Nursing Students' Satisfaction with Their Clinical Experiences

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Abstract

Background: Studying students' satisfaction regarding clinical experiences is crucial to develop confidence in clinical nursing practices after graduation, and improve educational institutions' teaching strategies to meet students' learning needs ever changing demands. Aim: Evaluate nursing students' satisfaction with clinical education in both clinical field placement and nursing laboratories. Methods: A descriptive correlational research design was employed in one of the faculties of nursing at a private university in Jordan. A convenient sample of 293 questionnaires was collected from students enrolled in clinical courses during the academic year 2013/2014. Two different instruments were used to assess students' satisfaction regarding their clinical experiences; one for laboratory settings, and the other for clinical settings. Results: The study revealed that students were generally satisfied with their training experiences; with high mean satisfaction level regarding their laboratories experiences and moderate mean satisfaction level regarding their clinical experiences(45.3, 34.0) respectively. Conclusion: Using high-fidelity simulations increases students' satisfaction with their clinical education in both clinical field and nursing laboratories, which might enhance students' confidence in clinical nursing practices after graduation.

Keywords

Clinical Experiences, Laboratory Experiences, Students' Satisfaction, Nursing

1. Introduction

Nursing education provide nursing students with the necessary skills that help them to offer the best quality of care for patients with complex health problems through a fit clinical experience (Fisher & King, 2013). Clinical experience is considered a core element of undergraduate nursing education (Dobrowolska, et al., 2015). It prepares nursing students with the required skills to provide safe and high quality care (Masters, 2015). In addition, it develops the professional skills of nursing students such as critical thinking, psychomotor proficiency, and professionalism (Elisha & Rutledge, 2011).

Recently, nursing education programs in Jordan have expanded in the number and variety of clinical setting which challenges nursing education institutions to offer high quality of clinical learning experience environment (Richardson, et al., 2014). Furthermore, learning institutions work carefully to create and improve educational strategies such as clinical laboratories practices and using of simulation-based learning in a safe and less anxious environment than the hospital setting (Owen, 2016; Morgan, 2006; Wellard, Woolf, & Gleeson, 2007). Furthermore, nursing students gain experience through their engagement in actual clinical field setting (Omer, Suliman, Thomas, & Joseph, 2013). However, some of ethical

and professional issues may diminish students' benefits from clinical practice in the clinical field to maintain patients' safety and patients' rights (Lee et al., 2007).

Several studies in the literature highlighted complex factors exert positive and significant influences on students' satisfaction regarding their clinical learning strategies from the nursing students' point of view such as the clinical teacher characteristics and professional competence(Claudette, 2007), another important characteristics include the professional behavior during clinical teaching in the clinical setting; as calmness during stressful events, use of clear communication, and encouraging students for independent decision making (Claudette, 2007; Elisha & Rutledge, 2011; Rika & Denham, 2009). On the other hand, several studies reported that uncivil approach to nursing students from their instructors form a major source of stress and dissatisfaction among nursing students (Clark, 2008). In addition to the stress they experience by viewing the clinical instructor as evaluator rather than educator (Elcigil & Yildirim Sari, 2007; Tiwari et al., 2005).

Additionally, clinical environment is a major factor that contribute to students' learning satisfaction (Rahimi & Ahmadi, 2005), by the learning opportunities it offered to the students to develop confidence and competence in clinical skills (Chesser, 2005; Croxon & Maginnis, 2009; Papastavrou, Lambrinou, Tsangari, Saarikoski, & Leino-Kilpi, 2010), or by providing sufficient meaningful learning situations that offer learning situations with multi-dimensional approaches (Bisholt, Ohlsson, Engström, Johansson, & Gustafsson, 2013).

Students' satisfaction regarding their clinical education experience is important to develop confidence in clinical nursing practice after graduation (Sharif & Masoumi, 2005). Studying students' satisfaction is very important to improve educational institutions 'teaching strategies to meet students' changing demands (Jaradeen, Jaradat, Abo Safi, & Al Tarawneh, 2012). Furthermore, investigating student's perspective about clinical training is essential in order to promote clinical education strategies and meet the student's expectation regarding their clinical learning experiences.

