Nursing Students' Learning Experiences in Clinical Settings:

Stress, Anxiety and Coping

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ABSTRACT

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Magdalena Mlek

This qualitative study explored nursing students' learning experiences during their clinical rotations, with a focus on stress, anxiety and coping. The six student participants were in the last semester of a three-year nursing program in a Montreal CEGEP. Three students reported this experience to be stressful, two described their experience as very positive and one described it as average. Despite different perceptions, all of the study participants identified a variety of stressors. These were classified under four thematic areas: 1) Learning environment, 2) Preparation for clinical and perception of self, 3) Effects of stress and anxiety, and 4) Coping skills.

Participants felt that communication and the development of relationships with nurses and medical staff was difficult and stressful. Therefore, as students, they felt they did not belong on the team. Although participants described most of their teachers as approachable, several reported that the constant evaluation process, high and unrealistic expectations teachers had regarding students' knowledge and performance, and lack of autonomy to practice led to heightened states of stress and anxiety.

Stress did not have an adverse effect on the performance of the clinical skills as reported by the students, but they acknowledged that it did affect their memory, retention and thinking process negatively. The study yielded new qualitative data on coping methods which students use in special situations in the clinical environments: a combination of emotion-focused and problem-focused coping methods. Emotion-focused methods were used more often. The findings have implications for improving

learning and teaching practice and the environment of clinical experience for all concerned: nurse educators, nursing staff and teams, medical and management team and the students.

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CHAPTER 1

INTRODUCTION AND PURPOSE

Introduction

My story

The idea to explore the clinical experiences of nursing students came from my own experiences as a nursing student, then as a nurse and eventually as a nursing educator. During my undergraduate studies in nursing school I was constantly stressed. I remember my anxiety before the clinical days. At times it was hard to deal with, so I occasionally took "mental health days" and called in sick. The main source of my stress was a feeling of incompetence, being afraid to find myself in a situation that I would not know how to deal with, and sometimes perceived lack of support from the faculty. Today, I am in the unique position to see the students in a variety of settings: in the classroom, in labs and in the clinical areas. It is striking how different some of the students are in the hospital settings. Many exhibit signs of stress and anxiety while some adjust easily and seem to cope well with the new challenges.

I wanted to find out what the clinical experiences were like for the students today. Health care has changed considerably from the time when I was at school. The patients in the hospitals suffer from a wide array of illnesses, the cases are more complex, the shortage of nursing staff affects daily care, and the stress of the working nurses is visible. How does the student deal with all this? As a teacher and a human being I want all my students to learn in a non-threatening atmosphere. It is obvious that there are a multitude of factors and variables which may make the learning experience stressful or anxiety provoking. What are the factors which contribute to their learning and what are the ones

which inhibit it? Some of them are not in our control, but many are and this is why I wanted to identify those factors which as a teacher I could influence.

Background of the Problem

In Quebec, nursing education programs are offered at both the college level and at the university level. Most programs last three years and besides the theoretical component, each program has a clinical component. A clinical setting, which is most often a hospital setting, gives the student an opportunity to integrate theory learned in the classroom into practice. In most of programs, students spend on average two days a week in a clinical setting under the supervision of a clinical teacher (usually member of the faculty). During the three year program students are rotated through a variety of settings; each semester the setting changes and in some semesters it changes twice. Learning takes place within the social context of the clinical setting, in which students constantly interact with nurses, doctors, orderlies, patients, patients' families, and a multitude of other health care professionals. Each new placement means the student must socialize into a new setting, establish relationships with staff while being exposed to new clinical situations, with different patient populations, and to clinical situations that are acute and can change quickly. At the same time students' clinical performance is continuously being evaluated by a teacher. All of these experiences have the potential of being stressful and anxiety provoking.

Rationale for the Study

Most research studies examining stress and anxiety experienced by nursing students during their clinical rotations are quantitative in nature. Although these studies identify factors influencing students' feeling of stress or anxiety, many are listed under

general categories (i.e. relationship with faculty, relationship with staff), therefore they do not provide details on which aspects of a particular category are perceived as stressful or anxiety provoking. There is also very limited research on how nursing students cope with stressful situations in clinical settings. The rich data from the most recent qualitative study done by Melincavage (2008) on the subject of stress and anxiety provides a glimpse into the world of nursing students' learning environments and their perceptions of anxiety in clinical settings. My study complemented Melincavage's research and gave an opportunity for nursing students to share their personal experiences from clinical rotations, therefore adding to the existing body of literature on this subject. In addition, I was able to explore students' effective and ineffective coping strategies.

Statement of the Research Problem

Canada and the U.S. are facing a nursing shortage. Advances in medical technology help people to live longer, increasing the aging population requiring medical and nursing care. Admission to nursing programs has not declined in recent years, but the number of graduating students may not be enough to provide care to everyone. It is therefore important that nursing educators not only recruit to nursing schools, but also provide quality education in an environment conducive to learning which will minimize attrition. Clinical experience has been linked to high levels of stress and anxiety in nursing students and the literature shows that there is a link between the nursing student attrition and the stress related to the clinical experience (Deary, Watson, & Hogston, 2003; Lindop, 1989; Morgan, 2001). Stress related to clinical rotations has also been shown to increase nursing student absenteeism (Timmins & Kaliszer, 2002). Stress and

high levels of anxiety also negatively affect learning and student performance in clinical settings. This is discussed in the review of the literature in Chapter Two.

There is a multitude of factors which have been linked to students' experiences of stress and anxiety in clinical setting: a) the interpersonal relationships with health care professionals; b) constant observation and evaluation by teachers; c) perceptions of non-supportive, threatening faculty; d) ineffective teaching skills of the nursing educator; e) unrealistic expectations by staff and teachers; f) fear of making a mistake or harming a patient; g) lacking the clinical knowledge to accomplish a task; h) feeling of inadequacy; and i) unfamiliarity with the clinical setting, among others. Providing clinical experiences within a non threatening setting is therefore essential to student learning. The goal of this research was to describe the realities of students' clinical experiences and to develop a deeper understanding of the stressors facing students during their clinical learning. The results of the study will hopefully sensitize nursing educators and nurses working with nursing students to the challenges students are facing. One reason for undertaking this study was to identify stress-provoking factors in the clinical environment which teachers might influence, so as to optimize the learning environment. The study also examined the coping methods used by nursing students. I hope the results of this study will encourage nursing educators to examine their teaching methods and approaches to students in order to better support the students in their learning in a stable environment conducive to learning.

Research questions

The research questions which guided this study were:

1. What are the nursing students' experiences during clinical rotations?

2. What are students' perspectives of stressors in clinical practice which bring on anxiety?

3. What promotes or hinders students' learning?

4. How do students cope with their anxiety?

CHAPTER 2

LITERATURE REVIEW

Section One: Literature Review

Introduction

Understanding students' experiences and the challenges they are faced with in clinical settings is essential in identifying the kind of support they require in order to cope well and to be able to learn. I believe that the way students are coping with stress will influence their self efficacy, development of a professional self concept, their perception of autonomy, and subsequently their learning. The use of effective coping skills help the student bring anxiety to a manageable level, which in turn helps them to develop confidence and eventually to believe that they can influence their own learning. This study is informed by Folkman's and Lazarus' Theory of Stress and Coping and Bandura's Social Cognitive Theory. Theories on the effect of anxiety on performance will also be discussed here.

Learning Process

Jarvis (2006) sees learning as a complex set of human processes whereby "the whole person-body (genetic, physical and biological) and mind (knowledge, skills, attitudes, values, emotions, beliefs and senses) experience a social situation" (p. 13). The content which the person perceives is integrated further into one's individual biography which results in a changed person (Jarvis, 2006). As the learning process is a very complex one, I will focus here on the effects of emotion, mainly stress and anxiety, on human learning. Jarvis (2006) notes that the thinking brain can be overpowered or paralysed by emotional brain when anxiety, for example, negatively influences

concentration or the thought process and therefore can influence one's capacity to learn. Emotions can influence many domains in the learning process: cognition, memory, attention, reasoning ability (Jarvis, 2006; MacLeod, 1996) and subsequently one's performance. The theories of stress and learning discussed below will illustrate this point.

Learning in clinical environment involves what Jarvis (2006) defines as action learning, which involves "learning by doing... within a specified social context" (p. 154) (in nursing it is the clinical area). It also involves much more complex learning such as learning of concepts, problem solving, decision making, rule learning, critical thinking, etc. The literature review below will illustrate a multitude of stressors which nursing students are faced with in clinical areas. As a large part of clinical learning involves almost continuous assessment and evaluation of performance by the clinical teacher, this issue will be examined below under the discussion of evaluation anxiety.

Stress and Anxiety

Lazarus and Folkman (1984) define psychological stress as "a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well being" (p. 21). They add that the person uses cognitive appraisal to judge whether the person-environment relationship is stressful. Varcarolis, Benner- Carson and Shoemaker (2006) define stress as a state which is created by "a change in the environment that is perceived as challenging, threatening or damaging to a person's well being" (p. 212). Sullivan, an American psychiatrist who developed the Interpersonal Theory, defined anxiety as an emotion or painful feeling "arising from social insecurity or blocks to getting biological

needs satisfied" (Varcarolis et al., 2006, p. 17). One of the most common physiological responses to stress is anxiety.

Anxiety can be mild, moderate, or severe. Varcarolis et al. (2006) distinguish between fear and anxiety. They define fear as "a reaction to a specific danger" (p. 213). Anxiety, on the other hand, is "a vague sense of dread relating to unspecified danger" (p. 213). They add that the physiological reactions to anxiety and fear are similar. When experiencing stress, there are many different physical signs and symptoms which a person might experience, depending on how severe the reaction is. Mild anxiety can be characterized by "slight discomfort, restlessness, irritability, or mild tension-relieving behaviours (e.g. nail biting, foot or finger tapping, fidgeting)" (Varcarolis et al., 2006, p. 213). Moderate anxiety can cause individuals to become tense, reporting an increase in heart rate and respirations, as well as feeling their "heart is pounding", or "fluttery". They may perspire, complain of gastric discomfort or headaches, or experience shaking, and possibly voice tremors (Varcarolis et al., 2006). Severe anxiety is characterised by additional symptoms such as dizziness, trembling, pounding heart, nausea, severe headaches, hyperventilation and insomnia. At this level an individual can have "a sense of impending doom or dread" (Varcarolis et al., 2006, p. 215).

Mild general anxiety is not detrimental to learning and may even enhance perception and memory. It may act as a positive motivator, though moderate or severe anxiety can alter one's ability to learn and perform in a clinical setting (Audet, 1995; Blainey, 1980, Sellek, 1982).

The literature on nursing education provides some pointers as to how the educators can recognize anxiety in their students. Blainey (1980) lists behavioural,

affective, autonomic, and verbal manifestations of anxiety. Behavioural manifestations are: hand tremors, increase in muscle tone, and difficulty remaining in the same position for sustained period. Affective manifestations are: increased voice pitch, facial appearance of apprehension, and increased speech volume. The autonomic manifestations are related to the reaction of autonomic nervous system: dilated pupils, red blotches on the face and neck, and pulsating carotid arteries. An example of verbal manifestation of anxiety is "intermittent rapid speech with occasional, transient blocking of speech" (Blainey, 1980, p. 34). In Kim's (2003) study, nursing students who were anxious reported not feeling rested, not being able to make decisions easily, feeling restless and nervous.

Stressors in Clinical Settings

A multitude of factors has been linked to students' experiences of stress and anxiety in a clinical setting. Themes that emerged from a review of the literature include: a) interpersonal relationships with nursing staff and the socialization process; b) relationships with medical staff, c) relationships with clinical teachers; d) feelings of incompetence and inadequacy; e) a lack of knowledge needed to perform clinical procedures; and e) the fear of making mistakes and possibly harming patients. Besides the stressors related directly to the clinical setting, students are often dealing with life events outside nursing which may lead to psychological stress (Watson, Gardiner, Hogston, Gibson, Stimpson, Wrate and Deary, 2008). In addition, as theories discussed above suggest, personal traits also influence how the person perceives stressful situations and how they cope with it.

Relationships with nursing staff and socialization process

Development of professional relations with staff members is part of the socialization process. In the literature review, students identified interpersonal encounters as a source of stress, especially when students did not feel welcomed or supported by nursing staff. This in turn often led to poor learning outcomes.

Nursing students evaluated their clinical experience as negative when nursing staff was not interested in mentoring (Papp, Markkanen and Von Bonsdorffif ; 2003). Other research studies found that nursing students often had difficulty coping with unhelpful staff and being ignored by them (Cooke, 1996; Melincavage, 2008). Melincavage discovered that students felt anxious when staff nurses were inconsiderate of students' inexperience, which in turn influenced students feeling of incompetence. In LaFauci's (2009) study, nursing students reported that being treated as a nuisance by cranky and non-responsive staff nurses hindered their learning experiences. In a qualitative study by Shipton (2002), nursing students described some of the actions and attitudes of nursing staff as stressful, and nurses were described as "nasty", "not wanting to be bothered" or "demeaning" (p. 246). The nursing students in one study (Levett-Jones, Lathlea, Higgins & McMillan; 2009) described nursing staff as unfriendly, hostile, indifferent, unreceptive, and unapproachable. Their feelings of inclusion/exclusion affected directly their sense of belongingness and subsequently increased their anxiety, capacity and motivation to learn. In a study by Nolan (1994), nursing students identified the process of "fitting in" as their biggest challenge and felt that the energy spent on this took away from their learning.

In a qualitative research study by Gibbons, Dempster and Moutray (2007), many nursing students had "a feeling of being criticized rather than supported" by nurses on the unit (p. 286). They felt that nurses focused more on students' weaknesses (or what they did not do) rather than on their strengths. In some studies, students felt stressed when nurses had unrealistic expectations of their clinical abilities (Cooke, 1996; Melincavage, 2008).

As students often change their clinical settings, many find that the unfamiliarity of clinical setting is stressful (Beck & Srivasteva, 1991; Kim, 2003; Shipton, 2002). Nursing students in Melia's study (1982) stressed the importance of fitting in and learning the rules of the wards. They identified the transient nature of their experiences as a source of stress.

There are numerous studies which report positive outcomes when students develop good relationships with nursing staff. Chesser-Smyth (2005) reported factors identified by students which contributed to their increased confidence level, increased self esteem, and decreased anxiety which subsequently facilitated their learning. These were: acquisition of knowledge; receptive, respectful and supportive staff; and feeling as part of the team which all gave indication that successful socialization process facilitated learning in clinical. In the study by Levett-Jones et al. (2009) nursing students reported that when they felt welcomed by nursing staff it motivated them to learn. In the study by Papp et al. (2003) nursing students felt appreciated when students felt to be a part of the nursing care team. Wilson's 1994 research provided evidence that nursing students' sense of competence increased when the nursing staff accepted students' presence on the unit, when students felt part of the team, and when nurses helped students willingly.

Relationships with medical staff

The literature review revealed many research studies reporting that nursing students find communication with medical staff stressful. Many participants recalled that the interactions with physicians were often unpleasant and anxiety provoking.

Several studies (Kleehammer, Hart, & Keck, 1990; Kim, 2003; Cooke, 1996) identified talking with physicians as anxiety-producing. In a study by Clarke and Ruffin (1992) when students were asked to rate the interpersonal interactions on a stress scale, the interaction with medical staff was rated highest.

There is a great deal of evidence in research that nurses, particularly females, are subjects of verbal abuse from doctors. O'Keefe-Domaleski (2010) examined the conversational violence experienced by women in nursing, revealing a hierarchy within the healthcare system in which nurses are subordinate to doctors and are subjected to verbal abuse from physicians. Despite mostly positive interactions with doctors, nurses in this study gave examples of "overt verbal abuse, physical assault, and sexual harassment" (p. 96). The nurses recalled being belittled, intimidated and as a result they questioned their own self-worth and respect. The results of a study by Hesketh, Duncan, Estabrooks, Reimer, Giovannetti, Hyndman and Acorn (2003) carried out in British Columbia and Alberta hospitals showed that although a majority of acts of violence towards nurses were committed by patients, "hospital staff (physicians and nursing coworkers) were more frequently cited as sources of non-physical violence (i.e. emotional abuse and verbal sexual harassment)" (p. 314). Zigrossi (1992) sampled 99 nursing students who identified physicians as the most frequent abusers in the verbal abuse theme. The most common types of verbal abuse reported were: anger, belittling comments, rudeness,

disapproval, and condescension. In the second phase of the same study, 759 staff nurses identified the three most common sources of verbal abuse as patients, patients' families and physicians.

Relationships and interactions with teachers

The educational practices of many nursing educators reflect the hierarchy and patriarchy of the health care system. Boughn and Wang (1994) believe that nursing students are socialized in the traditional nursing education system to internalize the values which perpetuate the power status of the dominant medical establishment characterized by unequal power relations between nurses and doctors. A review of the literature on traditional nursing education reveals recurring themes and issues which are linked to fostering of oppression: behaviouristic curriculum model, patriarchal and authoritarian educational practices, and sexual stereotyping (Brophy, 2000). This approach has been linked to suppression of important qualities such as initiative, creativity, critical thinking ability, and insight which characterize autonomous and well educated nurses

(Brophy, 2000).

Several studies reported that relationships with teachers were a big source of stress, particularly during interpersonal conflict with the instructor and when students were being observed or evaluated (Beck & Srivasteva, 1991; Garret, Manuel & Vincent, 1976; Mahat, 1998; Parkes, 1985; Kleehammer et al., 1990; Mahat, 1998; Kim, 2003; Sellek, 1980). Other studies show that students were stressed or anxious when their teacher was inexperienced (Melincavage, 2008), incompetent (Pagana, 1988; Shipton, 2002), anxious (Windsor, 1987) or had ineffective teaching skills (Kleehammer et al.,

1990; MacMaster, 1979; Melincavage, 2008; Oermann, 1998; Shipton, 2002). Many nursing students identify non supportive (Brophy, 2000), threatening, derogatory (Windsor, 1987), and demeaning (Mahat, 1998; Pagana, 1988) teachers as a source of anxiety.

Participants in Brophy's (2000) study reported that their clinical teachers were perceived as powerful and authoritarian and that their "nursing careers were in the hands of the instructor in that the instructor could pass or fail them in clinical, through a process that was entirely subjective in nature" (p. 69). They felt therefore that they could not express their opinions to their instructors because of fear of recrimination. They were intimidated by authoritarian instructors and felt anxious and fearful which in turn inhibited their ability to be autonomous. They also attributed the sense of powerlessness to a domineering learning environment which in turn led to their passiveness. Those students in her study who were autonomous felt empowered. Autonomy was defined by Brophy (2000) as "the freedom to make independent decisions; personal freedom, and freedom of choice concerning student learning experiences" (p. 6). Positive relationships with their teachers characterized by caring, honesty, trust and constructive feedback were found to be helpful in development of autonomy and sense of empowerment. In the study by Lofmark and Wikblad (2001) nursing students reported that being given responsibility and being independent during their clinical studies facilitated their learning. Independence gave them opportunity to make their own decisions and it also contributed to deeper contact with patients. This in turn improved students' self confidence.

Nursing students in the study by Mogan and Knox (1987) perceived the worst clinical teachers to be unapproachable, lacking empathy, belittling students when they made mistakes, and judgmental. Nehring (1990) replicated this study using the same tools and came up with similar results. Clark (2008) conducted a qualitative research study on students' perceptions of faculty incivility. Students in the study gave examples of teachers treating students unfairly; teachers behaving in demeaning and belittling ways towards students; and students being pressured by teachers to conform to unreasonable demands. These teacher behaviours made students feel powerless, helpless, traumatized, angry, and upset. Similarly in LaFauci's (2009) study, nursing students felt that being exposed to clinical instructors who instilled fear and intimidation in them hindered their learning.

There are numerous studies which explore nursing students' perceptions of effective and best clinical teachers. In the study by Gignac-Caille and Oermann (2001) nursing students listed "being approachable" as an important characteristic of an effective clinical teacher. In Nehring's (1990) study on best and worst clinical teachers, nursing students felt that their best clinical teachers were: good role models, who enjoyed nursing and teaching; they were supportive, encouraging, and respectful. The nursing students in Cooke's (2005) research study reported having lower anxiety during their clinical rotations when their clinical teachers were friendly, trustful, and respectful towards students. In a research study by Kube (2010), nursing students identified teaching behaviours which had the greatest influence on learning in clinical to be approachable, organized, encouraging and supportive.

In the study by Cook (2005), students had higher state anxiety levels when their teachers were impolite towards students, when they were difficult to talk to and when they treated students as if they were irresponsible. Spielberger describes state anxiety as a transitory emotional state which is an individual's reaction to a stressful environmental condition judged by an individual as threatening (Gaudry & Spielberger, 1971). In addition, according to Spielberger's theory, an individual's response to a stressful situation is affected by one's trait anxiety, or one's proneness to anxiety. Therefore the individuals with high trait anxiety who are exposed to a stressful situation appraise it as more threatening than the ones with low trait anxiety. In Kim's (2003) research study one of the most interesting findings was that students who scored high on trait anxiety (or proneness to anxiety) also had a higher degree of anxiety producing clinical experiences.

The literature review has also shown that nursing students often deal with evaluation anxiety during their clinical placements. There is a great deal of research in which nursing students found evaluations by teachers to be stressful (Kleehammer et. al, 1990; Mahat, 1998; Sellek, 1980). A majority of stressful situations in Kim's (2003) study were related to the evaluation process and were labelled as "asking questions of faculty", "being evaluated by faculty", and "being observed by instructors". Teachers are often seen by students as evaluators rather than teachers. In Wilson's (1994) research on nursing students' perspectives on learning in clinical setting, one of the students' major goals for clinical practice experience was to look good to the clinical instructors. These students perceived their instructors as always collecting evidence for their grades. They had a constant awareness of being evaluated. Looking good to their instructors meant always having the right answers. Depending on how the students in Wilson's (1994)

study felt regarding their feeling of competence, they would approach or avoid their interaction with the teacher. In the research by Kushnir (1986) nursing students perceived their clinical instructors mainly as evaluative "even in the absence of such objective elements" (p. 18). Some students felt that the mere presence of their clinical teachers negatively affected their performance. The perceived evaluation was reported to be a source of emotional stress.

