

## ORIGINAL RESEARCH

# Learning in the traditional-faculty supervised teaching Model: PART 1-The nursing students' perspective

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## ABSTRACT

**Objective:** The purpose of this study was to explore perceptions and experiences of nursing faculty, clinical instructors (CIs) and nursing students within the traditional faculty supervised model of clinical teaching. This article presents findings that explored the strengths and limitations of the traditional model in relation to student learning from the nursing students' perspectives.

**Methods:** A qualitative descriptive design was used. Qualitative data were gathered through individual semi-structured interviews. Transcripts were analyzed using thematic content analysis.

**Results and conclusions:** Seven nursing students participated. Students perceived their experiences with the traditional model positively but noted that their learning experiences were dependent on CIs and the clinical settings. Strengths of the model included peer learning/support and support for novice students. Limitations of the model included high instructor-to-student ratios, missed learning opportunities while waiting for CI, and concerns with the evaluation process. Recommendations for improving the quality of clinical experiences are presented.

**Key Words:** Traditional faculty-supervised model, Clinical experience, Nursing students, Qualitative method

## 1. INTRODUCTION

The ultimate goal of clinical education is to provide students opportunities to attain the level of a beginning practitioner by integrating theory into practice under the guidance and supervision of a qualified clinical educator. The clinical experience is viewed as an integral component of the undergraduate nursing education program.<sup>[1-4]</sup> It is during clinical experience that students acquire the knowledge, skills, and values required for professional practice and become socialised into the profession.<sup>[3,4]</sup> As such it is imperative that nurse educators and clinician establish strategies in which to maximise students' clinical learning experiences.<sup>[4]</sup> The traditional "faculty-supervised" model is widely used in Canadian undergraduate nursing programs for clinical teaching of

lower level students. In this model, however, the challenge of providing consistent, high quality clinical education is noteworthy considering factors such as the high student-to-instructor ratio, increasing patient acuity and the shortage of well qualified clinical faculty. New graduates often report inadequate clinical knowledge, insufficient confidence in skill performance, and deficient organizational and priority-setting skills related to clinical judgment, which can result in errors in practice.<sup>[5-8]</sup> In order to meet the needs of today's graduates, it is important that nursing education programs re-evaluate current clinical teaching approaches to better prepare safe and competent future nurses.<sup>[3]</sup> Thus, the purpose of this descriptive qualitative study was to explore the strengths and limitations of the traditional model in relation

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to student learning from faculty members', clinical instructors (CIs)', and nursing students' perspectives. In this Part 1 of a two-part series only the students' perspectives are presented.

In Canada the traditional faculty-supervised model (Traditional model) is most widely used for clinical teaching of lower-level students (Years 1, 2, and 3), whereas the preceptorship model is applied to senior-level students. Within the traditional model a registered nurse (RN), in the role of clinical educator/instructor employed by the educational institution, directly teaches and supervises a group of 8 to 10 students in the clinical setting over a particular time period within an academic semester.<sup>[1,9]</sup> Several scholars have argued that this model has existed for decades purely based on tradition, common sense, and feasibility with minimal research on the effectiveness of its performance.<sup>[9,10]</sup> Moreover, although the literature reveals that the model is expensive for nursing programs,<sup>[11,12]</sup> new nurses are still not adequately prepared to provide safe and competent care upon graduation.<sup>[6,8]</sup> These issues raise concerns about the increased risk of students' and new graduate nurses' unsafe practice.<sup>[1,10]</sup>

Additionally, while the traditional model provides the potential for direct supervision by a qualified clinical educator, evidence has shown that the model does not always guarantee the level of supervision, support, and attention that most junior level students need to succeed and provide safe patient care.<sup>[1,8,13]</sup> It is crucial that nursing students receive the best possible supervision to become safe and competent practitioners, evidence suggests that patient safety and outcomes are dependent on the educational preparation of registered nurses.<sup>[2]</sup> Furthermore, CASN<sup>[14]</sup> suggested that "best practice" learning experiences should be identified with the full participation of stakeholders (i.e., nursing faculty, CIs, and nursing students), with an overall goal of quality learning environments for students that will ensure evidenced-based, safe patient care. Therefore, there is need to investigate, nursing students' perceptions of their experiences with respect to learning within the traditional model. An increased understanding of students' perspectives of the strengths and limitations within the traditional model of clinical instruction can guide nurse educators and clinicians to facilitate students' learning in the clinical setting.<sup>[3]</sup>

## 2. METHOD

### 2.1 Design

A qualitative descriptive design was employed to explore the perceptions and experiences of nursing students within the traditional model. Through this qualitative approach it was possible for me to deeply engage and interact with the par-

ticipants through interviews, and I was able to generate rich data on the perceptions and experiences of the participants within the traditional model.

### 2.2 Sampling and recruitment

Participants were recruited through the electronic distribution of a study information flyer. Purposive sampling was used as the primary approach to recruit the information rich cases.<sup>[15,16]</sup> In addition to the flyer, participants were recruited using "snow ball" techniques or referrals from initial volunteers. Potential participants were asked to email or call me or the research assistant. I then followed up by telephone or email to set up the time, date and place for interviews. The inclusion criteria for nursing students were that the participant (a) had to be registered in a four year BScN program, at one of the selected universities or college in the province, (b) be in years 2, 3, & 4 of their study, and (c) should have had multiple or adequate exposure to clinical experience in the traditional model. Ultimately, twenty stakeholders from two universities and once college in western Canadian province volunteered to be interviewed for the study: of these, seven were nursing students.

### 2.3 Data collection

Data were collected by the author via semi-structured interviews that lasted on average 40-90 minutes. The interview guide was developed based on literature, existing research, and my previous experience as a CI in a traditional model. Interviews were digitally recorded and transcribed verbatim. Field notes of observation were also recorded during the interview process. Interviews were conducted until the data saturation was achieved as evidenced by repeating themes.<sup>[17]</sup> Transcription was done by a graduate research assistant who signed a confidential pledge prior to transcribing. Following the transcription, each written transcript was then reviewed and checked against the original recording for accuracy.

### 2.4 Data analysis

Data collection and analysis occurred concurrently. Interview transcripts were thematically analysed using the techniques recommended by Braun and Clarke.<sup>[18]</sup> Initially, the transcripts were read and re-read while listening to the audio recordings. Engaging with the data in this manner allowed me to familiarize with the interview data and ensured accuracy of data. Thereafter, as recommended by Braun and Clarke,<sup>[18]</sup> significant sections of individual transcripts were highlighted and common content between transcripts were grouped into preliminary codes and later grouped into themes. Themes were then labelled, reviewed and further developed to ensure final themes were coherent with the research question goal.<sup>[4]</sup> Analysis commenced after completion of the

first interview and continued until consensus was reached regarding the final themes presented.

## 2.5 Ethical consideration

Approval for this study was gained from the Human Research Ethics Committees of the relevant institutions. All participants provided informed consent to participate in the study. To ensure confidentiality all transcripts were assigned a code and any potentially identifying features of the transcripts were removed. Additionally, consent was verbally reaffirmed by each participant prior to audio recording the interview. Further, participants were also informed that they could refuse to participate or withdraw from the study without penalty, and that participation or refusal would not affect the participants' course grade. All data with participants' identifying information were kept confidential in a locked drawer.

