UNSAFE STUDENT NURSE BEHAVIOURS:
THE PERSPECTIVES OF EXPERT CLINICAL NURSE EDUCATORS

by

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Abstract

Background: Clinical evaluation of undergraduate nursing students is one of the most challenging aspects of baccalaureate nursing education, especially for novice nurse educators. Early identification of unsafe student behaviours is necessary to ensure students obtain adequate support and guidance. The degree to which clinical nurse educators are certain about what is safe and unsafe varies, and greatly influences their decisions about patient assignments and evaluative processes.

Purpose: The purpose of this study was two-fold. First, to gain consensus from a panel of nurse educator experts on particular student nurse behaviours that represent unsafe clinical practices. Second, to provide a hierarchy of the unsafe behaviours, from the perspective of expert clinical nurse educators.

Method: Using the Delphi technique, a series of four online surveys were administered to a panel of sixteen expert clinical nurse educators. The four surveys were: exploratory (open-ended questions), evaluative (responses to Likert statements with level of agreement), reconsidering (revising or confirming), and ranking.

Results: Thirty eight unsafe student behaviours with respect to patients and seventeen unsafe behaviours with respect to others reached 80% or more consensus as being very unsafe. Two cultural themes emerged from a cognitive perspective: honesty (value) and knowledge (expectation). Expert clinical nurse educators, above all else, value honesty in their interactions with undergraduate nursing students. They also expect student nurses to possess a certain amount of theoretical knowledge prior to arrival in the clinical setting. Two cultural themes emerged from a behaviorist perspective: control (value) and scrupulousness and precision (expectation). Expert clinical nurse educators value control in the clinical teaching/learning environment. They

also expect scrupulousness and precision in the clinical setting and in the students' personal lives.

Lay Summary

Clinical evaluation of undergraduate nursing students is necessary to ensure students obtain adequate support and guidance while maintaining patient safety. This study was to gain consensus from nurse educator experts on particular student nurse behaviours that represent unsafe clinical practices and to provide a hierarchy of these unsafe behaviours. Four online surveys were administered to sixteen expert clinical nurse educators. Thirty eight unsafe student behaviours with respect to patients and seventeen unsafe behaviours with respect to others reached 80% or more consensus as being very unsafe. Results indicate that expert clinical nurse educators, above all else, value honesty in their interactions with undergraduate nursing students; expect student nurses to possess a certain amount of theoretical knowledge prior to arrival in the clinical setting; value control in the clinical teaching/learning environment; and expect precision (precision in medication administration and scrupulousness of moral and ethical conduct in the students' personal lives).

Preface

Contributions of the Student, the Supervisor, and the Committee Members

This thesis is a quantitative focused ethnography. The delphi technique was the method used to collect data gathered through four online surveys. I completed the data collection, analyzed the data and wrote this thesis with guidance and input from my supervisor, Dr. Elizabeth Andersen, and my committee members, Dr. Lise Olsen and Lisa Moralejo. Ethical approval for this study was provided by the UBC Behavioural Research Ethics Board. The certificate number for this approval is H16-03193. Ethical approval was also provided by Okanagan College Research Ethics Board. The certificate number for this approval is 17-002.

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Chapter 1 Review of the Literature

Clinical evaluation of undergraduate nursing students is one of the most challenging aspects of baccalaureate nursing education, especially for novice nurse educators. Clinical nurse educators have dual obligations and responsibilities: they must facilitate student learning by incrementally challenging students, while at the same time ensuring patient safety. There is also a considerable financial burden on the health care system in general as a result of patient safety issues. According to the World Health Organization (WHO) (2014), “safety studies show that additional hospitalization, litigation costs, infections acquired in hospitals, disability, lost productivity and medical expenses cost some countries as much as US\$ 19 billion annually” (p.1). Identifying unsafe student nurse behaviours can help decrease costs to the broader health care system. There is a dearth of information in the literature explicating specifics of unsafe behaviours. One result of this study is a hierarchy of unsafe behaviours, from the perspective of nurse educator experts that may be used to guide novice nurse educators who must make judgments about whether a student nurse is safe or unsafe.

In this chapter, existing literature was reviewed in order to synthesize how previous researchers have portrayed student nurse behaviours that constitute unsafe clinical practices and then establish the context of the study. The electronic databases “Cumulative Index to Nursing and Allied Health Literature” (CINAHL) (2002 to 2016) and Medline (2002 to 2016) were accessed, limited to articles published in English in peer-reviewed academic journals. In CINAHL, database specific controlled vocabulary was used for the phrases “patient safety” and “nursing students” combined with free vocabulary for the term “clinical” as there was no specific CINAHL heading. This search yielded 76 articles. In Medline, database specific controlled vocabulary were used for the phrases “nursing students” and “patient safety” combined with free

vocabulary for the term “clinical” as there was no specific Medline heading. This search yielded 213 articles. When duplicates were removed, 183 articles from both databases remained. After abstracts were reviewed, 55 full text articles were assessed for eligibility. Articles were included if they focused on undergraduate student nurse behaviours in clinical settings that would constitute unsafe practices. Articles were excluded if they focused on methods and practices of teaching undergraduate students how to provide safe patient care; how students learn safe practices; systems perspective versus individual; use of technology and simulation to improve patient safety; and behaviours and practices of graduate student nurses or professional nurses rather than undergraduate students (Table 1).

Table 1

Article Inclusion and Exclusion Criteria

Inclusion	Exclusion
Articles focused on undergraduate student nurse behaviours in clinical settings that would constitute unsafe practices	Articles focused on methods and practices of teaching undergraduate students how to provide safe patient care
Any study design	Articles focused on how students learn safe practices
Time frame- 2002-2016	
English and Peer Reviewed only	
Any country	Articles focused on use of technology and simulation to improve patient safety
	Articles focused on the behaviours and practices of graduate student nurses or professional nurses rather than undergraduate students

After inclusion/exclusion criteria were applied, eight articles remained. The reference lists of these articles were searched, and four additional articles were included. A total of 12 articles, therefore, were included in this review (Table 2). Of the 12 articles, four were from preceptor perspectives, two were from nurse educator perspectives, one was from both preceptor and nurse educator perspectives, and five were from undergraduate student nurse perspectives. Preceptors

are expert nurses recommended by nursing supervisors to the preceptor role (Hrobsky & Kersbergen, 2002). Researchers in three of the studies used Grounded Theory methodology, researchers in three of the studies used Qualitative Descriptive techniques, five researchers used Q- Methodology, and in one study the researcher used an Inductive Qualitative approach in the first phase of a multiphase research project. One article was from Britain, seven were from Canada, three were from the United States, and one was from Muscat, Oman.

Table 2

Literature Search Strategy

	MESH or equivalent terms	Search Strategy	Number of Articles Identified
CINAHL	Clinical	Limiters – Full Text; Abstract Available; Published Date: 20020101-20161231; Peer Reviewed	124,150
CINAHL	Patient Safety	Full Text; Abstract Available; Published Date: 20020101-20161231; Peer Reviewed	6,119
CINAHL	Nursing Students or student nurses	Full Text; Abstract Available; Published Date: 20020101-20161231; Peer Reviewed	5751
CINAHL	Combined results from clinical, patient safety, nursing students	Boolean/phrase AND	76
Medline Ebscohost	Clinical	Date of Publication: 20010101-20160731; Abstract Available; English Language; Academic Journals	1,833,239
Medline Ebscohost	Patient safety	Date of Publication: 20010101-20160731; Abstract Available; English Language; Academic Journals	23,845
Medline Ebscohost	Nursing Students or student nurses	Date of Publication: 20010101-20160731; Abstract Available; English Language; Academic Journals	10,730
Medline Ebscohost	I combined all three results from nursing students, patient safety, clinical.	Boolean/phrase AND	213 Results

	MESH or equivalent terms	Search Strategy	Number of Articles Identified
CINAHL and Medline Ebscohost	Duplicates removed		183
	After abstracts were reviewed		55
	After inclusion/exclusion criteria were applied		8
	After reference lists were reviewed for additional articles	+ 4	Total = 12

Narrative Summary of Findings From the Review of the Literature

Student nurse behaviours can be identified through direct observation, close monitoring of students, and feedback from colleagues (Luhanga, Yonge, & Myrick, 2008). Multiple authors agree that there are a number of behavioural indicators that prompt educators to consider that a student may be unsafe. Three key themes were identified in the literature reviewed: 1) inability to demonstrate knowledge or lack of practical skills, 2) lack of professional attitude, and 3) lack of professional ethics.

Inability to Demonstrate Knowledge or Lack of Practical Skills

Nursing students' inability to demonstrate knowledge or lack of practical skills were cited frequently in the literature as indicators of unsafe practice (Duffy, 2003; Hrobsky & Kersbergen, 2002; Lewallen & DeBrew, 2012; Luhanga et al., 2008; Mossey, Montgomery, Raymond, & Killam, 2012; Tanicala, Scheffer, & Roberts, 2011). From the perspectives of preceptors and nurse educators, unsafe students do not ask questions and were not able to demonstrate basic knowledge, organizational skills, and were unable to follow instructions resulting in frequent repetitive mistakes. A lack of confidence or extreme nervousness was also cited frequently as unsafe (Duffy, 2003; Luhanga et al., 2008; Tanicala et al., 2011). Finally, they may fail to practice basic safety measures (such as aseptic technique) (Luhanga et al., 2008).

From the perspective of undergraduate nursing students, inability to demonstrate knowledge and skills was consistent with preceptors and nurse educators perceptions of unsafe practice (Killam, Montgomery, Luhanga, Adamic, & Carter, 2010; Killam, Montgomery, Raymond, Mossey, Timmermans, & Binette, 2012; Montgomery, Killam, Mossey, & Heerschap, 2014; Mossey et al., 2012). According to Montgomery et al. (2014) safety is most compromised when students are unable to demonstrate integration of ethical, cognitive, and behavioural competencies consistent with a professional identity. Undergraduate nursing student perceptions of compromised clinical safety also included systematic barriers such as a non-student centered program. This was defined as a disconnect between theory and practice and/or lack of trust in an educator's competency (Killiam et al., 2012).

An interesting finding from a student perspective was premature and inappropriate clinical progression (Killam et al., 2012; Mossey et al., 2012). From this perspective, students perceived safety as most compromised when clinical educators allowed students to practice beyond their scope and/or determined that students were successful despite patterns of unmet clinical expectations (Killam et al., 2012).

Lack of Professional Attitude

According to Duffy (2003) student attitude problems are particularly challenging to evaluate. Lack of interest, having an unenthusiastic attitude toward nursing, overconfidence, lack of motivation to learn or work, defensiveness, or unreceptive attitude toward feedback were behaviours that were commonly referred to (Duffy, 2003; Hrobsky et al., 2002; Luhanga et al., 2008; Muliira, Fronda, & Raman, 2015). Muliira et al. (2015) identified four major categories that fall under this theme: slothfulness, obstinateness, inattentiveness, and selfishness.

Poor communication or interpersonal skills were also frequently cited throughout the literature. Poor communication included both verbal and non-verbal cues between the student, clinical staff, nurse educators and patient's. Examples of these behaviours included: inappropriate interaction with the preceptor (being too argumentative and disrespectful), inappropriate interaction with patients, and inappropriate non-verbal communication such as eye rolling, sighing in front of patients, chewing gum, or yawning (Duffy, 2003; Lewallen & DeBrew, 2012; Luhanga, et al., 2008; Tanicala et al., 2011).

Lack of Professional Ethics/Integrity

From the perspective of preceptors and nurse educators, lack of professional ethics among students can include: poor work ethic, negligence, laziness, gossiping, eating or using a cell phone while on duty, dishonesty, intentional unsafe behavior, lying/falsifying documentation, attending the clinical day under the influence of alcohol or drugs, or not seeking assistance when needed (Duffy, 2003; Luhanga et al., 2008; Tanicala et al., 2011). All of these behaviors were identified as unsafe clinical practice.

From the perspective of students, lack of professional integrity included practicing with impaired cognition, being dishonest, lack of patient-centeredness, lack of critical thinking, unpreparedness, not adhering to standards and practicing beyond their competency (Killam et al., 2010; Killam, Mossey, Montgomery, & Timmermans, 2013).

Although these studies provide some insight into unsafe student nurse behaviours, descriptive information that is enough to guide novice nurse educators is limited, especially when novice nurse educators are uncertain if a student's behaviour is unsafe enough to fail. Early identification of specific unsafe student nurse behaviours is vital to ensure students receive adequate support and guidance, while, at the same time, ensuring patient safety. It is clear that

novice nurse educators may lack the confidence and skills to decide exactly what behaviours are most unsafe. Additionally, most of the available evidence was from one college and one clinical site. Therefore, the findings may not be representative of the whole spectrum of difficult student situations. A summary of the key findings from each article is provided in Appendix A (Data Extraction Table).

Significance to Nursing Education

A novice nurse educator may perceive that a student's behaviour is unsafe or will lead to unsafe practices, but that educator may not be able to make a judgement about the severity of the behaviour. "Is the behaviour somewhat unsafe, is the behaviour borderline, or is this behaviour really a deal-breaker?" In this study, two hierarchies of unsafe behaviours are provided, from the perspective of nurse educator experts in order to guide novice nurse educators who must make judgments about whether a student nurse is safe or unsafe.

Authors consistently agree that there is a need for early identification of unsafe student behaviours in order to ensure students obtain adequate support and guidance (Duffy, 2003; Killam et al., 2010; Lewallen et al., 2012; Luhanga et al., 2008). Novice clinical educators lack experience and often lack adequate preparation for their evaluative role. Therefore, they may be reluctant to fail students because they lack confidence in their own abilities to decide if their judgments are accurate (Scanlan, Care, & Gessler, 2001). Some students may pass clinical assessments when there is, in fact, some doubt about their clinical competence. Some educators may violate professional expectations when students are deemed successful despite contradictory evidence. This finding is consistent throughout the literature and has been commonly termed 'failure to fail' (Duffy, 2003; Gainsbury, 2010; Montgomery et al., 2014; Killam et al., 2010, 2012, 2013; Scanlan et al., 2001). For example, in one study, 37% of 1,945 mentors admitted

they would not fail a student they had doubts about (Gainsbury, 2010). Clinical faculty also have difficulty deciding whether clinical performance is satisfactory or unsatisfactory (Brown, Neudorf, Poitras, & Rodger, 2007). Finally, a novice clinical educator may put an unsafe student in a situation that would be difficult for even the most able student (Skingley, Arnott, Greaves, & Nabb, 2007). This action can jeopardize the student's ability to be successful. As a result, some students are passing without demonstrating competence and some patients may be put at significant risk.

When definitions of unsafe behaviours are vague, it is ultimately left up to the instructor to decide whether a student is safe or unsafe (Killam, et al., 2010; Scanlan et al., 2001). Killam et al. (2012) argued that there are no national strategies for a unified approach to address patient safety within nursing curricula. It is imperative that clear and consistent definitions of unsafe behaviours that constitute unsafe practices are established to guide novice instructors in their assessment and evaluation of student clinical performance.

Most authors used vague terms such as: poor work ethic, unsafe practice, inconsistent clinical performance, poor communication skills, negligence, etc. (Duffy & Hardicre, 2007). A phrase such as "inconsistent clinical performance" provides little guidance to educators who are uncertain if a student's behaviour is unsafe enough to fail. When clinical nurse educators are unable to clearly identify unsafe behaviours, students do not receive the support and guidance they need to fulfill competencies for success and some student's progress when they are not ready or unsuitable for nursing.

Some educational institutions have policies that allow nursing students an entire term to be successful in a course (Scanlan et al., 2001). Consequently, failures in clinical courses can be assigned only at the end of a clinical course. If a student demonstrates variable behaviours or

questionable behaviours, the preceptor or nurse educator may have limited options. A common strategy is to intensify the supervision of a student who is having some challenges, often to the detriment of the other students (Scanlan et al., 2001). The student who is in difficulty can also become more anxious with added supervision, which frequently leads to additional mistakes or difficulty thinking in practice. Nurse educators often find it stressful to remain cognizant of the learning process while also protecting the safety of patients. Finally, some may make a negative decision about a student's capabilities and then gather information that supports this decision. Clearly a student in this situation is not treated fairly (Paterson, 1991).

The subjective nature of assessment and expectations makes it difficult to consistently evaluate student performance. Compounding the issue is the close relationship that can develop between a clinical nurse educator and student, leading to a socialization process (Scanlan et al., 2001). Caring is an integral part of the nursing profession, and some nurse educators can view the failing process as an uncaring practice, when indeed, it may be more caring to fail students than allow them to continue (Scanlan et al., 2001). Evidence suggests that student attitude is the most difficult attribute to assess (Duffy & Hardicre, 2007). Lack of theoretical knowledge or skills are easier to identify and address compared to identifying and addressing a problem related to an individual's attitude. According to Brown et al. (2007), other issues are a lack of support from other colleagues and administration, that faculty may want to take the students personal circumstances into account (which may or may not be appropriate), and that failing a student can be extremely time consuming.

In summary, there were few articles in the literature where authors clearly identified specific unsafe clinical behaviours of students that can lead to unsafe practices. As well, few studies provide a potentially helpful hierarchy of unsafe behaviours from the perspective of

experts. It is important for nurse educators to make judgments and decisions based on evidence. Novice nurse educators rely on empirical evidence to support their decisions and the purpose of this study was to further develop evidence on this topic.

Purpose

The purpose of this study was to gain expert clinical nurse educator consensus on undergraduate student nurse behaviours that constitute unsafe clinical practices.

Primary Research Question

According to a panel of clinical nurse educator experts, what specific student nurse behaviours constitute unsafe clinical practices?

Secondary Research Questions

1. From the perspective of clinical nurse educator experts, what specific student nurse behaviours reflect lack of knowledge, skills, or clinical judgment?
2. From the perspective of clinical nurse educator experts, what specific student nurse behaviours reflect unprofessional or unethical conduct that threatens or has the potential to threaten the physical, emotional, mental, or environmental safety of the patient?
3. From the perspective of clinical nurse educator experts, what specific student nurse behaviours reflect unprofessional or unethical conduct that threatens or has the potential to threaten the physical, emotional, mental, or environmental safety of others?
4. From the perspective of clinical nurse educator experts, what specific student behaviours reflect a problem related to student attitude?
5. After consensus is reached, how will clinical nurse educators rank unsafe student nurse behaviours? (A hierarchy).