Recently, some evidences are available regarding students' perspectives about theoretical nursing education (Ahmed, Touama, & Rayan, 2015), but little evidence is available in the middle-east region regarding nursing students' satisfaction with their clinical training in different settings (both laboratories and clinical setting). Therefore, the overall aim of the current study was to assess students' perspectives and satisfaction regarding their clinical nursing experiences in both laboratories and clinical setting utilizing a comprehensive investigation of different aspects of students' satisfaction.

2. Methods

2.1. Research Design

A quantitative descriptive research design was employed to investigate students' satisfaction regarding their clinical education.

2.2. Description of Subjects

Participants included undergraduate baccalaureate nursing students at a private university in Jordan, during the academic year 2013/2014. Participants who completed the study were trained in laboratory or clinical setting such as hospitals, community health centers, etc… or both in the same semester. The total number of participants was 293, all of them were asked to participate in the study voluntary. Verbal consent was obtained from all students. Students were asked to complete the study questionnaire after completing their training in the laboratory or in the clinical setting.

2.3. Instruments

Two instruments developed by the researchers were used in the current study utilizing the literature review and their experiences in the field of nursing education. An instrument was designed to assess students' satisfaction regarding their training in the laboratory setting, and the other one for assessing students' satisfaction regarding their training in different clinical settings.

The two scales have demographic information about participants such as course title, course level, year/semester, gender and students' status (regular or bridging student). Both instruments used a five point likert scale: (1= strongly disagree; 2= disagree; 3= natural; 4= agree; 5= strongly agree). Some sentences in both scales were obtained from The Clinical Learning Environment, Supervision and Nurse Teacher Scale (CLES+T scale) after obtaining an official permission from the corresponding author (Saarikoski, Isoaho, Warne, & Leino-Kilpi, 2008). The first instrument aimed to assess students' satisfaction in the laboratory; which consists of three sub dimensions (laboratory setting facilities, clinical instructor characteristics and laboratory setting opportunity for learning), each sub-dimension has a number of statements that ask the students to rate their satisfaction level regarding different aspects. The total number of items regarding satisfaction level with laboratory training is 12 items, yielding a total score ranges between 12 and 60 with the higher total score indicates greater satisfaction. A mean score of (12-28) indicates poor satisfaction level, a mean score of (>28-44) indicates moderate satisfaction level, and a mean score of (>44-60) indicates high satisfaction level.

The second instrument assesses students' satisfaction regarding their clinical field placement experiences. It consists of four main sub-dimensions (clinical setting facilities, nursing staff in the clinical setting, clinical instructor characteristics and clinical setting opportunity for learning). The total number of items regarding satisfaction level with clinical training is 13 items, yielding a total score ranges between 13 and 65 with the higher total score indicates greater satisfaction. A mean score of (13-30.3) indicates poor satisfaction level, a mean score of (>30.3-47.6) indicates moderate satisfaction level, and a mean score of (>47.6-65) indicates high satisfaction level.

2.4. Validity and Reliability

Face and content validity for the two instruments used in the study were examined by three panel of expert in the field of nursing who suggested minor rephrasing of some sentences. Confirmatory factor analysis using AMOAS program supported single factor structure for each measure used. Also the reliability coefficients were calculated for the two instruments. The result for Cronbach alpha values for laboratory satisfaction tool was (0.91), while it was (0.89) for clinical setting satisfaction tool. Also a test- retest reliability was conducted among a pilot sample (n=59) for each tool; the results of correlation coefficients for the paired students' rating for the instruments' statements ranged from (0.72 to 0.93) for laboratory satisfaction tool, and from (0.71 to 0.87) for clinical setting satisfaction tool; which indicates acceptable value of test-retest reliability for both instruments.

2.5. Setting

The current study was conducted in one of the faculties of nursing affiliates to a private university in Jordan. Study participants' were the undergraduate baccalaureate nursing students, from four levels (first, second, third and fourth year) in the first semester of the academic year 2013/2014. The laboratory clinical experiences included the following courses: fundamental nursing, physical assessment, adult health nursing (1), adult health nursing (2), pediatric health nursing, maternity health nursing and critical care nursing. The clinical setting included the following courses: adult health nursing (1), adult health nursing (2), pediatric health nursing, maternity health nursing and critical care nursing, community health nursing, psychiatric and mental health nursing, nursing management and comprehensive clinical.