## 2.6 Rigour

To ensure rigor or trustworthiness of data, the four criteria of credibility, fittingness, auditability, and conformability<sup>[19]</sup> were used. Credibility was achieved by collecting data from a variety of participants (i.e., nursing students, CIs, and nursing faculty) and prolonged engagement with participants during the interviews.<sup>[20]</sup> Fittingness was enhanced by collecting data from different settings and use of excerpts from participants.<sup>[20]</sup> The researcher kept a comprehensive audit trail and recorded theoretical memos to facilitate auditability and confirmability.<sup>[20]</sup> The criterion of confirmability was also achieved when credibility, fittingness, and auditability were established.<sup>[21]</sup>

## 3. RESULTS

Seven nursing students participated in the study. All of the students were female under the age of thirty and had various clinical experiences within the traditional model. Four students had just completed third year, two were in second year, and one had just completed year four. Participants were asked to describe their experiences with the traditional faculty-supervised model. The perceptions of student participants are reflected in the following interrelated four major themes: (a) overall experience; (b) strengths of the traditional faculty-supervised model; and (c) limitations/challenges of the traditional faculty-supervised model, and (d) recommendations for program improvement. Overall, nursing students commented that the disadvantages of the model outweighed the strengths.

### 3.1 Theme 1: Overall experience

Participants were asked to comment on the overall effectiveness of the faculty-supervised model. Although all seven

students initially reported to have been satisfied with model, participants further explained that their experience depended on several factors, including, the CI, the clinical setting, the size of the clinical groups and the kind of relationship with the clinical staff. This led to two subthemes: (a) It all depends on the CI and (b) It depends on the clinical setting.

#### 3.1.1 *It all depends on the CI*

Among nursing students in this study, the CI was perceived as having an extremely significant influence on their clinical learning experience. The clinical teaching expertise and characteristics of instructors play an important role in the clinical learning experience of the students. The way the CIs do their teaching can alter the learning experience. As one student commented,

"I find it really depends on the instructor, which is kind of sad, like in some clinicals you learn so much it's such a good experience and the next it totally depends on your instructor and where you're placed... you can't really control the circumstances...It seems some do some things so differently than the others and that alters your learning experience immensely." (S2, year 3)

Additionally, the kind of support and guidance that instructors provide their students was reported as critical as it could either have a positive or negative impact on the student learning experience. Students reported that the instructor's attitudes, clinical expertise and teaching approaches were critical to student success in clinical setting. Students further explained how the knowledge and teaching behaviours of CIs such as being approachable, resourceful, organized, or having enthusiasm for teaching influenced her clinical learning experience:

"Like my one instructor that I just had in neuro, she would seek out opportunities for you to learn even if it wasn't your patient. She would find things that needed to be done, that you know you could build upon, she would come and get you and pull you off whatever you are doing to go and do those things and this teacher just wouldn't seek out for nothing so it's kind of different because there are so many different kinds of instructors, and pretty much just is luck who you happen to get drawn as your CI." (S3, year 2)

"I really had good experience throughout my program, I was lucky I had really good instructors that knew their stuff really well, were approachable and like really good teachers, you could

tell they wanted to be there and like they made sure you got the experiences that you needed to get but I don't think that happened to everybody throughout their program which is unfortunate." (S7, completed year 4)

"I had orthopedics and that one [CI] was really good, it was really straightforward. My teacher was clear. He told us exactly what was expected of us for our journaling, how to document. He gave us sample documentation cause it was all the same thing, like pretty much black and white. . . so that rotation went really well." (S4, year 2)

Students reported that CIs who engage in empowering teaching behaviours, are non-judgemental and create a learning environment that allows students to learn from mistakes can promote positive clinical learning experiences as one student stated:

"I thoroughly enjoyed my community [placement] and most importantly that made it so stand out from the all others clinical rotations were my CI. He would empower each and every single individual student to do something more, so if we thought that we did something wrong, he would say, umm, you know that's not a problem, we can fix it. So there is no punishment for doing something wrong. So the fact that he let us make those mistakes and learn from it and not judge us, was what made this experience great." (S3 year 2)

Although most of the students in this study had reported mostly positive relationships and good communication with their CIs, there were a few examples of CIs who were perceived as inexperienced, unapproachable, or not readily available when students needed them. New younger CIs were often perceived to be inexperienced making it difficult for students to gain confidence in them.

"... some of them are rather young and inexperienced and so, and I mean, I appreciate the fact that everybody deserves an opportunity that's, that's not but sometimes it's hard as for us as students to have that confidence..." (S5, year 3)

"Yeah like some of them [other students], like their instructors were hard to find, they weren't there a lot of the time they would go off unit or just like funny little stories or if they were

maybe newer to teaching, they weren't as confident maybe, they weren't able to get the experiences for the students as well as kind of maybe some of the senior staff did..." (S7, completed year 4)

Another student compared her experience with a more experienced CI and an inexperienced CI in this way:

"Well I feel, sometimes it is good. It depends on the instructor, if you have an instructor that is more of a senior instructor that's been nursing for quite some time, usually will work out because they can answer the questions that you need and you kind of know how to supervise and when to be there and when not to be. I've had previous experiences with less, with instructors that were younger and had less experience and it was too much for them to take on, [a clinical group of] seven or eight students." (S3, year 2)

Students described feelings of frustrations due to poor or negative relationships they experienced with their CIs. Students were not satisfied with their learning experiences when the CI displayed a non-supportive attitude. Moreover, negative encounter with the CIs made students anxious and frustrated.

"For me, I don't know if it's me because I'm, I don't need a lot of attention or I'm independent, I don't know but, there'd be times during my clinical rotations, past clinical rotations, not this recent one, where I would feel as if the CI doesn't care whether I do something right or wrong but..." (S1, year 3)

"Well, I found first year difficult because we had all this information thrown at us in three hour lectures and then we get to clinical for one day and honestly I didn't know what to do, what was expected of me and it didn't help, my teacher didn't help me as much as she should have... [When] I was having issues with the staff and my teacher didn't bridge me to the staff." (S4, year 2)

The student felt that the teacher was deliberately ignoring her.

"I felt like she was constantly in the med room, she wasn't around me and the time she would ask, 'Oh, who wants to do this procedure, who wants to do that procedure' when we were all together after morning report, I would specifically say, 'I would like to do it'. She would glance at

me and look away. I felt like she was ignoring me. So I ended up honestly walking out on her and going to do my morning assessments on my patients because she didn't want to acknowledge me that I wanted to do a procedure." (S4, year 2)

Other students also felt frustrated and confused by the CIs teaching method but did not have the courage to speak up

"Well, I know the other students, students talk, and right. They had the same problems as I did, not about the staff [yeah] not the staff problem like her talking in circles, constantly repeating and confusing them and constantly being on your case, this med, that med but they didn't say anything. I was the only one that would say anything and I would only speak on my behalf cause I'm not going to speak up for them, if you wanted something to be changed you have to do it [yeah, yeah] so I think maybe she singled me out after because I was the only one that called her on her stuff and she didn't like it, may be." (S4, year 2)

### 3.1.2 *It depends on the clinical setting*

In addition, to the CI, the clinical placement or environment had a great influence on whether nursing students regarded their clinical accomplishment as successful or not. Students in this study reported that they were not able to practice certain nursing skills in some clinical settings due to lack of opportunities to do so or policies of settings. One student narrated her clinical experience in a nursing home where she felt students were performing the work of a nursing aide:

"We did more of like a care aide type of role. We kind of just shadowed the care aides and did that type of stuff, so, umm, overall like I said, my one experience was good my other experience, not so great. Just basic care, feeding [feeding], changing, bathing, that type of stuff, which is more, very beginning first year [hmm], so I do feel that I kind of did, you know, not get my full experience and my full potential to where I should have been for my second year." (S3, year 2)

Another student who was not satisfied with the opportunity to practice nursing skills in a setting narrated her experience:

"My first rotation was an internal med rotation and we had only one patient and I don't think,

yeah, we went to two, eventually and it went better, like the only thing was expected was pretty much what a special care aide would do because we couldn't do meds like right at the very end we could do meds, we can't do anything with I/Vs or pumps..." (S4, year 2)

## 3.2 Theme 2: Strengths of the traditional model

Participants were asked to describe the main strengths of the traditional model. Although as stated earlier, all participants independently commented that there were more disadvantages/limitations than strengths associated with the model; the participants were able to identify some strengths that were then organized under two subthemes: (a) peer teaching/support and (b) support for novice students.