The Context

This study took place in two urban nursing schools in the province of British Columbia, Canada. School One (college) provides 26 seats for undergraduate nursing students across two years of study. In 2016, 380 applicants competed for the 26 available seats. Sixty two percent of the students admitted were directly out of high school while 38% were mature students who had some post-secondary education. In School One, approximately 20% of the students were male and 80% were female. In School One, seven clinical nurse educators provide direct supervision to undergraduate students. Of those, in 2016, 28% had less than two years' experience. School Two (university) provides 140 seats for undergraduate nursing students across four years of study. In 2016, approximately 600-800 applicants competed for the 140 seats. Ten seats were designated for Licensed Practical Nurse (LPN) applicants, approximately 50% of the remaining seats were filled with direct admissions from high school and approximately 50% were university transfer students (students who had already completed 24 credits of university level). Approximately half of the students in School Two were aged 18 to 19 years on admission. The majority of the remaining students were between the ages of 20-25 on admission. Few of the university transfer students were older than 25. In School Two, approximately 5 to 10% of the students were male. Thirty-five clinical nurse educators provide direct supervision to undergraduate students in School Two. Of those, in 2016, approximately 25% had less than two years teaching experience, while 10% had no experience.

Chapter 2 Methodological Framework- Ethnography

The methodological framework for this study was quantitative focused ethnography. Ethnographers want to learn what is going on (Agar, 2006; Hammersley & Atkinson, 1995). There are many different ways of doing ethnographic research and a multitude of choices that an ethnographer has to make (Agar, 2006). Although qualitative methods of data collection tend to dominate, ethnographers use “any and all methods (including quantitative methods) to best understand the cultural system in which he or she is studying” (Whitehead, 2005, p. 2). Agar (2006) refers to the ambiguous nature of ethnographic methods as “spaces of possibilities” (p.7). Essentially, the work of an ethnographer is to gather and translate many different points of view (Agar, 2006), and to communicate to the participants that “I want to know what you know in the way that you know it” (Spradley, 1979, p.34).

Two concepts within nursing culture helped me to gain a deeper understanding of the behaviours of nursing students that constitute unsafe clinical practices: cognitive perspectives and behavioral/materialist perspectives (Barroso & Cameron, 2013). Cognitive perspectives are the “beliefs, knowledge, and ideas” that individual clinical nurse educator experts use when they teach in clinical settings (Barroso & Cameron, 2013, p. 179). A key emphasis in this study was on the examination of the cognitive perspectives of a panel of experienced clinical nurse educators about particular student nurse behaviours that constituted unsafe clinical practices. From the behavioral/materialist perspective, I observed the culture of clinical instructing “through a group’s patterns of behaviour and customs” (Barroso & Cameron, 2013, p. 179). The behavioral/materialist perspective was a good fit with my method of data collection that was aimed at gaining consensus from a group of experts. Culture is central to ethnographic studies. According to Hole (2014), “Ethnographic practices direct an approach to research (a method,

process) that generates/produces a description of a culture studied from the perspective of the individuals belonging to that culture (a product)” (p. 167).

Focused Ethnography

Focused ethnography is one form of ethnography that is focused on a discrete community or phenomenon and context. Participants in a focused ethnography have specific knowledge about an identified problem (Higginbottom, Pillay & Boadu, 2013). Therefore, focused ethnography was a good fit for my study aimed at obtaining specific knowledge about the patterns of unsafe behaviours of undergraduate students in clinical settings. Focused ethnographers attempt to learn what is happening in a particular culture, but are very selective. They have specific questions in mind, they obtain information from a limited number of participants who have shared experiences on the topic of interest, and they collect only specific elements of knowledge relevant to the study focus (Agar, 2006; Knoblauch, 2005; Roper & Shapira, 2000).

In contrast to classical ethnographies where ethnographers use a number of different methods of data collection in an attempt to capture a broad range of activities, knowledge, and beliefs of the culture under study (Richards & Morse, 2013; Roper & Shapira, 2000), focused ethnographers usually use only one method to obtain data (Agar, 2006; Knoblauch, 2005). As a result, the length of time needed to conduct a focused ethnography is much shorter than the length of time needed to conduct a classical ethnography. In this study, the Delphi technique was used to collect data. During a Delphi technique, the data collected is initially qualitative, but becomes quantitative as the participant responses converge towards a consensus. Focused ethnography also “presupposes an intimate knowledge of the field to be studied” (Higginbottom

et al., 2013; Knoblauch, 2005, p. 2), so it was a good fit for me because I am an experienced clinical nurse educator.

I have been teaching nursing and working as a clinical educator for ten years and am familiar with the culture that I have studied. I have the background, insider, and experiential knowledge in this topic area. I found it rather difficult, at times, to ascertain whether or not their practices were safe or unsafe when I began teaching nursing students in the clinical setting. It would have been helpful to have some concrete examples in the literature to draw from. Furthermore, after completing a literature review on “how to support failing nursing students” for a graduate course, the lack of consensus on what constitutes unsafe practice became clear. Both my personal and academic experiences have motivated me to study this topic. I anticipate that my results will be of pragmatic use to novice nurse educators and will have significant implications for immediate practical training approaches.

Reflexivity

Ethnographic research is shaped by the nature of the relationship between the participants and the researcher, taking into account both the emic (insider view) and etic (outsider view) perspectives (Fetterman, 2010). Reflexivity is an important aspect of an ethnography. Reflexivity dismisses the notion that social research can be carried out independently from the wider society and from the biography of the researcher, in such a way that the findings will be unaffected by social processes and personal characteristics (Hammersley & Atkinson, 1995). Therefore, it was unrealistic for me to believe that I would be able to put aside my own thoughts, values, beliefs, and presuppositions. I am part of the culture that I studied so I have made explicit and transparent the beliefs, values, and assumptions that I possess. I also tried to be open-minded to beliefs, values and assumptions that were different from my own.

My Beliefs, Values, and Assumptions

I believe that the role of the clinical nurse educator is dynamic and interactive and it is sometimes difficult to make decisions about what constitutes safe and unsafe clinical practices. I also believe that novice nurse educators are reluctant to fail a student if they do not feel entirely confident about their decision-making processes. During my ten years of clinical teaching I have observed novice clinical educators doubting themselves and questioning whether a student's behaviour was safe or not. I believe that novice nurse educators want specific information on what constitutes unsafe clinical practices.

The Code of Ethics for Registered Nurses guides my practice. Part of this code is to support and guide students while protecting patient safety. I highly value this role as a safety gatekeeper and believe that it is imperative for novice nurse educators to have the knowledge and skills necessary to evaluate student nurses appropriately. I assume that a novice clinical educator's level of inexperience will negatively influence his or her abilities to make decisions about what is safe and unsafe and ultimately influence his or her responses to situations that occur in the clinical context. I assume that the more information provided on specifics of unsafe practice, the better informed the novice clinical nurse educator will be to make decisions about what is safe and unsafe in clinical settings.

Chapter 3 Method of Exploration

The Delphi technique is a consensus reaching method. The method can be used to improve decision-making in health care and is employed when there is limited or conflicting evidence in a particular area (Vernon, 2009). This method of collecting data was originally developed by Helmer and Dalkey (1963), however, Abraham Kaplan (1949), who was employed by the Research and Development Corporation (RAND) created the term ‘Delphi’ to forecast the potential impact of technology in warfare (Hasson, Keeney & McKenna, 2000). The term Delphi means to receive good judgement on an issue and the underlying assumption is that group opinion is more valid than individual opinion (Keeney, Hasson, & McKenna, 2011). Although Delphi findings represent expert opinions, they do not represent irrefutable facts (Powell, 2003). The Delphi technique has been used frequently by nurse researchers and by allied disciplines (McKenna, 1994). Examples from the literature where the the delphi technique has been used include: by physiotherapists to develop a paediatric cardiopulmonary physiotherapy (CPT) discharge tool; by dental hygienists to identify the competencies that Canadian dental hygienists need at the fourth-year baccalaureate level to promote and support the oral health of the public; by nurses to identify the competencies of nurses for palliative care in home care; by nurses to develop an evaluation system of clinical competencies for the practicum of nursing students based on the Nursing Interventions Classification (NIC). According to Rowe and Wright (1999) the four key features of a classic Delphi are: 1) anonymity of Delphi participants, 2) an iterative process, 3) controlled feedback, and 4) statistical aggregation of group responses.

Delphi Technique

Using this approach, a researcher will purposively recruit a panel of experts and will follow a prescribed set of procedures designed to enable the panel of experts to reach consensus on a specific issue (or question) over multiple survey rounds (Fletcher & Marchildon, 2014; Keeney et al., 2011; Powell, 2003). In the first round, the panel of experts are provided with an open-ended questionnaire to elicit their opinions and gain feedback (qualitative data) on a topic/issue that is being addressed (Keeney et al., 2011). The researcher will analyze the responses and the data will be summarized by identifying major themes in the form of statements (McKenna, 1994). In round two, the panel of experts respond with their level of agreement to these statements, based on their expert knowledge of the subject (Keeney et al., 2011). In round three, the researcher gathers all items that did not reach a specified level of consensus, and returns these items to the participants so that they can reconsider, should they wish to do so. In round four, the researcher may ask participants to rank order all items that reached a specified level of consensus, in order of importance.

The approach is iterative, whereby the expert participants are provided with findings during each questionnaire round and are provided with an opportunity to revise or confirm their previous answers (Fletcher & Marchildon, 2014). Empirically, consensus is usually measured by variance in participant responses over rounds, with a decrease in variance indicative of greater consensus achieved (Rowe & Wright, 1999). In general, median and mode are most frequently chosen (Hsu & Sandford, 2007), although a researcher is free to define different levels for consensus desired (Duffield, 1988). I planned to use a consensus threshold of 70% ($\pm 5\%$), set aside items from the second round that did not reach a consensus threshold of 70% ($\pm 5\%$) and return those items during the third round. I selected a priori consensus threshold of 70% ($\pm 5\%$)

because previous researchers have considered this threshold to be acceptable for small panels (Graham, Regehr, & Wright, 2003; Naidoo & Joubert, 2013).

There are variations of the classical Delphi technique including the modified Delphi, policy Delphi, real time Delphi, and e-Delphi to name a few. The modified Delphi differs from the classical Delphi in that the researchers utilize either face-face-interviews or focus groups for the first round and may use less than three rounds (Keeney et al., 2011). A researcher who uses a policy Delphi will attempt to find all possible points of view and examine features underlying disagreement to inform policy making (Turoff, 2002). In a Real Time Delphi, sequential rounds are not employed which increases efficiencies and reduces the amount of time to accomplish such studies (Gordon & Pease, 2006). In an e-Delphi the researcher employs the Delphi through an online forum or via email (Avery et al., 2005; Cole, Donohoe, & Stellefson, 2013). Generally, an e-Delphi researcher will use internet-based databases and listservs to recruit hundreds or thousands of participants from a number of different countries (Cole et al., 2013). An original or classic Delphi approach was chosen for this study, however the questionnaire(s), feedback, and participation of the expert panel were all done via online surveys.

Advantages of the Delphi Technique

There are five distinct advantages for researchers who choose to collect data using the Delphi technique:

1. All participants have equal opportunity to express their opinions and all opinions are regarded as of equal importance (Vernon, 2009). The panel of experts never meet face-to-face so they remain anonymous (to each other) and all opinions are considered in a non-adversarial manner (Hasson et al., 2000). Participants are able to freely express their judgments and opinions without undue social pressures

to conform from others in the panel who, in face-to-face settings, may have more powerful voices. Participants are able to consider each idea on the basis of merit alone, rather than on the basis of other participants' opinions.

2. Participants can be recruited from different geographical locations so the researcher can access a variety of experts (Vernon, 2009).
3. A Delphi survey is simple to create, flexible, and user friendly (Duffield, 1988).
4. The researcher is able to demonstrate accountability to the participants through controlled feedback (Fletcher & Marchildon, 2014). After each round, the data is fed back to the participants who are provided an opportunity to express their opinions and validate the findings. As a result, the researcher carefully processes the data and responsibly interprets the participant's meanings and intentions (Fletcher & Marchildon, 2014; McKenna, 1994).
5. The delphi technique is typically very cost-effective (McKenna, 1994).

Limitations of the Delphi Technique

The Delphi technique has been criticized for lack of universal guidelines (scientific or professional), the plethora of labels used to describe the Delphi technique, and multiple variations that can increase misperceptions about the technique (Keeney et al., 2011). Some researchers have suggested that maintaining quality of data can be challenging because there are distinct possibilities of declining response rates due to the numerous rounds that characterize a Delphi, (Hsu & Sanford, 2007). The Delphi technique is iterative and sequential in nature, so the process can feel lengthy or arduous and a major challenge can be participant attrition (Hsu & Sanford, 2007; McKenna, 1994). Researchers recruit experts on a given topic or issue, and as a result, participants will be known to the researcher and may know one another and be able to

recognize who gave particular responses (Keeney et al., 2011). McKenna (1994) refers to this potential disadvantage as “quasi-anonymity” (p. 1224). Hasson et al. (2000) suggest that there may be researcher and subject bias as group responses are shared among the experts. Although the process directs the experts towards group consensus, the process may unduly influence individual opinion to align with what others are saying (Hasson et al., 2000). Finally, the Delphi has been criticized for lack of clarity of defining consensus and subsequent differing interpretations (Powell, 2003). In order to ensure credibility of findings, the researcher must demonstrate a clear decision trail that supports the suitability of the method to address the problem at hand, choice of expert panel, data collection procedures, identification of justifiable consensus levels and means of dissemination and application (Powell, 2003).

Recruitment of Expert Participants

The aim of this study was to gain expert consensus on student nurse behaviours that constitute unsafe clinical practices in order to guide novice instructors in their assessment and evaluation of student clinical performance. I provided a copy of my proposal to the Dean of School One and the Director of School Two. I made an appointment to meet with both to explain the study and sought their written administrative support (Appendices B and C Administrative support letters). After the study received approval from the Behavioural Research Ethics Board at School One and School Two, I employed purposive sampling (Strauss & Corbin, 1998) to recruit a panel of experienced clinical nurse educators from both the College (School One) and the University (School Two) (Table 3).

Table 3

Inclusion and Exclusion Criteria of Expert Participants

INCLUSION	EXCLUSION
Nurse educators who were currently or previously employed as a clinical instructor in School One or School Two and were currently providing direct supervision to undergraduate nursing students in a clinical setting and had five or more years of teaching experience providing direct supervision in any type of clinical setting	Nurse educators who were not currently or previously employed as a clinical instructor in School One or School Two
Nurse educators who were currently or previously employed as a clinical instructor in School One or School Two and were not currently providing direct supervision to undergraduate nursing students in a clinical setting but had 5 or more years of past teaching experience providing direct supervision in a clinical setting.	Nurse educators who had less than five years of teaching experience providing direct supervision to undergraduate nursing students in a clinical setting
Nurse educators who met criteria 1 or 2 and were willing and able to commit to the Delphi process.	Nurse educators who were not able to commit to the Delphi process

Known experts who met the inclusion criteria were identified by either the Dean or the Director and received an invitation by email and information letter from either the Dean at School One or the Director at School Two (Appendices D and E). Experts who agreed to join the panel were asked to contact me. I am an employee of School One, and know a number of clinical instructors at School Two. I was cognizant that my colleagues may have felt unable to refuse to consent if I contacted them directly, therefore this recruitment process was designed to reduce possible peer pressure.

Experts who contacted me by email received an electronic link to the first survey which also contained the consent form, and demographic questionnaire. There is no consensus in the literature as to what constitutes an optimal sample size (Hsu & Sandford, 2007), therefore my sample size was consistent with the average sample sizes of 9 studies where researchers used the Delphi technique as the method of data collection (Appendix F). Five clinical nurse educators at School One and twelve clinical clinical nurse educators at School Two agreed to participate in this study. The characteristics of these participants are below (Table 4).

Table 4

Characteristics of Participants

Highest Level of Completed Education	Percentages
Master of Science in Nursing	75%
Bachelor of Science in Nursing	25%
Years worked as a Registered Nurse	
11-15 Years	12%
16-20 Years	40%
21-25 Years	18%
26-30 Years	12%
More than 30 Years	18%
Amount of Time Teaching Undergraduate Nursing Students	
5 Years	12%
6-10 Years	31%
11-15 Years	44%
16-20 Years	13%
Areas of Clinical Expertise	
Oncology	4%
General Medicine	17%
Critical Care/Coronary Care	8%
Case-Room/Post-Partum	6%
Palliative Care	6%
General Surgery	18%
Orthopedics	6%
Community Health	10%
Pediatrics/Neonatal	6%
Emergency	8%
Women's Health	2%
Residential Care	9%
Subjects Currently Taught in Undergraduate Nursing Program	
Relational Practice	5%
General Medicine	17%
Pharmacology	7%
Pediatrics/Neonatal	5%
General Surgery	17%
Obstetrics	2%

Subjects Currently Taught in Undergraduate Nursing Program	
Residential Care	10%
Gerontology	5%
Community Health	7%
Mental Health	10%
Pathophysiology	10%
Research	5%
Subjects Previously Taught in Undergraduate Nursing Program	
Relational Practice	7%
General Surgery	17%
Research	2%
Obstetrics	2%
Pediatrics/Neonatal	7%
Oncology	3%
Pathophysiology	7%
Community Health	3%
Residential Care	12%
Palliative Care	5%
Mental Health	5%
General Medicine	17%
Pharmacology	5%
Gerontology	8%
Types of Experience Teaching Undergraduate Nursing Students	
Clinical Instructor	31%
Classroom Instructor (Lecturer)	27%
Laboratory Instructor	22%
Preceptor	20%

Summary of Characteristics of Participants

The panel consisted of 17 participants, more than half of whom had worked sixteen years or more as a Registered Nurse (88%). The majority of the participants (57%) had more than eleven years' experience teaching undergraduate nursing students and 75% had completed a Master of Science in Nursing. Close to half had extensive clinical expertise in either general medicine, general surgery, or community health (47%). Many of the participants were teaching on either general medicine or general surgery nursing units (34%). Close to half the participants (46%) had previously taught in either general medicine, general surgery or residential care.

Data Collection

The Consent Process

I explained the study, and expectations of participation were provided via the information letter for participants (experts). Experts who agreed to join the panel received an electronic link to the first survey which also contained the information letter, consent form, and demographic questionnaire (Appendices G, H, I). The electronic link was a general link, not a link that was tied to the participants' identities. Therefore, although I knew who had agreed to receive the general link to the survey, I was not able to match individual participant's responses to their identities.