2.6. Data Collection Procedure

The study was initially approved by the Institutional Review Board (IRB) at the University and the research committee of the faculty of nursing; where the study was conducted. Verbal consent was obtained from each student, after explanation of the study purposes, nature, procedures; the agreed students only were asked to complete the satisfaction scales. Students participated in the study voluntary after they were assured that information obtained would be confidential. Participants' anonymity was maintained. Students were asked to complete the questionnaires at the end of their training in both laboratories and clinical field placements. Each questionnaire took about 10 minutes to be completed.

2.7. Data Analysis

Data was analyzed using SPSS program version 21. Descriptive statistics using (frequency, mean and standard deviation) were used to describe the sample and to calculate the mean score for the satisfaction in the laboratory and clinical setting. Comparisons between the groups were conducted using t-test. The reliability of each instrument was analyzed using Cronbach alpha coefficient and test-retest reliability.

3. Results

Out of the 320 questionnaires administered, 293 were fully completed giving a response rate of 91.5%. Table 1 shows the socio-demographic characteristics of the participants. The courses involved in this study were divided into clinical based, lab based and mixed courses. The majority of participants 119 (40.6%) participants were from clinical based courses. Additionally, 128 (43.7%) participants responded to the questionnaires in the mixed courses which include adult 1(6.5%), adult 2 (4.4%), pediatric (6.1%), maternity (5.8%), critical care (17.7%) courses.

Table 1. *Demographic characteristics of the study sample.*

Parameter	Category	Frequency
Training Type	Laboratory	46
	Clinical	119
	Both	128
Study Level	First year	38
	Second year	55
	Third year	81
	Forth year	119
Gender	Male	62
	Female	231
Study Program	Regular	112
	Bridging	181
Total		293

A greater percentage of participants were from the fourth year level 119 (40.6%), 81 (27.6%) were from third year level, 55 (18.8%) from third year level and 38 (13%) were from the first year level Most participants 181 (61.8%) were bridging students and 112 (38.2%) participants were regular students. Majority of participants were female students 231 (78.8%) while 62 (21.2%) were male students.

Figure (1) presents the clinical training areas for study participants. Most participants were in Medical Surgical Units 97 (37%) and Critical Care Units 82 (31%), followed by community setting 34 (13%), MCH 17 (6%) and Psychiatric Units 34 (13%).

An independent sample *t* test was performed to assess whether mean of lab satisfaction and mean of clinical experience satisfaction differ significantly for a group of 37 male students compared with a group of 128 female students. The results indicated no significant difference in the mean of lab or clinical satisfaction based on the gender of students. For lab satisfaction, $t(163) = 0.338$, $p = 0.74$, two-tailed. For clinical satisfaction, $t(245) = -0.62$, $p = 0.54$, two-tailed (Table 2).
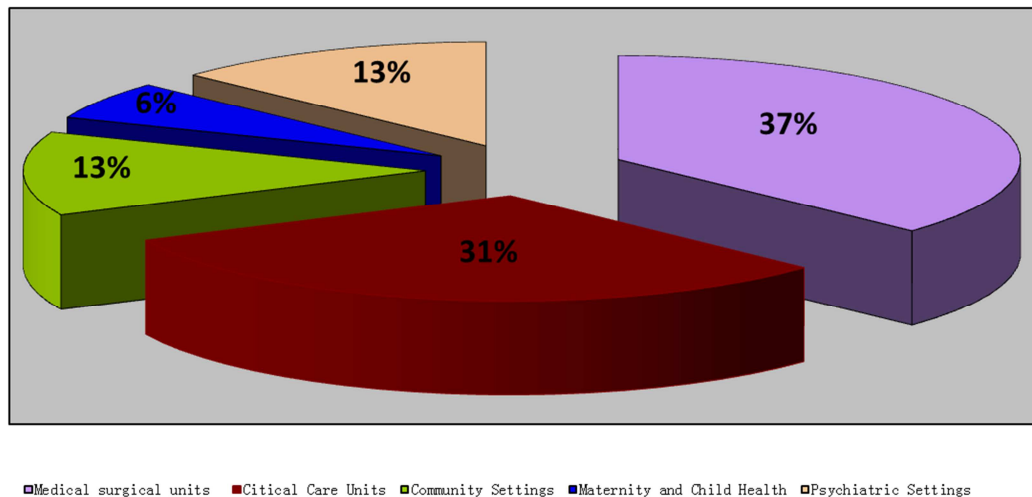
Figure 1. Settings for Clinical Based Courses.