### 3.2.1 *Peer learning/support*

Five students felt that one of the key advantages or strengths of the traditional model was the fact that students were able to discuss with each other, which facilitated learning. In this model, peer learning enabled students to share ideas. While one-to-one teaching was considered ideal, students also acknowledged that it was not practical. Thus the traditional model was considered beneficial in terms of group interaction and peer learning. Students also reported they felt more comfortable to question each other, solve problems and learn from each other in the clinical environment.

"I think one of the advantages of having a faculty [supervised model] is being able to be in that group of six students cause then it's not just you on the unit alone. You have other students that you can kind of run ideas by or you can help each other out or you just feel kind of more comfortable because there are more people on the environment." (S5, year 3)

"The main strength is you have more help because sometimes, I know when you are with just your nurse [or CI], they get pulled away or they're doing things on their own. With students you can always go and get someone to help you, like confirm things, like do you remember how to do this like you can ask or bounce ideas off at each other. So I think that's the biggest strength, there's always someone there to help you." (S2, year 3)

### 3.2.2 *Support for novice students*

Another perceived strength of the model reported by two students was the guidance and support novice students get from CIs. Students realized that what they are taught in theory

did not always connect in practice; as such they perceived the CI as a safety net especially when they had concerns or questions about patient care. As one student described:

“... as a student I felt more comfortable going to my instructor rather than the nurse that was in charge of my patient just because I wanted to make sure that this was you know, meeting the standard of practice, cause I mean, there are short cut and there are, you know things like that... So you want to make sure that you are on the right page.” (S5, year 3)

Additionally, three students commented that the CI acted as a support for students on the unit in situations where students face harsh behaviour from unit staff.

“...when you have an instructor who understands and when you tell him about your experience and then they'll talk to you and tell you that you didn't do anything wrong, you were following procedures and they will in turn go and talk to the charge nurse, unit manager, whoever it is, the next person in line, and tell him you know, these are students and this is how they are taught and this is the right way... know get mad at the students for it but that's very common... and I don't like being yelled at for something that I think I am doing right you know.” (S1, year 3)

### 3.3 Theme 3: Challenges/limitations of the traditional faculty-supervised model

Participants described several challenges or limitations associated with associated with the model. These challenges are discussed under three subthemes: (a) high instructor-to-student ratio, (b) missed learning opportunities while waiting for CI, and (c) concern with evaluation process.

#### 3.3.1 High instructor-to-student ratio

With regard to the instructor-to-student ratio, student participants reported that this varied between 1:6 and 1:8. This ratio varied depending on the nature of the practice experience and year of study. The high CI-student ratio was reported as a major concern for students as it decreased the time available for individual student-instructor's interactions. Students were concerned that the high ratio of 1:8 makes the CIs' tasks difficult to complete. Students reported that large clinical group size made it difficult for the CI to simultaneously supervise students which could potentially compromise patient safety, especially during administration of medications.

“It was, it was very overwhelming... with a group of eight, and the particular unit that we

were on couldn't accommodate that large of a group, so we were kind of dispersed throughout in different areas which was also great for a learning opportunity that way, but it wasn't really, it was very difficult to, keep the doors of communication open with that instructor...” (S5, year 3)

“Our CI was excellent. But there were six of us and so you are doing I/V meds, oral meds and doing all these meds and when you have six patients or maybe up to twelve patients that all receive meds at 8 o'clock that one CI is running around like crazy, trying to supervise everybody giving meds. It's very chaotic at that point in time or at noon... , everybody needs their meds and when everybody is assigned two patients each and there is six of us, that's twelve people she has to oversee so a lot of the time our meds were given way late and stuff like that, so other than that it was a good experience, like our instructor was excellent.” (S6, year 3)

#### 3.3.2 Missed learning opportunities while waiting for CI

Due to the fact that the CI had to observe each nursing student every time they did a procedure, students were able to describe situations where they missed the opportunity to give medications, for example, and how they had to learn to manage their time while waiting for the CI.

“... because she had to run around six of you, you find that the supervision is kind of a bit hard or difficult. Just waiting. Like you were always kind of waiting and then trying to find something else to do, and so its bit chaotic because she was, she's very busy, that's a lot of things to oversee, so you patiently wait your turn to go and give meds and that kind of stuff, right so she has to be there.” (S6, year 3)

#### 3.3.3 Concern with evaluation process

Three out of seven students (43%) were positive about the evaluation process and commented that they received constructive feedback from their CI, which they found helpful in identifying strengths and areas needing improvement, as one student commented:

“...when the assessment time came and they would give you your evaluation, your midterm evaluation and tell you, 'this is where you are and this is what I think you can improve on and right before we do our mid-term evaluations',

they ask us to do our self evaluations which really helps. It makes you think, what is it that I need to work on and it's the same for our final." (S1, year 3)

Several concerns were reported related to the appropriateness or effectiveness of the clinical evaluation form and marking guide that was currently being used in their program. As one of the students narrated:

"Unfortunately in the [Name] program, the marking guide is the same marking guide from year 1 through year 4. So that I find is a big issue, cause what you can do in year 4 and what you can do in year one is [different] is way different but you are based on the same marking guide so I've been told by instructors that based on the marking guide you can't achieve higher than a certain grade because of the way that the marking guide is because what I can do in year one isn't as what I can do in year 4 so you can only, you can't achieve your fullest potential because you don't have those skills yet because you haven't learned that yet so I think that the marking guide does need to change so that based upon what you've learned in each year is reflective of your grades, [Yeah for that] just like elementary school, you know." (S3, year 2)

"...so they observe us, some part of their mark is based on observation of what we are doing skill wise and how we interact with the other students and staff and patients and I know with my last instructor she also went around to the patients after our day was finished and said, how did she do? What do you think of her? She got their opinions and she based a lot on then cause if we're not making our patients comfortable then we are obviously not doing something correctly, right..." (S2, year 3)

Another student described her disappointment with the evaluation she had received from one of the CIs. She explained that CI's evaluations are very generic and mostly cut and pasted.

"With one of my rotations... I took my midterm evaluation and compared it with another student's... You could tell that it was cut and pasted like the comments and the observations, they were exactly word for word and so that made

me sort of question that ok well I know you can't be in six places at once but I question whether the fact you did review my journal writing or the fact that ok I need to improve on this and so when they compare you word to word... I felt this was very generic like I said, she cut and pasted it... wasn't specific to me, I did not feel that at all and I'm not into comparing things but we kind of had that sense about our instructor so we [another student] both looked at our evaluation we both started reading out loud and we were saying the same exactly the same things..." (S5, year 3)

Furthermore, students complained of inconsistency among CIs in evaluation approaches and expectations, and that the evaluation process is mainly dependent on CI's discretion.

