PROMOTING A CULTURE OF REFLEXIVITY IN UNDERGRADUATE NURSING EDUCATION

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Abstract

Intentionally reflecting on action to improve practice is mandated as a method for continuing competence by nursing regulatory bodies in most Canadian provinces. Accordingly, nursing education must prepare students as reflective practitioners. Nurse educators typically use the medium of post-clinical conferences (i.e., having students engage in self-appraisal of learning and discussing their learning strategies with peers) to help students build their reflective capacity. It is widely held that such post conferences enable students to share knowledge, connect theory to practice, unload stress and confusion, examine perceptions, and deconstruct failures and successes. However, the role of clinical post-conference participation in developing student reflective capacity is not known. To help address this gap in evidence, we elicited information via a confidential online survey of students' perceptions about their experiences within post-clinical conferences. Combining their quantitative responses to Likert scale questions about attitudes and beliefs with their qualitatively described clinical learning situations, we identified sociocultural influences that inform students’ values and meaning making processes. Our findings depict the development of reflective practice through experiences of peer support, safety, and nurse educator leadership style. Peer support requires students to respect one another and establish positive group dynamics. Students’ perceptions of safety are paramount to their participation. Nurse educators who lead post conferences by modelling reflective practice and promoting a safe environment for students contribute to strengthening a culture of reflexivity in nursing education. Critical to the development of student nurse reflective capacity is confidentiality, the encouragement and timing of feedback, and seniority level of students. In this article, we will provide a detailed, contextually grounded understanding of the development of reflective clinical practice and its barriers and facilitators. Following this, we suggest pedagogical strategies and resources to promote a culture of reflexivity in nursing education.

Keywords: Reflexivity, undergraduate nursing education, leadership, support, safety.

1 INTRODUCTION

Deliberate reflection on experience brings observations, perceptions, and surface learning into conscious awareness, contributing to increased knowledge. The College of Nurses of Ontario [1] has stated that practice reflection “is an intentional process of thinking, analyzing, and learning to identify learning needs and commit to action” (p. 4). Because reflective practice has been mandated as a method of continuing competence in order to maintain licensure by nursing regulatory bodies in most Canadian provinces/territories including New Brunswick [2], nursing students are required to develop their capacity for reflection. The trend toward supporting reflective practice is also noted internationally as a key element of professional practice with time allotted for reflection in busy practice settings [3]. This study provides knowledge about the role of clinical conferences in promoting reflective practice.

2 AIM

Our research objectives were to (a) develop a detailed, contextually-grounded understanding of student nurses’ capacity for reflecting on and within clinical situations, b) gain insight into the role of nursing post conferences in fostering reflective practice, and (c) identify pedagogical strategies and resources that foster reflective capacity. Research questions included How do post-conferences foster reflective practice? and What are nursing student’s experiences of learning through reflective practice?

3 LITERATURE REVIEW

Using the key terms “reflection OR reflective practice OR reflexivity AND post-clinical conference AND nursing education,” we searched CINAHL and ERIC databases. Due to the initial huge volume
 (>23,000), we limited the search to articles that were peer reviewed, available, English language, published in academic journals 1994-2017, and contained the key terms in their abstracts. From the 431 articles located via this search strategy, we excluded those that did not specifically focus on the perspectives of undergraduate nursing students and post-clinical conferences leaving 14 articles. We then searched Dissertations & Theses, Google Scholar, and the websites of various professional nursing associations across Canada to locate additional relevant theoretical, topical, and policy related literature. Also, we conducted manual searches of the reference sections of relevant papers and purposely sampled the work of germinal authors (e.g., Brookfield, Dewey, Johns, and Schön). The final literature sample was 31 articles, texts, and reports that we reviewed through a critical lens.