Several research studies reported that the evaluation process had negative effects on students' learning process. In the qualitative study by Elcigil and Yildirim Sari (2007), the evaluation process and the consequent evaluation anxiety was identified by students as having a negative effect on their learning. Anxiety was also brought on by teachers' questions which students saw as stress creating interrogation, and by getting negative feedback. This in turn decreased students' motivation to learn. In the research study by Shipton (2002), nursing students appraised as stressful the following actions of the clinical faculty: clinical evaluations, waiting on clinical instructor, being observed by a clinical instructor. In the study by Tiwari, Lam, Yuen, Chan, Fung and Chan (2005), nursing students described their clinical assessment as very stressful. Clinical teachers in this study were concerned about the student anxiety they witnessed during their assessments. A majority of students and clinical teachers agreed that the assessments influenced student learning and students spent all of their energy on passing assessments at the expense of learning other things.

Feelings of inadequacy and lack of knowledge

The lack of clinical knowledge or skills to accomplish a task or to perform clinical procedures has been linked to stress and anxiety in many studies (Admi, 1997; Beck &

Srivasteva, 1991; Blainey, 1980; Sellek, 1982; Pagana, 1988; Parkes, 1985). Cooke (1996) found that lack of confidence often brought on the anxiety. Chesser-Smythe (2005) found students felt particularly vulnerable at the beginning of each rotation when they described themselves as "knowing little and feeling useless" (p. 323).

Kim (2003) found that 77% of nursing students in their last semester of the program reported uncertainty about their clinical skills and "doubts about personal adequacy as beginning staff nurses" (p. 150). These feelings of inadequacy and uncertainty about their own clinical skills were associated with high anxiety. Nursing students in Magnussen's and Amundson's (2003) study reported feelings of inadequacy and unpreparedness for clinical. Their teachers, they reported, often "put them on the spot" and expected them to have knowledge about "all aspects of care" (p. 265). Many students had "the sense of knowing so little, when the professional demands would be so great" even at the end of the program (p. 264). In Mahat's (1998) research, nursing students reported tension due to inability to perform nursing activities, and attributed it to lack of knowledge and inadequate preparation.

Nursing students felt that clinical instructors often had unrealistic expectations about students' performance in clinical (Brophy, 2000). The study participants reported that this in turn led to frustration, stress and even avoidance of learning experiences. Melincavage (2008) found that students were anxious as a result of their clinical teachers' unrealistic expectations. The students found the reading and preparation necessary before going to clinical were too time-consuming and clinical instructors often expected students to be experts, despite their inexperience and lack of knowledge.

Patients

The literature review shows that nursing students often get a sense of satisfaction from interactions with patients. In the study by Beck and Srivasteva (1991) the three areas in clinical ranked by nursing students as primary areas for satisfaction were relationships with patients, new learning experiences and helping others. In the study by Wilson (1994) the nursing students reported having a feeling of accomplishment resulting from helping a patient and this in turn contributed to their sense of competence. Sellek (1982) reported that one of the categories which students identified in her study as satisfying was "total patient care" when they were able to see to emotional and physical needs of patients. In the study by Kleehammer et al. (1990) on anxiety producing situations in clinical setting, talking to patients was not considered by nursing students to be anxiety provoking.

Although interactions with patients are not often reported in studies as anxiety provoking, nursing students identify a few situations which are quite stressful. The identified situations are mainly dealing with terminally ill and dying patients and handling emergencies (Clarke & Ruffin, 1992; Parkes, 1985; Rhead, 1995) and situations in which there is a possibility change in the patient's condition (Blainey, 1980; Pagana, 1988). In Cooke's (1996) study, situations perceived by nursing students as challenging were dealing with very ill patients and having to deal with emergencies such as cardiac arrests. Similar findings were reported where nursing students identified fear of making a mistake or harming a patient as a source of stress in clinical (Clarke & Ruffin, 1992; Kim, 2003; Kleehammer et al., 1990; Mahat, 1998; Pagana, 1988; Wilson, 1994).

Effects of stress and anxiety on clinical learning

Given the review of the literature on sources of stress and anxiety experienced by nursing students during their clinical rotations, and the theoretical review of the effects of high emotional states on learning, one can expect that the learning process would be negatively influenced under excessive amounts of stress and anxiety in nursing students. A few studies below provide examples of the effects of stress and anxiety on learning in clinical rotations.

Evaluation anxiety has been found to prevent students from learning. In a study by Elcigil and Yildirim Sari (2007), motivation to learn was decreased by anxiety provoking negative feedback and by teachers' questions, which students saw as stress-creating interrogation. Nursing students felt that more effort on their part was put into getting good grades and passing clinical rather than on learning. Tiwari et al. (2005) reported similar findings wherein nursing students in clinical adopted a surface approach to learning as they focused on assessment tasks. Kleehammer et al. (1990) found that evaluation of students' performance by a teacher hindered their learning in clinical. The unrealistic expectations by instructors in clinical settings were identified by students to lead to frustration, stress and even avoidance of learning experiences (Brophy, 2000).

Many studies identify difficult relations with staff as influencing stress on student learning or performance (Beck & Srivasteva, 1991; Blainey, 1980; Cooke, 1996; Kleehammer et al., 1990; Melincavage, 2008; Sellek, 1982). In one study (Levett-Jones et.al, 2009) nursing students reported that nursing staff's lack of receptiveness and approachability affected negatively their sense of belongingness and subsequently increased their anxiety, capacity and motivation to learn.

Anxiety related to work overload, both in academics and clinical led to great stress, fatigue and lack of sleep (Elgicil & Yildirim Sari, 2007). Stress and lack of time led students to feelings of loss of control, which is not conducive to learning. Beck and Srivasteva (1991) concluded that nursing students in their study had a higher rate of psychiatric symptoms in comparison to the general population, which is known to affect the learning process negatively. In Kim's (2003) study, students who scored high on trait anxiety did not feel rested and 34% of them did not make clinical decisions easily, which not only affects their learning process but also patient safety. Students' feelings of inadequacy and lack of knowledge necessary to carry out specific procedures often leads them to fear of making a mistake. This was identified by students as an inhibitor of learning in clinical (Oermann and Lukomski, 2001).

Section Two: Theoretical Framework

Theories of Stress and Learning

There is a multitude of theories on the effect of anxiety on performance which postulate that moderate or severe anxiety affects learning and performance negatively: a) Saranson's Cognitive Interference Theory; b) Eysenck's Processing Efficiency Theory; c) Spielberger's Trait State Anxiety Theory; and d) Easterbrook's Hypothesis of Selective Attention. These four theories will illustrate how emotional states such as high anxiety affect learning process and performance.

Saranson's Cognitive Interference Theory

Saranson, Pierce and Saranson (1996) define cognitive interference as intrusive thoughts which are unwanted or disturbing. According to this theory, the interference diminishes attention to task, lowers the individual's ability to function effectively,

subsequently interfering with one's performance. When an individual experiences stress it may be recognized as a call for action and this can lead to task relevant or task irrelevant cognitive activities (Saranson et al., 1996). They believe that task relevant cognitive activities will occur in a situation where the individual perceives the stressor as a challenge and is able to direct one's attention to a task by setting aside unproductive worries. This subsequently has a positive influence on performance. Task irrelevant cognitive activities or "self preoccupying worry, insecurity and self doubt" (Saranson et al., 1996, p. 142) associated with high anxiety occur when the call for action is imposed by situational demands (either perceived or real), such as exams or evaluation of performance by a teacher. For anxious individuals, the precipitating event or situation may magnify "personal preoccupations such as fear of negative consequences and give rise to uncertainty about outcomes, hyper-vigilance and concern over potential dangers" (Saranson, 1986, p. 20). When the person is preoccupied with intrusive thoughts he or she does not pay enough attention to the task at hand, contributing to poor performance (Saranson et al., 1996), subsequently influencing personal development (Saranson, 1986). Saranson adds that the content of one's preoccupations is not only due to one's perception of a situation but also by personality characteristics and one's social background.

Spielberger's Trait State Anxiety Theory

Spielberger's theory of learning addresses the influence of stress and anxiety on performance. He distinguishes between state and trait anxiety. State anxiety, or a transitory emotional state, is the reaction of an individual to an environmental condition judged by the individual to be threatening (Gaudry & Spielberger, 1971). It varies in

intensity and fluctuates over time. Trait anxiety is related to an individual's susceptibility to anxiety (Eysenck, 1982; Gaudry & Spielberger, 1971). According to this theory, the arousal of an anxiety state involves a sequence of events which begin with the cognitive appraisal of a situation as threatening. It is initiated by an external psychological stressor or by internal stimuli such as thoughts or feelings and is influenced by one's proneness to anxiety (Gaudry & Spielberger, 1971). Individuals with high trait anxiety, who often have self derogatory attitudes and poor self image, will appraise the situation as more threatening than those with low trait anxiety. They also "perceive a greater number of situations as more dangerous or threatening" (Heinrich & Spielberger, 1982, p. 147). Furthermore, situations that pose a threat to self esteem (as in case of negative evaluation of performance or failure) will produce higher levels of anxiety in individuals with high trait anxiety (Gaudry & Spielberger, 1971). Those who are low in trait anxiety will appraise the situation, and the intensity and duration of the reaction will fluctuate according to the amount of perceived stress. Once the appraisal is done, the individual may choose to avoid the danger or to mobilize defence mechanisms which will alter his or her cognitive appraisal of the situation (Gaudry& Spielberger, 1971). In summary, students who have high trait anxiety often do not perform well, especially in evaluative situations. This has negative consequences on their learning process.

Eysenck's Processing Efficiency Theory

According to Eysenck's processing efficiency theory, anxiety decreases the effectiveness of information processing. Performance of many cognitive tasks requires a working memory for active processing and transient storage of task relevant information (MacLeod, 1996). In high anxiety states, working memory is not reduced, but its

functioning is affected as it is employed to sustain certain types of task irrelevant processing operations, therefore leaving less capacity for the task at hand (Eysenck, 1985; MacLeod, 1996). Eysenck (1979) notes that the "task-irrelevant information involved in worry and cognitive self-concern competes with task-relevant information for space in the processing system" (p. 364), therefore highly anxious people find themselves in a divided attention situation or what Eysenck calls "dual task". The processing capacity of individuals with high anxiety is further decreased by the effort put into compensating for the "adverse effects of anxiety" or the investment of processing resources (Eysenck, 1985, p. 580). It will therefore affect performance quality. Eysenck (1996) believes however, that worry about task performance possesses a motivational function and it "leads to the allocation of additional processing resources to the task" (p. 98). In this situation, if there is sufficient expenditure of effort, it may not affect the performance efficiency negatively (Eysenck, 1979). The notion of task irrelevant processing operations employed during a high anxiety state is in line with Saranson's theory of cognitive interference which postulates that intrusive thoughts disrupt the performance in anxious individuals.

Easterbrook's Hypothesis of Selective Attention

Easterbrook's hypothesis also addresses the effects of emotional arousal such as anxiety on one's performance, which he believes is mediated by attentional mechanisms (Eysenck, 1982). According to Easterbrook, during states of high emotionality, there is "a restriction in the range of cue utilization reduction" (cited in Eysenck, 1982, p. 120). Easterbrook (1959) defines the range of cue utilization as "the total number of environmental cues in any situation that an organism observes, maintains an orientation

towards, responds to, or associates with a response" (p. 183). In other words, these are the stimuli in the environment which a person notices and reacts to. As the anxious arousal increases there is a narrowing of attention, resulting in performance being affected (Eysenck, 1982). His assumption is that difficult tasks consist of "more components or cues than easy ones" and leading to attentional narrowing (or what he calls "reduced cue utilization") "under high anxiety would have a greater adverse effect on the performance of difficult tasks" (Eysenck, 1985, p. 579).

If one applies these four theories to an educational setting, it is clear that high emotional states such as anxiety influence negatively students' performance and learning process. This process is interrupted due to decreased or narrowed attention to the task at hand because of cognitive interference by unwanted intrusive thoughts such as worry or insecurity. Performance can also be affected by decreased effectiveness of information processing, if during the learning process the working memory is employed to sustain task irrelevant processing operations (worry or concern). As the student tries to put more effort into the task at hand to compensate for high anxiety, the processing capacity of his or her memory is further reduced. In addition, during stressful events such as exams, tests or evaluations by a teacher, the student with high trait anxiety (who already has poor self image) will perceive the evaluation as more threatening, resulting in even higher state anxiety.

Theory of Stress and Coping by Lazarus and Folkman

Coping is defined as "the person's cognitive and behavioural efforts to manage (reduce, minimize, master, or tolerate) the internal and external demands of the person-environment transaction that is appraised as taxing or exceeding the person's resources"

(Folkman, Lazarus, Gruen, and DeLongis, 1986, p. 572). According to Folkman's and Lazarus' cognitive theory of stress and coping, coping has two functions: a) dealing with the problem causing stress (problem-focused coping), and b) regulating emotion (emotion-focused coping) (Folkman et al., 1986). Emotion-focused coping, or cognitive coping strategy, changes only the interpretation of a threat because it involves thinking rather than acting (Lazarus, 2006). Lazarus adds that it is a sort of internal restructuring when one changes the meaning of an event or threat and so an emotional reaction and therefore it regulates emotional response to the problem (Lazarus and Folkman, 1984). Problem-focused coping involves action which addresses the perceived problem or "doing something to alter the source of stress" (Carver, Sheier and Weintraub, 1989, p. 267) and therefore it helps one manage the situation which causes the distress. An individual can simultaneously deal with stressors using both types of coping: dealing with the stressors directly (action) and regulating one's feelings (emotion). However problem-focused coping is used more often when the person thinks that something constructive can be done about the situation (Carver et al., 1989). Emotion-focused coping on the other hand is used more often when an individual feels "that the stressor is something that must be endured" (Carver et al., 1989, p. 267).

Based on the research done by Folkman and Lazarus, the researchers Carver, Sheier and Weintraub (1989) have devised a detailed coping inventory and added a few additional dimensions of coping. This tool was used by Kirkland (1998) in a study on African American nursing students' perception of stressors in clinical and their use of coping strategies. Problem-focused coping involves actions such as: taking action to remove stressor; planning how to confront stressor; suppressing competing activities

(putting other projects aside in order to deal with the stressor); restraint coping (waiting until an appropriate opportunity to act presents itself); seeking social support for instrumental reasons (seeking advice, assistance or information) (Carver et al., 1989). Emotion-focused coping involves: seeking social support for emotional reasons (getting moral support, understanding, or sympathy); positive reinterpretation and growth; acceptance; turning to religion; focusing on and venting of emotions; denial; behavioural disengagement (reducing effort to deal with stressor, or giving up on goal); mental disengagement (i.e. daydreaming, escaping through sleep, immersion in computer, TV); alcohol and drug disengagement (Carver et al., 1989). Coping methods, whether emotion-focused or problem-focused can be judged by an individual as effective or ineffective.

Effective coping with stress requires first an appraisal of the event, then a mobilization of the "personal and social coping resources" and eventually the use of actual coping strategies (Shipton, 2002, p. 244). Ineffective coping methods may lead to prolonged stress, feeling of powerlessness and eventual burnout and attrition. Lindop (1989) and Morgan (2001) linked nursing student attrition to stress related to the clinical experience.

There is limited literature on nursing students' use of coping strategies in a clinical area and a majority of the studies are quantitative in nature (Brown & Edelman, 2000; Jones & Johnston, 1997; Kirkland, 1998; Lo, 2002; Mahat, 1998). In the quantitative study on sources of stress in nursing students Gibbons et al. (2008) only investigated the students' perception of types of support available to them.

Shipton's (2002) qualitative study provides some valuable information on the way nursing students manage stress related to clinical studies. In her study on the types of

coping methods used by senior nursing students, she identified 5 different categories which students used to manage the stressful event related to clinical. These were: a) seeking relaxation (music therapy, trying to relax, relaxation exercises, focusing, and regrouping self); b) venting (humour, crying, screaming, complaining, exercising, over eating); c) escaping (isolating self, sleeping); d) seeking support (prayer, looking for support); and e) taking action (planning action, organizing, confronting, prioritizing).

There is also literature demonstrating that nursing students use some effective coping strategies. Problem-focused coping methods such as problem solving or seeking social support from peers, family or instructor (Gibbons et al., 2008; Kirkland, 1998; Mahat, 1998; Shipton, 2002; Parkes, 1985), and exercise (Hamill, 1995; Lo, 2002; Shipton, 2002) were identified as effective. Some of the emotion-focused coping methods which were identified as effective were praying, self assurance or using relaxation techniques such as deep breathing exercises, and music therapy (Mahat, 1998; Shipton, 2002). Maladaptive emotion-focused strategies used by nursing students and nurses (which were judged not to be very effective) were: using escape and avoidance (Brown & Edelman, 2000; Mahat, 1998; Shipton, 2002), crying, screaming, overeating (Hamill, 1995; Shipton, 2002), smoking and alcohol use (Hamill, 1995; Kirkland, 1998; Mahat, 1998; Shipton, 2002), confronting (Brown & Edelman, 2000), hostility, fantasy and wishful thinking (Parkes, 1985; Jones & Johnston, 1997). Although these studies identify some coping methods used by nursing students they do not correlate them to specific situations in clinical environment.

Hamill (1995) studied stressors and coping methods used by 2nd year nursing students. She described the use of mainly problem-focused coping methods and

attributed it to students being more assertive and more confident at the end of the 2nd year of the program. Besides problem-focused coping, students also reported using emotion-focused coping methods such as: binge eating; sitting in a bath and having a good cry; being irritable; discussing stressors with peers; socializing; resorting to alcohol. One of the common coping mechanisms which all of the students in this study used was physical exercise.

Although Jones and Johnston's (1997) research study did not focus directly on stress and coping related to clinical experiences, it provided useful information about coping among nursing students in general. First year students in their study reported mainly academic items such as fear of failing, long hours of study and lack of free time as their main sources of stress. The authors of this study examined the use of coping methods in relation to the level of distress experienced by nursing students. Students whose level of distress was lower used problem-focused coping methods, whereas the students, who experienced higher level of distress, engaged in non-direct (or emotion-focused) coping methods such as hostility or wishful thinking.

In a large longitudinal study Lo (2002) identified strategies which Australian nursing students used to cope with stressors related to nursing studies as well as to personal stressors, such as finances, family or health. The coping strategies were: problem solving (i.e. setting aside time for study), recreation and sport (gardening, music, exercise, or laughing), social support (friends, classmates, family, teachers, tutors) and tension reduction strategies (smoking, drinking, crying, or meditation).

In the study by Kirkland (1998), African American nursing students judged as effective and most often used coping strategies to be active coping (action focused), "seeking social support for instrumental reasons, and seeking social support for emotional reasons". In contrast the Nepalese students in the research study by Mahat (1996) used mainly emotion-focused coping methods, such as seeking emotional support from peers, crying, praying, wishful thinking or avoidance.

The Social Cognitive Theory by Bandura: The Role of Self Efficacy in Learning

The theoretical framework chosen for this research study is Bandura's Social Cognitive Theory. In order to understand the influence and the results of stress and anxiety on individuals and on their learning, one needs to first consider the factors which affect human functioning. According to Bandura's theory, human functioning is influenced by one's environment, by one's personal factors, and by one's behaviour (Pajares, 2002). Human functioning, therefore, is seen "as the product of a dynamic interplay of personal, behavioural, and environmental influences" (Pajares, 2002). Learning occurs as a result of individual's constant interaction with and interpretation of the environment. In nursing education, the environment affecting student functioning would be the clinical environment in which students are learning nursing practice. The environment within which learning occurs influences students' "aspirations, personal standards, emotional states, and other self-regulatory influences" (Pajares, 2002).

Social cognitive theory recognizes that environmental conditions are not the only conditions which influence human functioning (Pajares, 2002). Whether or not students reach their goals in clinical, which for most is learning and eventually becoming a nurse, depends in part on their personal factors or individual agency. By agency, Bandura

(2001) means the individual's personal factors, such as cognition, motivation, affect and personal choice which all play a large role in this process. According to Bandura (2001), people are agents of their experiences. They manipulate the environment and regulate their motivation and activities in order to accomplish tasks. Bandura (2001) identifies four core features of human agency: intentionality, forethought, self-reactiveness and self- reflectiveness. For a person to perform a certain action in order to bring a desired outcome there needs to be an intention. When one has an intention he or she starts developing a plan of action. Through forethought, or anticipation, people "motivate themselves and guide their actions in anticipation of future events" (Bandura, 2001, p. 7). During this process they consider consequences and this in turn regulates their behaviour. In order to link thought to action, people use self regulatory processes. Through the use of these processes, people compare their goals to personal and moral standards which give them self incentives to sustain their efforts in order to reach the goal. People self examine their functioning by using self reflection.

According to social cognitive theory the individuals can successfully master various learning tasks if they have feelings of competence and confidence in their abilities (Bassi, Steca, Delle Fave & Caprara, 2007). This is one's self efficacy. Bandura adds that efficacy expectations have an influence on one's emotions. They may reduce one's fears if one believes in a successful outcome. One's expectation of eventual success affects coping efforts and the energy one will expend in order to overcome the perceived obstacles or environmental demands (Bandura, 1977). He notes that "the stronger the efficacy expectations, the higher the likelihood that threatening tasks will be dealt with successfully" (Bandura, 1977, p. 85) as one's vulnerability to stress is reduced and one's

resiliency to adversity is increased (Bandura, 2001). The learning process is therefore further influenced by one's self efficacy beliefs which affect motivation, effort, affect and decision making process (Bassi et al., 2007).