"Midterm evaluations depend on CI. Some CIs sit down with students to discuss progress whereas the others ask them to submit evaluation." (S3, year 2)

"...at the end of the second week we had our midterm evaluation and she said the only thing that I need to work on is my documentation and learning the side effects of the psychotropic drugs and I said, ok, fair enough. So I went home that week, I had two days off and I tried my best to study the psychotropic drugs and there wasn't I much I could do about documentation other than work on it throughout and my final evaluation came out two weeks later and she told me that the staff thought that I was a know it all, so she gave me a very low mark and I was very upset with her about it and I tried to explain that she should have told me this." (S4, year 2)

### 3.4 Theme 4: Recommendations for program improvement

Lastly, in this theme, nursing students provided suggestions or recommendations to strengthen the clinical learning experience within the traditional model (see Table 1). Recommendations focused on addressing the identified limitations: high instructor-to-student ratios (e.g., reducing clinical groups), missed learning opportunities while waiting for CI (e.g., increasing clinical hours and number of CIs), and concerns with evaluation process (e.g., reviewing evaluation tools and restructuring post conference time).

**Table 1.** Suggestions for improvement and representative statements from interviews of students

Subthemes	Student recommendations	Representative statements from interviews of students
High instructor-to-students ratios	Reduce clinical group size to 1:4	<p>“...maybe it would have been better if there were two, two faculty advisors to the group or maybe less students cause you know sometimes waiting for them to do procedures...”</p> <p>“I find with a larger group I felt like it was ,how can I say this, felt like with a larger group the evaluation wasn’t as strong, the fact that with a lower amount of students in the group, there’s just more opportunity to learn., more opportunity to approach your instructor...”</p>
Missed learning opportunities while waiting for the CI	Increase the duration of clinical hours	<p>“...in our [name] program, in second year other than the May/June rotation we only get clinical, couple of days in a week every other week, so...I think they need to incorporate clinical at least very week, yeah, to me nursing it’s a hands on profession so the more hands on experience you can give to someone the better they are going to do...”</p> <p>“...in terms of improving clinical... I really believe that more clinical hours are needed, umm, especially in, not so much the specialty areas but more so like the general medicine units, general surgery, the medical...”</p> <p>“I just think if it’s possible, more clinical time like...even two days every week instead of two days every other week... I think more clinical time would have been good...”</p>
	Increase acute placements for Yr 2; more acute placements required	<p>But I really believe that more clinical hours are needed, especially in, not so much the specialty areas but more so like the general medicine units, general surgery, the med- surg practices kind of thing. I remember back in year two, I felt you are trying to figure things out... that you were just sort of getting into a flow, some continuity and then all of a sudden, boom , it was over</p>
	Hire more experienced CIs and review selection criteria	<p>“...I would say is you know, more experienced instructors.”</p> <p>“...my suggestion would be to make sure that the instructors have actually experienced nursing for quite a number of years before they are able to go and teach...”</p>
Concerns with the evaluation process	Review and revise clinical evaluation tool or marking guide	<p>“...the marking guide does need to change so that based upon what you’ve learned in each year is reflective of your grades...It’s the same across the board...I don’t think it’s fair... it needs to be specific to each year based on the skills that you’ve been taught in that year.”</p>
	Ensure more consistent among CIs	<p>“I think that their needs to be more structure... it’s not kind of across the board so some people get better experiences than others and like I said it comes basically down to an instructor...”</p>
	CIs to share their course expectation with students early	<p>“...I would say to be upfront with your clinical group, what your expectations are; to give more examples of what you want for documentation; to allow for more time with assignments, like having it in on your last day of clinical is tough...”</p>
	More structure and teacher involvement during post conference	<p>“...have a purpose to your post conference. Not just sitting there, oh how was your day and no, everyone’s just gonna say good so they can get out of there...”</p>
Allow clinical independence after a certain period of observation, for example, year 4 students to give oral meds independently		<p>“...I know a lot of med errors happen... but if they were to watch us for first two weeks and then give us, empower us to you know provide care to our patients independently, I think that would be beneficial.”</p>
Have in-serve education to improve staff-student interaction		<p>“I think to basically have like an in-service for the unit itself every once in a while for that actual unit that ... the nursing students are coming to. An in-service to let them know what they’re allowed to direct and what they aren’t and what needs to be referred and to encourage them to help the nursing students because it’s a lot for the instructor to do... They could maybe oversee some of these oral meds and things like that with us as opposed to just pushing it back off to our instructor.”</p>

**4. DISCUSSION**

Findings revealed that although students were generally satisfied with the clinical experiences within the traditional model, they indicated that their clinical experience was greatly influenced by the CI and clinical setting. These findings are consistent with those reported in previous studies that the characteristics of the CI<sup>[22–25]</sup> and the quality of the clinical

learning environment<sup>[26–28]</sup> are among the two most influential factors on student learning. Therefore, it is important that CIs know and recognize the impact they have not only on the students’ current clinical learning experience but also on their future nursing practice.

Students further identified several teaching behaviors they believed facilitated their clinical learning experience, which cor-



roborate those in the literature and previous studies. These include demonstrating clinical and teaching knowledge expertise,<sup>[29-31]</sup> being available and accessible,<sup>[23, 28, 32]</sup> being approachable<sup>[23]</sup> open and understanding,<sup>[25, 33]</sup> and being non-judgemental<sup>[25]</sup> such that students could feel free to ask questions, and allowed students to learn from mistakes;<sup>[29, 32]</sup> possessing good time management and organization skills;<sup>[22, 33]</sup> having good communication skills, and providing students clear communication of expectations.<sup>[22, 29, 32, 34]</sup>

In addition, students appreciated CIs who demonstrated motivation and enthusiasm for teaching and their profession;<sup>[24, 29, 32, 33]</sup> who were supportive and encouraging,<sup>[23, 32]</sup> empowering<sup>[34, 35]</sup> and took initiative to seek learning opportunities for students.<sup>[2]</sup> Furthermore, the indicated they valued CIs who provided them with timely, appropriate and constructive feedback on their clinical performance.<sup>[22-24, 32]</sup> Over the years, evidence from research in nursing education has demonstrated that these qualities are important in clinical teaching. As such the CIs identified in this study and previous studies could be considered during ongoing professional developmental workshops and training of CIs to maximise students clinical learning experiences.

Conversely, some students believed was compromised due to CIs who were perceived as inexperienced, unapproachable, inaccessible, difficult to communicate with, or unprofessional. These findings corroborate with those found in previous studies<sup>[34, 36, 37]</sup> that students often feel ignored, insecure, and even abandoned when learning in unfamiliar clinical environments. Other scholars have also reported that students become stressed or anxious when their teacher is inexperienced, unsupportive, or with ineffective teaching skills.<sup>[10, 38]</sup>

The literature also acknowledges that with the current shortage of faculty,<sup>[39]</sup> many nursing programs are increasingly relying on sessional or part-time CIs. Concerns have been raised that these CIs may lack experience and yet are required to 'parachute' into familiar practice units.<sup>[10]</sup> Other authors suggest that some CIs disappear or detach away from the clinical setting because of their incompetence<sup>[36]</sup> and lack of confidence.<sup>[40]</sup> CIs need confidence to accomplish their role effectively.<sup>[40, 41]</sup> However, it is also acknowledged that for some CIs it may take years of experience to develop confidence.<sup>[40]</sup>

Over the years, evidence from research in nursing education has demonstrated that these qualities are important in clinical teaching. As such the CI characteristics identified in this study and previous studies could be considered during ongoing professional development workshops and training of CIs to maximise students clinical learning experiences.