***Table 2.** Differences in laboratory and clinical experience satisfaction according to some sample characteristics.*

Sample characteristics	Laboratory Satisfaction		t	P	Clinical Satisfaction		t	p
	M	SD			M	SD		
Male	86.9	13.7	0.34	0.74	89.4	15.9	- 0.62	0.54
Female	86.1	13.4			90.7	13.6		
Regular	78.9	11.2	- 6.97	0.001	88.8	14.1	- 1.29	0.199
Bridging	91.8	12.2			91.3	14.2		

Additional independent samples *t* test was performed to assess whether mean of lab and clinical experience satisfaction differ significantly for a group of 83 regular students compared with a group of 164 bridging students. The mean lab satisfaction differed significantly, t (163) = -6.97, $p < 0.001$, two-tailed. Mean of lab satisfaction for regular students (M = 78.8, SD = 11.2) was about 13 point lower than mean for bridging students (M= 91.8, SD = 12.2). However, the mean lab satisfaction was not different significantly, $t(163) = -1.29$, $p = 0.199$, two-tailed (Table 2).

One Way Analysis of Variance was used to assess whether mean of lab satisfaction differed significantly across the types of courses (Table 3). The results showed that there was no statistically significant difference in total lab satisfaction between the different courses F (5, 100) = 2.01, P = 0.08). The overall satisfaction level in lab courses was high (Mean satisfaction = 45.33).

***Table 3.** Comparison of laboratory experience satisfaction across courses.*

COURSE	N	Mean	SD	Min	Max	F	P-Value
Fundamentals	12	42.08	5.24	30	50	2.006	.084
Physical exam	19	46.52	7.62	33	59		
Adult (1)	15	48.73	6.40	35	58		
Adult (2)	16	45.87	5.73	35	55		
Pediatric	36	43.77	7.08	29	60		
Maternity	8	46.87	5.22	42	55		
Total	106	45.33	6.76	29	60		

One Way Analysis of Variance was used to assess whether mean of differed significantly across the types of courses (Table 4). The results showed that there was statistically significant difference in total clinical satisfaction between the different courses F (8, 183) = 8.34, P < 0.001). The overall satisfaction level in clinical courses was moderate (Mean satisfaction = 34.01).

***Table 4.** Comparison of clinical experience satisfaction across courses.*

Course	N	Mean	SD	Min	Max	F	P-Value
Psychiatric	19	48.1	4.94	38	52	8.337	<0.001
Adult (2)	48	27.5	12.33	6	52		
Adult (1)	15	31.8	8.98	16	45		
Intensive	24	34.0	11.48	12	52		
Management	18	30.7	10.80	10	49		
Community	17	32.4	10.89	7	49		
Maternity	15	34.5	10.78	8	52		

Course	N	Mean	SD	Min	Max	F	P-Value
Pediatric	15	38.5	6.19	26	49		
Critical	21	38.7	7.71	23	52		
Total	192	34.0	11.64	6	52		

4. Discussion

The purpose of this study was to assess students' perspectives about their clinical nursing experience in lab settings and clinical settings. Overall, the students reported high satisfaction level regarding the lab training and moderate satisfaction level regarding their clinical training. The same outcome was reported by Ewertsson, Allvin, Holmström, and Blomberg (2015) who found that nursing students were generally satisfied with their learning in the laboratory settings. The researchers suggest that students feel more control and confidence in structured scenarios in the lab setting than the clinical setting with actual patients.