A person's emotional and physiological state while experiencing stress can have a negative effect on one's efficacy beliefs and therefore on their performance. According to Bandura (1997) people in stressful situations read physiological signs such as uneasiness, tension, sweating, trembling, as "signs of vulnerability to dysfunction" (p. 106). Also, mood states can affect how events or situations in the environment are interpreted. Bandura (1997) noted that "individuals can learn faster if the things they are learning are congruent with the mood they are in" (p. 111). He added that "a negative mood activates thoughts of past failings, whereas the positive mood activates thoughts of past accomplishments" (p. 111). These reactions can therefore influence self efficacy perceptions either positively or negatively depending on their mood state. The efficacy beliefs are therefore the foundation of human agency (Bandura, 2001).

Efficacy expectations are derived from processing information from four sources: a) the actual performance accomplishment; b) observation of a role model (i.e. nurse or a teacher); c) verbal persuasion such as encouragement; and d) the emotional or physiological state experienced by an individual, such as anxiety or vulnerability (Goldenberg, Iwasiw & MacMaster, 1997; McLaughlin, Moutray & Muldoon, 2007). In order to help students meet the challenging or anxiety provoking situations in a clinical setting, nursing educators should thus provide role modelling and verbal persuasion so students' self efficacy is at the optimal level. Role modelling by a staff member or

clinical teacher has been found by Elliott (2002) to improve the quality of learning experiences.

All of these processes are carried out within a social context, which in the case of nursing education is the clinical area. The individual's sense of self efficacy can be affected not only by personality traits but also by one's culture, upbringing, past experiences or social context. The use of effective or ineffective coping strategies by students may be related to their self efficacy and as a result can influence their learning. I believe that the relationship between perceived self efficacy and use of coping methods is circular. The psychological appraisal of a situation will influence coping methods chosen to deal with the stressful situation and this may affect one's self efficacy. At the same time, perceived self efficacy will influence a person to choose appropriate coping skills. During learning situations in clinical settings stress can then have detrimental effects on students' self efficacy and their self efficacy will influence the type of coping skills used to deal with the stress.

Summary

The literature review shows that students are dealing with a variety of stressors related to their clinical studies. The themes identified show that nursing students are affected by their interactions and relationships with teachers, staff nurses and doctors. Many students reported in research that they often felt incompetent, inadequate and that they lacked knowledge needed to perform clinical procedures and to take care of their patients safely. Many also reported fear of making mistakes and harming their patients.

The literature review also revealed that stress and anxiety was often perceived by students as having a negative influence on their learning in clinical. As a result of high

emotional states caused by a variety of factors, some students lost motivation to learn, others avoided difficult and challenging situations, which subsequently deprived them of good learning opportunities, and yet others adopted surface approach to learning as they perceived their teachers as evaluators rather than educators.

This chapter provided an overview of the theoretical framework: Folkman's and Lazarus' Theory of Stress and Coping and Bandura's Social cognitive Learning Theory. The theories on effect of anxiety on performance were also discussed here.

CHAPTER 3

METHODOLOGY

Purpose of the Study

The purpose of this study was to examine nursing students' learning experiences, sources of stress and anxiety, and students' coping methods during their clinical rotations. The main aim was to hear and to report students' personal stories and to identify their perceptions of the learning environments during their three-year nursing program.

Research methodology

This study was qualitative and descriptive in nature. In qualitative inquiry researchers try to understand their subjects from a subjects' own frame of reference (Bogdan & Biklen, 2007). One of the goals researchers have when engaging in qualitative research is to develop understanding of human behaviour and experience in order "to grasp the processes by which people construct meaning" (Bogdan & Biklen, p. 34) about events in their lives and "to describe what those meanings are" (p. 43). Researchers attempt to understand behaviour from the informant's frame of reference by assuming that all data gathered from research is a potential clue to comprehension. This approach to data collection allows for explanation of learning experiences "from the point of view of the student nurse" (Melia, 1982). This methodology also allows for collection of rich data which in turn would provide a much needed insight to the world of a student nurse.

Setting

The participants for this study were chosen from a graduating class from a large urban college in the province of Quebec, Canada. The interviews were conducted one-on-

one in a place mutually agreed on by the student and the researcher. Four of the interviews were carried out in small conference rooms at the college. Care was taken to use the conference rooms which were quiet and where the participant and the researcher would not be interrupted. Also, the researcher ensured that the rooms were away from the offices of the nursing faculty in order to protect identity of the study participants. One of the interviews was conducted in the conference room at the hospital where the subject had his clinical rotation. The last interview was conducted in researcher's home. Again care was taken to ensure confidentiality and to protect participant's identity. There was no one else present in the house at the time of an interview.

Ethics Approval

Before commencing this research study I submitted my research proposal to the Research Ethics Committee in the Department of Education at Concordia University. After presentation of the proposal to the Committee at Concordia, I received approval to conduct my study. In order to gain access to the subjects I submitted my research proposal to the Human Research Ethics Committee of the urban college and obtained the permission to carry out my research.

Sample

Purposeful sampling and convenience sampling were two methods for the selection of the subjects. The sample consisted of six students graduating from the three year nursing program from an urban college in the province of Quebec, Canada. With the permission from the Chairperson of the Faculty of Nursing at the urban college where I conducted the study, I met with the students of the graduating class alone in February, 2010. I explained the purpose of the study, and I obtained their permission to contact

them for the interviews (see Appendix B). Out of the 61 students, 29 filled out the consent to contact them for interview (48% response rate).

In order to identify subjects who would have the ability to reflect on their experiences, I consulted the third year teaching team who knew the students of the graduating class. I provided the class list, which I obtained from the Chairperson of the Department, and I asked teachers to highlight the names of the students who they believed were articulate, and could easily reflect on their clinical experiences. At no time were the teachers aware of the names of the subjects chosen for the study. I then matched that list with the names of the students who agreed to participate in the study. In order to avoid conflict of interest type bias in the results, I excluded from my sample the students who were in my clinical groups at any point during their three year program. There were no subjects under the age of 18 in the sample chosen.

I initially contacted students by e-mail, and four agreed to participate in the study. Two remaining subjects were from a convenience sample (they were available for interviews within the specific time). A total of 6 participants were interviewed. In this study I did not use students' real names and they were all given pseudonyms. Also, the subjects were interviewed during their last clinical rotation to ensure that there was no possibility that I could be their clinical teacher in the future.

Method

Data for this research study were collected through semi-structured, approximately one- hour interviews using audio recordings. In order to gather broad data I started each interview with general questions about subjects' experiences during clinical rotations during their three year program. After giving the subjects an opportunity to

reflect on their experiences I used open ended questions which focused on factors which may have contributed to subjects' feelings of stress or anxiety during their clinical experiences. For each of the research questions I had two or three sub-questions (see Appendix D). The interview questions were tested on a former student who was not part of this research study and the data from this interview was not used in this study. The initial guiding questions (Appendix D) were modified or expanded as I began to notice common themes among the responses of the participants.

I also collected demographic data from each of the participants which could be useful in the analysis of data; i.e. age, country of birth, marital status, prior education, history of work within the health care system (see Appendix C).

I provided subjects with the consent form assuring them that their identity would remain confidential and that the results of my interviews would be used in my thesis (see Appendix A). I assured them that any raw data would not be shared with anyone on the faculty, nor would any member of the faculty gain knowledge of any information gathered during the interviews. The participants were all given a copy of the consent form. I also informed them that all data collected from the interview would be used for the research purposes only. As the subject discussed during the interviews was potentially upsetting to study participants, I provided them with the information on the counselling options at the college and the name of the counsellor who agreed to provide support if there was a need. One of the study participants was quite upset and cried during the interview when she recalled difficult and upsetting situations. She did not however want to stop the interview and she did not feel the need to see the counsellor at that time. After the interview the researcher encouraged this participant to seek help with the counsellor if

she felt she needed support or to contact the researcher, but she declined both stating that "she was OK".

At the beginning of each interview I also obtained their consent for using an audio recording device (part of the consent form: Appendix A). I also obtained their permission to contact them by e-mail or phone, after the analysis of the data would be completed in order for each participant to review my data interpretation. I informed the subjects that the results of the study would be available at the Concordia University Library after the thesis was approved and placed on the library shelves, which would take place after the students have graduated from the program. The interviews were transcribed by the researcher verbatim, and reflective field notes were written after each interview.

Data analysis

The analysis of the data was done using transcripts of the interviews and my reflective field notes. This was an ongoing process during data collection as it provided me with some guidance in the subsequent interviews. The analysis process involved colour coding of the transcripts and identifying the emerging themes. The periodic review of data allowed me to reflect on it and facilitated the process of analysis. When reviewing the transcripts I chose quotes from the text which I later used to support my analysis as suggested by Maxwell (2005). In order to ensure the validity of data, I used a member check strategy by asking each of the participants to review my interpretation of data. All of the study participants reviewed my interpretation and agreed with my analysis. I also used peer examination strategy by having one of my colleagues examine my data for plausibility of the emerging themes (Merriam and Simpson, 1995).

Timeline for the study

The preparation for the study started in the fall of 2009. The research proposal was submitted for approval and hearing to the Ethics Committee of the Department of Education at Concordia and to the Human Research Ethics Committee at the college where the research participants were studying. Once the approval was obtained, the actual interviews took place between the months of March and May 2010, which were guided by student and researcher availability. The analysis of the findings took place in the fall of 2010.

CHAPTER 4

PRESENTATION OF FINDINGS

The purpose of this research project was to explore nursing students' learning experiences, sources of stress and anxiety, and students' coping methods during their clinical rotations. Six third year nursing students participated in this study: Annie, Brianna, Emma, Hanna, Margaret and Michael. This chapter presents the findings obtained through one-hour interviews with each student. The aim of this qualitative study was to hear and to report students' personal stories and to identify their perceptions of the learning environments during their three-year nursing program. The guiding research questions were:

1. What are the nursing students' experiences during clinical rotations?
2. What are students' perspectives of stressors in clinical practice which bring on anxiety?
3. What promotes or hinders students' learning?
4. How do students cope with their anxiety?

All the interviews were audio recorded and transcribed verbatim and although each experience was unique, common themes were identified in all of them. The results are reported under these themes and direct quotes are used to describe students' individual perceptions. The four major themes with subheadings are:

1. *Learning environment:*
    a) *Place within the healthcare team: nursing staff*
        i. *Sense of belonging*
        ii. *Positive encounters*

b) *Place within healthcare team: medical staff*

c) *Relationships with the teachers*

i. *The role of a teacher*

ii. *Teacher incivility*

iii. *Evaluation anxiety*

iv. *Lack of autonomy*

d) *Relationships with patients*

2. *Preparation for clinical and perception of self*
3. *Effects of stress and anxiety*

a) *Physical effects of stress*

b) *Influence of stress on learning and performance of skills*

4. *Coping methods*

Profile of the Participants

The participants in this study were in their last semester of the three year nursing program at a public College in a large urban area in the Province of Quebec, Canada. After their graduation all of the participants would obtain a DEC degree and after passing the licensing exam they would obtain the title of Nurse and a permit to practice. They were all given pseudonyms to protect their identity. The participants are listed in alphabetical order and their profiles are presented below.

Annie is a 20 year old white single female who started the nursing program after completing high school. She works part time as a PAB and after the second year of nursing she did an externship in a large urban hospital over the summer.

Brianna is a 26 year old white single female, also a high school graduate. She worked previously in the healthcare setting on the blood procurement team (phlebotomist).

Emma is a 23 year old white single female who obtained a DEC in social science prior to entering the nursing program. She also completed one year of the undergraduate studies in a program unrelated to health sciences. Emma did an externship in a large urban hospital over the summer after her second year of nursing.

Hanna is a 28 year old white married female who did a 3 year program in natural therapy and worked as a massage therapist prior to entering the nursing program. She also completed one year of undergraduate studies in psychology

Margaret is a 46 year old white divorced female who worked as a PAB in a healthcare setting for 20 years.

Michael is a 40 year old single white male who obtained an undergraduate degree in a program unrelated to health sciences. He does not have any prior experience in health care setting.

Themes

The four identified themes are: *1. Learning environment, 2. Preparation for clinical and perception of self, 3. Effects of stress and anxiety, 4. Coping methods.*

1. *Learning Environment*

Although there were many common themes among the learning experiences of all the participants, their perceptions of the overall quality of experiences were different. Three of the participants reported that their clinical experiences were extremely stressful (Brianna, Hanna and Margaret), two reported that they were very positive (Annie and Emma), and one participant reported it was average (Michael).

Brianna described her experiences as very stressful:

> Generally I found clinical very stressful. I consider myself to be a strong student, but they were just difficult... and it got worse actually. First year wasn't so bad, but by third year, I found it very stressful... Clinical lead me to having high anxiety...I'm in therapy now.

Hanna had similar perceptions. When asked how she found clinical in the last 3 years she responded:

> Difficult. I found clinical to be a major source of stress in the week. I would dread it. I dreaded going in until this semester...just a sense of anxiety every Wednesday night before clinical... So I would go in and just felt like I had a mountain to climb every day. Then I would be so relieved at the end of the night, but the nights that I would have to go back again it was just a feeling of a weight.

Margaret shared a similar experience: "I found it very stressful, throughout the entire three years" and she cried during the interview when describing some events and stressors. Annie had a different outlook. Despite having some stress she described her experiences as "positive so far" and clinical being "great".

Emma had the most positive experiences:

> I had really good 3 years in clinical experiences. I enjoyed all my clinical teachers. I enjoyed all clinical areas, except for one area, but it wasn't because of the teaching or anything like that. It was just the nursing care that I saw was really inappropriate, so that area I didn't like. But I've really enjoyed the entire thing. I've never had any complaints. I've never NOT wanted to go in one day... I mean I LOVE going to clinical. I can't even sleep because I am so looking forward to it...I found something that I liked in every area, even if I didn't like the subject.

Michael thought it was average:

> Ups and downs. There were good parts, and there were parts that were a little freaky. But in general it wasn't detrimental, and it wasn't super brilliant either. It was just middle of the road… It was average… So overall, I think positive outweighed the negative, but the negative, even though it was smaller, it was so much more amplified. Because it's just like someone judging you and telling you that you are really not good...

Hanna described how unfamiliar environment and all the equipment on the unit stressed her and affected her learning:

> The sense that it's like a whole other world. It feels like a trip almost sometimes to be in there. I go in there and suddenly everything just seems complicated. And there are all these machines, equipment, Foleys, chest tubes, IVs that I don't feel comfortable with and yet I'm responsible for it.

She summarized the challenges of changing environments each semester:

> …changing environments and teachers and settings and nurses and even just the way charting and everything is done is really challenging. Until I felt comfortable on the floor and had the sense of where things were, the feeling…like somehow I was missing something was more present. And that was probably just because I didn't feel so grounded on the floor, I think.

a) Place within the healthcare team: nursing staff

All the participants in the study talked extensively about their place within the health care team during their clinical rotations. The interpersonal relationship with healthcare professionals was a source of stress among all of the participants. The process

of socialization into the unit and into the team of nurses was difficult for many and it depended in large part on the behaviours and on the professionalism of individual nurses and doctors. Some gave examples of how first impressions influenced the way nurses worked with students for the rest of the clinical rotations. Many felt that their inexperience and unfamiliarity with terminology lead to situations in which students were perceived by nurses as weak or unprepared.

Sense of Belonging

Students often feel that if the socialization process does not go smoothly they do not have a sense of belonging. All of the participants in the study felt that they were often in the way, being a burden to nurses or being an inconvenience throughout most of the program. They also reported that some nurses refused to work with students and showed hostility towards them, although this did not happen often. Some felt that it was only in the last semester during their internship that most of them started to feel like they were part of the team.

Until his last semester and except for the rotation where he spent in the small outpatient clinic Michael never really felt like he belonged:

> Previous semesters it was kind of like very difficult with the socializing, because nurses didn't want you to go into their nurses' lounge, you kind of like you belonged, but you did not belong… I didn't feel that I was fully integrated as part of the group or as part of the team...

He identified one of his most difficult rotations (medical-surgical) as the most challenging and he attributed it mainly to the unwelcoming environment:

> And med surg was the only semester that I truly, truly felt I did not belong in that group... once I hit the med-surg semester then it became much more difficult. But

> I don't think it became much more difficult because I was given the impression that I didn't know what I was doing. I think it was just difficult because the environment and nurses that I was with didn't provide like a welcoming and learning experience... the environment wasn't teaching oriented.

He felt that this environment in which nurses were not interested in teaching or understanding students' thinking negatively affected his learning. He did not learn from the nurses and he needed to spend time after clinical looking things up.

> They (nurses) assumed a lot without actually asking what any of us were thinking, or what I was thinking… After, I probably tuned out to what they were all saying. I just did what I had to do, and took care of whichever patient that I had to take care of. It became more of task oriented… The learning was done outside of the clinical setting… I wasn't interested in what they had to say, because they weren't interested in what I had to say….Which made things harder because I had to actually spend twice as much time learning what I needed to know.

Brianna also felt that it was hard to become part of the team and to have the sense of belonging. She felt that as a student she was not important. She said:

> ...Part of the hardest things to deal with is just trying to find a place on the team as a student...I felt like I had no credibility...to be respected and try to be autonomous...it wasn't only until sixth semester where you start feeling where you maybe belong... That took a long time. That took two and a half years to feel that way. Otherwise like I said you are only there for a certain amount of time, they don't care. You are changing the bed and washing their patients. They don't care about you, they don't think you are important, I know this, yeah unimportant.

Margaret recalled one instance when the nurse refused to work with her. She said that" it made me feel bad".

Hanna was in the same situation one time. She recalled:

> ...One nurse, you know they have assigned me to her. And she was "oh no, no, I'm not taking a student and I can't have a student" and she was really adamant. And I was like "I don't bite, you know"... That was probably the worst reaction I ever had from anybody.

Despite good experiences in clinical Emma also felt at times like she was an inconvenience. She said:

> There are some (nurses) that just don't like having students...Sometimes I felt like I was just an inconvenience. And it pretty much would ruin my day in the sense that why would I bother even being here if you don't even want to teach me.

Until her last semester Emma did not feel like she fully belonged on any team during her clinical rotations. When asked if she felt as a member of the team she responded:

> No I never really felt like...I don't, can't even find a word for it. That I was just a student, that I was just there to kind of absorb information...

She gave an example of her geriatrics rotation when she felt the nurses were not interested in teaching students.

> Like in geriatrics...I just felt like I was there to get through the semester, the rotation finished, and I never felt like I was part of anything on that floor... they don't really teach you and spend time with you. They just are there to like watch you pour your meds, and then you get them, and then they kind of leave you alone... Like they just didn't seem interested in having us there. Like not too enthusiastic about having students...they just never really took the time to sit with us and talk to us about the patient and, you know, teach us things or what their current situation is, what brought them there.

Emma described the behaviour of one nurse who was hostile towards the nursing students.

> There is a nurse on the floor now, and she just seems so miserable... she just seems to hate all our students, and hates having students... I just avoid her, she just looks so angry all the time and I want to tell her to smile and relax, you know what I mean? She hasn't been a nurse for that long, so I don't understand why she is so miserable. That's just an example where I feel like I could never ask her anything without her snapping at me or thinking I'm an idiot for even asking her questions…when we pick our assignments, we never put ourselves with her. Just stay clear.

Annie described experiences from her first year when she felt she did not belong.

> It's harder in first year. It definitely felt like you just don't belong and you are always looking at the chart and you don't do a lot with the patients, but you're always with them. But you're not doing a lot of skills, so there I definitely felt I just didn't belong.

Annie added that she often felt like she was in the way. This is what she recalled regarding sharing the space with the nurses:

> There is only so much space to look at charts, or in med room, and it would be OK if we were there and the nurses sort of elsewhere, in the rooms or doing rounds. But when they really came it was sort of like: "OK you need to get out. I need the charts"... Or in the med room. Always, like "OK well like excuse me I need to get to the insulin" and you're like "Yeah, I know that we are two people doing that, and that it's not a lot of place, but I need the insulin too, or I need the narcotic cupboard".

Some of the participants concluded that if one was accepted on the team one could be invited to join nurses for breaks in the nurses' lounge. Many felt that it did not happen until their last semester when students spent on average four days a week on the same unit. In some cases it was their teachers who instructed them not to take their breaks in the nurses' lounge. In other instances students felt that they were not welcomed there.

Emma was not specifically told that she should not use the nurses' lounge on the unit for her breaks but she heard that it was nurses' preference that students did not use it. She understood that nurses needed their personal space away from students. She said:

> I...don't go into the staff room because...I've heard that they don't like it too much because they like to go and talk about us. But that's what I heard… I just feel like that's their territory, which is fine, and I don't hold any judgement on that. I mean they need to have time too, where they can go and not have to worry and say what they want. Because they are our teachers as well...

Margaret was told by her clinical teachers not to use the nurses' lounge and she understood that nurses needed their space away from students. She felt like part of the team when she was invited to the nurses' lounge in her last semester. She commented:

> Some teachers don't want you in the staff room, and they tell you that that is the nurses' time to have their break away from us, so we are not allowed in the staff room. So we have to go downstairs get a coffee, go outside whatever…. I thought it was reasonable, that didn't bother me. And in internship I just out of habit

> didn't go into the staff room. Then they were all like, how come you don't eat lunch with us, how come you don't come to the staff room? You know it's like when you reach third year, it's a big difference, a big change, they are welcoming you, and you are part of the team, when you are doing internship.