The participants were informed that before they could proceed with the first survey, an informed consent would appear, which they were asked to read. Participants were informed that taking part in the survey was entirely voluntary and that they may choose not to answer one or more questions, and they may stop the survey at any time. To stop the survey, they could simply close the survey window and exit from the survey website. Consenting participants clicked "yes" in order to proceed with the survey. Finally, participants were informed that if they did not click on the "submit" button at the end of the first survey, their answers and participation would not be recorded. The participants were advised that once they had submitted their responses they would not be able to withdraw their responses because I would not be able to connect any names to the responses. I did not anticipate that the participants would require special assistance during the consent process because they would have already met the physical (eye sight, hearing etc.) and English requirements necessary for employment as clinical instructors within the Schools of Nursing.

Renewal of Consent

The Delphi technique consisted of four electronic surveys and a few weeks lapsed between surveys. Therefore, the consent process, described above, was repeated for each survey.

Potential Risks and Procedures for Mitigating Potential Risks

Although I believed that participation in the expert panel would not be greater than the risks encountered by nurse educators in their everyday work, there were some potential risks worthy of discussion. First, there was a risk that the participants, who are also employees or former employees within Schools One and Two, might recognize and attribute specific survey responses to a specific individual. The term “quasi-anonymity” was used for this risk, which means being part of an exclusive ‘expert’ group whose membership may be known even though the participants do not meet in person (McKenna, 1994). When I analyzed participants’ responses to the open-ended questions contained in the first survey, if I believed that a certain word or phrase might pose a risk to a participant’s identity, I would replace that word or phrase with a sign ##### before sending out the second survey.

Second, there was a small chance that someone on the expert panel or someone within the Schools of Nursing would find out that a colleague was a participant in the study. However, they would not know how the colleague responded to the survey items. Only I and my supervisor (Dr. Elizabeth Andersen) had access to the surveys responses.

Third, the first survey contained open-ended questions and space for unlimited text responses so there was a small chance that a participant may use certain words or phrases during the first survey that might pose a risk to another person’s identity (a student for example). I made every effort not to inadvertently expose another person’s identity. If I believed that a certain

word or phrase might pose a risk to another person's identity, I altered the response, or replaced a word or phrase with a sign ##### before sending out the second survey.

Finally, although the role of the researcher is not to make judgments about the responses of participants, but instead, to promote the process for the participants, there was a risk that I might feel tempted to add some of my own personal views/ideas because I was familiar with the topic. To mitigate this risk, I carefully considered my own values, beliefs, and assumptions and made them explicit and transparent, which is a part of reflexivity. I made every effort to remain open-minded to values and beliefs that were different from my own.

I constructed the surveys using a password protected laptop. I administered the surveys online using the University version of FluidSurveys, a Canadian-hosted survey solution complying with the BC Freedom of Information and Protection of Privacy Act. All data was stored and backed up in Canada. My supervisor and I accessed the survey responses using password protected laptops. Only I and my supervisor (Dr. Elizabeth Andersen) had access to the individual responses. If completed surveys were printed, the printed material was stored in a secure locked filing cabinet, in a locked office at the university campus. Only I and my supervisor had access to the locked cabinets.

Method to Analyze Data

In round one, I provided the participants with open ended questions and asked for unlimited text responses. I received 233 descriptions of unsafe practices. I read all 233 descriptions and extracted a list of 137 behaviours. In round two, 137 statements were returned to the participants. Participants were instructed to read each of the 137 statements and evaluate the level of threat to safety for patients and others using a five-point Likert scale (very unsafe, somewhat unsafe, neutral, somewhat safe, safe). The online survey captured the participant

responses and levels of agreement. During round three, participants were asked to reconsider the items that did not reach consensus. Thirty eight items for patient and 17 items for others reached consensus. During the final survey, the participants were required to drag and drop items that had reached 80% agreement as very unsafe until they were satisfied that they had ranked the items in the way they wanted. The participants were instructed to place the most unsafe item in the #1 spot. To calculate, I assigned 38 points to the item ranked number 1, 37 points to the item ranked number 2, 36 points to the item ranked number 3 and so on. I did this for each participant and repeated the procedure for the 17 additional items; I assigned 17 points to the item ranked number 1, 16 points to the item ranked number 2, and so on. The points for each item were tallied. Finally, the rankings were reviewed with my supervisor, and together we assessed what the results revealed about the culture of nurse educators.

Chapter 4 Results

In this chapter, I present the key results of the four surveys conducted utilizing the Delphi technique. The chapter is structured into four sections:

1. Round One (The Exploration Phase) - Open Ended Questions
2. Round Two- The Evaluative Phase
3. Round Three- The Reconsidering Phase
4. Round Four - The Ranking Phase

Each section provides a story about what was done during each round. Specific unsafe behaviours are highlighted and in the last section a hierarchy of these behaviours are provided from the perspective of clinical nurse educator experts.

Round One-(The Exploration Phase) - Open Ended Questions

Round one began with an online demographic questionnaire for experts (see Appendix I). In round one, the findings from each article were reviewed and all examples of unsafe behaviours were highlighted. Twenty-two vague descriptors of unsafe student nurse behaviours gleaned from the literature review were used to form open-ended questions for the participant's. For each descriptor, I asked, "Thinking back, have you ever observed this behaviour?" The participants were asked to respond "Yes" or "No". If "Yes", the participant was asked to provide as many details as possible about the incident without specifying the name of the student or agency involved. The responses were in the form of unlimited text. Table 5 is a list of the 22 questions that formed the open-ended questionnaire.

Table 5

Round One (Exploration Phase)- Open-Ended Questionnaire

#	Open-Ended Questions
1	Have you ever observed overconfidence in your students in the clinical setting?
2	Have you ever observed poor work ethic in your students in the clinical setting?
3	Have you ever observed lack of confidence- extreme nervousness in your students in the clinical setting?
4	Have you ever observed your students exhibiting verbal abuse towards patients in the clinical setting?
5	Have you ever observed your students exhibiting physical abuse towards patients in the clinical setting?
6	Have you ever observed your students interacting inappropriately with patients in the clinical setting?
7	Have you ever observed attitude problems with your students in the clinical setting?
8	Have you ever observed your students exhibiting poor verbal communication skills with patients in the clinical setting?
9	Have you ever observed your students exhibiting poor non-verbal communication skills with patients in the clinical setting?
10	Have you ever observed your students exhibiting poor verbal communication skills with staff in the clinical setting?
11	Have you ever observed your students exhibiting poor non-verbal communication skills with staff in the clinical setting?
12	Have you ever observed your students exhibiting uncaring behaviors in the clinical setting?
13	Have you ever observed your students exhibiting lack of knowledge in the clinical setting?
14	Have you ever observed your students exhibiting lack of practical skills in the clinical setting?
15	Have you ever observed your students exhibiting disrespect for the rights of patients in the clinical setting?
16	Have you ever observed impaired cognition in your students in the clinical setting? (for example, due to stress, drugs, alcohol, lack of sleep).
17	Have you ever observed your students exhibiting any illegal activities in the clinical setting?
18	Have you ever had any students who were unprepared for the clinical experience?
19	Have you ever observed students who were unable to think critically in the clinical setting?
20	Have you ever observed students who exhibited lack of organizational skills in the clinical setting?
21	Have you ever had a student who failed to disclose or discuss a clinical error with you?
22	Have you ever had a student who practiced outside the scope of practice for a nursing student?

The participants were informed that the first survey would take the longest time to complete (approximately one hour). According to Keeney et al. (2011) response rate has to be balanced with quantity and breadth. A reminder email was sent to participants who had not responded to the questionnaire within two weeks (Appendix J). Sixteen out of the seventeen participants completed round one open-ended questionnaire (response rate

94%). I received 233 responses in the form of short stories. Here are some examples of the participants' responses:

A student working with a First Nations patient was inappropriately asking questions about her time in Residential School; for personal interest, not reading the patient's verbal's/non-verbals or attending to the patient's emotional needs.

Student making gross breaches in sterile technique with wound care- placing hand in center of the dressing field, placing hand into the garbage and then going back to the dressing field to continue the dressing, student picking up a used rose bud that fell onto the bed with the sterile forcep and then going back to the field to pick up the next gauze.

Student came to clinical with dilated pupils, slurred speech and movement, student admitted to doing drugs the evening prior and was still 'feeling the effects'.

A couple of students have taken on the "Doctor knows best" approach in the clinical setting when patients have asked questions. One student had a difficult time understanding that it was important to explain medication information that the patient questioned. The patient had doubts about medication timing and necessity. The student thought that the patient should trust the doctor and did not see her role in educating and supporting the patient.

Students that lack confidence greatly dislike anything or anyone that questions or challenges their thought processes or practice. They often try and fly under the radar and to go unnoticed by the instructors to the point that they compromise their practice by avoiding the instructor and not asking enough questions or not asking the right questions.

I remember that I once had a student that complained about many things in the nursing program (e.g. other teachers weren't fair on their exams, that she hated when there were contradictions between different textbooks, and why couldn't people get their stories straight, or about things that seemed unfair to her). This one student seemed to 'infect' the rest of the clinical group, so that student discussions (e.g. post conference) often turned into 'bitch sessions' where students would complain about the things that they didn't like. That term, I often needed to re-direct those conversations to get them back on topic, and tell students that if they had a problem with a particular teacher that they should go and talk to that teacher directly, rather than just complaining about him/her. I remember that I needed to remind them about what constituted a professional discussion several times that term.

Closely related responses were combined, the data were summarized, and 137 specific behaviours were identified. Examples of specific behaviors are below.

1. A student removes an arterial line and is unaware that an arterial line is not the same as an intravenous catheter.
2. A student exhibits a cavalier attitude about a skill learned in lab, but is unable to demonstrate the same skill in the clinical setting.
3. A student fabricates a blood glucose reading for an insulin dependent patient.
4. Half way through a clinical shift, the student leaves the clinical facility and goes home without informing the instructor.
5. When changing an incontinence pad for a patient with clostridium difficile, the student gags in front of the patient.
6. A student is fifteen minutes late administering medication and begins to cry in front of the patient. When asked by the patient "What is wrong?" the student begins to laugh inappropriately.
7. A student does not report to the nursing team. When questioned, the student states, "I'm afraid of the nurse".
8. A student's assigned patient has a low oxygen saturation level. The student is unable to suggest any interventions to improve the patient's oxygenation.
9. A student fails to disclose a clinical error with her instructor. When questioned, she states that she withheld the information due to fear of failure and/or consequences (a learning contract, not able to go to Africa or out of region).
10. A student is assigned to a patient whose family do not want him to receive prescribed intravenous medication. The student administers the prescribed intravenous medication while the family is out of the room.

See Appendix K for full list of the 137 behaviors that were identified from round one.

During round one, the participants were also asked if they felt any student behaviours were missing in the questionnaire. The following were examples of responses from participants:

Psychosocial issues and their relation to practice-failure to leave their personal lives or personal insecurities at home and allowed to influence their practice (this happened ALOT).

One of my biggest issues is students not being prepared to take responsibility for their actions; there is often a level of justification or defensiveness in many students rather than accepting some responsibility.

The super shy introverted student is one I find challenging. To get them to do an assessment when they can barely speak out loud or touch another person's body

when they are so uncomfortable. Nursing is all about touching and talking, how to make the student more comfortable so they do not miss anything important.

Finally, in round one participants were also asked if there if there was anything else they might like to add. The following were responses from participants:

Feel like I see these behaviours early on with many students. Usually with coaching they come around. There are a few who never seem to learn or incorporate changes into their practice.

Lack of preparation (information, planning, and skills) and organization difficulty are by far the most common concerning behaviour I have encountered. Other behaviours of concern are much rarer.

I met with my supervisor to discuss the responses and create the Likert scale required for round two.

Round Two- The Evaluative Phase

In round two, 137 statements were returned to the participants. Participants were instructed to read each of the 137 statements and evaluate the level of threat to safety for patients and others using a five-point Likert scale (very unsafe, somewhat unsafe, neutral, somewhat safe, safe). Others were defined as friends, family, visitors and hospital staff. In comparison to a three point Likert scale, the five point Likert scale captured a more precise opinion of my participants and allowed me to investigate the participant's opinions, as well as the intensity of those opinions. The participants were informed that the second survey would take approximately 30 minutes to complete. A reminder email for those participants who had not responded to the second survey within two weeks was sent (Appendix J). Sixteen out of the 17 participants completed round two (evaluative phase) (Response rate 94%). Items that did not reach a consensus threshold of 70% ($\pm 5\%$) were set aside to be used during the third round.

I retained all items from round two that reached a consensus threshold of 70% ($\pm 5\%$). See Table 6 for full list of specific behaviours that met 70% ($\pm 5\%$) agreement and were retained.

Table 6

Round Two Behaviours that met 70% ($\pm 5\%$) Agreement and Retained

#	Patient	Others
1	A student has not been taught how to remove an intravenous (IV). In the clinical setting, a staff nurse asks the student to remove an IV and the student does so, without seeking guidance from the clinical instructor.	A student fabricates a blood glucose reading for an insulin dependent patient.
2	A student removes an arterial line and is unaware that an arterial line is not the same as an intravenous catheter.	A student appears sedated when preparing medications in the clinical setting.
3	A student exhibits a cavalier attitude about a skill learned in lab, but is unable to demonstrate the same skill in the clinical setting.	A student enthusiastically offers to teach a skill to a peer. The same student, however, has not received instruction on that particular skill.
4	A student is showering a hemiplegic patient, and leaves the patient alone in the shower in order to complete another task.	A student has not completed all aspects of a head to toe assessment, but to demonstrate capability, the student reports fictitious data.
5	A student fabricates a blood glucose reading for an insulin dependent patient.	A student assesses a patient's blood pressure and reports it as 120/80. The instructor is suspicious so assesses the same patient's blood pressure and the result is 190/110.
6	A student appears sedated when preparing medications in the clinical setting.	A student flushes a peripherally inserted central catheter (PICC) line without supervision. When questioned, the student states "Everyone was busy".
7	A student has not been taught how to perform a dermatome assessment. In the clinical setting, the student performs a dermatome assessment on a patient, and when questioned, the student states she had watched the nurse and "it wasn't hard to figure out".	A student finds a patient halfway fallen out of bed. Instead of asking for help from the nurse who is in the room, the student asks another student to find the instructor while holding the patient to keep him from falling out of bed.
8	A student rushes through medication administration and omits some of the medication checks.	A student is unable to perform mathematical calculations necessary for medication administration.

#	Patient	Others
9	A student enthusiastically offers to teach a skill to a peer. The same student, however, has not received instruction on that particular skill.	A student administers a larger than normal dose of medication to a patient without questioning or reviewing appropriate lab values.
10	A student has not completed all aspects of a head to toe assessment, but to demonstrate capability, the student reports fictitious data.	A student is unable to describe the implications of administering a heparin injection to a patient who is already receiving oral anticoagulants.
11	A student assesses a patient's blood pressure and reports it as 120/80. The instructor is suspicious so assesses the same patient's blood pressure and the result is 190/110.	A student is assigned to a patient with a fractured hip. The student does not know what activity level has been ordered for this patient.
12	A student complains about repetitious classroom content and does not complete assignments. The same student is unable to apply the theory in the clinical setting.	A student begins to lift a patient with a mechanical lift. The instructor notices that the sling is not properly placed and that the patient is slipping out.
13	A student is assigned to look up information in preparation for clinical practice. It is obvious to the instructor that the student hasn't looked up the information. When questioned, the student states, she is planning on "winging it".	A student leaves the keys in the narcotic drawer of the medication cart and the drawer is left open.
14	A student flushes a peripherally inserted central catheter (PICC) line without supervision. When questioned, the student states "Everyone was busy".	A student is assigned to patient A but looks up medications for patient B. The student begins to administer patient B's medications to patient A.
15	A student finds a patient halfway fallen out of bed. Instead of asking for help from the nurse who is in the room, the student asks another student to find the instructor while holding the patient to keep him from falling out of bed.	A student arrives at the clinical setting the evening before clinical practice in order to look up details about her assigned patients. The nursing staff notice that this student smells of alcohol.
16	A student is unable to perform mathematical calculations necessary for medication administration.	A student in the clinical practice setting is lethargic, has dilated pupils, and slurred speech. The student admits to consuming sedatives the evening prior and states that she is "still feeling the effects".
17	An adult patient has a resting pulse rate of 130 beats/minute. The student assigned to this patient is unable to interpret the meaning of the patient's pulse rate.	<i>A student performs an assessment and documents the patient's resting heart rate of 140 beats/minute without telling the instructor or nurse of the findings.</i>

#	Patient	Others
18	A student doesn't know what to expect or what interventions to perform if a patient's condition worsens.	A student documents administering a medication to a patient, but in fact, the medication wasn't administered. When questioned, it becomes obvious to the instructor that the student is dishonest and misleading.
19	A student administers a larger than normal dose of medication to a patient without questioning or reviewing appropriate lab values.	For two consecutive days, a student administers a high alert medication without having the medication co-signed. When questioned, the student responds that she was too rushed to find the nurse to co-sign the medication administration record.
20	A student is unable to describe the implications of administering a heparin injection to a patient who is already receiving oral anticoagulants.	A student reports to her instructor that her patient has an epidural infusion of fentanyl. In reality, the patient has an intravenous PCA (patient controlled analgesia) of dilaudid.
21	A student does not check medication administration records throughout the day for new orders, and misses orders.	A student flushes a central line independently before having this skill checked and approved in lab or the clinical setting.
22	When looking at a patient's lab values a student is unable to identify significant laboratory values.	A student removes a chest tube without supervision.
23	A student is assigned to a surgical patient and is unable to describe the surgery, other than saying "It is some kind of head surgery".	A student fails to disclose a clinical error with her instructor. When questioned, she states that she withheld the information due to fear of failure and/or consequences (a learning contract, not able to go to Africa or out of region).
24	A student is assigned to a patient with a fractured hip. The student does not know what activity level has been ordered for this patient.	A student completes a 12-hour night shift as a licensed practical nurse (LPN). The student arrives at the clinical practice setting still wearing her uniform from the night before. The student appears very tired and says she has not retrieved any information about her assigned patient's because she has been working all night.