This satisfaction level was not significantly different according to gender of students, but the students' satisfaction regarding lab training differed significantly between bridging and regular students. Unsurprisingly, bridging students usually have more experience than regular students, which make them perceive their lab training easier than regular students who are exposed to new experiences. However, there was no significant difference in students' satisfaction regarding their training in the clinical settings. In fact, regular students may perceive their lab training as a vague experience because they have not real contact with patients. Subsequently, high fidelity simulation is a suggested approach to increase students' confidence, decrease their anxiety, and enhance their satisfaction with their lab training (Kirkman, 2013; Megel et al., 2012; Yuan, Williams, & Fang, 2012). Nursing students who are trained in clinical settings may feel that the skills they learned in the lab settings are cultivated to meet the actual needs of patients and workplace requirements, which make them more satisfied regarding their clinical training.

The mean scores of students' satisfaction with lab training were not differed significantly across the types of courses. Among all lab courses, students reported less satisfaction scores with fundamental of nursing course. This outcome suggests that the courses students enrolled in during their first year of training are perceived as difficult and rated with low satisfaction by students. However, with increasing knowledge and experience, students might become more used to the lab settings and report more satisfaction with lab training when taking advanced courses in laboratories. Students in the third and fourth year are more able to integrate the theoretical information and the clinical components in lab settings, which make them more able to acquire the skills in labs and use clinical reasoning and critical thinking (Mahoney, Hancock, Iorianni-Cimbak, Curley, 2013).

The mean scores of students' satisfaction with clinical training differed significantly across the types of courses. The highest mean score was reported for psychiatry course, pediatric course, and critical care course, while the lowest score was reported for the adult courses. In the psychiatry course, pediatric course, and critical care course, nursing students usually overcome their weaknesses during the first year of training and are assigned to patients and be responsible for providing full care for patients under supervision which make students feel more confident about their qualifications and skills. In contrary, in adult courses, students may lose control over their patients and feel that their skills are inadequate to handle different situations while dealing with the patients for the first time.

Future research may want to use large international samples to confirm and generalize the results of the current study. Furthermore, qualitative research may provide in depth understanding of the actual experiences of nursing students during their lab and clinical practice. Validation of the tools used in the current study on a larger sample may overcome the limitations of the current study. Finally, using high-fidelity simulation in lab setting may increase students' confidence and satisfaction with their lab training in different courses.

5. Conclusion

Using high-fidelity simulations in laboratory settings increase students' satisfaction with their clinical education in both clinical field and laboratories. This might positively impact students' confidence in clinical nursing practices after graduation.

Acknowledgement

References

[1] Ahmed, M. Z., Touama, H., & Rayan, A. (2015). Students' Perspectives about Nursing Education. American Journal of Educational Research, 3(3), 288-291.

[2] Alinier, G. (2007). A typology of educationally focused medical simulation tools. *Medical Teacher, 29*(8), 243-250.

[3] Bisholt, B., Ohlsson, U., Engström, A. K., Johansson, A. S., & Gustafsson, M. (2014). Nursing students' assessment of the learning environment in different clinical settings. *Nurse education in practice*, *14*(3), 304-310.

[4] Chesser, P. A. (2005). The lived experiences of general students nurses on their first clinical placement: a phenomenological study. *Nurse Education in Practice, 5*, 320-327.

[5] Clark, C. M. (2008). Student Voices on Faculty Incivility in Nursing Education: A Conceptual Model. *Nursing Education Perspectives, 29*(5), 284-289.

[6]   Claudette, K. (2007). Student's perception on effective clinical teaching revisited. *Nurse Education Today, 27*(8), 885-892.

[7]   Croxon, L., & Maginnis, C. (2009). Evaluation of clinical teaching models for nursing practice. *Nurse Education in Practice, 9*(4), 236-243.

[8]   Dobrowolska, B., McGonagle, I., Jackson, C., Kane, R., Cabrera, E., Cooney-Miner, D.,... & Kekuš, D. (2015). Clinical practice models in nursing education: implication for students' mobility. *International nursing review, 62*(1), 36-46.

[9]   Elcigil, A., & Yildirim Sari, H. (2007). Determining problems experienced by student nurses in their work with clinical educators in Turkey. *Nurse Education Today, 27*, 491-498.

[10]   Elisha, S., & Rutledge, D. N. (2011). Clinical Education Experiences: Perceptions of Student Registered Nurse Anesthetists. *AANA Journal 79*(4), 35-42.