3.1 Overview of reflection literature

Reflection originates from the Latin verb reflectere which means “bend back” [4]. Terms synonymous with reflection include reflective thinking, reflectivity, mindfulness, sense making, and critical thinking [5]. When nursing students “bend back” they pay attention to self, education, and care-giving [6] to ultimately deepen their learning [7]. It is through reflection that students begin to consider theoretical applications to practice [8] [9]. According to Dewey [10], thinking is innate but reflective thinking must be learned. Some reflective skills are more difficult to develop than others [11]. For example, analyzing the contextual influences on care and action planning are more difficult to develop than describing practice. The act of reflection is a way of promoting the development of autonomous, qualified, self-directed professionals as well as a way of developing more effective healthcare teams [12]. Nursing research specifically investigating the advantages of reflective practice is limited [13].

3.2 Variables that influence reflective practice

Using an online post-conference discussion intervention, Hannans [5] found the level of reflection higher if students had experienced failure in a previous clinical course or had prior experience in the healthcare field and if students were in their first year rather than second or third years. Interpreting this finding, Hannans suggested that reflection may occur less as nursing students become more comfortable in their role and have less doubt or questioning introspectively about what is already known. Gustafson and Bennett [14] grouped variables that enhance reflexive behavior into three main types: learner variables (e.g., motivation), environmental variables (e.g., seating arrangement), and reflection tasks (e.g., nature of the stimulus).

3.3 Barriers to reflective practice

“Reflective practice is neither educationally nor politically innocent” [15]. Power issues present obstacles to reflective practice [16]. These issues relate to the silencing of individuals who fall outside the dominant discourse [17], grading of reflective work [18], and inappropriate disclosure [19]. Brookfield [20] stresses that methods such as journal writing or other reflective work may be perceived negatively by students unless the instructor conveys that extraordinary revelations will not receive higher grades than less striking ones. Other barriers related to reflexivity and reflective practice are time constraints [21], limited power by nurses to initiate changes [22], insufficient mentor support [23] [24], unsupportive work environments [24], and a culture that does not support reflection [25].

3.4 Post-clinical conference and reflective practice

Clinical post conferences are used in health professional education for many reasons including the belief that practice alone does not automatically lead to insight development [26]. Students need to develop reflective capacity to step into the role of professional nurse [27]. Clinical conference discussions are assumed to help students develop reflective capacity through sharing knowledge to improve critical thinking [28] and clinical judgement [29], connecting theory to practice [30], examining perceptions [31], utilizing reflective skills such as critical analysis and support systems [32], unloading stress and confusion [33], and deconstructing failures and successes [34] [35] in reflecting on the clinical day [36].

Profetto-Mcgrath et al. [37] analyzed audiotaped seminars in a context-based Canadian nursing baccalaureate program and found the majority of faculty asked questions at the rote knowledge or recall level rather than at a higher level which could potentially facilitate critical thinking and deeper learning. Similarly, Rossignol [38] and Hannans [5] reported faculty asking lower cognitive level questions during nursing post-clinical conferences. For these conference to be effective, educators must be prepared to ask high-level questions that broaden and deepen student thinking [39].
Research evidence detailing particular curricular interventions utilized in post-clinical conference to support the development of reflective practice is limited by small sample sizes and predominately exploratory designs [40]. Even when strategies were implemented to promote reflection, the outcome of reflection or impact of the learning strategy on clinical reasoning was often not evaluated [41].

4 METHOD

Based on the dearth of evaluation of post-clinical conferences in helping develop reflective practice, an exploratory, descriptive design was required. We chose a mixed-methods approach to allow the research questions to be more comprehensively addressed [42].

A mixed method design is a ... scientifically rigorous research process comprised of a qualitative or quantitative core component that directs the theoretical drive, with qualitative or quantitative supplementary component(s)... [that] fit together to enhance description, understanding and can either be conducted simultaneously or sequentially. [43]

Mixed-methods designs differ in their combination of core and supplemental components. The core component as the main (dominant) method addresses the major part of the research question; the supplemental component provides additional information but is not complete enough to stand alone. In the present project, a qualitatively driven mixed-methods design (quan + QUAL) was chosen to quantitatively confirm factors influencing reflective practice found in the literature and to qualitatively explore the perceptions and practices of nursing students in supervised practice placements in New Brunswick, Canada. Thus, the core component was the qualitative questions of the self-administered survey completed alongside quantitative supplemental questions.