#	Patient	Others
25	A student is assigned to administer an ACE inhibitor to a patient. The student is unable to explain the reason for the prescription or how ACE inhibitors work.	A student writes in her reflective journal that she had an exciting day in the emergency department. A patient presented with an irregular heart rhythm and required cardio-version. When the attending physician asked the student if she would like to hold the paddles, she did so.
26	A student places her hand in the center of a sterile dressing field, places her hand in the garbage, and then goes back to the sterile field to continue the dressing.	A student hangs a new total parenteral nutrition (TPN) bag without performing any of the checks. She has been taught in class that TPN needs to be checked by an RN but stated that she couldn't find anyone. The IV pump alarm was ringing, and she knew how to change a regular IV bag, so she went ahead and did it independently.
27	A student begins to lift a patient with a mechanical lift. The instructor notices that the sling is not properly placed and that the patient is slipping out.	A student administers intravenous morphine and the patient's respiratory rate slows drastically. The patient becomes unresponsive. The student is unable to identify what is happening or what to do.
28	A student washes a patient's perineum first, and then uses the same cloth to wash the patient's face.	A student who is assigned to a post-operative patient ambulates this patient incorrectly and too soon after surgery.
29	A student administers medications to a patient without checking the patient's identity by reading the patient's arm band.	
30	A student leaves the keys in the narcotic drawer of the medication cart and the drawer is left open.	
31	A student is assigned to patient A but looks up medications for patient B. The student begins to administer patient B's medications to patient A.	
32	A student works at another job until midnight. In the morning, the instructor notices that the student is tired during clinical practice.	
33	A student arrives at the clinical setting the evening before clinical practice in order to look up details about her assigned patients. The nursing staff notice that this student smells of alcohol.	

#	Patient	Others
34	A student is assigned to a patient who does not want his prescribed medication. The student hides the prescribed medication in the patient's food while the patient is sleeping.	
35	A student in the clinical practice setting is lethargic, has dilated pupils, and slurred speech. The student admits to consuming sedatives the evening prior and states that she is "still feeling the effects".	
36	A student is asked by the cardiologist who the patient's responsible nurse is, and the student responds that she is.	
37	A student performs an assessment and documents the patient's resting heart rate of 140 beats/minute without telling the instructor or nurse of the findings.	
38	Over three consecutive weeks, a student is assigned to three patients who have all had the same surgery- transurethral resection of the prostate (TURP). This student is unable to retain information previously learned and discussed.	
39	A student is unable to verbalize required nursing care for a patient with an epidural infusion.	
40	A patient's oxygen saturation reading is 85%. The student assigned to this patient does not identify the patient's need for oxygen.	
41	A student documents administering a medication to a patient, but in fact, the medication wasn't administered. When questioned, it becomes obvious to the instructor that the student is dishonest and misleading.	

#	Patient	Others
42	For two consecutive days, a student administers a high alert medication without having the medication co-signed. When questioned, the student responds that she was too rushed to find the nurse to co-sign the medication administration record.	
43	A student reports to her instructor that her patient has an epidural infusion of fentanyl. In reality, the patient has an intravenous PCA (patient controlled analgesia) of dilaudid.	
44	A student flushes a central line independently before having this skill checked and approved in lab or the clinical setting.	
45	A student removes a chest tube without supervision.	
46	A student fails to disclose a clinical error with her instructor. When questioned, she states that she withheld the information due to fear of failure and/or consequences (a learning contract, not able to go to Africa or out of region).	
47	A student completes a 12-hour night shift as a licensed practical nurse (LPN). The student arrives at the clinical practice setting still wearing her uniform from the night before. The student appears very tired and says she has not retrieved any information about her assigned patient's because she has been working all night.	
48	A student writes in her reflective journal that she had an exciting day in the emergency department. A patient presented with an irregular heart rhythm and required cardio-version. When the attending physician asked the student if she would like to hold the paddles, she did so.	

#	Patient	Others
49	A student inserts an endotracheal tube during her operating room (OR) observational experience.	
50	A student hangs a new total parenteral nutrition (TPN) bag without performing any of the checks. She has been taught in class that TPN needs to be checked by an RN but stated that she couldn't find anyone. The IV pump alarm was ringing, and she knew how to change a regular IV bag, so she went ahead and did it independently.	
51	A student administers intravenous morphine and the patient's respiratory rate slows drastically. The patient becomes unresponsive. The student is unable to identify what is happening or what to do.	
52	A student's assigned patient has a low oxygen saturation level. The student is unable to suggest any interventions to improve the patient's oxygenation.	
53	A student is assigned to a patient with dysphagia. At meal time, the student feeds this patient even though she has not had any previous training on this skill.	
54	A student who is assigned to a post-operative patient ambulates this patient incorrectly and too soon after surgery.	
55	A student is unable to perform a skill in the clinical setting. The instructor asks, "Have you practiced this skill in the lab?" Student replies "No".	

It was brought to my attention that item # 95 was not formatted correctly. In consultation with my supervisor, item # 95 was added to the third survey with an explanatory note.

Round Three – The Reconsidering Phase

There were numerous email communications between my supervisor and me as we discussed the creation of the third survey (Round three). In round three, 109 items that did not reach 70% ($\pm 5\%$) group consensus were returned to the participants to reconsider. The purpose of this round was to provide the participants with an opportunity to compare their individual opinions to that of the collective group (Vernon, 2009). This round also provided a final opportunity for participants to change their opinions (Hsu & Sanford, 2007). The collective group opinions were also provided to the participants in the form of percentage of agreement. The participants were instructed to reconsider their previous responses and to respond with their opinion. Participants were told that there were no right or wrong answers.

Round three was divided into three sections:

1. Section one: item # 95. Stated “This item was repeated because it was not correctly formatted in survey 2, so participants were asked to consider it first. “A student is assigned to a patient whose family do not want him to receive prescribed intravenous medication. The student administers the prescribed intravenous medication while the family is out of the room”. Item #95 did not reach the 70% ($\pm 5\%$) consensus for either unsafe for patients or others.
2. Section two: items that had not reached agreement for patient safety
3. Section three: items that had not reached agreement for safety of others.

The participants were informed that the third survey would take approximately 15-30 minutes to complete. A reminder email for those participants who had not responded to the third survey within two weeks was sent (Appendix J). Thirteen of the 17 participants completed round three (reconsidering phase) (response rate 81%). After reconsidering, the participants identified 25 additional items that reached 70% ($\pm 5\%$) consensus as being very unsafe (Table 7).

Table 7

Results of Round Three- Reconsidering Phase – Additional Items

#	Patient	Others
1	A student forces a patient to take a bath.	A student exhibits a cavalier attitude about a skill learned in lab, but is unable to demonstrate the same skill in the clinical setting.
2	A student is unable to decide whether or not to hold a blood pressure medication for her patient.	A student removes an arterial line and is unaware that an arterial line is not the same as an intravenous catheter.
3	A student is unable to assess, provide personal care, or document on one patient before the end of a 7-hour shift.	A student rushes through medication administration and omits some of the medication checks.
4	A student applies a cream to a patient but does not recognize that it is a prescribed medication (celestoderm cream).	A student doesn't know what to expect or what interventions to perform if a patient's condition worsens.
5	A student contaminates his forceps while performing a sterile dressing change and is unable to problem solve / decide what to do.	A student is assigned to administer an ACE inhibitor to a patient. The student is unable to explain the reason for the prescription or how ACE inhibitors work.
6	A student states he has given report of his patient assessment and care to the primary nurse. The primary nurse states that report was not received. The student responds that the primary nurse is not telling the truth.	A student places her hand in the center of a sterile dressing field, places her hand in the garbage, and then goes back to the sterile field to continue the dressing.
7	Rather than providing patient education about medication timing and necessity, the student tells the patient that he should "Just trust the doctor".	A student washes a patient's perineum first, and then uses the same cloth to wash the patient's face.

#	Patient	Others
8		A student administers medications to a patient without checking the patient's identity by reading the patient's arm band.
9		A student works at another job until midnight. In the morning, the instructor notices that the student is tired during clinical practice.
10		A student is assigned to a patient who does not want his prescribed medication. The student hides the prescribed medication in the patient's food while the patient is sleeping.
11		A student is asked by the cardiologist who the patient's responsible nurse is, and the student responds that she is.
12		Over three consecutive weeks, a student is assigned to three patients who have all had the same surgery- transurethral resection of the prostate (TURP). This student is unable to retain information previously learned and discussed.
13		A patient's oxygen saturation reading is 85%. The student assigned to this patient does not identify the patient's need for oxygen.
14		A student inserts an endotracheal tube during her operating room (OR) observational experience.
15		A student's assigned patient has a low oxygen saturation level. The student is unable to suggest any interventions to improve the patient's oxygenation.
16		A student is assigned to a patient with dysphagia. At meal time, the student feeds this patient even though she has not had any previous training on this skill.
17		A student needs continuous reminders to articulate assessment findings clearly and accurately.
18		A student does not report to the nursing team. When questioned, the student states, "I'm afraid of the nurse".

Figure 1. Summary of Process up to Round Four – (The Ranking Phase)

Round Four – The Ranking Phase

The original goal for round four was to rank order all items that reached 70% ($\pm 5\%$) consensus (highest ranking = most unsafe). On consultation with my committee members, it was decided that 62 items that were unsafe for patients and 46 items unsafe for others would be too difficult for participants to rank. When consensus level was increased to 80%, the item numbers decreased to 38 items for patient and 17 items for others. My committee members agreed that because the participants were a panel of experts, if 80% or more of the participants agreed on an item, the evidence would be strong.

I provided detailed instructions for participants: “First scroll through the items to familiarize yourself with all of them. Please decide ahead of time on paper the ranking sequence as it’s difficult to change once you have dragged and dropped the items. Most unsafe item should be in the #1 spot”. The participants were informed that the fourth survey would take

approximately 15 minutes to complete. After two weeks a reminder email was sent (Appendix J). Fourteen of the 16 participants completed round four (response rate at 88%).

To analyze the data, I downloaded each individual participant's responses (pdf) and printed the pdfs. For each participant, I assigned 38 points to item ranked number 1, 37 points to item ranked number 2, 36 points to item ranked number 3 and so on. Then I tallied up all the points for each item. The highest tally was the highest ranked item. See Table 8 for the top 38 items ranked for very unsafe for patients and Table 9 for the top 17 items ranked for very unsafe for others that reached 80% or more agreement.

Table 8

Ranking 38 Items That Reached 80% or more Consensus as Most Unsafe for Patient

38 Items Ranked for Most Unsafe in Order- #1 being the most unsafe	Rank	Tally
Student fabricates a blood glucose reading for an insulin dependent patient	1	433
Student removes a chest tube without supervision	2	398
Student documents administering medication, but in fact, medication wasn't administered.	3	358
Student appears dishonest and misleading		
Student administers IV morphine, patient becomes unresponsive, student unable to identify what is happening or intervene	4	357
Student documents adult resting heart rate of 140bpm but fails to report the finding	5	355
Student removes an arterial line unaware that it is not the same as an intravenous catheter	6	354
Student reports fictitious data on a head to toe assessment	7	351
Student assesses and reports patient's blood pressure as 120/80 when it is actually 190/110	8	345
Patient's oxygen saturation reading is 85%. Student does not identify patient's need for oxygen	9	344
Student using mechanical lift does not notice that it is not properly placed and patient is sliding out	10	325
Student fails to disclose a clinical error due to fear of failure or other consequences	11	304
Student assigned to patient A but looks up medications for patient B. Begins to administer patient B's medication to patient A	12	304
Student flushes central line independently before having skill checked and approved	13	298
Student appears sedated when preparing medications in clinical	14	291
Student hangs TPN bag independently and without performing any checks	15	268
Student flushes a PICC without supervision, stating "everyone was busy"	16	268
Student administers larger than normal dose of medication without reviewing lab values	17	257
Unaware of implications of administering heparin injection to patient on oral anticoagulants	18	252
Student rushes through medication administration omitting some checks	19	251
Student consumes sedatives on evening prior to clinical practice and states she is "still feeling the effects"	20	248
Student administers medications to patient without checking patient's identity arm band	21	245
Student not prepared for patient assignment, stating she is "planning on winging it"	22	243
Student without prior training on dysphagia feeds patient who has dysphagia	23	243
Student unaware of what to expect, or how to intervene when patient condition worsens	24	242
Student unable to perform mathematical calculations necessary for medication administration	25	241

38 Items Ranked for Most Unsafe in Order- #1 being the most unsafe	Rank	Tally
Student assigned to patient with low oxygen saturation but unable to suggest interventions to improve oxygen levels	26	212
Student fails to get high alert medication co-signed 2 days in a row. Student states that she was “too rushed to find the nurse”	27	203
Student breaks sterile technique several times and continues dressing change	28	187
Halfway through clinical shift student leaves facility without telling instructor	29	176
Student ambulates patient incorrectly and too soon after surgery	30	175
Student unable to retain information previously learned and discussed	31	174
Student works a 12 hour night shift as an LPN, and arrives to clinical practice still in her uniform and hasn’t retrieved any information about assigned patient’s	32	170
Student unaware of prescribed activity level for a patient with a fractured hip	33	169
A student inserts an endotracheal tube during her operating room observational experience	34	145
Cardiologist asks student who the patient’s nurse is, and student responds that she is	35	119
RN tells student to ignore patient request for analgesia and withhold analgesia. Student does so without checking with instructor	36	118
Student attends clinical practice when he is obviously sick	37	114
An attending physician asks student if she would like to hold the paddles to cardio-vert patient and student does so	38	101

The top 38 items that reached 80% or more agreement as being very unsafe for patients are also displayed in the following bar graph.

Figure 2. Ranking of Top 38 Items that Reached 80% or More Consensus

1. Student fabricates a blood glucose reading for an insulin dependent patient
2. Student removes a chest tube without supervision
3. Student documents administering medication, but in fact, medication wasn't administered. Student appears dishonest and misleading
4. Student administers IV morphine, patient becomes unresponsive, student unable to identify what is happening or intervene
5. Student documents adult resting heart rate of 140bpm but fails to report the finding
6. Student removes an arterial line unaware that it is not the same as an intravenous catheter

7. Student reports fictitious data on a head to toe assessment
8. Student assesses and reports patient's blood pressure as 120/80 when it is actually 190/110
9. Patient's oxygen saturation reading is 85%. Student does not identify patient's need for oxygen
10. Student using mechanical lift does not notice that it is not properly placed and patient is sliding out
11. Student fails to disclose a clinical error due to fear of failure or other consequences
12. Student assigned to patient A but looks up medications for patient B. Begins to administer patient B's medication to patient A
13. Student flushes central line independently before having skill checked and approved
14. Student appears sedated when preparing medications in clinical
15. Student hangs TPN bag independently and without performing any checks
16. Student flushes a PICC without supervision, stating "everyone was busy"
17. Student administers larger than normal dose of medication without reviewing lab values
18. Unaware of implications of administering heparin injection to patient on oral anticoagulants
19. Student rushes through medication administration omitting some checks
20. Student consumes sedatives on evening prior to clinical practice and states she is "still feeling the effects"
21. Student administers medications to patient without checking patient's identity arm band
22. Student not prepared for patient assignment, stating she is "planning on winging it"
23. Student without prior training on dysphagia feeds patient who has dysphagia
24. Student unaware of what to expect, or how to intervene when patient condition worsens
25. Student unable to perform mathematical calculations necessary for medication administration
26. Student assigned to patient with low oxygen saturation but unable to suggest interventions to improve oxygen levels
27. Student fails to get high alert medication co-signed 2 days in a row. Student states that she was "too rushed to find the nurse"
28. Student breaks sterile technique several times and continues dressing change
29. Halfway through clinical shift student leaves facility without telling instructor
30. Student ambulates patient incorrectly and too soon after surgery
31. Student unable to retain information previously learned and discussed
32. Student works a 12 hour night shift as an LPN, and arrives to clinical practice still in her uniform and hasn't retrieved any information about assigned patient's
33. Student unaware of prescribed activity level for a patient with a fractured hip
34. A student inserts an endotracheal tube during her operating room observational experience
35. Cardiologist asks student who the patient's nurse is, and student responds that she is
36. RN tells student to ignore patient request for analgesia and withhold analgesia. Student does so without checking with instructor
37. Student attends clinical practice when he is obviously sick

38. An attending physician asks student if she would like to hold the paddles to cardio-vert patient and student does so

The top 17 items that reached 80% or more agreement as being very unsafe for others are displayed in Table 9. Number 1 indicates most unsafe.

Table 9

Top 17 items that reached 80% or more consensus and ranked as most unsafe for others

17 Items ranked for most unsafe for others- #1 being the most unsafe	Rank	Tally
Student documents administering medication, but in fact, medication wasn't administered. Student appears dishonest and misleading	1	195
Student administers IV morphine, patient becomes unresponsive, student unable to identify what is happening or intervene	2	184
Student works at another job until midnight. Instructor notices that student is tired during clinical practice	3	182
Student fails to disclose a clinical error due to fear of failure or other consequences	4	168
Student using mechanical lift does not notice that it is not properly placed and patient is sliding out	5	148
Patient's oxygen saturation reading is 85%. Student does not identify patient's need for oxygen	6	143
Student works a 12 hour night shift as an LPN, and arrives to clinical practice still in her uniform and hasn't retrieved any information about assigned patient's	7	122
Student rushes through medication administration omitting some checks	8	120
Student administers medications to patient without checking patient's identity arm band	9	114
An attending physician asks student if she would like to hold the paddles to cardio-vert patient and student does so	10	108
Student without prior training on dysphagia feeds patient who has dysphagia	11	103
A student inserts an endotracheal tube during her operating room observational experience	12	102
Student breaks sterile technique several times and continues dressing change	13	87
Cardiologist asks student who the patient's nurse is, and student responds that she is	14	84
Student unable to retain information previously learned and discussed	15	83
RN tells student to ignore patient request for analgesia and withhold analgesia. Student does so without checking with instructor	16	75
Student misses large number of clinical hours, minimizes importance of attendance, objects to additional clinical hours	17	70

The top 17 items that reached 80% or more agreement as being very unsafe for others are also displayed in the following bar graph.