The clinical environment. The findings of this study affirmed evidence in the literature that the clinical learning environment is an integral component of nursing education.<sup>[24, 26, 28, 32-34]</sup> It is in the clinical practice settings where students are given the opportunity to apply and integrate the knowledge, psychomotor and affective skills acquired in the theoretical part of the curriculum<sup>[33, 42]</sup> and develop professional socialization.<sup>[27, 32]</sup>

Findings of this study further revealed that students' perceptions of satisfaction of their clinical experiences varied considerably depending on the placement they had been assigned to. This finding echoes those in previous studies.<sup>[33, 43, 44]</sup> For example, students who were placed in nursing homes, psychiatric, and mother-baby units were disappointed with their clinical experiences than those in acute care units.<sup>[43, 44]</sup> While evidence suggests that nursing homes provide valuable learning opportunities for nursing students to practice basic nursing care, communication skills and health assessments, students in this study, like in previous studies,<sup>[45]</sup> were disappointed and negative about nursing home placements. Similarly, previous studies<sup>[32, 33, 44]</sup> have reported the frustration students feel when they are required to perform non-nursing tasks or when asked to concentrate on routine tasks which they believe they had already been mastered.

Although the literature acknowledges that skills practice in clinical placements cannot be guaranteed and students may not always get exposure to the experience intended by the specific clinical assignment student still feel disappointment and anxious about their clinical experience.<sup>[32]</sup>

It is imperative that clinical placements are carefully selected based on the expected learning outcomes and the nature of the learning being sought and the type of health issues they incorporate.<sup>[46]</sup> In addition, the selected clinical placement must build upon prior learning experience so students can make connection between theory and practice.<sup>[3]</sup> Failure to provide adequate learning opportunities for students to competently and safely care for patients could result in nursing graduates who have not met the required standards and competences of the profession.<sup>[47]</sup>

Students in this study described the main strengths of the traditional faculty supervised model as (a) peer learning and support and (b) support for novice students. The study findings revealed that the presence of other students in traditional faculty supervised model was beneficial for learning and provided an alternative form of support, peer support. Students reported that peer learning opportunities enabled them to share ideas or bounce ideas off each other, to question each other, confirm things and learn from one another. These findings affirm those in previous studies<sup>[32, 48-50]</sup> that

through group discussion or peer teaching students are able to question each other and learn from each other's experiences. Houston et al.<sup>[50]</sup> revealed that students preferred working with their peers as they felt less threatened and more receptive to learn. Although peer learning and support may be beneficial, other scholars<sup>[51]</sup> caution that CIs must be aware of discomforts that may arise in the grouping of students. As such CIs are advised to evaluate whether the required learning competencies are achieved particularly in groups of students with varying clinical strengths and learning needs.<sup>[51]</sup>

Findings from this study were similar to a study by Brown, Herd, Gwynneth, and Moya<sup>[52]</sup> that strongly emphasized the need for support during the first year and, in particular, during the first placement. Houghton et al.<sup>[50]</sup> concur that novice students, particularly those in initial days and years of clinical placements need more direct supervision and support while senior students can work independently and only need some environmental supervision. A correlational study of 192 nursing students enrolled in 3-year undergraduate nursing program by Bryan, Weaver, Anderson-Johnson, and Lindo<sup>[53]</sup> concluded that as students progressed through the program they require less support from educators. This is important as evidence suggest that first clinical experiences for undergraduate nursing students can be stressful and anxiety provoking which can interfere with the quality of clinical learning outcomes.<sup>[29,34,37]</sup> As stress or anxiety can impede students' ability to adapt and learn in the clinical setting,<sup>[50]</sup> guidance and supportive clinical learning environment by CI is crucial to maximize the learning outcomes of the nursing students.<sup>[38]</sup> increase their confidence.<sup>[32,38]</sup> These findings imply that provision of guidance and supportive clinical environment for students and in particular, novice students will help their learning in the clinical practice setting.<sup>[15]</sup> According to College of Nurses of Ontario,<sup>[54]</sup> "*nurses have a professional obligation to support learners to develop and refine the competencies needed for safe, ethical and effective practice, and to support the development and socialization of colleagues who are learning*" (p.3).

The findings of this study revealed several challenges associated with the traditional model. These include: (a) impact of the high instructor-to-student ratio, (b) missed learning opportunities while waiting for the CI, and (c) concerns with the evaluation process. These concerns were consistent with those highlighted in the literature.<sup>[1,9,37,55]</sup>

Although the instructor-to student ratios of 1: 6(8) reported in the current study were generally not excessive by external standards,<sup>[1,26,55,56]</sup> all the participants provided comments which indicated that the number of students in clinical groups

was a major concern. Students reported that high instructor-to-student ratio makes the CIs busy and decreases the time available for individual student-instructor interaction, which results in a decrease in time for student learning. These findings corroborate those in the literature.<sup>[1,9,10,37,55-57]</sup> For example, a study by Wang and Blumberg<sup>[57]</sup> revealed that one third of the interactions between faculty and student lasted one minute or less and one third lasted one to six minutes. Further analysis of these interactions showed that most were leading or directing or information giving in nature. In addition, students in this study described situations where they had to be dispersed in several different areas of the setting because the single unit could not accommodate when made it even more difficult to interact with their CI. This situation interfered with adequate and timely supervision as the CI cannot be physically present with all students at all times.<sup>[58-60]</sup> Within this arrangement, as Emerson<sup>[58]</sup> explained, even when the time for CI breaks or moving between units is not taken into consideration, "each student in a 10-student clinical group would receive an average of only about 45 minutes of one-on-one interaction with the faculty in an 8-hour clinical day" (p. 41).

Congruent with findings from this study Maguire et al.<sup>[55]</sup> assert that in large clinical groups, valuable "just in time" learning opportunities are lost while waiting for the instructor availability (p.80). Consistent with findings of the current study, Killam and Heerschap<sup>[37]</sup> reported several concerns regarding timing of medication administration were raised by students. Emerson<sup>[58]</sup> explained that in situations where students are placed in different areas of the clinical setting, skill performance may be limited to a certain number of skills each day or to a specific group of students within the clinical group, which was also highlighted by a student in the current study.

Evidence further suggest that the large clinical groups can make simultaneous supervision of students difficult and possibly increase the risk of error.<sup>[55,61,62]</sup> Students have reported that it is easier to learn about potential adverse event alerts with a smaller student-to-teacher ratio.<sup>[63]</sup> It is, therefore, critical that nursing students should receive optimal supervision in order to become safe, competent and independent health care practitioners. The impact of supervision must become an urgent research and practice priority for undergraduate nursing education programs.<sup>[62]</sup>

In an effort to reduce potential patient safety errors and challenges faced by both students and CIs during clinical teaching and supervision, the students in this study suggested that the number of student per CI should be moderated, which is in line with the literature.<sup>[37,63]</sup> Although no current nursing

research was found that has explored the effects of instructor-to-student ratio on students learning outcomes,<sup>[64]</sup> findings from a study by Dubrowski and MaRae<sup>[65]</sup> among medical students revealed that student outcomes may be negatively affected by the reduced timely feedback and supervision which are essential for improvement of students' psychomotor skills. Therefore, as Tanda and Denham<sup>[64]</sup> suggested, more nursing research is needed to determine if similar relationships exist between nursing students' learning outcomes and the instructor-to-student ratios.