4.1 Sample

Participants were recruited through the BN program offices at the respective sites within the university. All students in the undergraduate programs received an invitation to participate and a link to the study. The link contained basic information about the study, its purpose, confidentiality, and participant rights. Prior to data collection, the project was reviewed by the university’s ethics board.

Forty-nine students participated in the research: 45 female, 4 male. Forty-eight participants were in the four-year BN program and one was in the advanced standing (double degree) program. The majority (n=20) were in the third year of the BN program. To encourage participation, an incentive of five dollars for each completed response was donated to the Canadian Cancer Society (the study took place during Cancer Month in Canada). Students completed the survey on a voluntary basis. Consent was implied if students completed and submitted the survey. No personal, identifying data were collected.

4.2 Survey

We developed an online survey using LimeSurvey® that comprised both Likert style and open-ended items about participants’ recent experiences with post-clinical conferences, barriers and facilitators to reflective practice, and how post-clinical conferences have influenced the development of their reflective capacity. The survey was based on overarching themes identified in the literature with items grouped into learner, environment, and reflection task variables as Gustafson and Bennett [14] suggested these variables influence reflective behavior. Specifically, the survey contained items related to experience in the healthcare field, experience with failure in previous clinical rotations, year of program, grade point average, program (basic BN, advanced standing program or completion of a degree prior to entering the BN program), age, gender, and learner attitudes toward reflection. The Likert style items allowed participants to indicate how much they agreed or disagreed with statements about learner, environment, and reflection tasks on a range from 1 (strongly disagree) to 4 (strongly agree). The highest possible mean score was 4 and the lowest was 1. The open-ended questions encouraged students to discuss unique factors that influenced their ability to engage in reflexivity and reflective practice. The open-ended question boxes allowed an unlimited number of characters. The survey is exploratory and has yet to be tested for psychometric properties. The survey and consent processes were online to avoid a sense of faculty persuasion or power because of our role as nurse faculty members at the university.
4.3 Analysis

Data from the quantitative and qualitative components were analyzed separately. The quantitative items were analyzed with SPSS (v.20) using primarily descriptive statistics and comparison of means. The qualitative data were analyzed by reading and re-reading the texts to grasp content, sorting data under descriptive codes that emerged, and organizing patterns into threads and themes within and across individuals’ experiences. This narrative approach allowed exploration of factors that influence everyday decisions and reveal the meanings, dominant beliefs, and values of participants [44] [45] [46]. Our use of this approach enabled identification and analysis of “patterns, narrative threads, tensions, and themes within or across, and individual’s experience and social setting” [44]. Narrative threads were developed based on recurrence, repetition, and grab of ideas. The stories of participants were analyzed for individual meanings as well as a common collective rationalized representation of reflective capacity.

Core qualitative and supplementary quantitative data were interpreted in writing the results narrative. This stage of mixed-methods research is referred to as the point of interface, where results from the supplemental component are combined with those of the core component [47].

5 FINDINGS

5.1 Core qualitative findings: Reflective practice model

Students view reflection as a “process … [of] continually reflect[ing] -especially once home from clinical- [to] potentially enhance [our] practice, help identify areas that enhance/hinder [our] nursing practice, [and] also to identify changes [we]can make to ensure optimal nursing care is being delivered.” When students are encouraged to reflect on their clinical practice (Fig. 1) via participating in post-conference discussions and other reflective tasks (e.g., journaling), they think about how their work meets established criteria, analyze the effectiveness of their efforts, and create a plan for improvement. Post conferences “force me to think about my day and identify things that went right and things that did not.” This process “helps me to put my experiences into perspective.” Three necessary characteristics of post-conference (safety, support, and leadership) come together. Reflective practice develops over time through thinking about actions in practice (reflection-on-action [9]). It culminates in ability to carry forward the insights developed through reflecting on practice to new situations of practice (reflection-in-action [9]). Reflective practice transforms knowledge from doing and thinking into being.