Figure 3. Ranking of Top 17 Items that Reached 80% or More Consensus

1. Student documents administering medication, but in fact, medication wasn't administered. Student appears dishonest and misleading
2. Student administers IV morphine, patient becomes unresponsive, student unable to identify what is happening or intervene
3. Student works at another job until midnight. Instructor notices that student is tired during clinical practice
4. Student fails to disclose a clinical error due to fear of failure or other consequences
5. Student using mechanical lift does not notice that it is not properly placed and patient is sliding out
6. Patient's oxygen saturation reading is 85%. Student does not identify patient's need for oxygen
7. Student works a 12 hour night shift as an LPN, and arrives to clinical practice still in her uniform and hasn't retrieved any information about assigned patient's
8. Student rushes through medication administration omitting some checks
9. Student administers medications to patient without checking patient's identity arm band

10. An attending physician asks student if she would like to hold the paddles to cardio-vert patient and student does so
11. Student without prior training on dysphagia feeds patient who has dysphagia
12. A student inserts an endotracheal tube during her operating room observational experience
13. Student breaks sterile technique several times and continues dressing change
14. Cardiologist asks student who the patient's nurse is, and student responds that she is
15. Student unable to retain information previously learned and discussed
16. RN tells student to ignore patient request for analgesia and withhold analgesia. Student does so without checking with instructor
17. Student misses large number of clinical hours, minimizes importance of attendance, objects to additional clinical hours

Chapter 5 Discussion

The purpose of this study was two-fold. First, to gain consensus from a panel of nurse educator experts on particular student nurse behaviours that represent unsafe clinical practices. Second, to provide a hierarchy of the unsafe behaviours, from the perspective of nurse educator experts in order to guide novice nurse educators who must make judgments about whether a student nurse is safe or unsafe.

In this chapter, a discussion of what the results reveal about the culture of clinical nurse educators are provided. According to the College of Nurses of Ontario (CNO) (2009), “culture refers to the learned values, beliefs, norms and way of life that influence an individual’s thinking, decisions and actions in certain ways” (p.3) (Adapted from Leininger, 1991). In this context, culture refers to the participants’ values, beliefs, and expectations of student behaviours that are founded on their personal experiences as clinical nurse educators and link them as a group.

A key emphasis in this study was on the examination of the cognitive and behavioral/materialist perspectives of experienced clinical nurse educators about particular student nurse behaviours that constituted unsafe clinical practices. After the data were collected, the rankings were reviewed with my supervisor, and together we assessed what the results revealed about the culture of nurse educators. Two cultural themes emerged from a cognitive perspective: honesty (value) and knowledge (expectation). Expert clinical nurse educators, above all else, value honesty in their interactions with undergraduate nursing students. They also expect student nurses to possess a certain amount of theoretical knowledge prior to arrival in the clinical setting. Two cultural themes emerged from a behavioral/materialist perspective: control (value) and scrupulousness and precision (expectation). Expert clinical nurse educators value control in the clinical teaching/learning environment. They also expect scrupulousness and precision in the clinical setting and in the students’ personal lives.

Cognitive Perspective

Value Honesty

In this study, dishonest behaviour was ranked highest as being most unsafe for patients and most unsafe for others. While failure of a student to disclose or discuss clinical errors has been previously identified as an unsafe student behaviour (Duffy, 2003; Luhanga et al., 2008; Killam et al., 2010; Tanicala et al., 2011), failure to disclose or discuss is not the same as dishonesty. In this study, the panel of expert clinical nurse educators agreed that if a student is dishonest (for example, enters false information in a legal document or fabricates the results of a patient assessment) this type of behaviour is a “deal breaker” and cannot be tolerated. According to the Canadian Nurses Association (2008), nurses are moral agents who are accountable and responsible to provide safe, compassionate, competent, and ethical patient-centered care. Expert clinical educators highly value morality and expect that all undergraduate students will be moral agents and behave in an honest and ethical manner.

Expectations of Knowledge

The expert clinical nurse educators who participated in this study expect that students will possess a certain amount of knowledge. This knowledge is required to provide safe, competent, and ethical care. When students do not demonstrate the expected knowledge in the clinical setting, their behaviours are considered to be “deal breakers” and cannot be tolerated. Three types of expected knowledge were evident in the results: expected theoretical knowledge acquired before students enter the clinical setting, expected theoretical knowledge of safe medication administration, and expected ability to retain previously learned and discussed knowledge. An example of expected theoretical knowledge before students enter the clinical setting is an expectation that students will know how to accurately measure vital signs in an

average healthy adult and will know the parameters of normal vital signs. When students demonstrate that they are unable to accurately measure vital signs or fail to recognize abnormal vital signs, these behaviours are considered very unsafe and are “deal breakers”.

An example of expected theoretical knowledge of safe medication administration occurs when expert clinical nurse educators believe that students who are ready to administer an intravenous narcotic medication in the clinical setting are knowledgeable about narcotic pharmacodynamics and interventions for adverse effects, will be able to perform mathematical calculations necessary for medication administration, and will apply pharmacokinetic principles.

Finally, expert clinical nurse educators assume that students will be able to retain knowledge previously learned and discussed. When students repetitively break sterile technique, do not have some knowledge of the therapeutic devices used in their clinical settings, or ambulate patients incorrectly or too soon after surgery, these behaviours are not tolerable because the behaviours demonstrate that the students are unable to retain information previously learned and discussed. These behaviours are considered to be “deal breakers” and unsafe for both patients and others.

Behavioral/Materialist Perspective

Value Control

Clinical nurse educators who are employed by a college or university are not usually employed on the nursing units where they teach. Therefore, they are usually outsiders, not part of the nursing unit social culture, and may not be intimately familiar with cultural routines and rituals that include tacit procedures and processes. In order to maintain safety of the patients assigned to their students and their own safety, the expert clinical nurse educators in this study demonstrated that they valued tight control over student activities. Safety for clinical nurse

educators in this instance is freedom from being chastised or reprimanded (sometimes in front of students) by personnel employed on the nursing unit. For example, an educator loses control when students perform skills independently but without permission (even if there is no negative outcome), or skills they simply have not learned. An example of a highly ranked unsafe behaviour that illustrates the significance of maintaining control was removal of a chest tube without supervision. This unsafe behaviour was ranked #2.

Most expert clinical nurse educators also value their own choices for student experiences. They hope to choose appropriate experiences that will link theory to practice, and they want to be present to support and mentor students throughout the learning process. Therefore, when students perform skills independently with another health care professional and without preparation or permission, clinical nurse educators are not in control and not fulfilling a desired and valued role. For example, when an attending physician asked a student if she would like to hold the paddles to cardio-vert a patient and the student did so without permission, the panel of expert nurse educators in this study considered this behaviour to be very unsafe for the patient even though a physician was present. Similarly, when a student inserted an endotracheal tube in the operating room during an observational experience, even though the surgeons were present, the experts in this study clearly ranked the behaviour as unsafe. Expert clinical nurse educators may be more tolerant of extraneous student experiences when they know in advance, are present to supervise the student, are able to mold the learning activity and could intervene if necessary.

Expectations of Scrupulousness and Precision

Expert nurse educators in this study expected scrupulousness and precision in two domains: in the clinical setting when students are performing technical skills associated with medication administration and in the students' personal lives. For example, students who are not

scrupulous and precise will omit some checks while administering medications, fail to check a patient's identity band, or neglect to obtain co-signatures before administering high alert medications.

The expert clinical nurse educators also expected that nursing students would have high standards in their personal lives and act with moral integrity. For example, when a student appearing tired on arrival in the clinical practice setting, was still in her uniform from working the previous night and had not retrieved any information about her assigned patients, the experts agreed that his/her behaviours were not tolerable. When a student appeared sedated when preparing medications in the clinical setting, or a student admitted to consuming sedatives the evening prior to clinical practice and stated that she was "still feeling the effects", these behaviours were also not tolerable. Finally, when a student left the clinical setting halfway through a clinical shift without telling the clinical instructor, the student's behaviours most likely demonstrated not only lack of moral obligations for patient safety but lack of respect for the instructor's need to know.

Implications for Nursing Practice, Policy and Research

Most clinical nurse educators value their role in helping nursing students become successful practitioners. This study highlighted how important it is for clinical nurse educators to review their values and expectations with undergraduate nursing students at the very beginning of a clinical rotation: the value of honesty during interactions, the expectation of a certain amount of theoretical knowledge prior to arrival in the clinical setting, the need to maintain a level of control, and the expectation of scrupulousness and precision. For example, while acknowledging that many students feel overwhelmed with the large amount of theory content generally delivered to them over short periods of time, clinical nurse educators can also

point out that it is extremely difficult to help students link theory to practice in a clinical setting if students do not have the theoretical knowledge prior to practice. Clinical nurse educators may also wish to review patient diagnoses and conditions commonly seen on particular nursing units to help students become familiar with the nursing assessments and interventions required for particular patients. After a review of commonly occurring practical skills, students who are still struggling should be offered extra time in a nursing laboratory to practice skills.

Promoting a culture of honesty was also highlighted in the results. Clinical nurse educators may wish to inform students that mistakes are expected, that it is okay to make mistakes, but that mistakes should be discussed openly. A relationship between student and educator that is built on trust is a way of lessening fear of disclosure (Gillespie, 2005). Clinical nurse educators play an integral role in creating a safe space for learning.

It is also important to be clear about guidelines and policies, especially pertaining to the scope of practice for students. Clinical nurse educators may wish to review student guidelines scope of practice for students, and unit specific routines and policies with the nursing students more than once. It is theoretically possible to use the ranked items obtained from the results of this study to create a tool such as a check list, that could be used by clinical nurse educators during evaluations of students who are potentially unsafe.

Finally, clinical educators must role model appropriate behaviours that support scope of practice and uphold nursing standards. According to Killam et al. (2010), “to identify and manage incomplete praxis, there is a need for educators to engage and share responsibility with students through role modeling, professional disclosure, availability, discussion of clinical expectations, and student assessment on the part of the educator” (p. 13).

Suggestions for future research include: another study using the same Delphi techniques

used in this study but seek the perceptions of preceptors on the nursing units about unsafe behaviours, a Q methodology study with students or clinical nurse educators using the ranked items, or the development of a questionnaire for students or nurse educators using the ranked items. The findings could be used to create a standardized tool to measure unsafe behaviours, or featured in video-recorded vignettes. Students could watch the video and create a list of all the unsafe behaviours they have observed. Researchers may also wish to use the findings in another study aimed at illuminating the motivations behind unsafe behaviours.

Limitations

The expert participants in this study were recruited from one Canadian urban college and one Canadian university. All were women, and most were Caucasian. The results, therefore, may not reflect the views of male clinical nurse educators, rural educators, or educators from other cultural backgrounds. In addition, the results reveal the cultural perspectives of clinical nurse educators who taught only undergraduate baccalaureate nursing students. The cultural perspectives of clinical nurse educators who teach in diploma or associate nursing programs, or who teach practicing nurses may differ. Furthermore, clinical nurse educators were the only participants. Baccalaureate nursing students, preceptors, and staff nurses were not invited to contribute their perspectives of unsafe student practices. Therefore, while the results may be transferable to similar settings, they are not generalizable. The purpose of this study was to assist novice nurse educators to make decisions, and in that context, despite the limitations, the consensus of a panel of experts combined with the hierarchy of unsafe behaviours may be a useful guide.

Conclusion

There is a dearth of literature aimed at identifying unsafe student behaviours in clinical

practice, yet it is of great importance and concern to nurse educators. The primary focus of this study was to gain consensus from a panel of nurse educator experts on particular student nurse behaviours that represent unsafe clinical practices. A secondary objective was to provide a hierarchy of the unsafe behaviours, from the perspective of expert clinical nurse educators. The evidence from this study highlights how important it is for clinical nurse educators to review their values and expectations with undergraduate nursing students at the very beginning of a clinical rotation: the value of honesty during interactions, the expectation of a certain amount of theoretical knowledge prior to arrival in the clinical setting, the need to maintain a level of control, and the expectation of scrupulousness and precision. The results of this study may be useful to educate and support novice nurse educators on particular student nurse behaviours that represent unsafe clinical practices and could be used by clinical nurse educators to evaluate potentially unsafe students. Novice nurse educators may be also able to extrapolate from the list of identified unsafe student behaviours to fit their own clinical situations. For example, the descriptor about total parenteral nutrition is equally relevant to chemotherapy or heparin infusions.

Ongoing support and guidance for novice clinical educators is becoming increasingly important as the size of student clinical groups at some nursing schools expand due to fiscal constraints. Lists of potentially unsafe behaviours may be useful during professional development workshops. Ongoing support and guidance may also help to foster the retention of new clinical nurse educators. As safety gatekeepers, novice clinical nurse educators need to be equipped with up-to-date information about potentially unsafe student nurse behaviours. Further research should be conducted to obtain the perspectives of the students themselves, or the perspectives of preceptors who are employed in the facilities where nursing students are present.

References

- Agar, M. (2006). Culture: Can you take it anywhere? *International Journal of Qualitative Methods*, 5(2), 1-11. Retrieved from http://www.ualberta.ca/~iiqm/backissues/5_2/pdf/agar.pdf
- Avery, A., Savelyich, B., Sheikh, A., Cantrill, J., Morris, C.J., Fernando, B., Bainbridge, M., Horsfield, P., & Teasdale, S. (2005). Identifying and establishing consensus on the most important safety features of GP computer systems: e-Delphi study. *Informatics in Primary Care*, 13(1), 3-11. Retrieved from <https://imianews.wordpress.com/2014/05/23/informatics-in-primary-care-journal-now-full-open-access/>
- Barroso, J., & Cameron, C. (2013). Qualitative approaches to research. In G. LoBiondo-Wood & J. Haber (3rd Canadian Eds.), *nursing research in canada: Methods, critical appraisal, and utilization* (pp. 167-194). Elsevier.
- Brown, Y., Neudorf, K., Poitras, C., & Rodger, K. (2007). Unsafe student clinical performance calls for a systematic approach. *Canadian Nurse* 103(3), 29-32. Retrieved from <http://www.canadian-nurse.com>
- Canadian Nurses Association (CNA). (2008). *Code of Ethics for Registered Nurses*. Retrieved from http://www.nurses.ab.ca/content/dam/carna/pdfs/DocumentList/EndorsedPublications/RN_CNA_Ethics_2008.pdf

- Champoux, N., Lafleur, M., Bertrand, B., Gilbert, S., Latour, J., & Kergoat, M.J. (2010). Management of osteoporosis in short-term geriatric units. *Canadian Family Physician*, 56, e142-e149. Retrieved from <http://www.cfp.ca/>
- Chang, A.M., Gardner, G.E., Duffield, C., & Ramis, M.A. (2010). A delphi study to validate an advanced practice nursing tool. *Journal of Advanced Nursing*, 66(10), 2320–2330. Doi: 10.1111/j.1365-2648.2010.05367.x
- Cole, Z.D., Donohoe, H.M., & Stelfox, M.L. (2013). Internet-based Delphi research: Case based discussion. *Environmental Management*, 51(3), 511-523. Doi: 10.1007/s00267-012-0005-5
- College of Registered Nurses of Ontario (CNO). (2009). *Culturally Sensitive Care*, 1-16. Retrieved from http://www.cno.org/globalassets/docs/prac/41040_culturallysens.pdf
- Duffield, C. (1988). The Delphi technique. *Australian Journal of Advanced Nursing*, 6(2), 41-5. Retrieved from <http://www.ajan.com.au/>
- Duffy, K. (2003). Failing students: A qualitative study of factors that influence the decisions regarding assessment of students' competence in practice. G report. Glasgow: School of Nursing, Midwifery and Community Health, Caledonian University. Retrieved from http://www.nmc.uk.org/documents/Archived%20Publications/1Research%20papers/Kathleen_Duffy_Failing_Students2003.pdf
- Duffy, K., & Hardacre, J. (2007). Supporting failing students in practice 2: Management. *Nursing Times* 103(48), 28-29. Retrieved from www.nursingtimes.net

- Ellerton, C., Davis, A., & Brooks, D. (2010). Preliminary development and validation of a paediatric cardiopulmonary physiotherapy discharge tool. *Physiotherapy Canada*, 63(1), 34-44 doi: 10.3138/ptc.2009-30
- Fetterman, D.M. (2010). *Ethnography: Step by step* (3rd Eds.). Thousand Oaks, CA: Sage Publications.
- Fletcher, A.J., & Marchildon, G.P. (2014). Using the Delphi method for qualitative, participatory action research in health leadership. *International Journal of Qualitative Methods*, 13, 1-18. Retrieved from <https://ejournals.library.ualberta.ca/index.php/IJQM>
- Gainsbury, S. (2010, April 27). Nurse mentors still ‘failing to fail’ students. Retrieved from <http://www.nursingtimes.net/nursing-practice/clinical-zones/educators/nurse-mentors-still-failing-to-fail-students/5013926.article>
- Gordon, T., & Pease, A. (2006). RT Delphi: An efficient, “round-less” almost real time Delphi method. *Technological Forecasting & Social Change* 73, 321 – 333. Retrieved from <http://dx.doi.org/10.1016/j.techfore.2005.09.005>
- Graham B, Regehr G, Wright JG. Delphi as a method to establish consensus for diagnostic criteria. *Journal of Clinical Epidemiology*. 2003; 56: 1150-1156.
[http://dx.doi.org/10.1016/S0895-4356\(03\)00211-7](http://dx.doi.org/10.1016/S0895-4356(03)00211-7)
- Hammersley, M., & Atkinson, P. (1995). *Ethnography: Principles in practice* (2nd Eds.). Routledge: London and New York.

- Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing*, 32(4), 1008-1015. Retrieved from [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1365-2648/issues](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-2648/issues)
- Higginbottom, G., Pillay, J., & Boadu, N. (2013). Guidance on performing focused ethnographies with an emphasis on healthcare research. *The Qualitative Report*, 18(17), 1-16. Retrieved from <http://www.nova.edu/ssss/QR/web.html>
- Hole, R. (2014). Qualitative health research. In K. Bassil & D. Zabkiewicz (Eds.), *Health research methods: A canadian perspective* (pp. 165-189). Oxford University Press.
- Hrobsky, P.E., & Kersbergen, A.L. (2002). Preceptors' perceptions of clinical performance failure. *Journal of Nursing Education*, 41(12), 550-553. Retrieved from <http://www.healio.com/nursing/journals/jne>
- Hsu, C.C., & Sandford, B.A. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment, Research & Evaluation*, 12(10), 1-8. Retrieved from <http://pareonline.net/>
- Humber, N., & Dickinson, P. (2010). Rural patients' experiences accessing surgery in British Columbia. *Canadian Journal of Surgery*, 53(6), 373-378. Retrieved from https://www.collectionscanada.gc.ca/eppp-archive/100/201/300/cdn_medical_association/cjs/index.htm
- Iglesias-Parra, M.R., García-Guerrero, A., García-Mayor, S., Kaknani-Uttumchandani, S., Le on-Campos, A., & Morales-Asencio, J.M. (2015). Design of a competency evaluation model for clinical nursing practicum, based on standardized language systems: Psychometric

- validation study. *Journal of Nursing Scholarship*, 47(4), 371–376. Retrieved from [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1547-5069](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1547-5069)
- Keeney, S., Hasson, F., & McKenna, H. (2001). A critical review of the Delphi technique as a research methodology for nursing. *International Journal of Nursing Studies*, 38, 195-200. Retrieved from <http://www.journals.elsevier.com/international-journal-of-nursing-studies/>
- Keeney, S., Hasson, F., & McKenna, H. (2011). *The Delphi Technique*, in *The Delphi Technique in Nursing and Health*, Wiley-Blackwell, Oxford, UK. Doi: 10.1002/9781444392029.ch1
- Keeney, S., Hasson, F. and McKenna, H. (2011) *Debates, Criticisms and Limitations of the Delphi*, in *The Delphi Technique in Nursing and Health Research*, Wiley-Blackwell, Oxford, UK. Doi: 10.1002/9781444392029.ch2
- Killam, L.A., Montgomery, P., Luhanga, F.L., Adamic, P., & Carter, L.M. (2010). Views on unsafe nursing students in clinical learning. *International Journal of Nursing Education Scholarship*, 7(1), 1-17. Doi: 10.2202/1548-923X.2026
- Killam, L., A., Montgomery, P., Raymond, J., M., Mossey, S., Timmermans, K., E., & Binette, J. (2012). Unsafe clinical practices as perceived by final year baccalaureate nursing students: Q methodology. *BMC Nursing*, 11(1), 26-38. Doi:10.1186/1472-6955-11-26
- Killam, L., A., Mossey, S., Montgomery, P., & Timmermans, K., E. (2013). First year nursing students' viewpoints about compromised clinical safety. *Nurse Education Today*, 33(5), 475-480. Doi:10.1016/j.nedt.2012.05.010
- Knoblauch, H. (2005). Focused ethnography. *Forum: Qualitative Social Research*, 6(3), 1-10. Retrieved from <http://www.qualitative-research.net/index.php/fqs>

- Levitt, C.A., Nair, K., Dolovich, L., Price, D., & Hilts, L. (2014). Refinement of indicators and criteria in a quality tool for assessing quality in primary care in Canada: A delphi panel study. *Family Practice*, 31(5), 607-621 doi:10.1093/fampra/cmu021
- Lewallen, L.P; & Kayler DeBrew, J. (2012). Successful and unsuccessful clinical nursing students. *Journal of Nursing Education* 51(7), 389- 395. Doi: 10.3928/01484834-20120427-01
- Luhanga, F., Yonge, O., & Myrick, F. (2008). Strategies for precepting the unsafe student. *Journal for Nurses in Staff Development* 24(5), 214-219. Retrieved from <http://resourcecenter.ovid.com/site/catalog/Journal/402.jsp?top=2&mid=3&bottom=7&subsection=12>
- Luhanga, F., Yonge, O., & Myrick, F. (2008). Hallmarks of unsafe practice: What preceptors know. *Journal for Nurses in Staff Development* 24(6), 257-264. Retrieved from <http://resourcecenter.ovid.com/site/catalog/Journal/402.jsp?top=2&mid=3&bottom=7&subsection=12>
- McKenna, H.P. (1994). The Delphi technique: A worthwhile research approach for nursing? *Journal of Advanced Nursing*, 19, 1221-1225. Retrieved from [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1365-2648/issues](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-2648/issues)
- Montgomery, P., Killam, L., Mossey, S., & Heerschap, C. (2014). Third year nursing students' viewpoints about circumstances which threaten safety in the clinical setting. *Nurse Education Today*, 34(2), 271-276. Doi:10.1016/j.nedt.2013.09.019
- Mossey, S., Montgomery, P., Raymond, J.M., & Killam, L.A. (2012). Typology of undergraduate nursing students' unsafe clinical practices: Q-Methodology. *Journal of Nursing Education*, 51(5), 245- 253. Doi: 10.3928/01484834-20120309-01

- Muliira, J, K., Fronda, D, C., & Raman, S. (2015). An exploratory study of the perspectives of clinical preceptors about difficult student situations during clinical teaching of final year undergraduate nursing students. *Journal of Nursing Education and Practice*, 5(2), 17-25. Doi: 10.5430/jnep.v5n2p17
- Naidoo P, Joubert RWE. Consensus on hypotonia via Delphi process. *Indian Journal of Pediatrics*. 2013; 80(8): 641-650. Pmid: 23681830 <http://dx.doi.org/10.1007/s12098-013-1018-7>
- Paterson, B.L. (1991). *The juggling act: An ethnographic analysis of clinical teaching in nursing education*. (Doctoral dissertation, University of Manitoba). Retrieved from <http://mspace.lib.umanitoba.ca/jspui/handle/1993/18371>
- Powell, C. (2003). The Delphi technique: Myths and realities. *Journal of Advanced Nursing*, 41(4), 376-382. Retrieved from [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1365-2648/issues](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-2648/issues)
- Richards, L. & Morse, J.M. (2013). *README FIRST for a user's guide to qualitative methods* (3rd edition). Thousand Oaks, CA: Sage Publications.
- Roper, J.M., & Shapira, J. (2000). *Ethnography in nursing research*. Thousand Oaks, CA: Sage Publications.
- Rowe, G., & Wright, G. (1999). The Delphi technique as a forecasting tool: Issues and analysis. *International Journal of Forecasting*, 15, 353-375. Retrieved from <http://www.journals.elsevier.com/international-journal-of-forecasting/>

- Scanlan, J., Dean Care, W., & Gessler, S. (2001). Dealing with the unsafe student in clinical practice. *Nurse Educator*, 26(1), 23-27. Retrieved from <http://www.healio.com/journals/jne>
- Skingley, A., Arnott, J., Greaves, J., & Nabb, J. (2007). Supporting practice teachers to identify failing students. *British Journal of Community Nursing* 12(1), 28-32. Retrieved from https://www.internurse.com/cgi-bin/go.pl/library/issues.html?journal_uid=10
- Sousa, J.M., & Alves, E.D. Nursing competencies for palliative care in home care. (2015). *Acta Paulista de Enfermagem*, 28(3), 264-269 <http://dx.doi.org/10.1590/1982-0194201500044>
- Spradley, J.P. (1979). *The ethnographic interview*. Orlando FL: Harcourt Brace Jovanovich.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures of developing grounded theory (2nd ed.)*. Thousand Oaks, CA: Sage
- Sunell, S., Asadoorian, J., Gadbury-Amyot, C.C., & Biggar, H.C. (2015). Competencies for Canadian baccalaureate dental hygiene education: A Delphi study, part 1. *Canadian Journal of Dental Hygiene*, 49(2), 57-73. Retrieved from http://www.cdha.ca/cdha/The_Profession_folder/The_Canadian_Journal_of_Dental_Hygiene_CJDH_folder/CDHA/The_Profession/CJDH/CJDH.aspx?hkey=e1a5f6ac-ce37-4aeb-81c8-0bcaefbc85b
- Tanicala, M., L., Scheffer, B., K., & Roberts, M., S. (2011). DEFINING PASS/FAIL nursing student clinical behaviors phase I: Moving toward a culture of safety. *Nursing Education Perspectives*, 32(3), 155-161. Doi:10.5480/1536-5026-32.3.155
- Turoff, M. 2002, "The Policy Delphi" in *The Delphi Method: Techniques and Applications*, eds. H.A. Linstone & M. Turoff, 80-96. Retrieved from <http://is.njit.edu/pubs/delphibook/>

- Vernon, W. (2009). The Delphi technique: A review. *International Journal of Therapy and Rehabilitation*, 16(2), 69-76. Retrieved from <http://www.magonlinelibrary.com/toc/ijtr/current>
- Whitehead, T. (2005). Basic classical ethnographic research methods. *Ethnographically Informed Community and Cultural Assessment Research Systems (EICCARS) Working Paper Series*. 1-28. Retrieved from <http://www.cusag.umd.edu/documents/workingpapers/classicalethnomethods.pdf>
- WHO (2014). 10 facts on patient safety. Retrieved from http://www.who.int/features/factfiles/patient_safety/patient_safety_facts/en/index6.html
- Williams, C.K., & Carnahan, H. (2013). Design and evaluation of an interactive online program to enhance retention of infection control skills. *The Canadian Journal of Infection Control*, 28(2), 97-102. Retrieved from <http://ipac-canada.org/67kanagan-journal-of-infection-control-3.php>

Appendices

APPENDIX A: DATA EXTRACTION TABLE

Data Extraction Table.

1.	Authors, Year of Publication	Duffy, 2003
	Purpose	To uncover mentors' and lecturers' experiences regarding why some student nurses are being allowed to pass clinical assessments without having demonstrated sufficient competence
	Research Design and Level of Evidence	Grounded theory – Began with unstructured interviews and moved to Semi-structured interviews Constant comparative analysis
	Sample	N = 40. Mentors n = 26, Lecturers n = 14. Recruited from the Nursing Departments of three Scottish institutions offering the Diploma of Education in Nursing
	Instruments	Not applicable
	Findings	<p>Main problems identified: lack of practical skills, poor communication, and lack of interpersonal skills, lack of interest, and lack of professional boundaries. Students are passing assessments when there is in fact some doubt about their clinical competence.</p> <p>Highlighted the dilemmas in relation to the validity and reliability of current clinical assessment tools which may contribute to the issue of 'failure to fail'. Mentors who had 'failed to fail' students identified some of the reasons why some students are passing clinical assessments without having demonstrated sufficient competence. Identified as particularly problematic was failing students on the grounds of an attitude problem. Several recommendations for mentorship preparation, nurse education programmes and research emerged from the findings.</p>
	Limitations	<p>Lack of collecting data from nursing students and administrators in schools of nursing.</p> <p>Data analysis results were not confirmed with participants.</p> <p>Sample had limited diversity regarding ethnicity or gender; all participants were white women.</p>
2.	Authors, Year of Publication	Hrobsky & Kersbergen (2002)

	Purpose	To explore preceptors perceptions regarding unsatisfactory clinical performance by students. Secondary purpose was to evaluate how liaison faculty can improve the process of supporting preceptors when a student's clinical performance is unsatisfactory.
	Research Design and Level of Evidence	Qualitative descriptive Semi-structured interviews
	Sample	Purposive sample of 4 preceptors at one college.
	Instruments	Not applicable
	Findings	Data analysis resulted in three themes: Hallmarks of poor clinical performance, preceptor's feelings, and the liaison faculty role. Red flags of poor clinical performance occurred early: students not asking questions, having an unenthusiastic attitude toward nursing, and demonstrating unsatisfactory skill performance. Preceptors identified three liaison faculty roles that were effective when handling an unsuccessful student: listening, being supportive, and follow up after the experience.
	Limitations	Small purposive sample from one college High degree of bias
3.	Authors, Year of Publication	Killam et al., 2010
	Purpose	To describe the viewpoints of undergraduate student nurses and their clinical educators about unsafe clinical student practices.
	Research Design and Level of Evidence	Q Methodology Mixed Method
	Sample	Convenience Sample N=57 students N=14 clinical educators from three sites of the program
	Instruments	Not applicable
	Findings	An unsafe student was characterized by his/her compromised professional accountability, incomplete praxis, and clinical disengagement. A shared attribute among these three features was violated professional integrity. While students affective,

		cognitive, and praxis competencies were priority elements in the conceptualization of unsafe student practice, this study also identified the salient role of were priority elements in the conceptualization of unsafe student practice, this study also identified the salient role of educators as active participants in preparation of safe practitioners.
	Limitations	The primary purpose of Q methodology is to identify a typology, not to test the typology's proportional distribution within the larger population. Therefore the findings are not generalizable.
4.	Authors, Year of Publication	Killam et al., 2012
	Purpose	To describe viewpoints of fourth year nursing students about compromised safety in the clinical learning environment.
	Research Design and Level of Evidence	Q-methodology Mixed Method
	Sample	Purposive Sampling Across two program sites N=59 fourth year students sorted 43 theoretical statement cards descriptive of unsafe clinical practice
	Instruments	Not applicable
	Findings	<p>A total of six discrete viewpoints and two consensus perspectives were identified. The discrete viewpoints at one site were endorsement of uncritical knowledge transfer, non-student centered program and overt patterns of unsatisfactory clinical performance. In addition, a consensus perspective, labelled contravening practices was identified as responsible for compromised clinical safety at this site.</p> <p>At the other site, the discrete viewpoints were premature and inappropriate clinical progression, non-patient centered practice and negating purposeful interactions for experiential learning. There was consensus that eroding conventions compromised clinical safety from the perspective of the students at this second site.</p> <p>Senior nursing students perceive that deficits in knowledge, patient-centered practice, professional morality and authenticity threaten safety in the clinical learning environment.</p>

	Limitations	The primary purpose of Q methodology is to identify a typology, not to test the typology's proportional distribution within the larger population. Therefore the findings are not generalizable.
5.	Authors, Year of Publication	Killam et al., 2013
	Purpose	Identify first year student's viewpoints about unsafe clinical learning situations. This data set is part of a larger study aimed at identifying priorities for safe clinical practice described by nursing students across four years of a BSN program.
	Research Design and Level of Evidence	Q- Methodology Mixed Method
	Sample	Convenience sample from one scheduled first year class. N= 94 first year BSN students The number of students who submitted and consented to the use of their completed Q-sorts for further analysis was N= 68 first year nursing students
	Instruments	Not applicable
	Findings	Four discrete viewpoints from first year nursing students of unsafe clinical situations included: 1) an overwhelming sense of inner discomfort; 2) practicing contrary to conventions; 3) lacking in professional integrity and; 4) disharmonizing relations. A consensus viewpoint described exonerating the clinical educator as not being solely responsible for clinical safety.
	Limitations	The primary purpose of Q methodology is to identify a typology, not to test the typology's proportional distribution within the larger population. Therefore the findings are not generalizable.
6.	Authors, Year of Publication	Lewallen, & Kayler DeBrew, 2012
	Purpose	To describe the characteristic of successful and unsuccessful clinical performance in prelicensure nursing students
	Research Design and Level of Evidence	Qualitative Descriptive design Telephone Interviews
	Sample	N=24 Nurse Educators
	Instruments	Not Applicable
	Findings	Successful student: prepared for clinical, critical thinker, able to communicate, positive attitude, & adapt to clinical setting.

		Unsuccessful student: unable to function in the clinical area, used unsafe practices and violated legal-ethical principles, not prepared for clinical, & poor communication
	Limitations	Small sample size, generalization cannot be made Largely Caucasian, may not reflect views from of educators from other cultural backgrounds
7.	Authors, Year of Publication	Luhanga et al., 2008
	Purpose	To explore how nursing preceptors manage or deal with students whose level of performance is unsafe.
	Research Design and Level of Evidence	Qualitative Grounded theory Semi-structured interviews and document review.
	Sample	Theoretical sampling of Nursing preceptors N=22 in selected acute care practice settings.
	Instruments	Not Applicable
	Findings	<p>Hallmarks of unsafe practice were categorized into four subcategories: 1) inability to demonstrate knowledge and skills; 2) attitude problems; 3) unprofessional behavior; and 4) poor communication skills.</p> <p>Inability to demonstrate basic knowledge: lack of knowledge and poor skill performance; sloppiness or lack of organizational skills; student's inability to ask questions; ineptness to follow instruction, resulting in frequent repetitive mistakes; and failure to practice basic safety measures (such as aseptic technique).</p> <p>Attitudinal problems: overconfidence; unmotivated to learn or work; defensiveness or unreceptive attitude toward feedback.</p> <p>Unprofessional Behavior: poor work ethic- such as negligence, laziness, gossiping, eating, or using cell phones while on duty; dishonesty; lack of confidence or extreme nervousness; and intentional unsafe behavior.</p> <p>Poor Communication or Interpersonal Skills: inappropriate interaction with the preceptor (being too argumentative and disrespectful); inappropriate interaction with patients; and inappropriate non-verbal communication such as eye rolling, sighing in front of patients, chewing gum, or yawning.</p>

	Limitations	Preceptors were from one BSN program High degree of bias
8.	Authors, Year of Publication	Luhanga et al., 2008
	Purpose	To explore how nursing preceptors manage or deal with students whose level of performance is borderline or unsafe
	Research Design and Level of Evidence	Grounded Theory Semi-structured interviews
	Sample	N=22 nurse preceptors
	Instruments	Not Applicable
	Findings	Hallmarks of unsafe practice: 1) inability to demonstrate knowledge & skills; 2) attitude problems; 3) unprofessional behavior; 4) poor communication skills
	Limitations	Preceptors were from one clinical practicum
9.	Authors, Year of Publication	Montgomery et al., 2014
	Purpose	To describe third year nursing students viewpoints of the circumstances which threaten safety in the clinical setting.
	Research Design and Level of Evidence	Q methodology Mixed Method Descriptive
	Sample	Convenience sample N=34 third year BSN students A single BSN program in Ontario, Canada
	Instruments	Not applicable
	Findings	Three distinct viewpoints and one consensus perspective constituted students description of threatened safety: 1) lack of readiness- demonstration of knowledge deficits and inappropriate decision-making. It was perceived that without adequate preparation for clinical practice, professional growth and the development of safety competencies were compromised. 2) Misdirected practices- Inappropriate guidance from educators impeded students efforts to achieve program expectations and appropriately develop their scope of practice. 3) Negation of professional responsibilities- Perceived as failure to adhere to professional expectations. Educators were perceived to violate professional expectations when students were evaluated as

		successful despite contradictory evidence. Consensus that it is most unsafe when novices fail to consolidate an integrated cognitive, behavioral, and ethical identity. This was labeled non-integration.
	Limitations	The primary purpose of Q methodology is to identify a typology, not to test the typology's proportional distribution within the larger population.
10.	Authors, Year of Publication	Mossey et al., 2012
	Purpose	To describe undergraduate nursing students perceptions of unsafe clinical practices
	Research Design and Level of Evidence	Q-methodology
	Sample	Fourth Year baccalaureate students N=59
	Instruments	Not Applicable
	Findings	Four discrete groups of students at risk for unsafe clinical practices: vulnerable, unprepared, unknowing, & distanced students.
	Limitations	Single baccalaureate nursing program- not generalizable
11.	Authors, Year of Publication	Muliira et al., 2015
	Purpose	To explore the perceptions of clinical preceptors (CPs) about difficult student situations during clinical teaching and the strategies they use to deal with such situations in the clinical setting.
	Research Design and Level of Evidence	Descriptive qualitative study Two group modified focus groups
	Sample	Clinical preceptors of final year BSN students during their last clinical course in the program Total of N= 21 CPs consented to participate. N=5 out of the N=21 were selected to be part of the initial focus group discussions During the second phase, the summary of findings agreed upon in the initial focus group discussions was shared with and examined by the second group of preceptors (N=21).

