Original Article

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Nursing Students' Perception on Satisfaction and Self-Confidence with Skill Laboratory Practice

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ABSTRACT

Introduction: *Nursing students go through series of theory and practical sessions before accomplishing the nursing course. It is necessary for the students to gain master in basic procedures prior to practicing on real patients. Therefore, students best learn to perform nursing procedures in skill laboratories through demonstrations and simulations. The current study aims to assess the nursing students' perception on satisfaction and self-confidence towards skill laboratory practice.*

Methods: *A descriptive cross sectional research design with total enumeration technique was used. Self- administered technique was used to collect data from 78 respondents. The data was analyzed in SPSS software version 20 using descriptive analysis.*

Results: *The mean age of the students was 20.35±1.43. Out of 78 students, half (51.3%) were involved in fundamental laboratory, while, 48.7% were involved in Midwifery laboratory practice. More than half of the students (56.4%) were satisfied with the skill laboratory practice, and half of the students (50%) had high self-confidence to practice in actual clinical setting after skill laboratory practice.*

Conclusion: *More than half of the students were satisfied and half of them had high self-confidence, and there is still need to put more efforts towards improving the practice in order to exceed the current quantity as well as the quality of practice.*

Keywords: *Nursing students, practice satisfaction, self-confidence, skill laboratory*

INTRODUCTION

Skill laboratory practice helps students to build up their confidence and satisfaction which ultimately will contribute to better clinical performance. Students can develop a high level of self-confidence in their abilities to carryout clinical interventions through simulation practice in the skill laboratory. Most of the skills required to perform nursing procedure are demonstrated by the teachers followed by the opportunity to practice on students and mannequins in the skill laboratories, where students are allowed to make mistakes and correct themselves.[1]

Demonstrations contribute effectively to the teaching and learning in the skills laboratories.[2] Similarly, simulation is considered an effective solution to replace some real-life clinical exposure hour as nursing and other health professionals' programs are facing challenges of inadequate clinical learning opportunities.[3] The practice sessions, tutors, and sufficient resources make the learning environment more efficient at skill laboratory than teaching and learning in the practice sites.[4] However, they often express anxiety and worry about their clinical practice.[3]

To overcome this, certain clinical teaching strategies should be used in order to facilitate learning and self-confidence of the students. Three strategies; lecture and dialogical classes, skills practicing in the laboratory and the development of simulated clinical scenarios

are commonly used. Nevertheless, students need to perceive satisfaction and develop their self-confidence towards what they have learnt so that they can perform their best in clinical practice.[5] Therefore, student's satisfaction and self-confidence remain an important measure to evaluate the effectiveness of teaching and learning strategies.

METHODS

After getting ethical approval from Institutional review committee, Institute of Medicine, Tribhuvan University (Ref no: 482(6-11)E2), formal permission for data collection was obtained from Maharajgunj Nursing Campus, IOM, TU. Total énumération technique was used in this study. All the B. Sc. Nursing students from first and third year who were practicing nursing skills inside the skill laboratory were included in the study as participants. The total number of students who are involved in practicing inside laboratory were 78. So, the sample size was 78. Written consent were obtained from the respondents who fall under the inclusion criteria. A self-administered method involving questionnaire completion was used. Researcher herself was assigned to supervise the class while the students were filling up the questionnaire to avoid the contamination of the data. Pretesting was done among 8 fourth year B.Sc. nursing students, who has just appeared third year final examination, and were involved in skill laboratory practice to establish validity and reliability of the instrument. Necessary modifications were done after pretesting.

Tool consists of three parts: Part one includes socio demographic data, including age, stream, and course. Part two included a 23 items satisfaction scale. This scale was developed by the researchers from various other tools used in different studies; Jaffries and Rizzolo (2006),[6] that measured satisfaction and self-confidence of student after simulation experience, and a multidimensional instrument to measuring nursing students' academic satisfaction by Dennison and El-Masri (2012).[7]

Part three included self-confidence survey form. This part included 13 items and was developed from previously used tools in other studies: the Jaffries and Rizzolo (2006) tool,[6] and Hicks and Li (2006)[8]. Part two and three of the survey is a five-point Likert Scale describing to what extend participants agree or disagree with the statements. There was no cut-off score for the scale, hence, the mean was utilized to represent the students' satisfaction and self-confidence level.