![Figure 1. Development of reflective practice.](image-url)
5.2 Support

Post conferences strengthen “the bond between peers and instructor, which helped us all work better as a team.” Feedback from peers and instructor during post conference helps students reflect later on when journaling (a clinical requirement of the nursing programs). Students value the support and feedback they receive. One student described the good connection the clinical group has with each other as helping students learn and replenish from the strain of clinical work.

After a difficult interaction with the daycare coordinator, I had post conference with my classmates and instructor. I was able to share my experience and we learned as a group ways to promote community relations as nurses and how to cope with horizontal bullying. I felt better about returning to my next shift with the advice of my peers and instructor.

Peer support also validates decision making. For example, “I was wondering about a situation that happened and if I did the right thing; everyone in my group supported my decision and I felt better about the situation.” Ongoing support helps make meaning from and temper everyday practice incidents within stressful working conditions. Students strive to develop professional character amid such situations.

One of my peers was singled out and berated by a RN on the floor in front of the staff and students. At post conference, I did my best to support my peer by offering an ear to listen and to give a positive message to her to try and get back some of her self-esteem and confidence.

5.3 Safety

Post-conferences create a “safe space to express emotions and experiences” and learn about other’s experiences. They promote the exchange of experiences “without breaching confidentiality.” Participating in conferences positively contributes to authentic practice and reflection when students feel free to express their ideas and if the instructor is willing to relate openly with them. Students reflect better when they feel they will not be judged and they know their reflections are not being graded or required to pass clinical. Without this basic level of safety, “I would rather learn skills or medications compared to stating how our day went and what we did wrong.” In other words, “the less judgmental that the instructor is, the more likely that I am going to open up honestly about my experiences.” Students enjoy post conferences when there is “no stress involved, [and you] just said what you thought.” Perceptions of safety in sharing reflections is “what matters most” to students.

5.4 Leadership

Post conferences vary from instructor to instructor. “Some instructors provide teaching and suggestions on how we dealt with events throughout the day and others are not as involved.” However, “I don’t see this as a bad thing because not every boss will be the same and I think it’s a great opportunity to be able to experience different personalities as we will run into these throughout our career.” Students believe instructors should be willing to meet one-to-one if students have pressing questions or issues about their reflections. Having instructors encourage students to continually reflect, especially via written journaling once home from clinical practice, helps students identify areas that enhance and/or hinder their nursing practice. Although reflecting this way can ensure optimal nursing care is being delivered, at times students want to leave everything that has happened at the hospital (or wherever the clinical setting is). According to one, “some days you are so exhausted you just want to go home.” Students appreciate “when my instructor cares about each one of our experiences every day and encourages us to share no matter how good or bad of a day it was.”

5.5 Value of post conferences

Overall, students value post-conferences because of their contribution to self-directed learning. They have “taught me to reflect on things I do and then I ask myself ‘is that the proper way to do that?’ based on what I have learned and I either adjust my approach or solidify my learning.” Post conferences ensure reflection after every shift which “force[s] me to think about my day and identify things that went right and things that did not.” Students also value the anticipatory guidance provided. For instance, “hearing different people’s patient experiences helps me to gauge my own understanding of what I might do in that situation.”
The support generated through post conferences interfaces with learner receptivity and instructor leadership. “Having an open mind, a wonderful group of peers, and a talented instructor” aids reflection. Together, the safety, leadership, and support act to prepare students for practice. To illustrate, “We were given Play-Doh and a cardboard box cut-out and expired ostomy supplies. We were walked through ostomy care and appliance installation. It was lovely.”

One participant summed up the value of post conferences as

Help you develop a great sense of self-reflection and offer you a safe space to express emotions and experiences. They are a great way to express and talk about the things you could improve on in a way that's informal and makes you feel supported.

5.6 Preferences

Students enjoy “reflecting with peer groups of my choice.” When peers are interested, “I felt supported by my clinical group. This allowed me to learn from the experience rather than feel too afraid to return to clinical the next shift.”

Students also prefer a relaxed environment where “you feel comfortable and open to sharing about your day.” It helps students to have a few moments to reflect “on the events of the day (either quietly or with my peers) and then discuss them together.” With their high valuing of the reflective function of post-conferences, students do not want to spend post-conference time charting which “should be done throughout the shift through proper time management” or doing concept maps which are “homework not to be done in post conference.”