	Instruments	Not applicable
	Findings	<p>Clinical preceptor's perceptions about difficult student situations in the clinical setting fall under four major categories: 1) slothfulness; 2) obstinateness; 3) attentiveness and; 4) selfishness. Difficult student situations or incivility undermines the culture of safety.</p> <p>Six main strategies that CPs were using to deal with difficult student situations: giving feedback and counselling, enforcing rules and regulations, giving simple tasks, acknowledging good behavior and improvements, rewarding or penalizing during evaluation, reporting to supervisors, and doing nothing.</p>
	Limitations	<p>The authors described why the number of participants was limited to 5 but did not explain how they chose those particular participants.</p> <p>CPs was all from the same hospital and was all staff nurses. Therefore the findings may not be representative of the whole spectrum of difficult student situations or incivility and the strategies employed to address them.</p>
12.	Authors, Year of Publication	Tanicala et al., 2011
	Purpose	To identify faculty perspectives regarding nursing student behaviors that result in failure in a clinical course.
	Research Design and Level of Evidence	<p>Phase 1 of a multiphase research project</p> <p>Inductive Qualitative approach</p> <p>Focus groups</p>
	Sample	<p>Purposive sample</p> <p>N=11 Nurse educators from colleges and universities located in metropolitan and suburban areas.</p>
	Instruments	Not applicable
	Findings	<p>One major theme (context and patterns) and five subthemes (safety, thinking, ethics, communication, and standards) with clarifiers emerged from this study.</p> <p>Context and Patterns: the need for nurse educators to recognize that time, place, and type of student behavior impact how student behaviors are evaluated regarding passing or failing a clinical course. The pattern portion focused on consistency/repetition of behaviors and/or evidence of improvements.</p>

		<p>Safety: clarifiers included actual errors, type of errors, and near misses. Standards (Course and Profession) were clarified in four areas: math competency, agency policies, course policies, and objectives. Communication: clarified with issues such as quality of written communication, inappropriate interactions with patients, and uncaring behaviors towards patients. The thinking subtheme was clarified with respect to inability to look at the bigger picture, blend theory and practice, and think critically in the decision-making process. The subtheme of ethics: clarifiers of lying/falsifying documentation or attending the clinical day under the influence of alcohol or drugs, or not seeking assistance when needed.</p>
	Limitations	<p>Lack of collecting data from nursing students and administrators in schools of nursing.</p> <p>Sample of participants had limited diversity regarding ethnicity or gender; all participants were white women.</p>

APPENDIX B: ADMINISTRATIVE SUPPORT LETTER FOR SCHOOL ONE

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THE UNIVERSITY OF BRITISH COLUMBIA

December 15, 2016
University of British Columbia Okanagan Campus
Research Proposal- Monique Karlstrom

Dear Research Ethics Board Members,

This letter is to confirm my support for the research project titled “Unsafe Student Nurse Behaviours: The Perspectives of Expert Clinical Nurse Educators”. As the Dean of Science, Technology and Health at Okanagan College, I am committed to supporting nursing research that is aimed at assisting novice nurse educators who teach undergraduate nursing students in clinical practice settings. Clinical evaluation of undergraduate nursing students is one of the most challenging aspects of baccalaureate nursing education, especially for novice nurse educators. This study is likely to produce results that are highly relevant to our nursing program.

Monique has met with me, and she has explained the study. I have read the proposal and I support the method of data collection which consists of a series of online questionnaires administered to a panel of expert clinical nurse educators, some of whom are employed by Okanagan College.

I am willing to send the email letter of invitation and information letter to individuals who teach in the baccalaureate program and meet the inclusion criteria, after the study receives approval from the Research Ethics Board at Okanagan College and the Behavioural Research Ethics Board at the University of British Columbia. Experts who agree to join the panel will be asked to contact Monique.

Yours truly,

Yvonne Moritz, RN, BSN, MA(Adult Ed), MSN(ANP)
Dean Science, Technology and Health
Okanagan College
(250) 762-5445 ext. 4334
ymoritz@okanagan.bc.ca

APPENDIX C: ADMINISTRATIVE SUPPORT LETTER FOR SCHOOL TWO

a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

December 15, 2016
University of British Columbia Okanagan Campus
Research Proposal- Monique Karlstrom

Dear Research Ethics Board Members,

This letter is to confirm my support for the research project titled “Unsafe Student Nurse Behaviours: The Perspectives of Expert Clinical Nurse Educators”. As the Director of the School of Nursing at the University of British Columbia – Okanagan Campus, I am committed to supporting nursing research that is aimed at assisting novice nurse educators who teach undergraduate nursing students in clinical practice settings. Clinical evaluation of undergraduate nursing students is one of the most challenging aspects of baccalaureate nursing education, especially for novice nurse educators. This study is likely to produce results that are highly relevant to our nursing program.

Monique has met with me, and she has explained the study. I have read the proposal and I support the method of data collection which consists of a series of online questionnaires administered to a panel of expert clinical nurse educators, some of whom are employed by the University of British Columbia – Okanagan Campus.

I am willing to send the email letter of invitation and information letter to individuals who teach in the baccalaureate program and meet the inclusion criteria, after the study receives approval from the Behavioural Research Ethics Board at the University of British Columbia, and the Research Ethics Board at Okanagan College. Experts who agree to join the panel will be asked to contact Monique.

Yours truly,

Marie Tarrant, PhD, RN.
Professor and Director, School of Nursing, Faculty of Health and Social Development
University of British Columbia, Okanagan Campus

APPENDIX D: INVITATION BY EMAIL FOR SCHOOL ONE

a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

Subject: Unsafe Student Nurse Behaviours: The Perspectives of Expert Clinical Nurse Educators.

Dear Colleagues,

I am writing this email on behalf of Monique Karlstrom who is a Master of Science in Nursing student at the University of British Columbia, Okanagan Campus. Monique is completing a thesis. Her study is designed to explore the perceptions of a panel of expert clinical nurse educators about student nurse behaviours that constitute unsafe clinical practices. You have been asked to take part in this study because you have been identified as an expert clinical nurse educator. Please see the attached information letter.

If you would like to know more about the study or volunteer as a participant, please contact Monique Karlstrom. mkarlstrom@okanagan.bc.ca

Regards,

Yvonne Moritz, RN, BSN, MA(Adult Ed), MSN(ANP)
Dean Science, Technology and Health
Okanagan College
(250) 762-5445 ext. 4334
ymoritz@okanagan.bc.ca

Monique Karlstrom BSN, RN. Professor, Okanagan College, Bachelor of Science in Nursing.
1000 KLO Road. Kelowna, British Columbia Canada V1Y 4X8 Email:
mkarlstrom@okanagan.bc.ca T: 250.718-2614.

APPENDIX E: INVITATION BY EMAIL FOR SCHOOL TWO

a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

Subject: Unsafe Student Nurse Behaviours: The Perspectives of Expert Clinical Nurse Educators.

Dear Colleagues,

I am writing this email on behalf of Monique Karlstrom who is a Master of Science in Nursing student at the University of British Columbia, Okanagan Campus. Monique is completing a thesis. Her study is designed to explore the perceptions of a panel of expert clinical nurse educators about student nurse behaviours that constitute unsafe clinical practices. You have been asked to take part in this study because you have been identified as an expert clinical nurse educator. Please see the attached information letter.

If you would like to know more about the study or volunteer as a participant, please contact Monique Karlstrom. mkarlstrom@okanagan.bc.ca

Regards,

Marie Tarrant, PhD, RN.

Professor and Director, School of Nursing, Faculty of Health and Social Development
University of British Columbia, Okanagan Campus

Monique Karlstrom BSN, RN. Professor, Okanagan College, Bachelor of Science in Nursing.
1000 KLO Road. Kelowna, British Columbia Canada V1Y 4X8 Email:
mkarlstrom@okanagan.bc.ca T: 250.718-2614.

APPENDIX F: COMPARISON OF STUDIES USED TO ESTIMATE SAMPLE SIZE

Comparison of Studies used to Estimate Sample Size

Authors (APA citation of Author(s) and year.	Purpose	Method	Sample Size
Champoux, Lafleur, Bertrand, Gilbert, Latour, & Kergoat (2010).	To identify the recommendations in Canadian and American clinical practice guidelines for the management of osteoporosis that are applicable to vulnerable, older patients in short-term geriatric units (STGU).	Modified Delphi approach according to the RAND/UCLA method.	The panel consisted of n=6 physicians, n=5 pharmacists & n=3 nutritionists Total: n=14
Chang, Gardner, Duffield, & Ramis (2010).	To validate an instrument for measuring advanced practice nursing role delineation in an international contemporary health service context.	An expert panel was established to review the activities in the Strong Model of Advanced Practice Role Delineation tool. Using the Delphi technique, data were collected via an on-line survey through a series of iterative rounds in 2008. Feedback and statistical summaries of responses were distributed to the panel until the 75% consensus cut-off was obtained.	Purposive stratified n=16 nurses from different nursing operational levels, including clinicians, educators, managers, APNs and senior directors, and represented rural, remote and metropolitan settings.
Ellerton, Davis, & Brooks (2010).	To develop a paediatric cardiopulmonary physiotherapy (CPT) discharge tool.	Modified Delphi Technique	n=20 academic leaders (individuals with an academic appointment in a PT programme who are responsible for providing the Cardiorespiratory physical therapy (CPT) curriculum or an individual doing research in the area of CPT.
Humber & Dickinson (2010).	To describe rural patients' experiences accessing local non-specialist, family physician-surgeon care and regional specialist surgical care when no local surgical care was available.	A qualitative pilot study of self-selected patients. Interviews were analyzed using a modified Delphi technique and Nvivo qualitative software.	N=15 patients

Authors (APA citation of Author(s) and year.	Purpose	Method	Sample Size	Sample Size
Levitt, Nair, Dolovich, Price, & Hilts (2014).	The 'Quality Tool', developed in Ontario, Canada, provides a framework for assessing practices and consists of indicators and criteria. The purpose of this study was to validate the indicators and simplify the Quality Tool.	This study involved a systematic comparison of indicators in the Quality Tool with those in other local and international tools to determine common indicators to include as valid in the Quality Tool. A Delphi process was used to help reach consensus for inclusion of any indicators that were not included in the comparison exercise.	N=23 Key informants with known expertise and experience in quality assessment in primary care.	
Sousa, & Alves (2015)	To identify the competencies of nurses for palliative care in home care.	An exploratory study using the Delphi method to identify the consensus of nurses working in home care regarding 43 competencies listed in a questionnaire, with the inclusion of a five-point Likert scale.	N=20 nurses linked to a Multidisciplinary Team of Home Care	
Sunell, Asadoorian, Gadbury-Amyot, & Biggar (2015).	To identify the competencies that Canadian dental hygienists need at the fourth-year baccalaureate level to promote and support the oral health of the public.	An online, 3-round Delphi study was conducted from fall 2012 until spring 2014. Respondents were asked to rate the importance, relevance, and realistic characteristics of domain competencies and their sub-competencies. Open-ended questions were included to augment the ratings. A 70% consensus level was selected for inclusion of the competencies.	Purposeful sample of n= 24 Canadian dental hygienists	
Williams, & Carnahan (2013).	The primary purpose of this study was to develop and evaluate an interactive simulation that is beneficial for practicing personal protective equipment (PPE) skills in order to enhance the	Based on findings from a Delphi survey and existing guidelines for PPE use.	N=21 individuals from the University of Toronto (7 males, 14 females in the evaluative study.	

Authors (APA citation of Author(s) and year.	Purpose	Method	Sample Size	Sample Size
	retention of skills over a period without practice.			

APPENDIX G: INFORMATION LETTER FOR EXPERT PARTICIPANT

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THE UNIVERSITY OF BRITISH COLUMBIA

MSN student: Monique Karlstrom BSN, RN. Professor, Okanagan College, Bachelor of Science in Nursing. 1000 KLO Road. Kelowna, British Columbia Canada V1Y 4X8 Email: mkarlstrom@okanagan.bc.ca T: 250.718-2614.

Supervisor: Elizabeth Andersen PhD, RN. Assistant Professor, Faculty of Health and Social Development, School of Nursing, University of British Columbia, Okanagan Campus. Arts Building – Art 142, 1147 Research Road. Kelowna, British Columbia Canada V1V 1V7 phone 250 807 9963

Committee members: Lise Olsen, PhD, RN and Lisa Moralejo, MSN RN, Faculty of Health and Social Development, School of Nursing, University of British Columbia, Okanagan Campus.

Information Letter for Expert Participant

Dear Colleague,

I am a graduate student in the Master of Science in Nursing program at the University of British Columbia, Okanagan Campus. As part of my Master's degree, I will complete a thesis. My thesis research is a focused ethnography designed to explore the perceptions of a panel of expert clinical nurse educators about student nurse behaviours that constitute unsafe clinical practices. You have been asked to take part in this study because you have been identified as an expert clinical nurse educator.

Who is eligible to participate in this study?

To be eligible to participate:

- You must be a clinical nurse educator who is currently or previously employed within the School of Nursing at Okanagan College or the University of British Columbia (Okanagan campus)
- You must have five or more years of teaching experience providing direct supervision to undergraduate nursing students in a clinical setting

What will I have to do?

This study consists of a series of 4 online surveys. If you contact me because you believe that you may wish to participate in the study, I will send you an electronic link to the first survey which will also contain the consent form. You must click “agree” in order to proceed with the survey. The first survey will also contain a demographic questionnaire. By clicking “agree”,

you acknowledge that you have read this information letter and agree to participate, with the knowledge that you are free to withdraw your participation at any time without penalty.

Taking part in each of the 4 surveys is entirely voluntary and you may choose not to answer one or more questions, and you may stop a survey at any time. To stop a survey, simply close the survey window and exit from the survey website. If you do not click on the “submit” button at the end of a survey, your answers and participation will not be recorded.

The first survey will take approximately 60 minutes to complete. The second will take approximately 30 minutes to complete. The third will take approximately 10 minutes to complete, and the final survey will take approximately 15 minutes to complete. Although your participation is voluntary, if you choose to participate, it will be important to commit to participating in the surveys every time a survey is offered.

What are the risks of participation on the expert panel?

My supervisor and I do not believe that your participation in the expert panel will pose a risk for you that is greater than the risks encountered by nurse educators in their everyday work.

There is, however, a slight risk that the other participants may recognize and attribute specific survey responses to a specific individual. After you complete the first survey, if I believe that a certain word or phrase within your responses might expose your identity, I will replace that word or phrase with a sign ##### before sending out the second survey.

Second, there is a small chance that someone on the expert panel or a colleague will find out that you are a participant in the study. They will not know how you responded to the survey items. Only I, my supervisor (Dr. Elizabeth Andersen), and my committee members (Dr. Lise Olsen and Lisa Moralejo) will have access to the survey responses. The Directors of the Schools of Nursing and other participants will not be able to see your individual responses. Participants will not be provided with the names of those who have also agreed to be on the panel. In addition, the electronic link will be a general link, not a link that is tied to your identity. Therefore, although I will know that you have agreed to receive the general link to the first survey, I will not be able to match any individual participant responses to their identities.

What are the benefits of participation on the expert panel?

You may enjoy participating on the panel. Your responses to the questionnaires may focus your attention on various student behaviours that influence safety in clinical practice settings. We anticipate that the surveys will be time consuming for you, therefore a \$20.00 honorarium in the form of a gift card will be provided to you at the end of the process, as acknowledgement for your time and effort.

What will happen to the survey responses?

Your demographic profile, survey responses, and aggregated survey results will be stored on the

UBC Fluid Survey site (University of British Columbia Okanagan IT services, social media and collaboration). UBC Fluid Surveys is a Canadian-hosted survey solution that complies with the BC Freedom of Information and Protection of Privacy Act. All data is stored and backed up in Canada.

In accordance with Policy 85 (Scholarly Integrity), all original data and associated research material will be stored securely for at least five years following publication. Please note that because this is a thesis it will be made publically available (for example on cIRcle, which is the University of British Columbia's digital repository for research and teaching materials created by the UBC community).

A summary of the results may be reported in an article published in a professional journal.

If you have any questions about this study, please contact Monique Karlstrom, BSN, RN, Okanagan College Professor @ 250-718-2614 or email: mkarlstrom@okanagan.bc.ca or Elizabeth Andersen PhD, RN @ 250 807 9963 or email elizabeth.andersen@ubc.ca. Alternatively, if you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, please contact the Research Participant Complaint Line in the UBC Office of Research Services at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250-807-8832. It is also possible to contact the Research Participant Complaint Line by email (RSIL@ors.ubc.ca).

If you are an Okanagan College employee you may prefer to contact the Chair of the Okanagan College Research Ethics Board at 250-762-5445 (local 4736).

Thank you!

I realize that your time is valuable, and appreciate your help.

Monique Karlstrom BSN, RN
College Professor
Okanagan College
1000 KLO Rd
Kelowna, BC V1Y4X8
Ph 250-718-2614

APPENDIX H: CONSENT FORM FOR EXPERT PARTICIPANT

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In this study, there is no paper consent form for you to complete.

You must click “agree” in order to proceed with the survey. The first survey will also contain some demographic questions.

By clicking “agree”, you acknowledge that you have read the information letter sent to you and agree to participate, with the knowledge that you are free to withdraw your participation at any time without penalty.

If you decide to withdraw from this study after you have clicked the “submit” button I will not be able to withdraw your responses because I will not be able to connect your name to your responses.

Participating as an expert is entirely your choice. All information collected will remain confidential.

- I agree to take part as an expert participant.
- I do not agree to take part as an expert participant.