Students in this study described several challenges related to the complexity and subjectivity of the evaluation process. These included concerns with the clinical evaluation tool, perceived unfairness in the grading process, and inconsistencies among CIs in evaluation approaches, communicating expectations, and provision of feedback. These findings corroborate similar evidence from the previous studies.<sup>[32,37,66-69]</sup> For example, Killam and Heerschap<sup>[37]</sup> found students perceived the clinical evaluation process as subjective and complex and difficult to comprehend. Bourbonnais et al.<sup>[67]</sup> also reported concerns of inconsistency in the clinical evaluation process by teachers within the same year. Other authors have suggested several contributing factors to subjectivity in the evaluation process. First, subjectivity in the evaluation process is compounded by the involvement of value judgement on part of the evaluator.<sup>[56]</sup> As such it is important for CIs to be aware of differences between their own value system and those of the student that can bias the evaluation process. Second, the issue of lack of objectivity occurs because the evaluation process involves assessment of multiple domains (knowledge or cognitive, psychomotor, and attitudes or affective) some of which may be difficult to measure.<sup>[70,71]</sup> For example, many CIs find it easier to evaluate psychomotor skills rather than affective and cognitive domains.<sup>[70-72]</sup> Third, those CIs with different backgrounds, such as from clinical practice settings or from university are likely to interpret clinical evaluation tools differently.<sup>[73]</sup>

Findings of this study further revealed that students were concerned about clinical evaluation tool being used. Billings and Hallstead<sup>[74]</sup> asserted that "fair and reasonable evaluation of students in clinical settings requires use of appropriate evaluation tools that are ideally efficient for faculty to use." (p.446) However, evidence from the literature reveals that typically clinical evaluation tools have not been tested for reliability or validity.<sup>[67,68]</sup> Amicucci<sup>[66]</sup> suggests that nursing programs need to create clinical evaluation tool that are course specific and with clearly defined expected behaviours and skills that need to be achieved. Other scholars have suggested the clinical evaluation tool should be reviewed at the very beginning of each clinical placement to ensure that the

evaluation criteria will be known to both students and the CIs or faculty.<sup>[75]</sup> These are some of the issues that need further exploration by the nursing programs.

Students in this study, like in other studies reported variable experience of receiving feedback.<sup>[32,37]</sup> Regular, timely feedback that recognizes both strengths and weakness and areas for improvement is perceived by students as encouraging and helpful in increasing their confidence and independence.<sup>[32,76]</sup> Appropriate and accurate feedback on clinical performance is perceived as an integral element for effective student learning in clinical education. "Without feedback, mistakes go uncorrected, good performance is not reinforced, and learning can be compromised".<sup>[77,78]</sup> Thus, it is important, during orientation for CIs to be made aware of the importance of feedback for effective student learning in clinical practice.

Students in this study like others in previous studies<sup>[68]</sup> queried the validity of the grades they received from their CIs as they felt the CI had not observed them perform a procedure or spent enough time with them to know their weaknesses and strengths. It is acknowledged that in the traditional model of teaching, due to the number of students that the CIs have to supervise, they can only sample limited student behaviour, which may result in an unfair or inaccurate clinical evaluation.<sup>[58,74]</sup> Because of these limitations, complexity of the nursing practice and numerous competencies that require student mastery, a combination of evidence from several sources is suggested in supporting a fair and reasonable evaluation process. These include direct observation, verbal feedback, anecdotal notes, and journals, input from clinical staff, patients and peers.<sup>[70,74]</sup>

Lastly, nursing students in this study identified a number of recommendations for improving clinical experiences, which corroborate those in the literature. These include: reducing the clinical group size,<sup>[1,37,59]</sup> increasing the duration of clinical placements,<sup>[27,37]</sup> hiring more experienced nurses<sup>[36]</sup> and reviewing the selection criteria, reviewing of the clinical evaluation process and tool,<sup>[37,59]</sup> establish consistence processes for clinical teaching and evaluation strategies and expectations, CIs sharing course expectations with students, and more feedback from CI on their performance.<sup>[32]</sup>

## 5. CONCLUSION

Students' perspectives are crucial to understanding clinical teaching effectiveness in nursing education. The aim of this study was to explore the perceptions and experiences of nursing students within the traditional faculty supervised model of clinical education and, in particular their views regarding the strength and limitations of the model. These

findings offer useful contributions to the body of evidence relating to clinical education of nursing students. Findings from this study are generally consistent with existing literature and further highlight that there are more challenges than strengths associated with the traditional model, therefore this model may not be “best practice” with respect to

students’ learning experience. As the traditional model is still the most commonly used for preparing undergraduate student internationally, further research is needed to explore the effectiveness of the traditional model on student learning and to ensure safe and competent future generation of nurses.

## REFERENCES

- [1] Benner P, Stephen M, Leonard V, et al. *Educating nurses: a call for radical transforming*. San Francisco: Jossey-Bass; 2010.
- [2] Canadian Association of Schools of Nursing. *Education of registered nurses in Canada*. [Position Statement]. Ottawa, Ontario. 2011.
- [3] Hickey MT. Baccalaureate nursing graduates’ perceptions of their clinical experiences and preparation for practice. *Journal of Professional Nursing*. 2010; 26(1): 35-41. PMID:20129591 <https://doi.org/10.1016/j.profnurs.2009.03.001>
- [4] Peters K, McInnes S, Halcomb EJ. Nursing students’ experience of clinical placements in community settings: A qualitative study. *Collegian, The Australian Journal of Nursing Practice, Scholarship & Research*. 2015; 22(2): 175-181. <https://doi.org/10.1016/j.collegn.2015.03.001>
- [5] Doody O, Tuohy D, Deasy C. Final-year student nurses’ perceptions of role transition. *British Journal of Nursing*. 2012; 21(11): 684-688. PMID:22875356 <https://doi.org/10.12968/bjon.2012.21.11.684>
- [6] Duchscher JB. A process of becoming: The stages of new nursing graduate professional role transition. *Journal of Continuing Education in Nursing*. 2008; 39(10): 441-450. PMID:18990890 <https://doi.org/10.3928/00220124-20081001-03>
- [7] Dyess SM, Parker C. Transition support for the newly licensed nurse: A program that made a difference. *Journal of Nursing Management*. 2012; 20(5): 615-623. PMID:22823217 <https://doi.org/10.1111/j.1365-2834.2012.01330.x>
- [8] Smadu M, McTeer M. *The Health of Our Nation - The Future of Our Health System*. 2012.
- [9] Canadian Association of Schools of Nursing. *Clinical Practice Education Survey 2003*. Ottawa, Ontario. 2004. Available from: <http://casn.ca/vm/newvisual/attachments/856/Media/ClinicalPracticeEducationSurvey2003.pdf>
- [10] Gregory D, Guse L, Dick DD, et al. *The question of safety: An exploration of errors among undergraduate nursing students placed on clinical learning contracts. A research report submitted to the Manitoba institute for patient safety (MIPS)*. 2008.
- [11] Kim KH. Clinical competence among senior nursing students after their preceptorship experiences. *Journal of Professional Nursing*. 2007; 23(6): 369-75. PMID:18053963 <https://doi.org/10.1016/j.profnurs.2007.01.019>
- [12] Council of Universities of Ontario. *Integrating clinical education into Ontario’s changing health care system*. Council of Ontario Universities Office of Health Sciences. 2013. Available from: <http://www.cou.on.ca/publications/reports>
- [13] Dolansky MA, Druschel K, Helba M, et al. Nursing student medication errors: A case study using root cause analysis. *Journal of Professional Nursing*. 2012; 29(2): 102-108. PMID:23566456 <https://doi.org/10.1016/j.profnurs.2012.12.010>
- [14] Canadian Association of Schools of Nursing. *Position statement: Clinical/practice nursing education*. CASN position statement on baccalaureate education and baccalaureate programs. Author, Ottawa ON. 2005.
- [15] Patton MQ. *Qualitative research and evaluation methods*. (3rd Ed.). Sage Publications: Thousand Oaks, CA. 2002.
- [16] Streubert HJ, Carpenter DR. *Qualitative Research in Nursing: Advancing the Humanistic Imperative*. Wolters Kluwer: Philadelphia. 2011.
- [17] Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006; 3: 77-101. <https://doi.org/10.1191/1478088706qp0630a>
- [18] Guba EG, Lincoln YS. *Fourth generation evaluation*. California: Sage Publications; 1989.
- [19] Houghton C, Cassey D, Shaw D, et al. Rigour in qualitative case-study research. *Nurse Researcher*. 2012; 20(4): 12-17. <http://doi.org/10.7748/nr2013.03.20.4.12.e326>
- [20] Taylor BJ, Kermode S, Roberts K. *Research in nursing and health care: Evidence for practice* (3rd ed.). South Melbourne: Thomson. 2006.
- [21] Kelly C. Students’ perceptions of effective clinical teaching revisited. *Nurse Education Today*. 2007; 27: 885-892. PMID:17321013 <https://doi.org/10.1016/j.nedt.2006.12.005>
- [22] Kube ML. *The Relationship of Nursing Faculty Clinical Teaching Behaviors to Student Learning* (A dissertation) College of St Mary in partial fulfillment of the requirement for the degree of Doctor of Education with an emphasis on Health Professions Education. 2010.
- [23] Okoronkwo IL, Onyia-Pat JL, Agbo MA, et al. Students’ perception of effective clinical teaching and teacher behaviour. *Open Journal of Nursing*. 2013; 3(1). <https://doi.org/10.4236/ojn.2013.31008>
- [24] Sabog RFV, Caranto LC, David JJT. Effective Characteristics of a Clinical Instructor as Perceived by BSU Student Nurses. *International Journal of Nursing Science*. 2015; 5(1): 5-19.
- [25] Courtney-Pratt F, Marsden F. Quality clinical placements for undergraduate nursing students: a cross-sectional survey of undergraduates and supervising nurses. *Journal of Advanced Nursing*. 2011; 68(6): 1380-1390. <https://doi.org/10.1111/j.1365-2648.2011.05851.x>
- [26] Levett-Jones T, Lathlean J. Belongingness: a prerequisite for nursing students’ clinical learning. *Nurse education in Practice*. 2008; 8(2): 103-111. <https://doi.org/10.1016/j.nepr.2007.04.003>
- [27] Tiwaken SU, Caranto LC, David JJT. The real world: lived experiences of student nurses during clinical practice. *International Journal of Nursing Science*. 2015; 5(2): 66-75.
- [28] Gaberson KB, Oermann MH, Shellenbarger T. *Clinical teaching strategies in nursing*. (4th Ed.). Springer Publishing Company, LLC New York, NY. 2015.
- [29] Gardner MR, Suplee PD. *Handbook of clinical teaching in nursing and health sciences*. Jones and Bartlett Publishers, LLC: Mississauga, ON. 2010.