Data was entered into MS-Excel and then was exported to SPSS software for further analysis. After data entry, the data was checked for accuracy. Analysis was done in SPSS version 20 using descriptive statistics (frequency, percentage, measures of central tendency).

RESULTS

Table 1: General Information of the Participants (n= 78)

Variables	Number	Percent (%)
Age		
≤ 20	42	53.8
> 20	36	46.2
Mean(SD)= 20.35(1.43) Range: 17-23 years		
Gender		
Male	3	3.8
Female	75	96.2
Ethnicity		
Brahmin/Chhetri	58	74.4
Janajati	15	19.2
Madhesi	4	5.1
Dalit	1	1.3
Religion		
Hindu	74	94.9
Buddhist	4	5.1
Area of residence		
Rural	13	16.7
Urban	65	83.3
Year of education		
First Year	40	51.3
Third Year	38	48.7
Area of skill laboratory		
Fundamental of Nursing Laboratory	40	51.3
Midwifery Laboratory	38	48.7
Current stay		
At hostel	67	85.9
Out of hostel	11	14.1

The mean age of the students was 20.35±1.43. Out of 78 students, three of them were boys. Majority of them (83.3%) were resident of urban area and 85.9% were currently staying in hostel. First year students (51.3%) were involved in fundamental laboratory, while, third year students (48.7%) were involved in Midwifery laboratory [Table 1].

Table 2: Satisfaction of the Students with Skill Laboratory Practice (n= 78)

SN	Items	SA	Agree	Neutral	Disagree	SD
		No.(%)	No.(%)	No.(%)	No.(%)	No.(%)
1	Clinical instructors/faculties provide enough opportunities for independent practice in the lab and clinical sites	31(39.7)	30(38.5)	17(21.8)	-	-
2	Clinical instructors/faculties give me clear ideas of what is expected from me during a practical rotation	26(33.3)	39(50.0)	9(11.5)	4(5.1)	-
3	Clinical instructors/faculties assign me procedures/scenarios that are appropriate for my level of competence	23(29.5)	44(56.4)	8(10.3)	2(2.6)	1(1.3)
4	Clinical instructors/faculties are open to discussions and different opinions	29(37.2)	34(43.6)	7(9.0)	8(10.3)	-
5	Clinical instructors/faculties are making me feel comfortable about asking questions	21(26.9)	46(59.0)	6(7.7)	5(6.4)	-
6	Clinical instructors/faculties provided feedback at appropriate times	23(29.5)	43(55.1)	8(10.3)	2(2.6)	2(2.6)
7	Clinical instructors/faculties are approachable	20(25.6)	42(53.8)	15(19.2)	1(1.3)	-
8	Clinical instructors/faculties view my mistakes as a part of my learning	27(34.6)	32(41.0)	13(16.7)	5(6.4)	1(1.3)
9	Clinical instructors/faculties encourage me to link theory to practice	30(38.5)	29(37.2)	10(12.8)	8(10.3)	1(1.3)
10	I enjoyed how my instructor/faculties conducted the demonstration sessions	27(34.6)	30(38.5)	15(19.2)	6(7.7)	-
11	The teaching methods used in demonstration were helpful	19(24.4)	41(52.6)	17(21.8)	1(1.3)	-
12	The demonstration provided me with a variety of learning materials and activities to promote my learning process	25(32.1)	37(47.4)	7(9.0)	8(10.3)	1(1.3)
13	Teachers behave professionally	28(35.9)	27(34.6)	18(23.1)	4(5.1)	1(1.3)
14	The teaching methods used in skill lab is effective.	16(20.5)	44(56.4)	16(20.5)	2(2.6)	-
15	The teaching materials used in this demonstration were motivating me to learn	17(21.8)	42(53.8)	17(21.8)	2(2.6)	-