Appendix I: ONLINE DEMOGRAPHIC QUESTIONNAIRE FOR EXPERTS

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Online Demographic Questionnaire for Experts

1. How long have you worked as a registered nurse?
 - ☐ 1-5 years
 - ☐ 6-10 years
 - ☐ 11-15 years
 - ☐ 16-20 years
 - ☐ 21-25 years
 - ☐ 26-30 years
 - ☐ more than 30 years
2. What is your area of clinical expertise? (Check all that apply)
 - ☐ General Medicine
 - ☐ Community Health
 - ☐ General Surgery
 - ☐ Renal
 - ☐ Oncology
 - ☐ Palliative Care
 - ☐ Emergency
 - ☐ Critical Care/Coronary Care
 - ☐ Orthopedics
 - ☐ Pediatrics/Neonatal
 - ☐ Women's health
 - ☐ Case Room/Postpartum
 - ☐ Psychiatry
 - ☐ Residential Care

- ☐ OR/PAR
 - ☐ Other (please specify)
3. Completed level of education
- ☐ Diploma
 - ☐ Bachelor's Degree
 - ☐ Master's Degree
 - ☐ PhD
4. What experience do you have teaching undergraduate nursing students? (Check all that apply)
- ☐ Preceptor
 - ☐ Clinical instructor
 - ☐ Classroom instructor (lecturer)
 - ☐ Laboratory instructor
 - ☐ Other (please specify)
5. How long have you been teaching undergraduate nursing students?
- ☐ 1-5 years
 - ☐ 6-10 years
 - ☐ 11-15 years
 - ☐ 16-20 years
 - ☐ More than 20 years
6. What subjects do you currently teach in undergraduate nursing? (Check all that apply)
- ☐ Pathophysiology
 - ☐ Community Health
 - ☐ Relational Practice
 - ☐ Psychiatry
 - ☐ General medicine
 - ☐ General surgery
 - ☐ Oncology
 - ☐ Palliative Care

- ☐ Gerontology
 - ☐ Pediatrics/Neonatal
 - ☐ Women's health
 - ☐ Residential Care
 - ☐ Pharmacology
 - ☐ Microbiology
 - ☐ Research
 - ☐ Other (please specify)
7. What undergraduate subjects have you taught in previous years? (Check all that apply)
- ☐ Pathophysiology
 - ☐ Relational Practice
 - ☐ Psychiatry
 - ☐ General medicine
 - ☐ General surgery
 - ☐ Oncology
 - ☐ Palliative Care
 - ☐ Gerontology
 - ☐ Pediatrics/Neonatal
 - ☐ Women's health
 - ☐ Residential Care
 - ☐ Pharmacology
 - ☐ Microbiology
 - ☐ Research
 - ☐ Other (please specify)

APPENDIX J: REMINDER EMAIL

a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

Subject: Unsafe Student Nurse Behaviours: The Perspectives of Expert Clinical Nurse Educators.

Dear Colleagues,

This is a reminder email that you have only one week left to complete the questionnaire.

Thank you for your time and commitment to this process.

Kind Regards,

Monique Karlstrom BSN, RN

College Professor

Okanagan College

1000 KLO Rd

Kelowna, BC V1Y4X8

Ph 250-718-2614

APPENDIX K: LIST OF 137 BEHAVIOURS IDENTIFIED FROM ROUND ONE

List of 137 behaviours identified from round one

#	Behaviours
1	A student has not been taught how to remove an intravenous (IV). In the clinical setting, a staff nurse asks the student to remove an IV and the student does so, without seeking guidance from the clinical instructor.
2	Just before removing an indwelling urinary catheter, a student tells the patient that the catheter is 3 feet long.
3	A student removes an arterial line and is unaware that an arterial line is not the same as an intravenous catheter.
4	A student is employed as a care aide and transfers a patient before being taught the skill in the undergraduate program.
5	A student does not ask any questions in the clinical setting but at the same time, exhibits a cavalier attitude.
6	A student exhibits a cavalier attitude about a skill learned in lab, but is unable to demonstrate the same skill in the clinical setting.
7	A student is showering a hemiplegic patient, and leaves the patient alone in the shower in order to complete another task.
8	A student fabricates a blood glucose reading for an insulin dependent patient.
9	Half way through a clinical shift, the student leaves the clinical facility and goes home without informing the instructor.
10	A student appears sedated when preparing medications in the clinical setting.
11	A student appears inebriated in the lab when doing clinical skills testing.
12	A student has not been taught how to perform a dermatome assessment. In the clinical setting, the student performs a dermatome assessment on a patient, and when questioned, the student states she had watched the nurse and "it wasn't hard to figure out".
13	A student rushes through medication administration and omits some of the medication checks.
14	A student hangs out at the nurse's station talking with staff instead of engaging with the patient's.
15	A student declines to perform a skill in the clinical setting when asked to perform it. When questioned, the student states he does not need any further practice.
16	A student enthusiastically offers to teach a skill to a peer. The same student, however, has not received instruction on that particular skill.
17	At the patient's bedside, a student contaminates the sterile field multiple times. The instructor has to take over and finish the procedure.
18	A student has not completed all aspects of a head to toe assessment, but to demonstrate capability, the student reports fictitious data.

#	Behaviours
19	A student assesses a patient's blood pressure and reports it as 120/80. The instructor is suspicious so assesses the same patient's blood pressure and the result is 190/110.
20	A student complains about repetitious classroom content and does not complete assignments. The same student is unable to apply the theory in the clinical setting.
21	A student sits at the nursing station and complains that there is nothing to do. The call bells are ringing and the student's assigned patient has not had personal hygiene performed.
22	A student arrives at the clinical setting one minute prior to the start time or late with excuses.
23	A student does not lift the patient's gown to listen to heart and lung sounds.
24	A student hides from his or her instructor or staff.
25	A student is texting in the nursing station because she has "done everything" when in actuality patient care was not complete.
26	A student is offered an opportunity to practice urinary catheter insertion and student states "been there-done that".
27	A student is assigned to look up information in preparation for clinical practice. It is obvious to the instructor that the student hasn't looked up the information. When questioned, the student states, she is planning on "winging it".
28	A student states he has given report of his patient assessment and care to the primary nurse. The primary nurse states that report was not received. The student responds that the primary nurse is not telling the truth.
29	A student is unable to perform a skill in the clinical setting. The instructor asks, "Have you practiced this skill in the lab?" Student replies "No".
30	A student cries and shakes and is unable to initiate a given task or communicate with patients.
31	A student avoids eye contact and fidgets when interacting with others.
32	A student exhibits self loathing behaviour when unable to perform nursing care that has been previously taught.
33	A student reads and rereads the Medication Assessment Record without finding what he is looking for.
34	A patient has no bowel sounds, distended abdomen, and explosive vomiting. The student is unable to explain why this patient would require a nasogastric tube.
35	A patient states to the student, "I've lost lots of weight since my hospitalization". The student does not perform a nutritional assessment.
36	A student has missed a large number of hours of clinical practice due to "illness".
37	A student is performing a procedure and describes aloud every step of the procedure in front of the patient.
38	A student is drawing up insulin but is unable to remove air bubbles, so reinserts the needle multiple times dulling the needle.

#	Behaviours
39	A student who has been assigned to a diabetic patient is unable to get enough blood from the patient's finger for the glucometer reading. Instead of seeking help, the student continues to poke repeatedly on the patient's finger.
40	A student is fifteen minutes late administering medication and begins to cry in front of the patient. When asked by the patient "What is wrong?" the student begins to laugh inappropriately.
41	A male student on a maternity unit comments to the new mother who is breastfeeding that he likes to put his baby onto his breast so he knows what it feels like to have the baby suckle and to have sore nipples.
42	A student calls a patient who is in his sixties "dude".
43	A patient with dementia asks a student "Where am I?" The student says to the patient, "I just told you that you were in the hospital remember?"
44	A student is providing care to an older Aboriginal patient. The student repeatedly asks the patient to describe details about her time in residential school.
45	A student's negative demeanor impacts the mood of the entire clinical group.
46	A student repeatedly asks a patient in pain what his pain level is. The patient asks "Why do you keep asking me that?" The student replies, "Because I need to know - that's why".
47	A student who is having a meal in the hospital cafeteria is overheard speaking negatively about instructors, patients and staff.
48	A student flushes a peripherally inserted central catheter (PICC) line without supervision. When questioned, the student states "Everyone was busy".
49	A student texts her boyfriend during post-conference.
50	A student gives an instructor the middle finger and tells the instructor that she is the worst instructor ever and that she is not supportive.
51	A student uses medical terms when speaking with a patient instead of using plain language.
52	A student is performing a wound packing and states, "That looks so bad! What is that?"
53	Two students talk over a patient about the personal care they just completed on the same patient and discuss the patient's bowel movement.
54	An elderly patient is being transferred in a mechanical lift and begins to have a bowel movement. The student asks, "Is that supposed to happen?" (pointing at the patient and making sounds of disgust).
55	An older patient is hard of hearing and the student does not speak loudly enough for him to hear what she is saying.
56	A student is part of a dyad assigned to a patient. This student does not take part in the assessment and instead stares off into the distance the entire time.
57	Rather than providing patient education about medication timing and necessity, the student tells the patient that he should "Just trust the doctor".
58	A student needs continuous reminders to articulate assessment findings clearly and accurately.

#	Behaviours
59	A student pulls at a patient's wrist in order to look at the patient's name band, without explaining what she is doing.
60	When changing an incontinence pad for a patient with clostridium difficile, the student gags in front of the patient.
61	A student rolls her eyeballs and sighs with impatience as the patient moves slowly or hesitates.
62	A student sits on the side of a desk, running her hands through her hair, as she asks the physician to order something for her patient.
63	A student does not report to the nursing team. When questioned, the student states, "I'm afraid of the nurse".
64	A student enters a patient's room without asking for permission from the patient or the nurse, in order to watch procedures that the student deemed "cool to see".
65	A student exposes a patient's perineum and begins to wash the area without speaking to the patient about the procedure/process.
66	A student finds a patient halfway fallen out of bed. Instead of asking for help from the nurse who is in the room, the student asks another student to find the instructor while holding the patient to keep him from falling out of bed.
67	A patient rings her call bell frequently. The student assigned to this patient delays answering the call bell and becomes loud when providing the patient with explanations.
68	A student writes negative comments about a patient in her reflective journal.
69	Staff at the nursing station are overheard speaking disparagingly about a patient. A student assigned to the same patient also begins to speak disparagingly about the patient.
70	A nurse instructs a student to ignore a patient's request for analgesia and to withhold analgesics from this patient. The student follows these directions without questioning the instructor.
71	A student is unable to perform mathematical calculations necessary for medication administration.
72	An adult patient has a resting pulse rate of 130 beats/minute. The student assigned to this patient is unable to interpret the meaning of the patient's pulse rate.
73	A student doesn't know what to expect or what interventions to perform if a patient's condition worsens.
74	A student administers a larger than normal dose of medication to a patient without questioning or reviewing appropriate lab values.
75	A student is unable to describe the implications of administering a heparin injection to a patient who is already receiving oral anticoagulants.
76	A student does not check medication administration records throughout the day for new orders, and misses orders.
77	When looking at a patient's lab values a student is unable to identify significant laboratory values.
78	A student is assigned to a surgical patient and is unable to describe the surgery, other than saying "It is some kind of head surgery".

#	Behaviours
79	A student is assigned to a surgical patient and is unable to describe the surgery, other than saying "It is some kind of head surgery".
80	A student is assigned to a patient with a heart murmur. The student is not able to hear the murmur or articulate associated patient risks.
81	A student is assigned to administer an ACE inhibitor to a patient. The student is unable to explain the reason for the prescription or how ACE inhibitors work.
82	A student places her hand in the center of a sterile dressing field, places her hand in the garbage, and then goes back to the sterile field to continue the dressing.
83	A student begins to lift a patient with a mechanical lift. The instructor notices that the sling is not properly placed and that the patient is slipping out.
84	A student washes a patient's perineum first, and then uses the same cloth to wash the patient's face.
85	A student is unable to successfully draw up medications from vials or ampoules.
86	A student administers medications to a patient without checking the patient's identity by reading the patient's arm band.
87	A student leaves the keys in the narcotic drawer of the medication cart and the drawer is left open.
88	A student is assigned to patient A but looks up medications for patient B. The student begins to administer patient B's medications to patient A.
89	A student does not obtain consent from a patient before beginning to wash the patient's perineum.
90	A student works at another job until midnight. In the morning, the instructor notices that the student is tired during clinical practice.
91	A student arrives at the clinical setting the evening before clinical practice in order to look up details about her assigned patients. The nursing staff notice that this student smells of alcohol.
92	A student falls asleep during post-conference.
93	A student forces a patient to take a bath.
94	A student is assigned to a patient who does not want his prescribed medication. The student hides the prescribed medication in the patient's food while the patient is sleeping.
95	A student is assigned to a patient whose family do not want him to receive prescribed intravenous medication. The student administers the prescribed intravenous medication while the family is out of the room.
96	A student does not complete all required assignments on time.
97	A student attends clinical practice when he is obviously sick.
98	A student in the clinical practice setting is lethargic, has dilated pupils, and slurred speech. The student admits to consuming sedatives the evening prior and states that she is "still feeling the effects".
99	A student is unable to accurately transcribe medication changes into a patient's chart.
100	A student is asked by the cardiologist who the patient's responsible nurse is, and the student responds that she is.

#	Behaviours
101	A student shows up to clinical practice without student identification, a stethoscope, watch, pen, or flashlight.
102	A student performs an assessment and documents the patient's resting heart rate of 140 beats/minute without telling the instructor or nurse of the findings.
103	Over three consecutive weeks, a student is assigned to three patients who have all had the same surgery-transurethral resection of the prostate (TURP). This student is unable to retain information previously learned and discussed.
104	A student is preparing to perform a skill and makes several trips to the supply room to gather supplies.
105	A student is unable to verbalize required nursing care for a patient with an epidural infusion.
106	A patient's oxygen saturation reading is 85%. The student assigned to this patient does not identify the patient's need for oxygen.
107	A student documents administering a medication to a patient, but in fact, the medication wasn't administered. When questioned, it becomes obvious to the instructor that the student is dishonest and misleading.
108	For two consecutive days, a student administers a high alert medication without having the medication co-signed. When questioned, the student responds that she was too rushed to find the nurse to co-sign the medication administration record.
109	A student reports to her instructor that her patient has an epidural infusion of fentanyl. In reality, the patient has an intravenous PCA (patient controlled analgesia) of dilaudid.
110	A student flushes a central line independently before having this skill checked and approved in lab or the clinical setting.
111	A student removes a chest tube without supervision.
112	A student discusses her personal life and personal insecurities with others during clinical practice.
113	A student fails to disclose a clinical error with her instructor. When questioned, she states that she withheld the information due to fear of failure and/or consequences (a learning contract, not able to go to Africa or out of region).
114	A student completes a 12-hour night shift as a licensed practical nurse (LPN). The student arrives at the clinical practice setting still wearing her uniform from the night before. The student appears very tired and says she has not retrieved any information about her assigned patient's because she has been working all night.
115	From a list of available analgesics, a student is unable to choose an appropriate analgesic for his patient.
116	A student is unable to decide whether or not to hold a blood pressure medication for her patient.
117	A student is told by her instructor to be prepared and have all supplies gathered by 10 o'clock to perform a dressing change. The student is not ready to go and misses out on the learning opportunity.

#	Behaviours
118	A student is unable to assess, provide personal care, or document on one patient before the end of a 7-hour shift.
119	A student administers a medication late to a patient because the patient was away from the unit to receive an X-ray.
120	A student writes in her reflective journal that she had an exciting day in the emergency department. A patient presented with an irregular heart rhythm and required cardio-version. When the attending physician asked the student if she would like to hold the paddles, she did so.
121	A student inserts an endotracheal tube during her operating room (OR) observational experience.
122	A student hangs a new total parenteral nutrition (TPN) bag without performing any of the checks. She has been taught in class that TPN needs to be checked by an RN but stated that she couldn't find anyone. The IV pump alarm was ringing, and she knew how to change a regular IV bag, so she went ahead and did it independently.
123	A student removes an intravenous (IV) catheter independently. She has been taught the theory portion of the skill but has not practiced the skill in lab.
124	A student arrives in the clinical setting wearing street clothes. When questioned, the student states that he did not have time to wash his uniform.
125	A student applies a cream to a patient but does not recognize that it is a prescribed medication (celestoderm cream).
126	A student administers intravenous morphine and the patient's respiratory rate slows drastically. The patient becomes unresponsive. The student is unable to identify what is happening or what to do.
127	A student contaminates his forceps while performing a sterile dressing change and is unable to problem solve / decide what to do.
128	A student's assigned patient has a low oxygen saturation level. The student is unable to suggest any interventions to improve the patient's oxygenation.
129	A student is assigned to 2 patients. The student must perform full personal care, administer medications, and complete a simple dressing change. The student is late administering medications, late for charting, and has to delegate the dressing change to another student.
130	A student is assigned to a patient with dysphagia. At meal time, the student feeds this patient even though she has not had any previous training on this skill.
131	A student takes 45 minutes to perform a complete head to toe assessment on his patient.
132	A student routinely misses breaks or does not take any breaks during an entire shift.
133	A student has difficulty speaking with patients or touching patients' bodies to perform care.
134	A student leaves several pieces of paper-notes, cue cards, and a folder with patient information in a medication binder.
135	A student who is assigned to a post-operative patient ambulates this patient incorrectly and too soon after surgery.

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Behaviours

- 136 A student is unable remember how to roll an immobile patient to change an incontinence brief, or place a sheet or sling under the patient.
- 137 A student who has missed a number of clinical hours minimizes the importance of attendance and objects to additional clinical hours.

APPENDIX L: TIMELINE

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Activity	Date to start and complete
Research Proposal	September 1- December 16, 2016
Ethics Approval	January 20, 2017
Recruitment	January 25- February 1, 2017
Data Collection- Round One- Exploration Phase	February 1- February 15, 2017
Coding Round One Responses	February 15- February 25, 2017
Data Collection- Round Two- Evaluative Phase	February 25- March 10, 2017
Coding Round Two Responses	March 10- March 15, 2017
Data Collection- Round Three- Reconsidering Phase	March 15- April 1, 2017
Coding Round Three Responses	April 1- April 5
Data Collection- Round Four- Ranking Phase	April 5- April 19, 2017
Completing Research	April 19- June 1, 2017

APPENDIX M: BUDGET

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Item	Cost
Computer Monitor	\$200.00
Honorarium: \$20.00 per participant. 17 participants x \$20 per participant	\$340.00
Office Supplies	\$100.00
Parking	\$100.00