The instructor leadership during post conferences is critical to reflecting on and sharing experiences. Students prefer their instructor exhibit a high level of professionalism, model engagement in reflective practice, and openly share with them. This promotes an honest and safe environment where they feel able to share their own experiences and how they feel about those experiences. They are disappointed when instructors are late for conferences or cut conferences short. Students want their instructor to put less effort into being friends with the students and more into being an educator.

5.7 Barriers

Personal biases on the part of peers and/or the instructor limit the effectiveness of post-conferences.

Some students were very negative, judgmental individuals who made your opinion feel wrong and discarded. It is hard to open up and reflect when these individuals are in the group and the instructor doesn't see that they are causing tension for others.

Although students identify that classroom or laboratory activities frequently occur during post-conference, they appreciate the benefit of reflecting on practice. Therefore if the instructor “just picks something new to teach us about (usually related to something that happened during the shift), like new meds or a disease, [this] doesn't really promote reflection.” In fact, students may feel short-changed with quizzes, technical skills, and theoretical content introduced during clinical time. One student commented, “All she [latest instructor] taught me were technical skills. If I wanted that, I would have gone to LPN school. This past clinical experience has left me feeling ripped off!”

The intimacy and benefit of reflecting is weakened by inclusion of additional students and instructors not part of the clinical group. Paired up with two other clinical groups made one student comment that “the people present actually made me LESS want to share [because] it just felt like too many people.”

In addition, reflection on practice is hindered when safety is compromised, as it is when, for example, “an instructor asks for feedback but when you give her that feedback, you are met with brutal criticism.” Students also do not think the hospital cafeteria is an appropriate place for post-conference because “there are all kinds of people around and you don’t know who could be listening.”

In terms of leadership, reflection with instructors is “rarely productive [if] the instructor … does all the talking and the student only gets to speak when prompted … [and] therefore do not speak openly and freely. Rather, they are simply answering instructors’ questions … [so] it's typically a monologue.” According to another student, “A higher caliber of instructor would have made for more and better opportunities to reflect.”
5.8 Contribution and discussion of supplemental quantitative findings

The quantitative findings in Table 1 provide support for the reflective practice model discussed in this paper, as the mean values on items related to safety, support, and leadership represent a high level of agreement among students. The need for students to feel safe that their reflections will “not be used against them” (Item 1) is consistent with the literature that suggests safety is important when engaging in reflective activity. In addition, students indicate they feel secure reporting actual reflections vs. what others want to hear (Items 2 and 3). This is an important finding as Maloney et al. [48] note that only 68% of health professional students stated they were at least 80% truthful in writing reflective essays.

The response to Item 4 (“I am more reflective when encouraged by group members”) may prove reassuring to faculty. This finding may help lessen faculty load to provide student support as this can be shared with the student group. Students acknowledge their experiences with reflection in post-conference will help prepare them “to support reflection in inter-professional teamwork” (Item 5).

The mean for Item 6 (“I find it helpful when feedback is provided following reflection”) indicates highest agreement at 3.71. Further research could yield additional information related to the actual timing of the feedback. For example, is immediate feedback necessary or would it be more effective to give feedback after time has elapsed? Item 7 (“I find it easier to be reflective in a clinical setting where I am regularly encouraged to reflect on my practice”) relates directly to provincial annual licensure mandates for continuing competence [1] [2]. These requirements of reflective practice involve objectively drawing conclusions on progress to see what needs to change to improve practice.

Although anecdotally students express discomfort with reflective activities, our data for Item 7 (“Reflecting on the experiences of the clinical shift enhances my learning”) support clinical learning as an outcome of reflection. The perceived disconnect between student affective state and identified learning outcome requires further exploration.

Although the mean (3.20) for Item 11 (“Post conferences are a place to learn about new medications, tests, and procedures that have not been covered in the classroom courses”) is not as high as other means in Table 1, it is consistent with the qualitative data in this research suggesting that post-clinical conference is often used for supplementing classroom content instead of reflective activities.