Annie had a different take on that. When informed by the staff on one of the units that students should not use the nurses' lounge she felt rejected:

> It sort of makes you feel like "OK, this is our area and you need to get out" and you are not a nurse enough yet to be there… It does make you feel like, well, you're not really part of this team so, don't use our area.

Michael felt that not being allowed to join nurses in the nurses' lounge for breaks was a lost opportunity for the two groups to learn from each other. This is what he said when asked how he felt about socializing with nurses:

> OK you belong when I want you to belong, and you don't belong when I don't want you to belong….it's been pretty much the case throughout most of the semesters. It was like OK you go eat in the cafeteria or do whatever it is you are going to do, but don't' do it in the nurses' lounge… Which is a shame because, I mean, I can understand from their point of view where it's, Ok, their little space. But if you don't let these students in they will never know how to socialize with you guys, because here is a great opportunity to…OK you know, "Come in this is what we do and yeah we talk about the patients we talk about teachers, and we talk about the doctors, same as nursing students talk about teachers and clinical and doctors". They don't welcome you into their space. They welcome you to their work environment, but not into their personal space. I guess that's their personal choice.

Some of the study participants felt that their inexperience might have negatively affected how they were perceived by the nurses, especially at the beginning of their rotations. Michael, Brianna and Hanna described events which they believed led to wrong first impressions.

Michael described a situation on his first day on the unit when his co-assigned nurse asked him for help and then she ridiculed him publically when he did not do what she asked him to do:

> My nurse told me to go do chemstrips. But because my previous rotation was in another hospital and they didn't call chemstrips chemstrips for blood glucose, like CBGMs (capillary blood glucose monitors). They were called the chemstrips for urinalysis. And so I have gone in to get the urinalysis thing, thinking that, well she asked me to get the chemstrips. And then I was in the hallway with all my colleagues that were there, so she kind of looked at me, she goes "Well you really don't understand anything because I said go get chemstrips". And I'm like "These are chemstrips". She is like "No these are urinalysis strips I want you to get CBGMs". So I felt like an idiot, because I'm like: Yeah, OK, the rotation before this, this was called the chemstrip. So, is a Foley still called a Foley, or are we calling it something different? So it kind of made me feel uneasy because it was day 1. I am like OK, this is going to be good because I still have another 6 or 7 weeks to go on that floor.

He felt that this event set the tone for the rest of the rotation and he had to "work twice as hard to prove that OK, yeah, I know what I am talking about, it's just a stupid little mistake".

Brianna described the day when she worked with a nurse who was "intimidating…loud and dominating" and it made her nervous. She felt that this also set the tone for the entire semester:

> I just kept on making mistakes that day, forgetting to unclamp my secondary medication bag...it just looked so stupid, considering it was the first day that we worked together...but not only did I do this once, I did it twice in one day, it was not like me...and my day was just full of little, little mistakes like that...and every time, he (nurse) just wasn't the nicest about it...That was pretty much the worst day in clinical. I was really down on myself, and made an impression of myself that, I felt, wasn't really accurate. That just kind of set the tone for the entire semester...I did wonder at the end of the day, if he had just reacted differently, and I didn't keep on getting more up tight and more anxious around him, I wonder if I would have made less mistakes throughout the day.

Hanna shared the story from her first day on the unit when she asked a staff member about the mobility of her patient and was told that he only needed assistance of one person to mobilize. However, when she helped him to walk to the bathroom the patient fell.

> He is just a step away from me and we can't both fit through the door and he was grumbling something and he didn't speak my language and he fell. Bang, right on the floor. And so he fell, I raced and grabbed his head before he hit the floor, which was good, and then I started yelling for help. That fall was...it was like the worst, like this was my first morning on the floor and this is what happens. It was unbelievable!...But then the physiotherapist got super mad and got quite hostile with me.

Positive Encounters

Despite many stressful encounters with the nurses many of the participants said that the positive experiences outweighed negative ones.

Brianna said:

> In the 3 years, most of the co assigned nurses have been fairly supportive and encouraging...You have the few who just kind of don't care. You are a bit of a burden to them because, you know, you double their work load, but no, they have been fairly OK.

She added that development of a good relationship with the nurses was vital:

> That's where I think is where your relationship with your co assigned nurse is really important to have them say "OK, I trust you. I know you are capable of this. Go do it". That makes a huge difference.

Brianna felt that despite one negative encounter, her relationships with nurses were best in the last semester of the program and she attributed it to her enhanced involvement in patient care:

> ...This semester (internship) it didn't feel like I was in the way as much... and after about 3 or 4 weeks you develop the type of relationship with your co assigned (nurse) where you just sit and do what they do and you go around and you do everything and you don't feel as you're in the way as much...

Emma also talked about how important trust was when she worked with the nurses:

> I made some decisions last week where my preceptor was like "That's good, that's your clinical judgment and I respect that and you need to decide that... You are in the third year now, I trust your judgment, I'll see what you're gonna do".

Emma said that "the nurses overall have been pretty good" and she felt like a member of the team in her last semester of the program. She talked about what made her clinical experiences best and when she learned the most:

> When you are working with a staff that actually takes the time and teach you, and ask you questions, and they don't act like you are inconveniencing them...I've had some really good preceptors (nurses) that have taken the time to really teach me and nurses that aren't even necessarily on the floor. Yesterday a nurse who is training to become a wound care specialist came up to do a dressing. And she asked me and my preceptor, "So who is doing this?" I said "Well the nurse will do it I guess" but the wound care nurse (in training) said, "Absolutely not…you are the student and you will do it". The nurse who was training stood there and she took the time to walk me through, how to do the perfect Vac dressing... I couldn't believe that she actually took the time to walk me through that despite her busy day. And that really meant something to me, so I've had some really good experiences like that.

Emma attributed the positive attitude of nurses towards her to being an asset to nurses due to her better knowledge with which comes more responsibility in clinical at the end of the program. This is how she described it:

> ...At the beginning we don't really help (the nurses) because we don't know anything we are doing. It's almost like they (nurses) are constantly giving directions. And maybe towards the end...we become more of an asset, because they can delegate and we are able to handle the responsibility.

Margaret also described most of her encounters with nurses as positive:

> I found the nurses very open, very helpful. I never had any problems with any of them... And they were there to teach you, they would teach whatever they can. Even if it's something that you have not learned, or you didn't need to learn at that time, if they were doing it, and it was something they knew you never saw they would ask you to go and see it ant teach you how to do it.

Margaret also noted a difference in nurses' approach to her in her last semester:

> You know, it's like when you reach third year, it's a big difference, a big change, they (nurses) are welcoming you. You are part of the team, when you are doing internship... I had more knowledge first of all and third year...you are working with a co assigned nurse but you are more independent, and if there is a problem you go to your co assigned, but they are not side by side with you.

Despite some negative encounters throughout the three years Annie's experiences with the staff nurses were also mainly positive:

> Most of the nurses, like in the ER right now, most of them are actually really happy to have us and trying to teach us as much as they can...One of the nurses in the ER, actually, she is like my model for helping student nurses. She is a recent grad, not too long ago, so I think that's why she still understands how it is...She always sits down with me and we, sort of go over everybody that's in our area in ER. And she is like: "Ok well this can be an interesting case"... She is always asking me:"What do you need to practice to try to get that skill in for the day?" And she is one of the nurses that even if a patient is not assigned to me, if he has an IV to be put in, or some sort of skill I still need practice with, she would be like: "Oh, do you have time, do you want to come do this for me? There is this patient that needs X skill to be done. Would you like to try it again?" So she is always looking at learning opportunities, and even on a really busy day...So always like trying to make me think even when we are booked and crazy and we don't have time to think, she sort of makes us stop and think about it.

She felt that she was lucky to work with some good team of nurses and she said: "Most of them taught me more that I could hope for".

Hanna felt reassured when working closely with the co-assigned nurse in ER during her last rotation. She said:

> I thought the co-assigned nursing in the ER was really helpful because, depending on the person I work with, there was that sense that this is my patient but this person and I are going to go and if there is a question we are going in together on it. Or I'm going to do my assessments and she's going to come through and just validate that all I did was just correct.

Michael felt that during his internship he was more valued by nurses as he had more to offer and staff on the unit worked well together. His recollection of relationships

with nurses at this stage was mostly positive. He attributed it partly to easing the nurses' workload:

> …This rotation (internship)...everybody just seems to work together so well …And I clicked in very well with everyone… And everybody (nurses) were more like "Oh, OK", you know, "So you are kind of going to pull your weight and it's not going to be a big problem, so you are not gonna add more work to my workload".

b) Place within the healthcare team: medical staff

Finding one's place within the healthcare team also means being able to communicate with doctors, residents or medical students. The study participants felt that throughout most of the program, students were not encouraged to talk to the members of the medical team. It was only in the last semester that this communication was encouraged and expected. The majority of the participants felt that doctors were often disrespectful towards the nursing students.

Brianna was sometimes afraid to talk to doctors as she felt she was unable to judge whether the information she wanted to share with doctors or residents was relevant. She felt that the communication was not stressful, but she was not encouraged to talk to the medical team. She said:

> ...I was afraid to bring anything up to the doctors or to my other nurse in case it was not relevant... And your teacher is not always there, and sometimes you branch out, and not always rely on your teacher as a sounding board, you want to be able to do it yourself...I don't remember talking to any doctor in first year, by any means, and second year even; I think I talked to the doctor twice in med surg... I think the understanding was kind of there that you could, you can go approach them, you are allowed but it wasn't really encouraged. It wasn't really "OK, why are you telling me? Go tell the doctor". That wasn't really that.

Brianna felt that giving report to other healthcare professionals was such an important part of nursing that it should be practiced earlier in the program and not only in the last semester. She said:

> ... (It) might be easier if they (nursing students) were encouraged to do that a little bit sooner and the realities of nursing become a little bit clearer too and you see how it works. Because sometimes you just wonder about what happens with the information that I have? How does it work? What process does it follow?

Margaret recalled an interaction with a doctor that was embarrassing. She described a situation when she was just starting her morning shift and she did not know that her patient had already left the unit to go to the operating room. This is what she said:

> You have to take a lot in...Doctors are sometimes very disrespectful in the way they talk to you...Because the patient did not receive his meds as anti-hypertensive medication before going to the OR, it was 25 after 7. We start at 7h30. I said well I can give them to him before he goes down and he goes "Are you blind? You can't see? He is already with the OR. He went down"...Oh yeah, my face was beet red.

She recalled that it was not the case with all the doctors and she felt that by practicing her communication with the medical team it became easier. She also appreciated when the doctors would take their time to teach her.

> Well I'm shy, believe it or not, I am. When I started doing that (talking to doctors) I was very nervous, but then I was fine. It's like everything else. You have to learn and get used to it. But some doctors will be super nice, and say "Excuse me, are you waiting to speak to me?" and be very helpful...I had another one (encounter with the doctor) who was like "Margaret come, come, come. You've got to see this" and (he would) teach you different things...Which is great...Communication is a huge thing between a doctor and a nurse, it's a team. They have to communicate. If they teach you what they know, then you are not going to call them all the time, it's going to cut down on the number of pages they get.

Emma had a similar outlook on communication with the medical team. She also felt it should be encouraged earlier in the program.

> I find that before third year we weren't really encouraged to talk to the doctors... We were not. No. I never took initiative either... Like now I'll sit down and I'll see a resident and I'll have a conversation about my patient and it doesn't really bother me. But I found the externship really improved my confidence...I don't feel nervous about talking to them, like, even staff.

She also appreciated when the doctors took the time to teach. She recalled the first time she inserted a nasogastric tube into a patient:

> So he turned to me and says "Can you put an NG tube?" And I said "Well yeah. I've never done one but I've learned it in the lab". So he said "OK come", he's like "You're gonna do it"... But he took the time to teach me and to let me try something new, so I really appreciated that because usually they are so brisk with you, and always in a rush. So, yeah I've had some pretty good experiences.

She felt that being recognized as a member of the team by the people you worked with during the clinical rotation made it easier to approach them.

Hanna felt that the communication with the doctors depended in large part on the personality of the individuals, but she had trouble deciding who she should talk to. She did not feel stressed when she needed to speak to the doctors and she attributed it to being assertive in life in general. She said:

> ... Generally I had trouble knowing who was whose doctor every day. I didn't know who anybody was. I wasn't there long enough to get a feel from the doctors unless there was somebody who was always there. I often couldn't tell who it was I could really talk to. And that was one of those things that I would be afraid to ask sometimes... I guess it was really about the person. Some people feel approachable, some don't, so sometimes I would be a little oooh...But I'm kind of outspoken in a lot of ways and assertive in general in life and not necessarily...in nursing, but in life. So I would try to master up that kind of feeling "Oh, it's just another person and I can talk to them". I would just sort of talk myself into it.

Annie reported that she was stressed when she needed to approach any members of the medical team. She wasn't always sure what was relevant in her reports. She had a feeling that as a student nurse she was lower down in the hierarchy. She also felt intimidated by some doctors.

> Just the fact that you have to know what to ask. Some of them are super nice, but some of them they sort of get impatient and you don't want to get them impatient because you're a student nurse and you feel like you are lower down in the hierarchy of medical whatever. So you sort of...feel like you are bothering them, so you better go fast with what you have to say and get out.

She described how she felt in rounds when she was giving report on her patient:

> ...Just in the rounds, whenever you are asked to speak and the doctor is there, and if he asks you a question and...I remember one time I think I guess I said too much or something the doctor just looked at me and like, "OK, do you have anything else to say?" I was like: "OK, I'm going to be quiet now".

She recalled that her teachers encouraged her to speak to the members of the medical team, but the nurses usually spoke to the doctors regarding the patients. She attributed this to the fact that only the nurses can take doctors' verbal orders.

In summary, despite the students having overall positive relationships with nurses during their clinical rotations, the socialization process was seen by a majority as stressful. Several students felt that their inexperience negatively affected the way they were perceived by the nurses. A majority did not have a sense of belonging on the healthcare team until the last semester in the program. Many felt they were in the way and an inconvenience to some nurses. Some students experienced unwelcoming environments in which the nurses were not interested in teaching. This was reported to negatively influence students' learning. Communication with the doctors was seen by a majority as stressful and this was attributed to doctors' individual personalities and the hierarchy within the hospital. Students felt that until the last semester they were not

encouraged by nurses or teachers to talk to the members of the medical team. Many felt that as nursing students they were not respected by doctors and their opinions were not valued. Students reported that they really appreciated when the doctors took the time to teach them.

c) Relationships with teachers

All of the study participants talked extensively about their relationships with clinical teachers, their teacher's role in the learning environment and the pedagogical approach of their teachers. A majority had overall good learning experiences and described their relationships as positive. The students who had personal conflicts with the teachers felt that they were treated unfairly and that these conflicts negatively affected their learning in clinical.

The role of a teacher

There was a consensus among the participants about the role of a clinical teacher. The main roles which students identified as important in a clinical teacher were that of a support person, advocate, guide, expert, and evaluator. A majority of the study participants felt that overall their relationships and communications with clinical teachers were positive and that most of the teachers were approachable. A couple of the study participants felt that they had to be careful about what they could share with their teachers, as they felt they could be judged harshly.

Michael found that most of his teachers were approachable. This is how he described his relationships with clinical teachers:

> ...My interactions with my professors have been very positive actually...the criticism was always fair...it doesn't bother me to get a criticism back because it's not like a personal attack...they were open and I would discuss stuff. I didn't feel like I was impeding on their time or I was bothering them...

Brianna said that she had mostly positive experiences with teachers. She particularly appreciated support from her clinical teachers when a close family member passed away:

> …I had very, very positive relationships with my teachers, except for one that was very bad...They were just quite supportive…just this last semester…somebody who I considered to be my second mother, she passed away, and the teachers…were just there for you. Like at that point you are a third year student and there is a certain level of respect…They were just very supportive through the entire thing and very understanding of how difficult that was…

Hanna also felt that the majority of her teachers were approachable. She said: "I really liked my teachers".

Emma described her encounters with most of her clinical teachers as really positive:

> For sure really positive...I really lucked out with being able to work really well with the teachers...there (were) just times when I was able to sit with the teacher and laugh about something and discuss my concerns without feeling like I'm necessarily being evaluated on what I'm saying...and have the discussion without more of an authoritative discussion, where they are talking down to you...

Michael saw his teachers mainly as someone who enriches your knowledge and guides you in this process. He said:

> ...(It) would be the role of guiding, adding to your knowledge but letting you do stuff without saying you can't do that, you can't do that and you can't do the other. It's kind of like, "OK you can do this if you can explain to me why is it that you are doing it".

Hanna also saw her teachers as guides, evaluators, experts, and facilitators. This is how she described their role:

> (They are there) to be sure that the patients remain safe. To guide and to help us learn techniques. And really mainly to monitor our performances if we got what it takes to go out there and do this and if we are going to be safe for the public... I felt like my teachers always really tried to assert us onto the floor (unit). So with our teachers there I felt comfortable...like I had my place there. Had I not had the teachers there, I don't feel like I would have felt so comfortable.

She described her teacher as an advocate in a situation when her patient fell and it was not Hanna's fault. When a staff member blamed Hanna for the fall her teacher said to the staff member that she heard her say that it was safe to move the patient. Hanna recalled:"I felt like she was really on my side. She stuck up for me".

Brianna described the clinical teacher's role as advocate, guide, confidante and enforcer:

> Firstly they are our advocate when it comes to the role that we play on the unit during our clinical. Secondly they are our guides... Third I think they are our confidant, like somebody who we should be able to (talk to if) I'm super scared about this... They have to be our enforcer right, making sure that we are doing everything correctly. I think those are four main roles. I'm sure there are other things that I don't even know they do.

Annie saw that the teacher's role changes with each year in the program:

> First year I find that the teacher...is there to help you with basic, basic things...it's sort of your mom teaching you how to take your first step basically, except in the nursing world. Second year... it's...trying to push you to be better...you have a lot of skills and you have a lot of the theories and the thinking, you just have to apply it... And in third year...the teacher is there almost to see how you are doing independently, but you still have that shoulder to lean on, and they are there to still ask you questions and make sure that you understood everything that you are supposed to understand the three other years, and that you are using what you know, but they are not there anymore all the time, so it sort of helps you become independent.

Emma described the teacher's role as a guide, evaluator, supporter and someone one can confide in. This is what she said:

> I think their role is to guide us in how to become a nurse in the profession. To be there to, not question our capabilities, but to quiz us, to test our learning, to test our knowledge, to be a support system, especially with new things that you've never had before, and also to be there when we need them. Sometimes you are in

> a hard situation and you want to tell somebody without feeling weak and ...without the student feeling like they are being judged for it.

Emma's experiences over the course of the program led her to believe that although she may have wanted to, she could not fully confide in her clinical teachers. She was concerned that she might be perceived as being emotionally unfit or weak. She shared a story of the recent passing of her grandfather and how this situation affected her. She felt that she could not confide in her teacher when she reacted emotionally while taking care of a patient who reminded her of her grandfather. This is what she recalled:

> ...When he (grandfather) was moved to palliative care I stayed with him. I had this week a patient in which there were a lot of things similar to my grandfather's situation... so yesterday, I broke down twice, and like really bad, but not in front of anybody, not in front of the patient, I went into a room and didn't share what happened with anybody. But I feel like if I told that to a teacher, they would think that I was weak, that I couldn't handle it. But it's just fresh for me... So that's an example of something that I would feel nervous about sharing with my clinical teacher.

Emma based her decision to be careful with clinical teachers on her past observations and what she heard from her peers. She said:

> ...I've heard that other students have been judged and reprimanded or stereotyped by their emotional reaction in clinical. And based on what I've heard I've known to always censor, you know like not open up to much...there are certain things that I would maybe not divulge.

Hanna had similar thoughts on not fully trusting her clinical teachers until she really got to know them. This is what she said:

> ...In the developing (of relationship with teacher)...it was also a study of what does this teacher want from me so that way I pass...I wanted to adjust sort of my interactions based on what I felt they wanted from me. So I felt sort of like I wasn't always honouring who I am but once I got to see what it was then I sort of could let myself hang loose a little bit and be myself more.

Teacher incivility

Sadly, a majority of the study participants gave at least one example of a difficult relationship with a clinical teacher. Those students who had personal conflicts with teachers reported that it really affected their learning negatively. They also felt that it was extremely stressful to be in such situations.

Emma described one clinical teacher in her three years of schooling who made her feel nervous and who hindered her learning. She felt she needed to adjust her answers to what she thought her teacher expected.

> I've had a teacher where I feel I have to watch every single thing I'm saying and I can't really open up. And I find that's what really hinders learning experience... I can't form an opinion. I have to agree with what the teacher agrees with. And if you do, then it kinds of makes things go along a bit smoother...I adjust how I give report on my patient... And I feel nervous about it and it's not like I'm engaging in a discussion. It's like I'm in the hot seat...and I just feel nervous; you can never say the right thing. If you say black, they say white...

She felt that it truly affected the open communication with her clinical teacher:

> And it's sad because you omit certain information or you don't fully open up, just to avoid the hassle of getting into an argument or feeling belittled or whatever.

Emma also recalled the situation when she was pulled out of the nurses' report to talk to her teacher. She felt it was embarrassing in front of the rest of the staff and that she missed out on the learning opportunities by missing the nursing rounds. She said:

> So I went out and she said "Can you meet me now?" And I said "Well no, I am just in sitting on the report". So I just thought it was really inappropriate and it made me feel really awkward with the rest of the staff. And it made me feel almost like a child; you know what I mean, like being pulled out...In school we are learning that certain things are really important and one of them is being able to report on your patient and participate in rounds...but here I am being pulled out to give report on my patient.

Annie described a clinical teacher with whom she and her clinical group had difficulty communicating. She felt the teacher was unapproachable and this affected Annie's learning in the clinical setting negatively. This is what she recalled:

> ...I had one teacher that I felt the communication was sort of nonexistent...The teacher didn't take e-mails, didn't take phone calls, questions were very hard to ask because she seemed intimidating and almost, didn't welcome questions...you just felt stupid whenever you did (ask questions)...