[11]   Ewertsson, M., Allvin, R., Holmström, I. K., & Blomberg, K. (2015). Walking the bridge: Nursing students' learning in clinical skill laboratories. *Nurse education in practice, 15*(4), 277-283.

[12]   Fisher, D., & King, L. (2013). An integrative literature review on preparing nursing students through simulation to recognize and respond to the deteriorating patient. Journal of Advanced Nursing, 69(11), 2375-2388.

[13]   Jaradeen, N., Jaradat, R., Safi, A. B., & Tarawneh, F. A. (2012). Students satisfaction with nursing program. *Bahrain Med Bull, 34*(1), 1-6.

[14]   Kirkman, T. R. (2013). High fidelity simulation effectiveness in nursing students' transfer of learning. International Journal of Nursing Education Scholarship, 10(1), 171-176.

[15]   Lee, C., Liu, A., Del Castillo, S., Bowyer, M., Alverson, D., Muniz, G., et al. (2007). Towards an immersive virtual environment for medical team training. *Studies in Health Technology and Informatics, 125*, 274-279.

[16]   Mahoney, A. E. D., Hancock, L. E., Iorianni-Cimbak, A., & Curley, M. A. (2013). Using high-fidelity simulation to bridge clinical and classroom learning in undergraduate pediatric nursing. Nurse education today, 33(6), 648-654.

[17]   Megel, M. E., Black, J., Clark, L., Carstens, P., Jenkins, L. D., Promes, J.,... & Goodman, T. (2012). Effect of high-fidelity simulation on pediatric nursing students' anxiety. Clinical Simulation in Nursing, 8(9), e419-e428.

[18]   Morgan, R. (2006). Using clinical skills laboratories to promote theorypractice integration during the first practice placement: an Irish perspective. *Journal of Clinical Nursing, 15*(5), 155-161.

[19]   Owen, H. (2016). Simulation in Nursing. In Simulation in Healthcare Education (pp. 403-416). Springer International Publishing.

[20]   Papastavrou, E., Lambrinou, E., Tsangari, H. b., Saarikoski, M. c., & Leino-Kilpi, H. d. (2010). Student nurses experience of learning in the clinical environment. *Nurse Education in Practice, 10*(3), 176-182.

[21]   Rahimi, A., & Ahmadi, F. (2005). The obstacles and improving strategies of clinical education from the viewpoints of clinical instructors in tehran's nursing Schools. *Iranian Journal of Medical Education, 5*(2), 73-80, 2005.

[22]   Richardson, H., Goldsamt, L. A., Simmons, J., Gilmartin, M., & Jeffries, P. R. (2014). Increasing faculty capacity: Findings from an evaluation of simulation clinical teaching. *Nursing education perspectives, 35*(5), 308-314.

[23]   Rika, T., & Denham, S. (2009). Clinical instruction and student outcomes. *Teaching Learning Nurs, 4*(4), 139-147.

[24]   Saarikoski, M., Isoaho, H., Warne, T., & Leino-Kilpi, H. (2008). The nurse teacher in clinical practice: Developing the new sub-dimension to the clinical learning environment and supervision (CLES) scale. *International Journal of Nursing Studies, 45*, 1233-1237.

[25]   Sand-Jecklin, K. (2009). Assessing nursing student perceptions of the clinical learning environment: refinement and testing of the SECEE inventory. *Journal of Nursing Measurement, 17*(3), 232-246.

[26]   Sharif, F., & Masoumi, S. (2005). A qualitative study of nursing student experiences of clinical practice. *BMC Nursing 4*(1), 6-10.

[27]   Tiwari, A., Lam, D., Yuen, K. H., Chan, R., Fung, T., & Chan, S. (2005). Student learning in clinical nursing education: Perceptions of the relationship between assessment and learning. *Nurse Education Today, 25*, 299-308.

[28]   Wellard, S., Woolf, R., & Gleeson, L. (2007). Exploring the use of clinical laboratory in undergraduate nursing programs in regional Australia *International Journal of Nursing Education Scholarship, 4*(1), 1-15.

[29]   Yuan, H. B., Williams, B. A., & Fang, J. B. (2012). The contribution of high-fidelity simulation to nursing students' confidence and competence: a systematic review. *International Nursing Review, 59*(1), 26-33.