16	The way my instructors/faculties conducted the demonstration was suitable to the way I learn	24(30.8)	32(41.0)	16(20.5)	6(7.7)	-
17	Clinical instructors/faculties give me sufficient guidance before I perform technical skills	23(29.5)	36(46.2)	10(12.8)	9(11.5)	-
18	Clinical instructors/faculties demonstrate a high level of knowledge and skill expertise	18(23.1)	42(53.8)	12(15.4)	6(7.7)	-
19	Clinical instructors/faculties did not embarrass me in front of others	29(37.2)	27(34.6)	8(10.3)	10(12.8)	4(5.1)
20	Clinical instructors/ faculties are consistent among different demonstration practice and lab sessions	17(21.8)	41(52.6)	12(15.4)	8(10.3)	-
21	Clinical instructors/faculties facilitate my ability to critically assess my client's needs	14(17.9)	45(57.7)	12(15.4)	7(9.0)	-
22	Clinical instructors/faculties give me verbal and written feedback concerning my simulation experience	8(10.3)	50(64.1)	13(16.7)	6(7.7)	1(1.3)
23	Clinical instructors/faculties are available when needed	16(20.5)	33(42.3)	16(20.5)	12(15.4)	1(1.3)

Note: SA: Strongly Agree, SD: Strongly Disagree

Table 2 shows the satisfaction survey with the means of its items. Participants mostly agreed with each statement and strongly agreed with some statements.

Table 3: Self-confidence among Students with Skill Laboratory Practice (n= 78)

SN	Items	SA	Agree	Neutral	Disagree	SD
		No.(%)	No.(%)	No.(%)	No.(%)	No.(%)
1	I am confident that I can initiate performing the nursing procedure for clients	23(29.5)	50(64.1)	5(6.4)	-	-
2	I am confident that I am obtaining the required knowledge from skill lab practice to perform necessary tasks in a clinical practice	15(19.2)	57(73.1)	5(6.4)	1(1.3)	-
3	I am certain that I can accomplish my intended learning goals	17(21.8)	51(65.4)	9(11.5)	1(1.3)	-
4	I am confident that I am developing the required skills from demonstration to perform necessary tasks in clinical practice	21(26.9)	44(56.4)	8(10.3)	5(6.4)	-
5	I can handle whatever comes my way in clinical practice	10(12.8)	31(39.7)	30(38.5)	7(9.0)	-
6	I am confident that I can always manage to solve difficult problems if I try hard enough	18(23.1)	44(56.4)	14(17.9)	2(2.6)	-

7	I am confident that I can evaluate the effectiveness of my interventions for an individual with any abnormalities	14(17.9)	49(62.8)	12(15.4)	2(2.6)	1(1.3)
8	I am confident that I can accurately assess an individual with any abnormalities	15(19.2)	44(56.4)	17(21.8)	2(2.6)	-
9	I am confident that I am mastering the content of the demonstration activity that my instructors presented to me	13(16.7)	42(53.8)	20(25.6)	3(3.8)	-
10	I am confident that I can appropriately intervene to meet the need of an individual with any abnormalities	15(19.2)	45(57.7)	17(21.8)	1(1.3)	-
11	I am confident that I can develop appropriate nursing care plan for individuals with any abnormalities	10(12.8)	47(60.3)	18(23.1)	3(3.8)	-
12	I am confident that I can deal efficiently with unexpected events	6(7.7)	38(48.7)	31(3.8)	3(3.8)	-
13	I am confident that the demonstration covered critical content necessary for the mastery of the curriculum	13(16.7)	40(51.3)	19(24.4)	6(7.7)	-

Note: SA: Strongly Agree, SD: Strongly Disagree

Table 3 shows the results pertaining to the self-confidence scale. Participants mostly agreed and strongly agreed with the statements, while some of them were neutral about the statements related to self- confidence. Only one of the participant strongly disagreed on the statement "I am confident that I can evaluate the effectiveness of my interventions for an individual with any abnormalities".