Brianna had a similar experience when she felt she could not communicate with her teacher and she attributed it to a personality conflict. She recalled:

> ...We just couldn't communicate. I think that was what the issue was. If I said something meaning one thing, it was always taken as another thing and I was just really anxious around her because I knew that...it didn't matter what I did anymore, whether it was good or bad, I was going to be reprimanded for something...and obviously it was some sort of personality conflict...

She recalled how this teachers' communication style affected her:

> …She yelled at me in front of everybody else…It was really embarrassing…if I'd said something her responses would be very sarcastic, like if I stated my clinical opinion as weak as it is in the beginning of second year, it's still my clinical opinion, and…it was just met with total sarcasm. It just kind of shoots down your professional confidence.

Brianna was also emotionally affected by this conflict. She blamed herself in part for her inability to resolve the conflict. This is what she said:

> …When I pass that teacher in the hallway I feel sick and we don't acknowledge each other, like I'll try but…it's really unfortunate. I just felt like the whole thing wasn't handled well by me or by her, like it really wasn't…I'm much more comfortable now handling conflict, or at least, evaluating what it means to me as a student and as a person…

Margaret was really negatively affected by her relationship with one of her teachers. She described teacher's behaviours as inappropriate and she felt that she was targeted and set up to fail. She also recalled that everyone, including nurses, her peers,

and other teachers on the faculty knew that she was going to fail because her teacher discussed Margaret's situation with others.

> Some of the other students told me that she would talk about me to them...and she was telling some of the staff that she was failing me because I had a bad attitude... But the hard thing is that she went around talking to staff you know, so everybody knew, and that is what is hard, and then I have to come back here and face all this...it was horrible. I mean she failed me, let's leave it at that, she had to continue it, and then I know I've had problems with other teachers because of her talking and these teachers don't know me.

Margaret described how this teacher was making notes on her performance right in front of her when Margaret was preparing medications. She also recalled when her teacher raised her voice in front of the patient, Margaret felt humiliated.

> You are doing your meds and she (teacher) is right there in front of you writing things down... There was one time where she started yelling at me...and my patient said to me, what is wrong with her? Why is she treating me like that?

She also felt she was set up for failure because the expectations in clinical this semester were not the same for her as they were for the other students in her clinical group. She felt she had no experience or preparation to take care of critically ill patients who were assigned to her by that teacher:

> ...The teacher...she is the one who chose the patient...She said that we needed to learn...she expected us to be the RN and not the student....I had one patient that I had to transfer him to ICU, and it was stressful...(the expectations) were very high... And she (teacher) would tell the co assigned (nurse), "you don't do anything for her, she is the nurse and she has to do it all on her own". Which as a student it should not be that way, you are there to learn.

Margaret felt that the evaluation process was too subjective. These were her comments:

> ...If you have a teacher that does not like you, she is going to make sure that your clinical experience is hell. It is so subjective, it does not matter how good you are, she can write up whatever she wants, even though it didn't happen. And there is nothing you can do to prove that.

Michael recalled one situation when he felt that his clinical teacher was deliberately stressing him:

> …I had one teacher who…I don't know if she did this to add a little extra stress to see how you cope or not. When I would pour meds…and I knew that everything was right. So she would come and she would look at it, she would shake her head and she would turn around and walk. So I'd stay in the med room, I'm like everything is there, so why is she shaking her head, and why did she walk? And she'd come back and so "You didn't give it?" I'm like, "You shook your head and you went away". She would shake her head again and walk away again. So I don't know if it was just to add extra stress or OK, "How is he going to deal if I do something like that?"…

Evaluation Anxiety

Although all the participants knew that the evaluation process in clinical setting is necessary and unavoidable, a majority felt that they were constantly being judged and evaluated and they felt that it was anxiety provoking. Some students offered solutions on how this process could be made less stressful.

Michael described his perception of constant evaluation:

> Every day, every minute, whether you are on your break, whether you are not on your break...For some strange reason you just feel like you are looked at, your are being ticked, and checked, and it's box for this and it's box for that.

He described the stress of not knowing when his teacher would observe him:

> I find in clinical setting where you are a student, the stress is intermittent and it's really amplified. OK I'm (teacher) going to stress you right there, then I'm going to leave you alone for 2 hours, then I'm going to come back and stress you out again. So you can't anticipate it, you can't manage it, and you can't really deal with it, because it just pops out.

Hanna had similar perception of being evaluated all the time whenever she was about to perform a skill or interact with her patient. This is what she said:

> ...I would think about my teacher, hoping that she catches the best stuff not the bad stuff. Constantly feeling watched. You know there is this sense I have to be like the ultimate performer when really I am a beginner...I feel I am constantly under evaluation. So I don't have room to sort of breathe, if you will, sort of relax for a minute.

She perceived her teacher mainly as an evaluator but not a nurse:

> I found that maybe I didn't use teacher's instructions the way I could have because I did not look at them as another nurse who is trying to teach nursing. It was more like that performance thing and also sense of well I better know this. I better walk in and know this. I can't ask for help. I don't want to ask for help because I don't know every step A to Z on this technique or I forgot what this drug is...I didn't want any of my weaknesses to show.

Hanna also felt that in her last semester when the teacher was not on the unit all the time her performance anxiety had considerably decreased as the main evaluators were the nurses.

> It changed a bit this semester because I felt more...like it was OK to be human and make mistakes. And I think the major difference was that...my co-assigned nurses were the ones watching you.... So it wasn't like any second I could just screw up something. Without the pressure of the teacher there, it was a lot easier in terms of performance anxiety.

She felt she could be more straightforward with nurses and that she did not need to pretend what she knew and what she didn't know.

> ...With the co-assigned nurses I was very open about (things) like "I have never done this before, I don't really know what I'm doing. I have an idea...I remember pretty much everything but can you help me through it?" And they would most of the time. And if I had used the teacher in that same way, maybe it wouldn't have been so bad. But I didn't think that I could somehow.

Hanna also felt that teachers were asking more questions than students and she felt it was not the way it should be in the learning environment. She said:

> I think it's partly just that you go to clinical and they (teachers) are asking you questions. You are not the one who is asking the questions. They are the ones that

> are asking you questions. So you are supposed to be somehow an expert on something that you are completely new at. I thought it was very unfair.

Brianna had a similar outlook on the constant evaluation in clinical. She compared it to an auditioning process. This is how she felt:

> ...It's like you're continually being watched and judged and...you are never really left to do what you need to do...until the teacher trusts you enough and then you can go off...3 years of being judged by others and having to judge yourself... After 3 years it kind of takes a toll...and it's exhausting...You're trying to make the best impression because it's like I'm auditioning...for those around you and I found that frustrating... It was for everybody else around me. It wasn't for me and my personal like gratification, you know, self-satisfaction.

She felt that being constantly watched is anxiety provoking:

> Yeah, you are definitely more uptight... More tense and more anxious, knowing that they (teachers) are watching. As soon as they leave it's like you totally relax and everything comes back to you again. When...you are being watched, and assessed it's like white noise in your head...and you are really tense... So yeah, it's anxiety provoking, for sure.

Margaret also felt stressed by constant evaluation. She said:

> I don't find it stressful having them (teachers) on the unit. I find it stressful having them on top of you constantly. That's hard. You are doing your meds, they are right there in front of you…with a notebook in your face writing everything down... Or they are stopping you as you are doing them, that is how you make errors, when people do that, you know. I don't care if they are over here when I'm doing something and I'm finished and I say come and look at them, I don't have issues with that.

Although she found being quizzed was beneficial to her learning, Margaret felt that too much of it was exhausting and stressful.

> ...I don't mind being quizzed...I'd be quizzed from the time I got to the floor to the time I left the floor. Some days I would say, OK I had enough now, can we get on now, I'm tired and my brain is tired from answering all these questions...

She offered less stressful solution which students could benefit from. She gave an example of how peers quizzing each other helped in their learning:

> ...Teacher made us do the (medication) cards...and we (students) would quiz each other on it, like I want to know 10 of these meds. I want to know...actions of all of them, so that was your goal to do that for this week. You would pair up and quiz each other, it's not the teacher quizzing you but the student quizzing each other, and I found that way you retain it better, and it is not stressful.

Annie felt that the evaluation process was part of clinical and she accepted it more easily:

> …Well I think, you are always being evaluated, but there, I mean that's how they know it you are good enough to go on so it's ok to always be evaluated…(to see) if you are improving… So for me it's not necessarily stressful, but at the same time I try not to let myself be stressed…

Emma and Hanna also offered some strategies for nursing teachers which they found helped them learn and made the learning process less stressful.

Emma described how the post clinical conferences which were organized by teachers helped her learning:

> I find conferences really helpful when they are structured…presenting the case, presenting the patient, how you felt about the experience of the day, what would happen that was meaningful to you, what are your concerns…it's a nice debriefing at the end of the day, because otherwise you kind of leave with your experience, and you don't really have anybody to tell…

Hanna liked "the buddy system" when she would be occasionally paired up with another student during her clinical rotations. She felt that it took away some of the stress, as she would have someone to rely on. This is how she described it:

> …I love the buddy system…Just to have someone…there…"OK I forget this part, but I remember this part" and the other person remembers the other part. Just in handling the equipment. Because that's all really new and there is also all this other information that you need to remember and my main priority was being sure that nobody had a cardiac arrest on my watch or something major, that I would be right there with the other person and would be able to handle it.

She also felt that being questioned by teachers was stressful when she was expected to know all the answers. She gave a few examples of questions her teachers would pose and which helped her thinking process:

> …What's helpful, and this happened a few times, when I would have…a rare situation or and (teacher would ask me) "So you did what?" OK and "What do you think should happen? Just tell me what you think.", "What is your sense, what is your thought process on this?" and then "Have you thought about this? Have you thought about that?" Sort of helping my thinking process in making those clinical decisions. It's helpful, it's super helpful.

Hanna also felt that when teachers shared their professional experiences, it made the nursing profession less abstract and more human:

> I find anecdotes of their careers as nurses…valuable to me…like anecdotes of mistakes… To see…OK you had that crazy experience. It sort of brings it back to, you know, we all mess up sometimes.

Lack of autonomy

Many of the study participants felt that they lacked independence and autonomy in clinical as their teachers controlled the environment too much. Some of the study participants talked about difficulties and stress during clinical rotations while they were waiting for their teachers. It was mostly when they were to perform clinical skills on patients and they needed to be supervised by teachers. They agreed that this was stressful and aggravating.

Michael recalled some teachers who did not give him enough time and autonomy to figure things out on his own and who were too quick to correct him. He gave an example of a teacher watching him prepare the medication and expecting him to do 5 rights and 3 checks (procedure to ensure safe preparation and administration of medications):

> ...You...have to let the student go through the 3 checks before you say "OK, that's a mistake" because if you say that at the check #1, well, you didn't give me time to go through check #2 and 3... And I'm thinking...OK, again it's like I made a mistake but I didn't go through check #2 and 3... So I didn't make a mistake...but...sometimes they are just too quick to perhaps say, Ok he's going to make a mistake, so I'll just stop him before he makes a mistake.

Hanna also described a day when she was performing a procedure on a patient and when she had difficulty with it, her teacher took over:

> ...I was always worrying about hurting people, so I was trying to pull out this guy's clips on his chest and some of them wouldn't come out. So I was like there is no way that I could complete the task because I just could not pull (them out). And then (my teacher) came...and she was just yanking it and got it out. And I was like "You can't do that" and my hands were shaking.

Michael felt that the stress of a teacher evaluating him all the time could lead to making mistakes:

> ...You (teacher) are looking over my shoulder to make sure that I'm not making a mistake, but you are stressing me out even more. So go away, let me fall, feel, do and then come back and take a look at this. So sometimes if you're trying to take a lot of the control or make sure that they (students) don't make mistakes a lot of mistakes occur because of that.

Michael felt that waiting for teachers took away his control over the way he would like to organize his work with patients. It also contributed to nurses' perception that he did not manage his time well. He recalled:

> ...If I were to do a dressing change...I have to wait until she (teacher) has the time to come see me...do my dressing change. But I have no control over how my patient is going to feel at the time... Maybe she does not want to do it then. Maybe she is like freaking out. Then I have to put my dressing change on hold and then wait until she (teacher) has another 15-20 minutes and if it works out, it works out. If it doesn't work out...then it ends up being, "Oh but you left your dressing for your nurse to do". And it's kind of like, "NOOOOO because when I had time you didn't have time, when you had time it didn't work out". So how do you want me to control my environment if you're pulling all the strings and you're telling me like you need to do it at this time because I'm available at this time.

He attributed it to teachers wanting to have control over everything:

> ...There are some teachers that absolutely like to control every minute of every day... And it's aggravating for students because then you...leave there feeling that oh I didn't do what I was supposed to do... So let go of the control a little and I think things would be a lot smoother.

Annie described feeling stressed and mad when she was in the same situation of waiting for the teacher to supervise her:

> ...That's I think the most stressful thing because...I have to be on time but the teacher is not here, and then my day gets all messed up, and then she is going to tell me that I can't organize my day and that I can't do this thing... No, it's definitely stressful and it actually makes most of us mad...

When Annie reflected on this she realized that it was not the teacher that she was mad at but the situation. She knew that one teacher needed to supervise seven or eight students on any given day. She recalled how one of her teachers dealt with limited time:

> I know one of my teachers if she had seen you do a dressing once, you could do it with another student and then the student had to give her feedback. That was sort of the way that we didn't have to wait as long... So sometimes being evaluated by students is actually...more beneficial. Because you are sort of equal so you don't feel the stress but you get the same comments at the end.

Emma felt that students should get more autonomy during their clinical studies. She said that she felt more autonomous in her last semester when the teacher was not on the unit all the time. When asked what changes she would like in her clinical teachers' approach she said:

> ...Not being on your back all the time... I think being pushed out a little to be a little more independent would probably be helpful...and just letting us make some decisions... Because I think we have more autonomy (this semester)... I feel like you are growing more in terms of your role...

Margaret talked about how the time in clinical can be better managed when clinical teachers let go of the control:

> ...the teachers when they are comfortable with you, they let you be independent...and then the students what we were doing, we checked each other meds. We did our second checks with each other, so I found it was better because it was faster. You are not waiting for somebody all the time so your time management was better.

In summary, students reported having overall positive relationships with their clinical teachers. Teachers were seen as students' support, advocates, guides, experts, and evaluators. Some of the students were cautious about sharing their emotions when talking to teachers fearing that the teachers would judge them as emotionally unfit. Despite having good relationships with their teachers, a majority of the students gave at least one example each of conflictual relationship with their clinical teacher. Some teachers' authoritarian approach and inappropriate communication style was a source of stress and anxiety to all and it negatively affected students' learning. All of the study participants felt that the constant evaluation process in clinical made them feel anxious and stressed. Several students felt that they did not have enough autonomy because some teachers controlled the learning environment too much. A majority of the students felt that the responsibility placed on them was overwhelming and that teachers had unrealistic expectations of them. They felt like they were not given opportunity to be students as they believed teachers expected them to be perfect. Some felt that they did not have the appropriate knowledge or experience to take care of some of their very sick patients.

d) Relationship with patients

A majority of the study participants enjoyed interactions with their patients and did not perceive them as stressful. Many noted that their interactions and relationships with patients brought them a sense of satisfaction.

Margaret summarized how she perceived her interactions with patients:

> I love it…that is why I went into nursing…I was very comfortable (with patients), because I worked 20 years with geriatric (population), and that gave me a strong foundation for coming into the nursing program… I really get along well with my patients.

For Margaret the stressful part of working with patients was the fact that on some occasions she took care of critically ill patients and she felt that as a student she was not prepared for that. This is what she said when she discussed the day when she had an unstable patient who was being transferred to ICU:

> … (Having) the patient being in critical condition…that would look like I lack confidence, where I don't think I lack confidence. I think it is just lack of knowledge, and lack of experience, you know, we don't have experience with patients that are critical. Like I had one patient that I had to transfer to ICU, but prior to transferring I had to have her assessed by everybody and then do a shock sheet, and it was stressful…I was (thinking) my patient is going to die on me, and we don't even have CPR at that point, I thought it was horrible…

Michael also enjoyed interactions with patients; he did not feel stressed by it and said that his communication with patients "has always been good". He was however acutely aware of the responsibility for someone else's life:

> …People are trusting me with their health; do I know what I'm doing? This is like a huge responsibility issue. And then was the "Oh my God, what if make a mistake and then I'm going to get a lawsuit?"

Hanna felt that getting positive feedback from her patients was very rewarding and that really "kept her going". Interactions with patients were also positive and she enjoyed listening to them. When asked about her best clinical days this is what she said:

> …I had a lot of good days. At the end of the day once I had the moments with the patients and I could see that I have made a difference by just listening. I love listening to people's stories…

She once received an anonymous gift from a patient with a thank you note. She suspected it was the patient with whom she worked for a couple of weeks. This is what she felt:

> …I think...(it was) one patient who I worked with a couple of weeks in a row…I showed up the next week and there was an envelope for me. And I'm pretty sure it was him but we didn't have a way of knowing. It was anonymous… And I was like I can't take a gift… And (my teacher said) we have no way of knowing who gave it to you…it just says you on it… It was the sense of that somebody really thought that I made that much difference that they gave me (the gift)… I just felt overwhelmed…and appreciated…like I had made a difference…

Just like Michael, Hanna was also anxious about the possibility of hurting her patients. She described anxiety the day before clinical:

> That was about making mistakes. I was afraid to make a mistake that would hurt somebody... And then feeling like I could be missing something because I know I am not detailed oriented and what if I do miss something. That could be like big something or a little something just hoping that if I did miss something that it wouldn't hurt anybody...

Emma described the interactions with patients as rewarding. She gave an example of one of her great clinical days:

> ...I think my best clinical day would be anything that made the patient happy. An example...a couple weeks ago, my patient had been in bed for a long time. We got her up in a wheelchair, and I washed her hair, she was so happy and smiling. Like to me that's an amazing clinical day, where I feel like I've gone above and beyond for the patient, where it's not just, you know, tasks and skills, but it's where I (can do) a little bit extra to make them happy...or when I am able to take the time to talk with someone... Those are good days.

Brianna enjoyed time spent with patients. When she talked about other stressors during clinical studies this is what she said about interactions with patients: "...Not the patients. Patients were fine, I really enjoyed them and I enjoyed learning..." She gave an example of a day when she worked with a woman who could not verbally communicate

with Brianna because of a language barrier. Despite that, Brianna felt that this day brought her a sense of satisfaction. This is what she recalled:

> It was really interesting to see the communication that we had, considering that we couldn't really speak to each other...and somehow we managed to work it out... something special happened, just because you can't actually talk to somebody, you do develop this other way of understanding them...so just like a satisfaction that I got from that day...knowing that I did the best that I could and she still received good care... That would be one of the better days, spending that time with her. She was really sick too, she just had been diagnosed with cancer and now doing salvage therapy... It was a really good day.

In summary all of the study participants enjoyed their interactions with patients and reported that the work with their patients brought them a high level of personal satisfaction. Their work with critically ill patients and the fear of hurting them was identified as a source of stress.

2. *Preparation for clinical and perception of self*

A majority of the study participants felt that in terms of knowledge they were not prepared to deal with complex patient cases in clinical. Many doubted themselves and many were overwhelmed by the amount of knowledge that one needed in order to work safely with patients. Some of the study participants felt that teachers placed unrealistic expectations on them given their knowledge level and inexperience. Some students commented on how different performance of clinical skills was from the lab experiences.

Brianna felt an overwhelming sense of responsibility during her clinical rotations:

> …There is just so much to know and such great expectations placed upon you, with great responsibility…I don't even think I've really realised until this semester, how much responsibility is placed on your shoulders.

Hanna felt at some point during the program that she would not make it as the expectations and responsibility placed on her shoulders were high. This is how she described it:

> …I wasn't sure if I could handle it or that I would pass…I didn't know if I had what it took. Because it just seemed like nursing is up here and I'm down here. And somehow I have to be responsible for all this and how is that ever going to work. Just balancing one patient was hard enough. How am I going to (take care of) four like these people are doing. How are these people doing it? I couldn't fathom how people were doing what they were doing.

Margaret also agreed that, given lack of experience and knowledge, the expectations of some teachers were too high for her level.

Michael felt that sometimes the amount of work expected in clinical was also unrealistic. This is how he described it:

> …As a nursing student you are expected to do all the nursing related stuff, and then you are expected to do all the PAB related stuff. It's not my job to do my PAB related stuff, because I'm not going to school to be a PAB, I'm going to school to be a nurse.

Annie had a different take on high expectations. Despite feeling that one of her clinical rotations was stressful and difficult she felt she learned a lot:

> …The teacher…expected us to perform high and pushed us…she would push you until you got to your limit, so it's hard when you are in it, but once you are out of it…it did help…it was my most stressful (rotation), but it was the one that I learned the most…

Hanna felt that there was a huge difference in the expectations in terms of knowledge, responsibility and clinical skills between 1st and 2nd year. This is what she said:

> I hadn't it even touched the IV hardly at all in the first year. Like I didn't do anything really besides (subcutaneous injections) and some basic meds. So then...going from first year to the second ...and having to worry about

> everybody's potassium levels, and their IV pumps and multiple pumps and dressing changes and everything. It was a shocking experience really...I feel like a lot of stuff that we do come second year we should do a little bit more in clinical first year as well. Because I was not ready for that jump. OK I'm going to go and have my own patient and I am going to have like pretty much all of the care for that patient. Whereas before it was OK I'll just go and Give Heparin SQ or I'll give this one pill.