- [30] Ludin SM, Fathullah NM. Undergraduate nursing students' perceptions of the effectiveness of clinical teaching behaviours in Malaysia: A cross-sectional, correlational survey. *Nurse Education Today*. 2016; 44: 79-85. <https://doi.org/10.1016/j.nedt.2016.05.007>
- [31] Townsend L. Success in the clinical setting: nursing students' perspectives. A Thesis submitted to the Faculty of Graduate Studies of The University of Manitoba In partial fulfillment of the requirements of the degree of Master of Nursing. 2012.
- [32] Nabolsia M, Zumotb A, Wardamc L, et al. The experience of Jordanian nursing students in their clinical practice. *Procedia-Social and Behavioral Sciences*. 2012; 46: 5849-5857. <https://doi.org/10.1016/j.sbspro.2012.06.527>
- [33] O'Mara L, MacDonald J, Gillespie M, et al. Challenging clinical learning environments: experiences of undergraduate nursing students. *Nurse Education in Practice*. 2014; 14(2): 208-213. <https://doi.org/10.1016/j.nepr.2013.08.012>
- [34] Babenko-Moud Y, Iwasiw C, Andrusyszyn M, et al. Effects of Clinical Practice Environments on Clinical Teacher and Nursing Student Outcomes. *Journal of Nursing Education*. 2012; 51(4): 217-225. PMID:22432538 <https://doi.org/10.3928/01484834-20120323-06>
- [35] Baraz S, Memarian R, Vanak Z. Learning challenges of nursing students in clinical environments: A qualitative study in Iran. *Journal of Education and Health Promotion*. 2015; 4: 52. <https://doi.org/10.4103/2277-9531.162345>
- [36] Killam LA, Heerschap C. Challenges to Student Learning in the Clinical Setting: A Qualitative Descriptive Study. *Nurse Education Today*. 2013; 33(6): 684-691. <http://doi.org/10.1016/j.nedt.2012.10.008>
- [37] Melincavage SM. Student nurses' experiences of anxiety in the clinical setting. *Nurse Education Today*. 2011; 31(8): 785-789.
- [38] Canadian Association of Schools of Nursing. Registered nurses education in Canada statistics 2012-2013: Registered nurse workforce, Canadian production: Potential New supply. Author: Ottawa. 2014. Available from: <http://casn.ca/wp-content/uploads/2014/12/2012-2013-SFS-FINAL-report-revised.pdf>
- [39] Wein S, Babenko-Mould Y, Iwasiw C. Clinical instructors' perceptions of structural and psychological empowerment in academic nursing environments. *Journal of Nursing Education*. 2014; 53(5): 265-270. <https://doi.org/10.3928/01484834-20140421-01>
- [40] Baker SL, Fitzpatrick JJ, Griffin MQ. Empowerment and job satisfaction in associate degree nurse educators. *Nursing Education Perspectives*. 2011; 32(4): 234-239. PMID:21923003 <https://doi.org/10.5480/1536-5026-32.4.234>
- [41] Stayt LC, Merriman C. A descriptive survey investigating pre-registration student nurses' perceptions of clinical skill development in clinical placements. *Nurse Education Today*. 2013; 33(4): 425-430. <https://doi.org/10.1016/j.nedt.2012.10.018>
- [42] Algosio M, Peters K. The experiences of undergraduate assistants in nursing. *Nurse Education Today*. 2012; 32(3): 192-202. <http://dx.doi.org/10.1016/j.nedt.2011.08.002>
- [43] Chaun OL, Barnett T. Student, tutor and staff nurse perceptions of the clinical learning environment. *Nurse Education in Practice*. 2012; 12(4): 192-197. <https://doi.org/10.1016/j.nepr.2012.01.003>
- [44] Lane AM, Hirst SP. Placement of undergraduate students in nursing omes: careful consideration versus convenience. *Journal of Nursing Education*. 2012; 51(3): 145-149.
- [45] Mayne W, Jootun D, Young B, et al. Enabling students to develop confidence in basic clinical skills. *Nursing Times*. 2004; 100(24): 36-39. PMID:15224491
- [46] Canadian Association of Schools of Nursing. Practice domain for baccalaureate nursing education: Guidelines for clinical placements and simulation. A companion document to the CASN national nursing education framework. Author: Ottawa. 2015.
- [47] McHugh MD, Lake ET. Understanding clinical expertise: nurse education, experience, and the hospital context. *Research in Nursing & Health*. 2010; 33(4): 276-287. <https://doi.org/10.1002/nur.20388>
- [48] Bourgeois S, Drayton N, Brown A. An innovative model of supportive clinical teaching and learning for undergraduate nursing students: The cluster model. *Nurse Education in Practice*. 2011; 11(2): 114-118. PMID:21185231 <https://doi.org/10.1016/j.nepr.2010.11.005>
- [49] Christansen I, Bjork AH, Hessewaagbakke E. Developing supervision skills through peer learning partnership. *Nurse Education in Practice*. 2011; 11(2): 104-108. PMID:21168367 <https://doi.org/10.1016/j.nepr.2010.11.007>
- [50] Houghton CE, Casey D, Shaw D, et al. Students' experiences of implementing clinical skills in the real world of practice. *Journal of Clinical Nursing*. 2013; 22(13-14): 1961-1969. <https://doi.org/10.1111/jocn.12014>
- [51] Stone R, Copper S, Cant R. The value of peer learning in undergraduate nursing education: a systematic review. *ISRN Nursing*. 2013. <http://doi.org/10.1155/2013/930901>
- [52] Chojecki P, Lamarre J, Buck M, et al. Perceptions of a peer learning approach to pediatric clinical education. *International Journal of Nursing Education Scholarship*. 2010; 7(1): Article 39. <https://doi.org/10.2202/1548-923X.1893>
- [53] Brown L, Herd K, Gwynneth H, et al. The role of the lecture in practice placements: What do student think? *Nurse Education in Practice*. 2005; 5(2): 84-90. PMID:19038184 <https://doi.org/10.1016/j.nepr.2004.03.006>
- [54] Bryan V, Weaver S, Anderson-Johnson P. The effect of interpersonal relationships between nursing students and lecturers on learning outcomes at a Jamaican nursing school. *Caribbean Journal of Nursing*. 2013; 1(1): 41-48.
- [55] Maguire DJ, Zambroski CH, Cadena SV. Using a clinical collaborative model for nursing education: Application for clinical teaching. *Nurse Educator*. 2012; 37(2): 80-5. PMID:22327534 <https://doi.org/10.1097/NNE.0b013e3182461bb6>
- [56] Gaberson K, Oermann M. *Clinical teaching strategies in nursing*. (3rd Ed.). Springer Publishing Company, LLC: New York. 2010.
- [57] Wang AM, Blumberg P. A study on interaction techniques of nursing faculty in the clinical area. *Journal of Nursing Education*. 1983; 22(4): 144-151. PMID:6100948
- [58] Emerson RJ. *Nursing education in the clinical setting*. St Louis: Mosby Inc. 2007.
- [59] Hooper JJ, Benton KK, Mancini ME, et al. *Journal of Nursing Regulation*. 2016; 7(2): 53-59. [https://doi.org/10.1016/S2155-8256\(16\)31078-X](https://doi.org/10.1016/S2155-8256(16)31078-X)
- [60] Wotton K, Gonda J. Clinician and student evaluation of a collaborative clinical teaching model. *Nurse Education in Practice*. 2004; 4(2): 120-127. [https://doi.org/10.1016/S1471-5953\(03\)00033-7](https://doi.org/10.1016/S1471-5953(03)00033-7)
- [61] Reid-Searl K, Moxham L, Walker S, et al. Supervising medication administration by undergraduate nursing students: Influencing factors. *Journal of Clinical Nursing*. 2010; 19(5-6): 775-784. PMID:20500321 <https://doi.org/10.1111/j.1365-2702.2009.03074.x>
- [62] Reid-Searl K, Moxham L, Happell B. Enhancing patient safety: the importance of direct supervision for avoiding medication errors and near misses by undergraduate nursing students. *International Journal of Nursing Education*. 2013; 1(1): 1-10. <https://doi.org/10.1111/ijne.12014>