<table>
<thead>
<tr>
<th>Items</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>1. I grow in my ability to reflect on practice when the consequences of reflecting are in no way “used against me.”</td>
<td>41</td>
<td>3.59</td>
</tr>
<tr>
<td></td>
<td>2. I feel secure in reporting my actual reflections versus what I think my instructor would want to hear.</td>
<td>45</td>
<td>3.33</td>
</tr>
<tr>
<td></td>
<td>3. I feel secure in reporting my actual reflections versus what I think my peers would want to hear.</td>
<td>45</td>
<td>3.58</td>
</tr>
<tr>
<td>Support</td>
<td>4. I am more reflective when encouraged by group members</td>
<td>45</td>
<td>3.33</td>
</tr>
<tr>
<td></td>
<td>5. My experiences with reflection in post-conference will help prepare me to support reflection in inter-professional teamwork.</td>
<td>44</td>
<td>3.45</td>
</tr>
<tr>
<td>Leadership</td>
<td>6. I find it helpful when feedback is provided following reflection.</td>
<td>49</td>
<td>3.71</td>
</tr>
<tr>
<td></td>
<td>7. I find it easier to be reflective in a clinical setting where I am regularly encouraged to reflect on my practice.</td>
<td>47</td>
<td>3.68</td>
</tr>
<tr>
<td>Reflection</td>
<td>8. Reflecting on the experiences of the clinical shift enhances my learning.</td>
<td>42</td>
<td>3.69</td>
</tr>
<tr>
<td></td>
<td>9. Reflection is best learned by discussing events with others while they are fresh in your mind.</td>
<td>43</td>
<td>3.51</td>
</tr>
<tr>
<td>Post Conference</td>
<td>10. Post conferences are a place to reflect on my successful actions</td>
<td>44</td>
<td>3.57</td>
</tr>
</tbody>
</table>
In the original exploratory survey, five items related to support. A t-test was carried out comparing group one (first and second year students) and group two (third and fourth year students) on the total support (calculated by adding the 5 support items.) The combined mean for group one (junior students) was higher, 3.67 compared with the senior student group, 3.19. A t-test comparing the two groups demonstrated the junior student group had higher mean support scores, \( t=2.90, p \text{ value} = 0.006 \). This significant finding suggests that support is more important to junior students than senior ones.

The use of an online format for data collection offered the convenience of anonymity, time, and self-pacing. Most participants completed all Likert type questions and wrote at least one sentence for each narrative question. Future steps to build on this research include working through the computer glitches related to the administration of this survey, refining several items on the survey such as specifically asking about the type of questions that instructors ask to stimulate reflection, exploring group approaches to data collection, increasing the sample size, and testing for psychometric properties.

### 5.9 Conclusion

The findings help address the paucity of evidence linking reflective practice and post-clinical conference participation. They offer insight on methods for promoting reflective learning in nursing education. Specifically there is new information about the role of safety, support, and leadership. Students value peer support for its role in providing diverse perspectives that facilitate meaning making and emotional sustenance to counter negative interpersonal interactions. Peer support deserves further exploration as an aspect of professional socialization outside of targeted curricular learning goals. The study findings raise safety concerns about practices of holding post conferences in public locations and including attendees otherwise not members of the select clinical group. Students associate post-conference discussions with personal and professional growth and closing the gap between theory and practice. They consider the opportunity to refine reflective practice being lost when post conferences are used as ancillary platforms for teaching content such as medications and technical skills. Post conferences that provide anticipatory guidance such as preparing students for specific ward procedures help students transition from generic classroom or laboratory instruction to context rich practice learning.

Drawing from this study’s findings, our recommendations for clinical instructors include designing post conferences for the purpose of group reflective processing, encouraging students to spend time reflecting privately or with peers before post conference, tending to safety issues of group location and size, and modeling openness and reflectiveness in receiving but not judging ideas expressed. We recommend instructors are aware of the need for increased support to junior students. Further research is needed to identify best practices in reflective practice via post-conferences in nursing education.

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### REFERENCES