This is how Brianna described what she felt regarding her preparation for clinical in her last semester:

> ...I actually don't know anything, and yes we had the support of the staff and support of our clinical teacher, but it's just I guess quite shocking actually to get into sixth semester and realize that what I've done in the past two and a half years was not all that helpful, in terms of preparing. And I'm not saying...it's the fault of anybody. I worked hard and my teachers worked hard but... there is just so much to know and such great expectations placed upon you, with great responsibility. I don't even think I've really realised until this semester, how much responsibility is placed on your shoulders...

Brianna described a constant feeling of anxiety before and during clinical days which she believed came from self doubt and a lack of confidence about her abilities in the clinical setting.

> ...You run through all the scenarios in your head, thinking what you would do and then you can't think about what you would actually do, and then you worry that you are not good enough or not as advanced enough...(in the last semester) I suddenly got the feeling of self doubt, and the fact that ...I'm graduating soon and...I have zero confidence in what I'm doing, and again the whole responsibility thing...

Hanna also commented on her perception of never having enough knowledge and how this stressed her in clinical:

> I always felt like I was really lacking something. So...I just wasn't quite right in terms of my knowledge even though I really did have a lot of knowledge that I didn't realize, I think. So just all the time no matter what I did my hands were shaking...

Michael felt that he doubted himself and his level of knowledge especially during difficult medical-surgical rotation:

> ...I was just doubting myself, even though 9 out of 10 times I knew what I was doing. So that made it like really stressful. Do I know what I'm doing or do I not know what I'm doing, am I a phony, am I a fake?

As part of clinical learning is preparation for clinical days, students are required to do clinical preps or write-ups on patients' diagnosis, disease processes, medications and other subjects relevant to their patients' clinical situations. Some of the study participants felt that there was not enough time to do all the work and they found it was stressful.

Margaret talked about stress and fatigue related to the pre-clinical preps and how it could influence her performance in clinical:

> The pre-clinical work is very stressful. We are in school till 3, 4 PM and you have to go home and you have to (look up) disease process, you have a lot of resourses to get, you have to look up everything, you have to get the test that goes with the disease process, and the medications and that takes a lot of time. So most students don't go to bed until 1, 2 in the morning and then have to be up at 4 to be at clinical... And then what happens when you don't sleep, you make errors.

She offered solutions to decrease the amount of work for the day before clinical:

> ...I had one teacher (who gave us)...all the disease processes for that particular unit, all the medications for that unit before clinical...when you are just starting in labs. You are to write up all those medications and all the disease processes, so it makes it a lot easier because you already have them, so you are not staying up until one and 2 in the morning.

Annie also found that doing pre-clinical work was stressful. She felt that a lot of times what she found in the textbooks or literature did not necessarily look like the clinical picture of her patients.

> ...The stressful part was the prep. Getting the prep done on time and after that...you have to take what you think the disease is going to look like and compared to what it actually looks like in the patient. But I found that, in most of the patients, it didn't correlate really well either because it was a chronic condition and they didn't have any acute symptoms. Or they were managing well, so for me the prep and the post where sort of like, not anxiety provoking but, the things that were not as pleasant...

Some students commented on how practicing clinical skills in the lab was different from reality. This is how Brianna felt about clinical skills:

> ...Skills... are one of the more stressful things about clinical...you look like an idiot in third year when you are like: "I actually don't know how to use the NG suction", because even though you have done it in lab one upon a time, you don't ever use (it)... I got caught up on doing skills and I know that they are not important. It's knowledge that's important, but it really gets in your way, because that's how you judge yourself, as a student...because half the time I wasn't even aware of the knowledge that I had ...it was just through skills, that there was awareness of progress...

Emma also commented on the difference between practicing in the lab setting and the reality in clinical. She gave an example of the insertion of a nasogastric tube into a patient:

> ...You rarely see them (NG tubes), we learn them in the lab, but to me what I learn in the lab is nothing until I actually do it. It's not the same. You know doing even a dressing that perfect line on the incision (in the lab). Until I learn it like practical, it's not the same.

Hanna said that she did not always have the opportunity to practice clinical skills on patients and she felt that it stressed her as the lab experience and reality was very different:

> ...And I didn't touch an IV (intravenous) in clinical and I needed to touch an IV. I mean I did it in the lab but it's not the same because there is not that sense that this is going into that person. It doesn't feel the same...

In summary, a majority of nursing students felt unprepared to take care of sick patients and felt that this was very stressful and anxiety provoking. Many lacked confidence in their abilities and many were acutely aware that practicing skills on patients was very different from practicing in the lab. Some students felt embarrassed that they were unable to perform some of the clinical skills even in their last semester.

3. *Effects of stress and anxiety*

All the participants in the study were in some way affected by stress in the clinical setting. They described the physical effects of stress or anxiety during their clinical rotations and they also recalled how stress influenced their learning and performance of clinical skills.

a) Physical effects of stress

The study participants exhibited a whole variety of physical signs of stress: excessive perspiration, tremors, heart palpitations, gastrointestinal disturbances, sleep disturbances, fatigue, weight fluctuation, hair loss, and skin problems.

Hanna reported weight gain as a result of stress in clinical:

> ...I put on 15 pounds since I started (the program). So it says something. Not eating enough during the day and then coming home starving and eating too much...

She also reported having hand tremors, heart palpitations, and gastrointestinal disturbances. This is what she recalled:

> ... So just all the time no matter what I did my hands were shaking. And it was actually (my teacher)...she used to laugh because I would shake so much, which actually really helped. And she was like "Oh some day you will not shake so much". But still to this day if people are watching me my hands shake. That's when people are not watching me then I actually feel pretty fluid. Or if somebody who is not evaluating me so that... Sometimes heart palpitations, sometimes stomach aches, especially the night before (clinical) I would get stomach aches.

For Emma the main physical effects of stress were increased heart rate and perspiration. She said that she rarely got stressed in clinical but when she did it would be mainly when others would watch her performance:

> ...My heart rate might go up a little bit...my hands are sweating. I told them (the nurses): "You guys are making me so nervous standing there watching me"...

For Michael the most common physical effects of stress were skin, gastrointestinal and sleep disturbances:

> ...Physically I get stomach aches and I feel noxious...I don't want to eat anything, and what I do want to eat is always like junk and candy and chocolates and I break out. So I get pimples. That's my physical reaction to stress...it (stress) affects my sleep, actually...I would fall asleep and then wake up at 3 o'clock in the morning and I would not be able to get back to sleep.

Brianna also described sleep disturbances:

> ...I don't sleep well... the night before (clinical)...during clinical week if I get four hours of sleep between clinical day and the day before I feel like I'm doing well...it's just like lying in bed the night before...and waking up and thinking about it, I wake up often.

She also reported hair loss as a result of stress.

Annie described having anxiety dreams related to clinical:

> ...I actually had weird dreams about that (clinical)...I woke up in the middle of the night, and I shook my boyfriend and I was like, Oh my god, I forgot to give meds, but I hadn't...

Margaret would have hand tremors and she would not eat.

b) Influence of stress on learning and performance of skills

Stress affected students' thinking processes and memory, but in most cases it did not affect their ability to perform clinical skills.

Annie felt that she was able to perform clinical skills when she used self persuasion. She found that her thinking process however was affected:

> Skills wise, if I'm really stressed about a skill...my dexterity might be a little bit less (precise), and... I can feel myself be a little bit more fluttery, but I really try not to let it affect me so I'll sort of talk myself down from the stress. Thinking wise... I just blank out...

Margaret felt that stress affected her memory but most of the time not skills because it made her more focused. This is what she said when asked about the effect of stress on learning and skills performance:

> ...I think sometimes it's hard to remember everything (when stressed)... I'll be clumsy (when performing skills), I might drop one of the utensils but I have more there that I can use. Usually I'm pretty good because I try to be focused... I take a deep breath, and I'm like you know what, you have done it in the lab, you know it, just take your time and go step by step. And that's what I've done, and it's always worked for me...

Brianna also felt that she can perform skills whether she was stressed or not: She said:

> ...It's amazing...right before (I) step into that room I can say that (I am) super nervous and... between the hallway and the room it's...like: take a deep breath and go at it, there is not much more you can do, you've already ran it over with the nurse, you ran it in your head a couple of times like just go do it right, it would really make me more anxious probably if I didn't do it...once I walk into the patient's room...it's OK, let's do this. I'm going to suck it up and do what I can...

She said that her memory was affected negatively by stress and her thinking process slowed down:

> ... Oh it's like I get stupid. If I'm stressed and tired, I can't hold on, I can't retain. That would be part of my learning, the retention. Like understanding the concept still comes to me quite fine, applying it is fine, but like definitely remembering and retaining it is really difficult for me...I feel like that's, maybe I'm slower...because I take more time to think about it, but I'm definitely very comfortable with the decision that I make at the end of it. It just might take me a little bit longer to get there. Like I need to sit there and really focus on the problem at hand and work it out...

She felt that some stress improved her focus and the actual performance of skills:

> ...I think a certain level of stress and anxiety is definitely a great tool to make you focus... it's easier when I'm in the patient's room because then they are in front of me and I have something I can focus on like really focus on the task at hand, especially when I'm doing a skill...

Michael had similar comments on the effects of stress on his learning and skills performance:

> But my performance does not (get affected)...if it is a task and skill oriented stuff, it will not affect me. If it's more of a knowledge base, analytical stuff, I may lose a bit here and there. It will be like OK 1, 2, 3 and may skip 4 and go on to 5. So there'll be bits and pieces of data that I'd be missing as to what I'm analyzing. And if it's the skills thing which is like very repetitious, it doesn't affect me.

Hanna's thought process and recall was affected by stress:

> I blank on stuff that I know... Like I just can't come up with a word...some thought process gets lost a little bit...feeling just like my nervous system is shot. Sort of like all of a sudden it's too much and then nothing. Then I can't output anything because it's just somehow has gotten too stressful...

Despite stress she was able to perform skills fairly well. She said" I still did it. I still was somehow able to perform".

Emma felt that stress often improved her performance as she would focus more on the task at hand and she would ask more questions:

> ...It could make it better, in the sense that, because I'm nervous I'm asking a lot more questions. When my confidence is being doubted because I feel under pressure, stressed, then I start to ask more questions... When I did the NG tube, I was like, oh my God, like all of a sudden it hit me... What did I just get myself into? I've never done this before and I'm really nervous and I was asking him (doctor) like tons of questions. His head should be like this? Use this hand and just push, and this and that. And so I asked like more questions when I'm nervous, I guess.

In summary, despite stress, most of the students were able to perform clinical skills and for the most part stress did not affect their performance negatively. Some students even felt that stress helped them focus better. A majority however, felt that stress and anxiety negatively affected their memory and thinking process and therefore their learning.

4. *Coping methods*

Students used different coping methods when dealing with stress related to clinical studies. Exercise and physical activity was identified as most beneficial by the

study participants. Most participants turned to family or friends for support. Some students used alcohol or smoked cigarettes more than usual. Others withdrew, cried, avoided or used distractions such as TV, music, or computers. Two students used professional help such as therapists or counsellors. Some of the study participants turned to nursing staff or peers for assistance when they felt unsupported by the teacher.

Besides having a support network including her mother, roommate and friends, Annie identified exercise and distraction as her main coping method:

> ...After clinical I either go work out, or if I don't or even if I do...I walk home, about 15-20 minute walk, and that just sort of with my headphones on I can smell sort of clean air... Just walking, headphones on, whatever music, just not thinking about anything, and then I get home and I'm like, re-energised, I'm able to... do homework...

Annie also organized her studying during the week so on weekends she had time to do other things not related to school. She felt that it really helped her better manage any stressors in clinical.

> On weekends, I have a no schoolwork policy, unless it's for a test, that's how I've always been through the program and I think I'm the only one that actually sticks to it. But on weekdays, I will do schoolwork until midnight... Until Sunday dinner time, I don't touch any school work... And that just sort of helps me...get a break...and just reenergise, refocus and then start back on Monday.

Brianna identified crying and sleeping at inappropriate times as some of her coping methods. As she felt really stressed by the clinical experience, she used the services of a professional therapist. This is what she recalled:

> ...I cried a lot this year, I cried and I slept but like at inappropriate times. So I slept a lot but never when I should be sleeping...I'd skip class, I would sleep through class or because often I wouldn't sleep through the night and then finally fall asleep et like 6 or 7 in the morning so I wouldn't go to my first class. I guess sleeping is a way to not deal with it... And then therapy I started last fall, which has been really helpful, but also very, very stressful on its own. Therapy is hard.

Like Annie, Brianna looked to friends for support. She also felt an urge to smoke more when stressed.

> ...My roommates are very supportive...they are really, really supportive...my one roommate is a doctor, so he is a little bit more...understanding of the responsibility and the stress. So he is really helpful, so he is definitely part of my coping...I don't really drink, but I wanted to smoke more this year...I see coworkers going for smoke breaks and I'm like 'Hey, I'd like to go with you', but I don't.

Michael also noticed that he would smoke more when he was stressed in clinical and after a stressful day in clinical he would have a drink. His main source of support was friends and family, but he often used distraction to deal with stress.

> During clinical I'll smoke more, so I'll have like 2 or 3 cigarettes at break, or a few more at lunch. And I tune out if I'm too stressed, so things that are going on around me, I just tune out. After clinical I usually have a tendency of re-hashing stuff, but with non-nursing friends...And after that I will just pass out, watch the television and just not deal with it anymore. But it does come back every once in a while and I'll re-hash it again... Having a martini always helps, having 2 martinis always helps. That has happened after clinical where it's been like 2 martini days. I think a lot of it is oddly enough negative coping as opposed to positive coping... It seems like the negative coping seems to be a lot more soothing than the positive coping.

Emma identified her mother as the best support as well as her peers:

> ...Especially when it comes to nursing related things I call her (mother) a lot...because she is a nurse too...I think it's colleagues too that are my support...we've really become close in the last 3 years. The people in the program...we often call each other at night or get together for drinks...I don't get drunk... (it) will be the end of a clinical day, and we'll be done for a week and we'll go for a drink and just talk...just to decompress and come together. I find that's really helpful.

Her main and most beneficial way of coping was distraction and exercise. She said: "I'll go to the gym or go for a walk... And just distracting...take my mind off stuff". Emma also posed more questions whenever she was stressed in clinical, especially before performing clinical skills. She said: "when my confidence is being doubted because I feel under pressure, stressed, then I start to ask more questions...". When Emma dealt with the

loss of her grandfather and reacted emotionally when faced with similar situation in clinical, she kept her feelings to herself. This is what she said:

> ...I broke down twice, and like really bad, but not in front of anybody, not in front of the patient, I went into a room and didn't share what happened with anybody...so, bottling it up a little bit...like if I don't necessarily share it with anybody.

Besides talking to friends and especially to her sister, Hanna also tried to exercise whenever she could and she felt that it helped her deal with stress:

> For all the second year I was really working out almost every day after clinical. I was working out like 3 or 4 times a week. That helped. That got to be a little too much this semester. It was sort of draining. I did yoga every morning this semester. And that was good for centering. Because I really feel if I'm not grounded then I'm not detailed oriented. I have to be grounded.

She would sometimes drink alcohol on weekends when she was stressed. When she noticed that stress had a negative impact on her relationship with her husband she sought a counsellor's help:

> ...Sometimes I would drink on the weekends. Complaining a lot. I found myself exploding at my husband a few times. You just get so fed up and I just was like "Oh God it's not you, it's not you at all". And then I would feel guilty about that. So I saw a counsellor a few times.

Margaret also reported that exercise and seeking support from family and friends were her main coping methods:

> I exercise, and I have a lot of support from my family, so I'm very fortunate that I have that. I have a lot of good friends, so I am able to talk and vent...But exercise, I walk, I have a treadmill I'll use that, and that does help, I find, you are not as emotional if you exercise.

Margaret reported crying and withdrawing when feeling stressed.

Emma tried to avoid an authoritarian teacher who did not value her opinion when she knew the teacher was coming to discuss a patient with her. She recalled:

> ...And so it comes to a point where you are almost avoiding the person when they come to speak with you... I make sure my day is really busy, so I don't have to meet with them (laughing).

Brianna used a variety of coping methods when dealing with a difficult teacher. She tried to avoid her teacher. She also turned to nurses for help and guidance. Brianna also made sure that her preparation for clinical was up to date in case her teacher would quiz her. This is what she recalled:

> ...What I did is I stood out of her way as much as I could and I reported to her when I had to and I made sure that I was up to par with all my stuff. I had all my information ready when she wanted to take a report, and it was kind of how I dealt with that...Yeah that really makes a miserable clinical experience…I didn't learn anything. I didn't want to ask her questions. I relied really heavily on my co-assigned nurses. They were actually really supportive…I definitely felt like I missed out on some really good learning experiences…

When trying to resolve the conflict with her clinical teacher, Brianna decided to meet with her, but prior to her meeting she turned to someone else for advice on how to handle this difficult situation.

> And I even went to her (clinical teacher's) office one day. I actually sought the advice of somebody else, what do I do about this? I'm not such a bad student and I shouldn't be treated this way, and obviously it is some sort of personality conflict...and you know I went to talk...to this clinical instructor and it just didn't (work)....after talking to her... I just didn't feel like anything had been resolved...

Annie described how she and her peers dealt with the difficult and unapproachable teacher in clinical:

> ...So the whole clinical group just sort of stuck more together and we answered our own questions or went through research with the clinical group without necessarily asking the teacher or went to (nursing) staff more, than the teacher. So we were able to get around that, but it's definitely a little bit more stressful, because when you don't have communication, you don't know what the teacher thinks, how you are doing, or what she wants you to improve...We sort of knew that either it wasn't going to reflect well on our evaluation or we were just going to get told (by teacher): "Well, you should know how to do this"..

Hanna described turning to her peers when she was stressed before the clinical day and discussing her preparation or sharing information:

> ...So we would go to each other and say "What do I do, how do I do this?" or just going over it in the locker room in the morning...so that way you prepare it and you find your information...

In summary, nearly all of the study participants used exercise as a coping method to help them deal with stress related to clinical. A majority also turned to peers, friends, family for support, help or advice. Some reported turning to nursing staff for help. Two students sought help from professionals. A few of the study participants reported increased alcohol or cigarette consumption. Others used avoidance, withdrawal or distraction. Some students tried to resolve the conflicts.

Summary of Chapter Four

This chapter reported on the findings of nursing students' learning experiences during their clinical rotations. Four related themes were identified: a) Learning environment; b) Preparation for clinical and perception of self; c) Effects of stress and anxiety; and d) Coping methods. The study participants were divided in their perception of the clinical experiences during the three year nursing program. Three of the nursing students reported their clinical experience to be stressful, two of them found it to be very positive and for one it was average.

All of the study participants reported that interpersonal relationships and communication with healthcare professionals was stressful. Despite mainly positive experiences with nurses, students often felt that they were in the way or felt like an inconvenience. They did not have a sense of belonging on the multidisciplinary team until their last semester of the program. Encounters with the nurses who were not

interested in teaching had negative effects on the students' learning. The students often attributed difficulties with developing positive relationships with nurses to their own inexperience, lack of knowledge or to nurses' personalities.

The communication with the medical team was rare, difficult, and it was not encouraged by nurses or teachers. The students attributed these difficulties to doctors' personalities, the hierarchy within the healthcare setting or lack of respect for students' opinions.

Most study participants found their teachers to be approachable and they described their relationships as mainly positive. Negative relationships with clinical teachers were attributed to some teachers' authoritarian approach, personal conflict or communication style. Students reported that in these situations their learning was negatively affected. Several factors related to pedagogy were described as stressful: constant evaluation, high and unrealistic expectations, lack of autonomy and being assigned to very sick patients.

Overall the interactions with patients were positive and gave students a sense of satisfaction. However, a majority of students did feel overwhelmed by the amount of responsibility placed on them during clinical studies. Some reported that they did not have sufficient knowledge or experience to take care of the very sick patients.

Stress in clinical did not have an adverse effect on the students' performance of the clinical skills, but it did affect their memory, retention and thinking process negatively. A majority of the study participants turned to peers, friends or family members when stressed. They used exercise as the main coping method. Some students used distraction and others reported increased alcohol and cigarette consumption.

CHAPTER 5

DISCUSSION OF THE FINDINGS

This chapter includes a discussion of the research findings compared to the literature review. The results are also examined using the theoretical framework.

The purpose of this study was to understand nursing students' learning experiences during their clinical rotations throughout the three year nursing program. Six nursing students in their last semester of the program shared their stories. Their narrative accounts were used to identify common themes which were then analyzed. The theoretical framework used in this research study included Bandura's social cognitive theory, Folkman's and Lazarus' theory of stress and coping and four theories of stress and learning: 1) Saranson's Cognitive Interference Theory, 2) Spielberger's Trait State Anxiety Theory, 3) Eysenck's Processing Efficiency Theory, and 4) Easterbrook's Hypothesis of Selective Attention.

Research questions which guided this study were:

What are the nursing students' experiences during clinical rotations?

What are students' perspectives of stressors in clinical practice which bring on anxiety?

What promotes or hinders students' learning?

How do students cope with their anxiety?

Discussion of the Findings

This research study has identified a variety of variables which influenced the qualities of learning experiences for the nursing students. The literature review demonstrated that students are dealing with multiple stressors and the effects of these stressors on students' learning vary. This research study provided similar findings. The

main theme identified in the data analysis was the learning environment which included students' relations with healthcare professionals and with their clinical teachers. Other themes were students' perception of their preparation for clinical, including their perception of self (feeling of competence and confidence), effects of stress on performance and learning, and coping methods which students used when stressed by clinical experiences.

1. *Learning environment*

As noted in chapter two, in the overview of Bandura's social cognitive theory, learning occurs as a result of an individual's constant interaction with and interpretation of the environment. In the case of nursing education, part of the learning environment in which nursing students are learning is a clinical environment.

a) Place within the healthcare team: nursing staff

One of the main themes emerging from this study, which students talked about at length, was the influence of the clinical environment, especially a team of nursing staff, on their sense of belonging, sense of acceptance, perception of their competence, and for many, their learning.

