987)	3.40(0.52)	-0.89(.377)
	No	54(58.1)	3.75(0.41)		3.09(0.39)		3.49(0.42)	
School achievement	High ^a	9(9.7)	3.72(0.28)	0.17(.847)	2.98(0.32)	11.43(<.001) b>c	3.25(0.19)	1.07(.348)
	Moderate ^b	67(72.0)	3.64(0.46)		3.20(0.38)		3.49(0.46)	
	Low ^c	17(18.3)	3.62(0.42)		2.74(0.28)		3.44(0.56)	
Medical workers in family members	Yes	29(31.2)	3.64(0.46)	-0.10(.923)	3.19(0.39)	1.51(.134)	3.45(0.54)	-0.03(.979)
	No	64(68.8)	3.65(0.41)		3.06(0.39)		3.45(0.42)	
Major satisfaction	Satisfaction ^a	28(30.1)	3.75(0.42)	1.31(.275)	3.25(0.39)	9.93(<.001) a, b>c	3.62(0.51)	2.93(.059)
	Common ^b	54(58.1)	3.61(0.45)		3.10(0.36)		3.39(0.45)	
	Dissatisfied ^c	11(11.8)	3.55(0.29)		2.68(0.31)		3.34(0.29)	
Thinking about nursing at entrance	Positive	54(58.1)	3.74(0.42)	2.45(.016)	3.17(0.42)	2.19(.031)	3.56(0.50)	2.66(.009)
	Neutrality	39(41.9)	3.53(0.41)		2.99(0.33)		3.31(0.36)	
Thinking about nursing at now	Positive	42(45.2)	3.75(0.42)	2.47(.090)	3.17(0.39)	2.08(.131)	3.56(0.53)	2.38(.098)
	Neutrality	48(51.6)	3.56(0.42)		3.04(0.40)		3.38(0.57)	
	Negative	3(3.2)	3.63(0.32)		2.81(0.13)		3.14(0.90)	
Thinking about a job as a nurse	Best job ^a	16(17.2)	3.88(0.49)	3.00(.035)	3.22(0.45)	1.66(.182)	3.90(0.61)	8.76(<.001) a>b,c,d
	A guaranteed job ^b	55(59.1)	3.63(0.34)		3.05(0.40)		3.38(0.35)	
	Provisional occupation ^c	19(20.4)	3.57(0.50)		3.16(0.33)		3.38(0.40)	
	Job that do not want ^d	3(3.2)	3.23(0.58)		2.75(0.20)		2.91(0.38)	

Difference of pre and post test between the variables as shown in Table 2. Nursing professionalism was

increased pretest 3.65 points to posttest 3.97 points ($t=5.17, p<.001$). Among the five sub-areas, professional self-concept was increased pretest 3.84 points to posttest 4.10 points ($t=4.18, p<.001$), social awareness was increased pretest 3.54 points to posttest 3.98 points ($t=5.29, p<.001$), nursing expertise was increased pretest 3.80 points to posttest 4.10 points ($t=3.87, p<.001$), role of nursing system was increased pretest 3.83 points to posttest 4.13 points ($t=3.59, p=.001$) were increased. This is a positive change in the nursing professionalism is intuition by experiencing the professionalism, social status, work and identity of nurses in the field. This is because nursing professional instincts are especially shaped and developed through professional education[15].

This will be an important factor that has a positive effect on the successful execution of nursing work through nursing activities. Self-efficacy was increased pretest 3.09 points to posttest 3.28 points ($t=3.16, p=.002$). Two sub-areas, general self-efficacy was increased pretest 3.08 points to posttest 3.27 points ($t=3.01, p=.003$), social self-efficacy was increased pretest 3.14 points to posttest 3.30 points ($t=2.17, p=.033$) were increased. Nursing students will have the opportunity to apply some of the nursing skills that have been intensively practiced at school in clinical sites. And it is believed that confidence in performance increases and confidence in social relations increases through interpersonal contact experiences between medical staff and patients[11]. So, the role of the clinical instructor is very important to enhance self-efficacy through experiences such as appropriate performance opportunities, success experiences, and encouragement. Clinical competence was increased pretest 3.45 points to posttest 3.71 points ($t=3.52, p<.001$). Five sub-areas, nursing process was increased pretest 3.40 points to posttest 3.68 points ($t=3.51, p<.001$) nursing skills was increased pretest 3.41 points to posttest 3.63 points ($t=2.52, p=.014$) education/cooperation was increased pretest 3.44 points to posttest 3.74 points ($t=3.66, p<.001$), interpersonal relationship/communication was increased pretest 3.52 points to posttest 3.79 points ($t=3.33, p=.001$), professional development was increased pretest 3.56 points to posttest 3.80 points ($t=2.86, p=.005$). Scores in all subareas were significantly higher. However, the lowest score was 3.63 for nursing skills. This is similar to the report of Kim[16].