Table 4: Status of Satisfaction and Self-confidence (n= 78)

Variables	Number	Percent
Level of satisfaction		
Low Satisfaction	34	43.6
High Satisfaction	44	56.4
Mean (SD) = 91.31 (14.76) Range: 62-114		
Level of Self-confidence		
Low Self-confidence	39	50.0
High Self-confidence	39	50.0
Mean (SD)= 50.83 (6.11) Range: 36-65		

Table 4 depicts level of satisfaction and level of self-confidence among the students towards skill laboratory practice. Score above the mean value was considered high level of satisfaction and self-confidence, while, score at the mean value and below were considered low level of satisfaction and self-confidence. More than half of the students (53.4%) had high level of satisfaction with the skill laboratory practice, and half of the students (50%) had high level of self-confidence. The overall mean for satisfaction scale was 91.31±14.76, with minimum score of 62 and maximum 114 and the overall mean score for self-confidence scale was 50.83±6.11, with minimum score of 36 and maximum 65.

DISCUSSION

In this study it seemed, clinical instructors/ faculties provided enough opportunities for independent practice in the lab and clinical sites ($\bar{x}$±SD = 4.18±0.77), similarly they gave clear ideas of what was expected from them during a practical rotation ($\bar{x}$±SD = 4.12±0.81) and they assigned the procedures/scenarios that are appropriate for the student's level of competence ($\bar{x}$±SD = 4.10±0.78) were the satisfaction items

with highest mean. As mentioned in a study done in Norway, hands on experiences linked to practical skill made learning more to remember, positive feedback to the students by clinical instructors/faculties develop more confidence among nursing students.[1]

In current study, it indicated that they were particularly confident that they can initiate performing the nursing procedure for clients and were obtaining the required knowledge and necessary skills from skill lab practice to perform necessary tasks in a clinical practice. These findings are somehow similar to results from a study done in Saudi Arabia which shows that the participants had high level of self-confidence in their abilities to conduct, appropriate health assessments, perform effective intervention, participate as an effective team member and recognize patient deterioration events in clinical area.[10]

In this study, almost all participants strongly agreed with the statement; I am confident that I can evaluate the effectiveness of my interventions for an individual with any abnormalities, in this regard, a study done in Egypt, also stated in their study that the high level of self-confidence and satisfaction in Nurse students' abilities help them to perform an effective intervention, recognizes errors and participate as an effective team member to conduct nursing procedure.[11]

In this study, more than half of the students were highly satisfied with the skill laboratory practice, and exactly half of the students had high self confidence level after skill laboratory practice in order to perform in a real clinical setting. This also indicates that nearly half of the students had low level of satisfaction with the skill laboratory practice and half of them had low level of self-confidence. The reason behind this finding might be because of the data collection period, which was during COVID-19 pandemic, where students were solely practicing clinical skills via skill laboratory without being exposed to real clinical scenario due to COVID protocol. The other reason might be a perceived fear among the students being incompetent to deal with the patients in real clinical setting after experiencing COVID-19 pandemic situation. In addition to this, use of simulation based clinical skill practice would have been more effective than just a demonstration method. The findings of this study are in contrast with the study done in Midwestern liberal arts college in the United States, where students reported a high level of satisfaction and self-confidence with the simulation experience as a whole (Mean = 4.04, SD = 0.44) in a study.[9] In the study done in Saudi Arabia, participants were satisfied with their learning and that the clinical simulation session improved up their self-confidence.[10]

CONCLUSION

Nearly half of the students had low satisfaction level towards skill laboratory practice, and half had low self-confidence level. However, just a skill laboratory practice cannot be as effective as simulation, so it is recommended the campus to purchase high fidelity patient manikins to adapt to local and international challenges facing in nursing education and to replace real life clinical experience. So, it should be implemented with simulation-based practice to enhance the practical skill of the students in this modern context.

LIMITATION

Pretesting was done among third year B.Sc. nursing students which might not have represented first year B.Sc. nursing students.

CONFLICT OF INTEREST: NONE

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