Sense of belonging

The results of this research showed that a majority of students, during most of their clinical studies, did not feel to be a part of the nursing team and many did not feel accepted. Many reported stress and anxiety in relation to poor acceptance by nursing staff. They felt that they were often in the way, a burden to nurses, or an inconvenience. Some participants were stressed by the occasional hostility of nurses, by being ignored,

by nurses who were not interested in teaching and/or not wanting to work with students. Others perceived nurses as intimidating at times, which led to students' feeling vulnerable and anxious. As a result of this, students felt that they were more prone to making mistakes. Students in this study reported feeling that nurses' initial impressions of the students had a negative effect on how they were ultimately perceived. They felt that some nurses did not take into account the students' inexperience, and judged them prematurely. Students also felt they were negatively affected by the environment they practiced in, which led to their perception of poor learning outcomes. These results are consistent with previous research (Chesser-Smythe, 2005; Cooke, 1996; LaFauci, 2009; Levett-Jones & Johnston, 2009; Melincavage, 2008; Nolan, 1994; Papp et al., 2003; Shipton, 2002).

The results of this study support Bandura's theoretical claim that being able to observe a role model and have positive feedback is an important part of the learning process. As noted in chapter two, individual self efficacy beliefs, which are important in the process of learning, are derived in part from the observation of a role model (a nurse, for example) and from verbal persuasion such as encouragement. If students do not have an opportunity to fully interact with nurses and observe them, their learning and performance in clinical cannot be optimal. This is especially true when there is little prior experience with a given task (Pajares, 2002), which often is the case when students are exposed to new procedures in clinical environment. As noted in chapter two, Bandura believes that "just as positive persuasions may work to encourage and empower, negative persuasions can work to defeat and weaken self-efficacy beliefs" (Pajares, 2002). The unwillingness of nursing staff to be role models for students, their lack of encouragement,

and negative comments which students in this study encountered, is almost certain to have affected their self-efficacy beliefs negatively.

As shown in chapter two, there is a relationship between one's affective state and his or her interpretation of the events or situations in one's environment. Besides that, the emotional and physiological state, such as the stress experienced as a result of feeling rejected, can have a negative effect on students' efficacy beliefs and therefore on their learning. Students in this study clearly linked their poor learning outcomes to nursing staff's behaviours. It is an interesting finding, because nurses may not even realize the long-lasting effects their behaviour and approach can have on nursing students. Nursing students, especially earlier in the program or at the beginning of their rotations are particularly vulnerable to such negative situations. In case of the nursing students in this study, the negative moods resulting from poor relationships with staff nurses and their own physiological cues which they read as a threat, might have affected their efficacy beliefs negatively. Michael felt that an unwelcoming and a non-teaching oriented environment prevented him from learning. He also felt that by being excluded from socializing with nurses he lost on opportunities to learn more about the profession directly from nurses. Emma expressed that when faced with an unwelcoming environment in which nurses were not interested in teaching, she just performed technical skills and did not learn much about the patient cases. The anxiety and stress related to nurses' unfriendliness, hostility, and lack of acceptance by nursing staff prevented students in this study from taking full advantage of learning opportunities.

Lack of interest in teaching may be related to the culture of the unit and the attitude of nursing leadership towards education. If the education of the nursing students

is not valued, nurses may be reluctant in getting involved with the students. Another common issue is that many units are dealing with nursing staff shortage and nurses are often feeling overwhelmed by their workload. Having to deal with the students, especially when the students are inexperienced and require a fair amount of supervision, may be too demanding for overworked nurses. This finding was reported in a study by Bennet Jacobs, Fontana, Hidalgo Kehoe, Matareses and Chinn (2005) in which nurses identified one of the major contributors to their feeling of stress and tension to be the demands of supervision and mentoring of students and graduate nurses. Due to limited clinical spaces in hospitals there is a large number of nursing students rotating through a variety of units. On any given day there can be students from different schools and at different levels, which may be confusing to the nursing staff. Therefore, the misconception of students' inexperience may be due to the fact that nurses do not remember which particular student is at which level of education and how much support students require.

Positive encounters

The development of positive relationships with nurses in this study was equated with the better learning opportunities, a sense of satisfaction, and reassurance about students' abilities. Many felt that they started to have a sense of belonging in their last semester of the program. Most of the examples of positive experiences with nurses, which students shared in this study, were from their internship in their last semester when they spent four days a week on the units. Some participants reported that positive relationships with nurses came at the end of the program when they felt they were an asset to nurses due to their better knowledge and more experience. Nurses could delegate

quite a bit of work to the students in their last semester, and subsequently their contribution would ease the nurses' workload.

In the literature review, some studies showed that students identified receptive, respectful and supportive nursing staff as important facilitators of their learning (Chesser-Smyth, 2005; Levett-Jones & Johnston, 2009; Papp et al., 2003; Wilson, 1994). I did not however find anything in my literature review related to acceptance of students by nurses later in the program, which this study provided. Students in this study felt that they were accepted more by nursing staff because of their experience. At this point they were able to provide most of patient care and therefore could have been seen by nurses as more of an asset rather than inconvenience. It is possible that this sense of belonging in the last semester could be attributed to the fact that the nurses had an opportunity to get to know students better on a personal level and therefore be more accepting of them. Also, due to their higher knowledge level, nurses might have perceived them more as equals on a professional level. Besides that nurse managers often recruit new staff members from a group of nursing students during their last semester. Staff nurses are aware of this process and therefore may treat students at this point as potential colleagues.

As the learning environment influences an individual's self efficacy, for students to feel competent and confident in their abilities, nursing staff needs to be supportive, welcoming, willing to engage with students and be verbally encouraging. How students interpret their relationship with nurses therefore has a big impact on their learning process. In this study students valued positive relationships with the nurses and felt that their learning was enhanced when the nurses were fully involved with the students.

Participants in this study described good learning opportunities when they were able to sit down with nurses and discuss their patient cases. Students clearly appreciate when they are recognized as learners and not someone who "eases nurses' workload". Students may be often faced with the fact that when nurses are busy with patient care, either due to nature of the clinical area or due to nursing staff shortage, students who work closely with nurses may end up providing patient care or perform clinical skills and not necessarily obtain optimal learning opportunities.

b) Place within the healthcare team: medical staff

Most of the study participants described their interactions with the medical team as stressful and difficult. Many felt that doctors were disrespectful towards them, impatient, and did not seem to value students' opinions. Some participants attributed it to a hierarchy within the healthcare system in which the nursing students were at the lowest level. Others felt that they were not valued because of their poor knowledge and inexperience. Yet others attributed doctors' unfriendly behaviours to doctors' personalities. Some felt that due to their inexperience they were not able to judge the relevancy of the information to be shared with the doctors.

There are several studies in the literature providing insight into the stress experienced by nursing students related to communication with medical staff (Cooke, 1996; Clarke & Ruffin, 1992; Kim, 2003; Kleehammer et al., 1990, Zigrossi, 1992). The literature review in chapter two demonstrates that nurses are also dealing with similar difficulties in communication with doctors (Hesketh et al., 2003, O'Keefe-Domaleski, 2010, Zigrossi, 1992). There are good examples of the existing hierarchy within the healthcare system in which nurses are subordinate to doctors and are subjected to verbal

abuse. Nursing students who observe the interactions of nurses and physicians in a clinical environment may encounter such abusive behaviours. This, coupled with a fragile sense of their own competence may negatively influence their own interactions with medical staff. The participants of this research study described unfriendly, disrespectful, impatient doctors who did not value students' opinions. As a result, many of them avoided communication with medical staff. Such avoidance may eventually have a negative effect on development of professional relationships with doctors when students become nurses. Effective communication and collaboration between nursing staff and medical team is essential as research studies indicate that it has positive influence on patient outcomes (Baggs, 2007; Baggs, Ryan, Phelps, Richeson & Johnson, 1992, Kelly, 1986).

Students in this study reported that the communication with the medical team was not encouraged by nurses or by teachers throughout most of their program. In the last semester of their clinical studies students felt that this has changed and the communication with medical team was encouraged and expected. Many attributed this to spending a considerable amount of time on the unit, and being very involved in patient care and clinical decision making. A majority of study participants felt that it would have been beneficial for them to be encouraged to communicate with the medical team much earlier in the program. There is little evidence in the literature about clinical teachers' or nursing staff's encouraging nursing students to communicate with doctors, so this adds new knowledge regarding the role of nurses and nursing educators in fostering such communication.

c) Relationships with the teachers

The role of a teacher

The study participants saw their teachers' role to be students' support, advocates, guides, experts, and evaluators. A majority of the participants had overall positive relationships with their clinical teachers. They described positive characteristics of their clinical teachers to be: approachable, supportive, open for discussion, respectful of students' opinions, and understanding.

There are numerous studies which explored nursing students' perceptions of effective and best clinical teachers and the positive effects which such teachers had on students' learning (Gignac-Caille et al., 2001; Cooke, 2005; Kube, 2010; Nehring, 1990). The characteristics of an effective clinical teacher and students' perception of an educator's role are consistent with a humanistic approach to education based on caring. Students are able to clearly identify which teacher behaviours facilitate their learning. The student-teacher relationship therefore needs to be based on this approach for the learning to be optimal. Such teacher behaviours have been linked in the literature to decreased anxiety, therefore one could conclude, using Bandura's social cognitive theory, that these behaviours have positive effects on students' self efficacy.

Teacher incivility

Although the study participants reported mostly positive relationships and good communication with their clinical teachers, there were examples of authoritarian and intimidating teachers who were unapproachable, difficult to communicate with, unprofessional, and/or sarcastic. Those students who described their relationships with

clinical teachers as conflictual felt that they missed out on learning opportunities because of the poor communication with teachers and their subsequent avoidance of encounters with those teachers. A majority of participants reported that negative encounters or conflicts with the teachers made them anxious and stressed. Some also reported that it negatively affected their feeling of competence. The results of this study lend support to previous research which clearly showed that authoritarian and uncivil approach to nursing students is a major source of stress for nursing students and it negatively affects their learning (Brophy, 2000; Clark, 2008; LaFauci, 2009; Mogan & Knox, 1987; Nehring, 1990). In the current study, students described having high state anxiety in response to teacher incivility. This study cannot fully support Spielberger's theoretical claim that people with high trait anxiety experience higher state anxiety, as no data was collected on the subjects' trait anxiety. Therefore it is not possible to make a conclusion whether Spielberger's theoretical claims are true in the situation of nursing student-teacher conflict.

Why do we still see the uncivil behaviours among the nursing faculty? It is possible that some of the nursing teachers still use the behaviouristic approach that was so prevalent in the traditional nursing education. Students are not treated as equals and they often feel their teachers do not respect them. There is also evidence in the literature that many nursing educators teach the same way as they were taught, so it is not surprising to see that the authoritarian and oppressive approach of traditional nursing education may still prevail. In addition, the educational approach of nursing teachers may not be consistent with principles of adult education (andragogy). Many nursing educators are expert nurses and hold degrees in nursing, but do not have graduate degrees in

education. Thus they may not be exposed to theories and principles of adult education. Today's nursing programs include diverse groups of students from different cultures, of different ages, and coming with very diverse life experiences. If teachers do not recognize the needs of adult learners, students will miss out on optimal learning.

Evaluation Anxiety

All of the study participants felt that the constant evaluation process in clinical made them feel anxious, stressed and tense. Some students felt that the uncertainty of not knowing when the teacher would observe them was very stressful. Many of the study participants reported that close supervision and observation by the clinical teacher often led students to making mistakes. Some felt that they did not have an opportunity to figure things out by themselves as teachers would interfere with this process too quickly. Many of the study participants felt they had "no room to breathe" and that their teachers were "looking over their shoulders". Many students also felt that they needed to perform well all the time, even when attempting to practice a skill for the first time on a patient. They reported being afraid to show their weaknesses or knowledge deficits.

The results of this study are consistent with the research reviewed in chapter two. Nursing students see teacher evaluation in clinical as an anxiety-provoking activity which negatively affects their learning (Elcigil & Yildirim Sari, 2007; Kim, 2003; Kleehammer et. al, 1990; Kushnir, 1986; Mahat, 1998; Sellek, 1980; Shipton, 2002; Tiwari et al., 2005; Wilson, 1994). It appears that despite extensive literature on the importance of supporting students in their learning, the evaluation of the students in clinical still seems to be a primary goal for the educators in this study. As Jewell (1994) noted, nursing

students do not need supervision, which is often used to describe the role of clinical nursing teacher. They need support, encouragement, and trust.

Many students in this study avoided interactions with faculty based on their feeling of incompetence. Some felt it was unfair that they were constantly interrogated by clinical teachers and if they asked questions they felt they could be judged negatively by their clinical instructors. Others reported not being able to fully trust their clinical teachers for fear of being evaluated negatively or being judged as emotionally unfit which led them to avoiding their teachers or holding back some information.

Students seem to be very vulnerable to their teachers' opinions of them. It appears that they are afraid to show any knowledge deficits or any perceived weaknesses. If students have these kinds of perceptions, it is possible that teachers may unwillingly be sending a message to students that there is no place for dialogue or discussion and that there is an expectation that students' knowledge must be impeccable. As a result, students may not use the clinical teacher as a resource, support, or an expert and this could lead to lost learning opportunities.

This finding also supports Folkman's and Lazarus' theory of stress and coping. If an individual does not see that anything can be changed about the stressful situation, he or she is more likely to use an emotion-focused coping method. Students in this study felt that they needed to perform well in front of the teachers and that they had no control over how their teacher would evaluate them. As a result they used avoidance to deal with such stressful situation.

Lack of autonomy

Several participants felt they did not have enough autonomy because some teachers controlled the learning environment too much. They often saw their clinical teachers as supervisors rather than guides. There was an overall consensus among the study participants that they would like to be more independent in their practice earlier in the program as this would allow them to better understand the role of nurses. It would also help them learn how to make clinical decisions. Many felt that they had more autonomy in the last semester during their internship and they all attributed it to their teachers not being on the unit with them. Some students reported being upset about the amount of control which teachers had over them. A few of the participants gave examples of how their clinical teachers wanted to supervise students' performance of clinical skills, yet often teachers were not available. Some students felt that as a result of constant waiting for their teachers, they had no control over their time management. This often led to frustration, anger, and stress. Other students felt that they could have been given more autonomy, allowing them to make arrangements either with nurses or their peers who could supervise them.

Autonomy is defined by Brophy (2000) as "the freedom to make independent decisions; personal freedom, and freedom of choice concerning student learning experiences" (p. 6). The literature shows the link between lack of autonomy among nursing students and negative influence on their development of initiative, creativity, and decision making process (Brophy, 2000; Jewell, 1994). Nursing students in Nolan's (1998) study felt that when they had freedom to direct their care they were able to manage their own time better. Students in the current study identified clinical teacher's

control over all aspects of clinical experiences to be inhibitors to learning the role of nurses. Some students sought more independence earlier in the program. It appears that students are ready for this independence much earlier in the program.

d) Relationships with patients

In the current study, all study participants enjoyed their interactions with patients and reported that the work with their patients brought them a high level of personal satisfaction. Although direct patient care was judged by many as an overall positive experience, some participants reported feeling stressed when taking care of very sick and medically unstable patients. Their work with critically ill patients and the fear of hurting them was identified as a source of stress. These results are consistent with the findings in literature review in chapter two which show that nursing students have a sense of satisfaction and a feeling of accomplishment when they provide patient care and attend to patients' needs (Beck & Srivasteva, 1991; Kleehammer et al., 1990; Wilson, 1994). The literature also demonstrates that students are stressed by the possibility of having to deal with emergencies, medically unstable patients, and many feared that they might make a mistake or harm the patients (Clarke & Ruffin, 1992; Cooke, 1996; Kim, 2003; Kleehammer et al., 1990; Mahat, 1998; Pagana, 1988; Parkes, 1985; Rhead, 1995; Wilson, 1994).

The results of this research study show that students place great value on interactions with patients and get a sense of satisfaction from being able to provide comfort to patients. Many nursing students who choose this profession still cite caring for and helping people as one of the main reasons they decided to enrol in the program (Holland, 1999). Although caring is a complex concept and can be viewed from

philosophical, psychological or psychosocial approaches, many still define caring as "human to human connection, an intention to help, an authentic presence with another" (Neil-Urban, 1994, p. 13). Caring therefore is often seen by nursing students, especially at the beginning of the program, as the core concept of nursing and big part of nurses' professional work.

2. *Preparation for clinical and perception of self*

A majority of participants felt that the responsibility placed on them was overwhelming and that teachers had unrealistic expectations of them given their knowledge level and lack of experience. They felt overwhelmed by the amount of knowledge they needed to care for the sick patients. Many lacked confidence in their abilities and felt that they were not well prepared, even in the last semester of the program. Self doubt and a lack of confidence was often a source of anxiety. Those students, who felt they had the knowledge, noted that their self doubt came from inability or difficulty applying it to clinical situations. Students were also aware that practicing skills on patients was very different from practicing in the lab. Some reported being embarrassed by their inability to perform some of the clinical skills even in their last semester. One student in this study commented on how she used the ability to perform clinical skills to judge her progress. Two of the study participants reported that the required pre-clinical preparation was stressful and time consuming. This in turn affected their sleep, as often they would stay up late to complete all the work for the next day. One of the study participants felt that sometimes the research she did on her patients' cases did not reflect the real clinical picture.

There are numerous studies which reported similar findings. Nursing students report stress and anxiety related to the lack of clinical knowledge or skills to accomplish tasks or to perform clinical procedures (Admi, 1997; Beck & Srivasteva, 1991; Blainey, 1980; Brophy, 2000; Kim, 2003; Mahat, 1998; Melincavage, 2008; Sellek, 1982; Pagana, 1988; Parkes, 1985). This study supports the findings in the literature. Nursing students often feel unprepared for clinical, they often lack confidence in their abilities, they feel that the expectations for their performance in clinical placed on them by teachers are often unrealistic given their inexperience and level of knowledge. This is an interesting finding, as students seem to have the same perceptions of their knowledge and preparation in so many studies. It appears that their self doubt and lack of confidence may be due to their own unrealistic expectations they set for themselves. It is possible that students are not aware of the natural progression of becoming an expert, which Benner (2001) has identified as progression from novice to expert (novice, advanced beginner, competent, proficient, and expert). Students often comment on feeling incompetent, especially at the beginning of the program or at the beginning of each clinical rotation. It is not possible for the students to be experts in a clinical area, after only being exposed to theory in the classroom. There seems to be a great need to educate the students on this natural progression in learning on how to become an expert nurse.

The results of this study, which show that some students judge their progress by the performance of clinical skills, are consistent with an overall students' belief that the activity of "doing" a skill defines their practice and is an important aspect of nursing (Cooke, 1990). This can explain why some students place such an emphasis on practicing skills. It appears then that the performance of clinical skills gives them a sense of

accomplishment and mastery, especially in the situation where they may feel they lack confidence in having sufficient theoretical knowledge.

3. Effects of stress and anxiety

All the participants in the study were in some way affected by stress in the clinical setting. Students described a multitude of physiological responses to stress. They also recalled how stress influenced their learning and performance of clinical skills.

a) Physical effects of stress

The participants in this study exhibited a whole variety of physical signs of stress. A majority of them described classic signs of anxiety such as hand tremors, excessive perspiration and increased or irregular heart rate in response to stressful situations. Two students described fluctuation in their body weight as a direct result of stress. For one participant it was a significant weight gain which she attributed to an irregular eating pattern. She often experienced stomach aches before the clinical day, not eating enough while in the hospital, and then overeating when she arrived home. A second participant lost weight as stress prevented her from eating. A third participant, whose weight did not change, described gastrointestinal disturbances such as stomach aches and nausea as a direct result of stress. Two reported changes in their skin. One felt that she aged considerably since enrolling in the program and she believed this change was directly related to stress in clinical. Yet another participant felt that he developed acne due to the stress. Two participants reported sleep disturbances related directly to stress: inability to fall asleep; waking up often; waking up early and not being able to fall asleep again; or having anxiety dreams. Many reported excessive fatigue as a result. One study participant attributed hair loss to stress in clinical. A majority of the signs and symptoms described

by the participants in the study are indicative of moderate anxiety, as suggested in the literature review in chapter two. Students in this study exhibited a variety of classic manifestations of anxiety.

b) *Influence of stress on learning and performance of skills*

All of the participants in this study reported that stress in clinical has in some way affected their memory or thinking process and therefore learning, but not performance of clinical skills. An interesting finding was that in most cases students felt that stress did not affect their ability to perform clinical skills. The effect of stress on the performance of skills was minor for two of the participants. They felt that their dexterity was not as precise and sometimes they would be more "clumsy" and drop something. This was however, not seen as a big problem and one which could easily be overcome. Three students reported that stress helped them focus better on the task at hand and so they did not feel that it affected their performance negatively. When faced with the performance of a clinical skill she was not familiar with, one student used self-persuasion. She felt that the anxiety would be more difficult to deal with if she did not attempt to perform the clinical skill. Two students used self relaxation technique, such as taking a deep breath, before performing the clinical skills.

Research studies reviewed in chapter two provided some information that students found performance of clinical skills stressful, however they did not provide any indication whether the stress they experienced had any adverse effect on their performance. The current study indicated that moderate level of anxiety does not interfere with the performance of clinical skills.