- nal of Nursing Practice. 2010; 16(3): 225-232. PMID:20618531 <https://doi.org/10.1111/j.1440-172X.2010.01820.x>
- [63] Mulready-Shick J, Kafel K, Banister G, et al. Enhancing quality and safety competency development at the unit level: An initial evaluation on students learning and clinical teaching on dedicated education units. *Journal of Nursing Education*. 2009; 48(12): 716-719. PMID:20000256 <https://doi.org/10.3928/01484834-20091113-11>
- [64] Tanda R, Denham SA. Clinical instruction & student outcomes. *Teaching & Learning in Nursing*. 2009; 4(4): 139-147. <https://doi.org/10.1016/j.teln.2009.01.002>
- [65] Dubrowski A, MacRae H. Randomised, controlled study investigating the optimal instructor: Student ratios for teaching suturing skills. *Medical Education*. 2006; 40: 59-63. PMID:16441324 <https://doi.org/10.1111/j.1365-2929.2005.02347.x>
- [66] Amiccucci B. What nurse faculty have to say about clinical grading. *Teaching and Learning in Nursing*. 2012; 7: 51-55.
- [67] Bourbonnais FF, Langford S, Giannantonio L. Development of a Clinical Evaluation Tool for Baccalaureate Nursing Students. *Nurse Education in Practice*. 2008; 8: 62-71. <http://dx.doi.org/10.1016/j.nepr.2007.06.005>
- [68] Msiska G, Smith P, Fawcett T, et al. Where is the grade coming from? Problems and challenges in evaluating the clinical performance of nursing students. *Open Journal of Nursing*. 2015; 5: 470-481. <https://doi.org/10.4236/ojn.2015.55050>
- [69] Oermann MH, Saewert KJ, Charasika M, et al. Assessment and grading practices in schools of nursing: national survey findings part I. *Nursing Education Perspectives*. 2009; 30(4): 274-278. PMID:19824235
- [70] Miller C. Improving and enhancing performance in the affective domain of nursing students: Insights from literature review for clinical educators. *Contemporary Nurse*. 2010; 35(1): 2-17. <https://doi.org/10.5172/conu.2010.35.1.002>
- [71] Seldomridge LA, Walsh CM. Evaluating student performance in undergraduate preceptorships. *Journal of Nursing Education*. 2006; 45(5): 169-176. PMID:16722499
- [72] Luhanga F, Yonge OJ, Myrick F. Failure to assign failing grades": Issues with grading the unsafe student. *International Journal of Nursing Education Scholarship*. 2008; 5(1): Article 8. <https://doi.org/10.2202/1548-923X.1366>
- [73] Butler MP, Cassidy I, Quillinan B, et al. Competency assessment methods - tool and processes: a survey of nurse preceptors in Ireland. *Nurse Education in Practice*. 2011; 11(5): 298-303. <https://doi.org/10.1016/j.nepr.2011.01.006>
- [74] Billings DM, Hallstead JA. *Teaching in nursing: A guide for faculty*. (5th Ed.). Elsevier Saunders: St Louis, Missouri. 2016.
- [75] Krautscheid L, Mocerri J, Stragnell S, et al. A descriptive study of a clinical evaluation tool and process: student and faculty perspectives. *Journal of Nursing Education*. 2014; 53(3): S30-S33. <https://doi.org/10.3928/01484834-20140211-02>
- [76] Bradshaw M, Lowenstein A. *Innovative teaching strategies in nursing and health related health professions*. Jones & Bartlett Learning, LLC: Maryland, USA. 2014.
- [77] Burgess A, Mellis C. Receiving feedback from peers: medical students' perceptions. *The Clinical Teacher*. 2015; 12(3): 203-207. <https://doi.org/10.1111/tct.12260>
- [78] Henning JM, Weidner TG, Jones J. Peer-assisted learning in the athletic training clinical setting. *Journal of Athletic Training*. 2006; 41(1): 102-108. PMID:16619102