This may be because of problems such as safety issues and accident risk, students did not have various opportunity and sufficient experiences during the practice[17]. Therefore, clinical introductory practice should have ample opportunity and time to practice sufficient knowledge and skills in a safe environment. In addition, it is necessary to try various effective education methods and change the educational program to improve clinical performance.

Table 2: The Difference of Pre-Post Test between the Variables (N= 93)

Variables	Pretest	Posttest	t	p
	M(SD)	M(SD)		
Nursing professionalism	3.65(0.42)	3.97(0.49)	5.17	<.001
Professional self-concept	3.84(0.46)	4.10(0.55)	4.18	<.001
Social awareness	3.54(0.58)	3.98(0.61)	5.29	<.001
Nursing expertise	3.80(0.52)	4.10(0.55)	3.87	<.001
Role of nursing system	3.83(0.57)	4.13(0.62)	3.59	.001
Identity in nursing	2.89(0.90)	3.07(1.12)	1.22	.227
Self-efficacy	3.09(0.40)	3.28(0.43)	3.16	.002

General self-efficacy	3.08(0.42)	3.27(0.45)	3.01	.003
Social self-efficacy	3.14(0.52)	3.30(0.56)	2.17	.033
Clinical Competence	3.45(0.46)	3.71(0.60)	3.52	.001
Nursing process	3.40(0.50)	3.68(0.65)	3.51	.001
Nursing Skills	3.41(0.52)	3.63(0.73)	2.52	.014
Education / Cooperation	3.44(0.50)	3.74(0.66)	3.66	<.001
Interpersonal relationship /Communication	3.52(0.56)	3.79(0.62)	3.33	.001
Professional development	3.56(0.56)	3.80(0.63)	2.86	.005

Clinical competence was positively correlated with nursing professionalism ($r=.636$, $p<.001$) and self-efficacy ($r=.423$, $p<.001$). Also self-efficacy was positively correlated with nursing professionalism ($r=.393$, $p<.001$). Therefore, the higher nursing professionalism and self-efficacy, the higher clinical competence as shown in Table 3.

Table 3: Correlation of Nursing Professionalism, Self-Efficacy, Clinical Competence (N= 93)

	Nursing professionalism $r(p)$	Self-efficacy $r(p)$	Clinical Competence $r(p)$
Nursing professionalism	1		
Self-efficacy	.393**(<.001)	1	
Clinical competence	.636**(<.001)	.423**(<.001)	1

The introductory clinical practicum in this study means a regular course for two weeks simultaneously performing practice at school and at clinical site. The practicum consisted of orientation, basic clinical practice, and post-hoc group discussion. The orientation comprised practice orientation, medical term test, basic nursing skill demonstration and practice. The basic clinical practice was carried out at the general ward of a university hospital under the guidance of a clinical expert. The post-hoc group discussion consisted of individual guidance on case study reports, debriefing and basic nursing skill evaluation. It is an important experience to reconstruct and form philosophy.

The clinical introductory practicum in the nursing curriculum is not only a performance aspect that can be applied to the knowledge and skills learned at school, but also a basic attitude and value that should be understood as a nurse in the clinical field. It is an important experience to reconstruct and form philosophy. So it is important to instruct and educate on-site hospitals so that their clinical initiation experience does not have negative consequences[18].

Clinical introductory practicum can be used to fully prepare theoretical education and professional nursing skills, and to link school education and clinical settings to help students adapt to successful clinical practice to achieve the goal of nursing education

4. CONCLUSION

The purpose of this study is to identify the convergent effects of clinical introductory practicum. This study was designed as one group pre-post design to identify the differences in nursing professionalism, self-efficacy, and clinical competence pre and post clinical introductory practicum. The results of this study confirmed a significant increase in nursing professionalism ($t=5.17$, $p<.001$), self-efficacy ($t=3.16$, $p=.002$), and clinical competence ($t=3.52$, $p<.001$) after clinical introductory practicum. In this study, the effect of clinical introductory practice was confirmed, and it can be used to reduce the anxiety and stress of students and to help adaptation by connecting the school education and the clinical so that the nursing students can reach the nursing goals well. There is a continuing need for study on teaching methods and programs for effective clinical adaptation and effective education for nursing students.

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