How students judge whether they can be successful in performing certain skills has much to do not only with their self efficacy beliefs (or their judgment of personal capabilities), but also with an understanding of task demands (Bandura, 1997). So even though students' self efficacy beliefs are strong, they may not be successful in performing a task. In this study, several participants felt stress about their lack of experience, yet they performed clinical skills accurately most of the time and without making major mistakes. This might be due to their overestimation of the task difficulty prior to performance of the task. Once they were faced with the actual situation they realized that they could actually perform it quite well. Many students commented on being nervous before entering their patient's room to perform a specific task, but once they started they realized that it was not so bad. Bandura (1997) noted that a moderate level of arousal could "heighten the attentiveness and facilitate deployment of skills" (p. 108) especially when the activity performed is not too complex.

Why do students persevere despite the stress? How do they develop interest in the activities in which they lack skill? Is it only the external rewards such as passing the course or getting praise from the teacher? According to Bandura (1997), one's efficacy beliefs contribute "to the development of intrinsic interest" (p. 219). People who initially lack skill, such as is the case of nursing students' lack of clinical skills, persevere despite all the stress associated with trying to master it. It is not only the behaviour which they eventually perform that is rewarding to them, nor the positive feedback they may get from others. People are interested in activities "at which they feel efficacious" (p. 219), but also in those which give them the satisfaction. In this study participants reported a

sense of satisfaction when they were able to perform clinical skills correctly. Inversely, those who felt weak in performance of clinical skills felt incompetent and embarrassed.

Another explanation of these results may come from Eysenck's processing efficiency theory. Eysenck (1996) believes that worry about task performance possesses a motivational function and it "leads to the allocation of additional processing resources to the task" (Eysenck, 1996, p. 98). In this situation, if there is sufficient expenditure of effort, it may not affect performance efficiency negatively (Eysenck, 1979). This could have been the case in the current study, especially if the tasks were not too complex.

All participants thought that stress had negatively influenced their memory, thinking process, decision making process or analytical skills. Students used words such as "blanking out", "getting stupid", "losing bits and pieces", "inability to output anything" when trying to analyze situations in clinical under stress. Two participants felt that their memory, specifically remembering and retaining, was affected by stress. For some the thinking process was slower and it took more time to come to a decision. In the case of more complex tasks, such as coming to a decision, remembering certain theoretical knowledge, or applying knowledge in clinical, students in this study reported being negatively affected by stress.

These results lend support to Easterbrooke's hypothesis of selective attention discussed in chapter two. He believed that as anxious arousal increases there is a narrowing of attention which results in performance being affected (Eysenck, 1982). As difficult tasks consist of "more components or cues than easy ones", under a state of high anxiety, attentional narrowing (or "reduced cue utilization") would have a greater adverse effect on the performance of difficult tasks (Eysenck, 1985). As a student tries to put

more effort into the task at hand to compensate for high anxiety, the processing capacity of his or her memory is further reduced. So it is possible that performance of tasks which require dexterity and following simple steps, such as clinical skills, will be less affected than the thinking process or a complex decision making process. Whereas simpler activities such as performance of clinical skills may not be affected by high emotional activation, the "performance of complex activities...is more vulnerable to impairment" (Bandura, 1997, p. 109).

Eysenck's processing efficiency theory also provides explanation why cognitive processes are affected by stress. As it was noted in chapter two, the performance of many cognitive tasks requires a working memory which is needed for active processing and transient storage of task relevant information (MacLeod, 1996). In high anxiety states working memory is not reduced but its functioning is affected because it is employed to sustain certain types of task irrelevant processing operations, therefore leaving less capacity for the task at hand (Eysenck, 1985; MacLeod, 1996). In addition, the processing capacity of individuals with high anxiety is further decreased by the effort that they put into compensating for the "adverse effects of anxiety" or investment of processing resources (Eysenck, 1985, p. 580). In the case of nursing students who are involved in complex cognitive activities, such as the clinical decision making process using their theoretical knowledge, high anxiety levels may interfere with processing capacity. The results of this study also provide support to Saranson's theoretical claim that worry about one's performance and having self doubt, as was in the case of majority of my study participants, interferes with one's cognitive abilities (1996).

There is very little in the literature describing how students' learning is affected by stress. The participants in this study provided detailed accounts on how stress affects their memory, thinking process and decision making. This study therefore provides more information on how nursing students' cognitive abilities are influenced by stress experiences during their clinical rotations.

4. Coping methods

Nursing students in this study used a variety of coping methods when dealing with stress related to clinical studies. Exercise and physical activity was identified as most beneficial by study participants and was used by majority of them. They walked, went to the gym or did yoga. Most participants turned to family or friends for emotional support. Some students used alcohol or smoked cigarettes more than usual. Others withdrew, cried, complained or used distractions such as TV, music, or computers. Two of the students used professional counselling services. One participants who described her clinical experiences as extremely stressful turned to sleep when feeling overwhelmed. She reported that she often slept at inappropriate times. When faced with stress related to difficult relations with their clinical teachers some participants used their peers for support and help or turned to nurses. One student instituted a "no schoolwork on weekends" policy which helped her deal with the demands of a stressful week. When trying to resolve a personal conflict with her clinical teacher one of the participants turned to someone else for advice. She also prepared extensively for clinical in case her teacher would question her. Another student asked more questions when unsure or stressed about performing clinical skills.

In this research study students used mainly emotion-focused coping methods. Those which they judged to be effective were: seeking support for emotional reasons (friends, family peers), focusing on and venting of emotions (exercising), mental disengagement (use of distraction such as TV, computer). The emotion-focused coping methods which students engaged in, but which were not very effective were: a) focusing on and venting of emotions (crying, complaining); b) mental disengagement (escaping through sleep, withdrawing); and c) alcohol and drug disengagement (drinking and smoking).

Only a few participants reported the use of problem-focused coping methods as related to stress in clinical, finding some methods to be effective. Those were: a) seeking social support for instrumental reasons (such as seeking advice from a faculty member to guide her in conflict resolution); b) asking questions when unsure about the clinical procedure; and c) asking peers or nurses for help when dealing with an unapproachable clinical teacher. One student planned ahead how to confront the stressor by making sure that her knowledge was good and her preparation for clinical was thorough in case the teacher would quiz her. Those who sought help from a counsellor or a therapist could be categorized either as seeking social support for instrumental or emotional reasons, depending on the outcomes of the interventions. This data was not available to me, so no conclusion can be drawn.

The results of this study are consistent with literature reviewed in chapter two in terms of a variety of coping methods used by nursing students. There is no consensus among the reviewed studies on which types of coping methods are used most often by nursing students and there is little information on which methods the students judge to be

most effective. A majority of the studies reviewed were quantitative in nature and so they did not provide students' perceptions or detailed descriptions of events which they experienced and coping methods used in response. The present research study provides some data on the effectiveness of coping methods as perceived by nursing students and on coping strategies used in specific stress-provoking situations during their clinical experiences.

Despite some participants' belief that alcohol consumption was "soothing", helping them to relax with friends, and therefore was judged as an effective coping method, it is important to note that alcohol can eventually increase one's risk for illness. The regular use of alcohol to deal with stress can lead to dependency on this particular coping method and eventually to alcohol dependency.

CHAPTER 6

IMPLICATIONS FOR NURSING EDUCATION

In this chapter implications for future nursing education practice and suggestions for further research are presented. At the end the limitations of the current study are discussed.

Implications for Nursing Education Practice

Based on the results of this study, there is a multitude of implications for nursing education practice. Given the themes identified, there is a need to address student-staff relationships and student-teacher relationships. Teaching methods which support students' self efficacy and which minimize anxiety experienced by nursing students in clinical will also be discussed. Given the students' use of coping methods which help them deal with stress related to clinical studies, I will look at how we can best support students, so they deal with the inevitable stressors effectively.

For the learning experience to be optimal the learning environment must also be optimal. That means that there should be cooperation of everyone involved, including the healthcare team. Although it is a difficult task, it is necessary in order to ensure that students learn in the least stressful environment. This means that the healthcare team is accepting of students, welcoming, and understands well the expectations. Each individual unit, even within the same health care institution, has its own culture which is often linked to the leadership style of a unit manager (head nurse). The staff members on some of the units are "student-friendly" while others do not accept nursing students easily. It is the role of the educator to ensure that the process of socialization goes smoothly, and that

the students are accepted. Nursing educators need to nurture the student-staff relationships.

It is imperative that nursing educators act as liaisons between the nursing staff and the students. As nurse managers often influence the attitudes of staff nurses on the units, when choosing the units which are suitable for students, educators need to take into consideration commitment of nurse managers to student education. Once this communication is well established, regular feedback regarding students' experiences and perceptions of their learning opportunities with nursing staff needs to be provided to nurse managers. This could be achieved by using the formal evaluation process, which should be developed by healthcare agencies, in which students fill out questionnaires providing feedback on the role of nursing staff and their involvement in the students' learning.

Besides regular contact with management, it is also important that educators are clear about their expectations of nursing staff who supervises students. Nursing staff also needs to be reminded of the students' level of education and clear objectives set for them during any particular rotation. This can be achieved by solid orientation to the units and creating a welcoming environment for students. During orientation, students should be welcomed by nurse managers and/or nurse educators and introduced to each staff member. Once the students' presence on the unit is well established students need to feel as part of the team. As an educator I often encounter the staff or nurse managers who exclude the students from nursing reports or multidisciplinary rounds. It is important that students participate in such meetings, as this not only gives students opportunity to learn the role of nurses, but also sends them a message that they are part of the team.

Through the skilful communication with nursing staff, nurse educators should identify the members of the nursing staff who are committed to teaching. When choosing patient assignments it should be educators' priority to match the student with a nurse rather than use patient diagnosis as the primary determinant of the clinical assignment. If the co-assigned nurse is not committed to students, the learning experience will not be positive, despite the exposure to variety of clinical cases.

The results of this study also showed the importance of solid communication with medical staff. Nursing students need to be introduced to medical staff on the unit, and communication with doctors should be encouraged early in the program. Through role play exercises in small groups nursing educators can provide opportunity for students to practice communication techniques in the safe environment with their peers. Role modeling of communication between clinical teacher and medical staff can help students learn how to effectively communicate with doctors. This in turn could help the students sort out the relevance of information they would like to share with medical team. Given the nature of the communication between the staff nurses and medical team, which literature shows is often conflictual, students need to be made aware of these dynamics and its roots. In order to be able to fully function within such environments nursing students need to be empowered and need to learn the assertive communication techniques.

Apart from ensuring the appropriate healthcare environment, teachers need to ensure that they use appropriate pedagogical methods which support students' learning. These include methods which support the students' internal agency factors. In the case of clinical learning, knowledge is not sufficient for nursing students to perform well in a

stressful and complex environment. Students need to have a sense that they have the competence to perform the tasks successfully. Otherwise no amount of knowledge will help a student perform a clinical skill on a patient if she does not believe she can succeed. Clinical teachers must be able to interpret students' behaviours in order to be able to support their self efficacy. Teacher's role modeling, their caring and nurturing teaching behaviours can positively influence nursing students' self efficacy and subsequently their learning in clinical. Teaching behaviours which are often identified by students as having the most positive influence on their learning are : a) being approachable; b) providing support and encouragement; c) being a role model; d) listening attentively; e) providing frequent feedback; and f) encouraging mutual respect.

These pedagogical approaches are also consistent with principles of andragogy. Clinical teachers therefore should use the principles of adult education theories to guide their practice. If the clinical educators better understand the needs of the adult learner, they can develop effective methods, tools and techniques which support adult learners in their development. An important assumption of andragogy is that adult learners are self directed. Self direction is used in some areas of literature synonymously with autonomy. Empowering nursing students should be a goal of each nursing educator in order to help students become autonomous in their practice. Letting go of the control over every aspect of a clinical experience and listening to students' learning needs would help students feel empowered and responsible for their own education. This in turn will help create independent professionals.

Teachers also need to remember that the evaluation process should be secondary to learning. If students have the perception that their teachers only collect data for student

evaluation, there is a potential that students will have a surface approach to learning, as their goal will only be to pass the courses. In order to decrease evaluation anxiety, teachers should be open to using less traditional means of evaluating students. Often the use of humour, and peer mentoring can decrease nursing students' stress and anxiety in clinical. In the current study students reported that being supervised by a nurse or by a peer was much less stressful than being supervised by a clinical teacher. It also improved their time management, as students did not have to wait for their clinical teachers to supervise their performance of clinical skills. Such peer support initiative where senior students supervise and support junior students during their clinical studies can benefit both groups of students. Senior students can improve their teaching skills, whereas junior students' anxieties related to clinical experiences, especially at the beginning, can be greatly reduced. A buddy system, where students are paired in clinical and are assigned to the same patient, has been judged by students in this study to decrease their anxiety and improve their learning. By instituting these pedagogical approaches to nursing education, students' anxiety related to the evaluation process can greatly decrease.

Given the widespread perception that students feel incompetent and not prepared for clinical practice, clinical teachers need to educate students on the natural progression in learning on how to become experts in nursing practice. Although Benner's (2001) model of developmental progression from novice to expert nurse was developed to understand how nurses become experts, educators could use this model to educate the students on how they can develop expertise during clinical studies. This would allow students to adjust their expectations and hopefully take off the pressure of feeling that they need to perform like expert nurses. In addition, educators should always attempt to

match the complexity of the clinical cases with a students' level of education and experience when assigning patients.

Although most nursing teachers have degrees in nursing and are expert nurses, many do not have any formal education in the field of pedagogy. It is therefore important that nursing educators take responsibility for their professional development in this area. Creating workshops and professional development opportunities for nursing teachers may help them reflect on their practice and hopefully be the driving force for change in their present educational approach.

As experiencing stress related to some aspects of clinical education is inevitable, educators need to develop skills in recognizing students' anxiety and their coping methods. This can help the educators provide appropriate support for students so they develop and use effective and healthy coping strategies. Education on healthy and effective coping methods should be included in every curriculum early in the nursing program. Teachers should familiarize themselves with the literature on stress reduction and interventional strategies to decrease anxiety related to clinical.

Implications for Further Research

The rich data obtained from the participants in this study supports some of the findings in the literature and provides new knowledge. It has also provided an opportunity for discussion and for raising many questions.

The study clearly shows how strong the influence of the clinical environment is on students' learning, specifically the influence of clinical teachers, nursing, and medical staff. It would be interesting then to explore staff nurses' perceptions of their role in student education. The relationship between medical staff and nursing students is still an

unexplored subject. This should be further investigated, given the importance that students place on development of relationships with physicians in a clinical setting, and the negative effects of the poor communication on students. In addition, the perception of the faculty's role in clinical teaching should be investigated. It would be interesting to get teachers' perspective on their role, given the students' perception that the clinical teachers' role is mainly to evaluate the student, Furthermore, it would be interesting to explore the teacher's perspective on the effectiveness of teaching methods and their impact on students' feeling of stress.

This study provided new qualitative data on which coping methods students use in relation to specific situations in the clinical environment. This is another area for more research.Given that only one participant in the study was male and there is still limited research on male experiences in a clinical environment, it would be beneficial to explore it further. This would help to identify the specific needs of a male student and identify whether they differ from female counterparts. It would provide nursing educators with valuable data on what kind of support they may require. Given that males are still underrepresented in nursing profession it would be important to get males' perception of their practice in a mostly female environment.

Although this study provided some examples of how life events (such as the death of family members) outside the clinical environment affected nursing students, it would be interesting to explore this area further. There must be a multitude of stressors students cope with that are outside the clinical environment, and which may have direct influence on their performance and learning during clinical rotations. This should be explored in future research.

Today's nursing students come from diverse cultural backgrounds. The participants in this study were white and all of them were born and raised in North America. Immigrant students and students from different ethnic groups comprise a large part of today's nursing programs in urban areas. It would be important to look at these students' experiences.

Limitations of the study

Despite the small sample, which is characteristic of a qualitative study, this research project provided insight into nursing students' experiences in clinical. There are however, some limitations to this study. One limitation may be the culturally/ethnically uniform sample. As this was a convenience sample, the researcher did not look specifically at students' background. The results therefore cannot be generalized to a more diverse group of nursing students.

The second limitation is that all the participants in this study were from the same school where the researcher teaches, and despite choosing the subjects who were never part of the researchers' clinical groups, students may have withheld some information which might otherwise have been shared.

The third limitation of this study was the fact that trait anxiety was not assessed here. In order to judge whether the results of this study support the theories of emotionality and learning, one would have to explore trait anxiety in the participants of the study. This would help the researcher to conclude whether students who are prone to anxiety perceive clinical experiences as more stressful.

The fourth limitation is that all of the study participants were from the CEGEP program and therefore the results cannot be generalized to students at different levels of education (baccalaureate or master's programs).

Despite the above limitations, this research study provided rich data which may help the nursing educators better understand the learning experiences of nursing students in clinical settings, so they can best support students' learning in an environment as low in stressors as possible.

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Appendix A

CONSENT TO PARTICIPATE IN

NURSING STUDENTS' EXPERIENCES IN CLINICAL SETTING: STRESS, ANXIETY AND COPING

This is to state that I agree to participate in a program of research being conducted by Magdalena Mlek, a graduate student in Educational Studies, Department of Education, Concordia University.

Phone #: 514-931-3236

Email: magdamlek@videotron.ca

A. PURPOSE

I have been informed that the purpose of the research is to examine the experiences of nursing students in clinical settings during their three year nursing program. The main goal of the study is to identify main stressors which cause anxiety as well as coping skills the students use in these situations.

B. PROCEDURES

I understand I will be interviewed once, for a period of 60 minutes. The interview will be audio taped and will be conducted at a place mutually agreed on with the researcher in Montreal, in March or April of 2010. My real name will not be used in the write-up of the study; a pseudonym will be given to me and every effort will be made to keep my name confidential. After the study is complete all the audio tapes and notes from the interviews will be destroyed.

C. RISKS AND BENEFITS

The risks to me as a participant in the study are minimal. The benefit may be that my story will be used to better understand the experiences of student nurses during their clinical practice. This may help improve nursing education in the future.

D. CONDITIONS OF PARTICIPATION

- I understand that I am free to withdraw my consent and discontinue my participation at anytime without negative consequences.
- I understand that my participation in this study is CONFIDENTIAL (i.e., the researcher will know, but will not disclose my identity). The tape of the interview, along with the names of participants will be kept in a locked cupboard in the home of the researcher until no longer needed, and destroyed at that time. All information and data obtained from participants during recruitment and interviews will be used for research purposes ONLY, and will not be shared with clinical instructors, supervisors or members of any professional order.

All data obtained during interviews will be used for research purposes ONLY.

- I understand that the data from this study may be published.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY.

NAME (please print) _____

SIGNATURE _____

DATE _____

If at any time you have questions about your rights as a research participant, please contact Adela Reid, Research Ethics and Compliance Officer, Concordia University, at (514) 848-2424 x7481 or by email at areid@alcor.concordia.ca

As the nature of this research study involves a discussion of potentially upsetting situations, if you experience any negative effects, as a direct result of participating in this study, and require personal support and counseling, please contact counselor Johanne Godin in Counseling and Career Development Services at Dawson College at 514-931-8731, ext 1406 (room 2.D.2.)

Appendix B

Consent form for contacting research participants

I, _____ (Print full name) agree to be contacted by Magdalena Mlek, the researcher for the study "Nursing Students' Experiences in Clinical Settings: Stress, Anxiety and Coping" to schedule the interview.

Contact information:

Telephone number: _____

Home address: _____

_____

E-mail address: _____

Signature: _____

Date: _____

Appendix C

Demographic Data

Name: _____

Age: _____

Gender: _____

Marital status: _____

Number of children living at home: _____

Country of birth: _____

Number of years living in Canada: _____

Education (prior to nursing program): _____

Work experience in health care (besides school): _____

Hours of work per week outside school: _____

Appendix D

Research and interview questions

Research question 1: What are the nursing students' experiences during clinical rotations?

-Describe some of your experiences during clinical rotations.

-Give me some examples of positive or negative experiences.

-How did your experiences change over time?

Research question 2: What are students' perspectives of stressors in clinical practice?

-What are some of the things which made you stressed or anxious?

-Give me some examples of the situations during clinical which made you feel stressed or anxious.

Research question 3: What promotes or hinders students' learning?

-What did you find helpful in stressful situations to facilitate (or improve) your learning?

-What hindered your learning (what prevented you from learning)?

-How would you describe the relationship with your clinical teachers? What in their approach to you was helpful / unhelpful?

Research question 4: How do students cope with their anxiety?

-What do you perceive as effective versus non effective coping strategies (or the way you were dealing with stress)?

-Give me some examples of what you did in the specific situations when you felt stressed.

Appendix E

Definition of Terms

Clinical: This term is used interchangeably with “clinical rotation”, “clinical studies”, clinical setting” and “clinical experience” to describe the practical part of nursing education. Nursing students spend on average 2 days a week each semester in the healthcare setting (mostly on the units in hospitals).

Clinical Skills: The term in this study is used to describe technical skills which students perform on their patients (i.e. medication administration, dressing changes, and injections).

Clinical Teacher: This term is used interchangeably with “clinical instructor”. In this study clinical teacher is a member of the faculty in the nursing program, who apart from being a teacher at the academic level (classes, labs at school) also teaches groups of students during their clinical rotations in healthcare agencies (mainly hospitals).

Co-assigned nurse: A staff nurse who supervises nursing students. Students are usually paired with a nurse and provide care to his/her patient/patients. The nurse is ultimately responsible for her own patients.

Externship: After the second year of the program, nursing students may be hired by the hospital to work as a “student nurse”, supervised by staff nurses, but with a limited scope of practice.

Internship: A clinical rotation in the last semester of the three-year nursing program when students spend four days a week on the unit. They are paired with a nurse (preceptor) who supervises them. A clinical teacher (faculty member) oversees the students on several units and meets with students a couple of times per week to discuss their progress.

Preceptor: A staff nurse who works closely with nursing student during Internship. This can also refer to a nurse who supervises the orientation of a new nurse on the unit.

PAB: Préposé aux Bénéficières is a French equivalent of an orderly.