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A Grounded Theory on the Process Emergency Department Nurses Utilize When Managing Adult Patients' Pain

Cheryl L. Bergman

A GROUNDED THEORY ON THE PROCESS EMERGENCY DEPARTMENT NURSES UTILIZE WHEN MANAGING ADULT PATIENTS' PAIN

DISSERTATION

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A GROUNDED THEORY ON THE PROCESS EMERGENCY DEPARTMENT NURSES UTILIZE WHEN MANAGING ADULT PATIENTS' PAIN

by

DISSERTATION

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Abstract

Background: Pain is the most common presenting complaint in emergency departments (EDs) and the primary reason patients seek medical care. Improving inadequate pain control has been identified as a critical goal in emergency health care. As patients' primary health care advocates, ED nurses play a vital role in resolving the problem of undertreated pain in their patients.

Purpose: To develop a grounded theory on the process ED nurses use to manage adult patients' pain and to increase understanding of how this process impacts on patients' pain treatment.

Research Question: What is the process ED nurses use when managing adult patients' pain?

Theoretical Framework: Grounded theory and the philosophical foundation of symbolic interactionism guided this study of human processes on ED nurses' management of ED adult patients' pain. Symbolic interactionism focuses on meanings people attach to events experienced in their everyday life. Subsequent actions are a direct result of interpretations of these meanings. Grounded theory methodology examines people's actions/ interactions with the goal of theory generation grounded in data gathered from people in social settings in which these phenomena occur.

Methods: Participants were recruited from the membership of the local emergency nurses association and six hospital-based EDs in Northeast Florida. Fifteen ED nurses were individually interviewed by the researcher. Interviews were transcribed verbatim and analyzed using open, axial, and selective coding.

Results: The central core category that emerged highlighted ED environments as inconducive to demonstrating caring when relating to adult patients with pain. Three broad categories supported this central core category: (a) feeling overwhelmed, (b) perceived non-cohesiveness of the health care team, and (c) frustration. Each broad category was supported by three subcategories. *Feeling Overwhelmed* included constant prioritizing, lack of staff, and lack of control. *Perceived non-cohesiveness of the health care team* included nurses, administrators and ED doctors. *Frustration* involved abuse of EDs, pain complexity, and unrealistic patient expectations.

Conclusions: Interventions and solutions need to be explored to improve ED nurses' ability to manage adult ED patients' pain adequately and to demonstrate caring while doing so.

Implications for accomplishing this goal clearly exist in nursing education, practice, research, and public policy.

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Virtuous and ethical behavior involves doing well, whatever we do.

Aristotle

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DEDICATION

If you think you are beaten, you are; if you think you dare not, you don't; if you want to win, but think you can't it's almost a cinch you won't. If you think you will lose, you're lost; for out in the world we find Success begins with a person's will; it's all in the state of mind. Life's races don't always go to the strongest and fastest who ran, but sooner or later the one who wins is the one who has faith he can. Walter D. Wintle

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TABLE OF CONTENTS

TITLE PAGE.	i	
SIGNATURE PAGE	ii	
COPYRIGHT PAGE	iii	
ABSTRACT	iv	
ACKNOWLEGEMENTS	vi	
DEDICATION		
TABLE OF CONTENTS	ix	
CHAPTER ONE: PROBLEM AND DOMAIN OF THE INQUIRY		
Introduction	1	
Ethics and Pain Management	4	
Emergency Nursing	6	
Statement of the Problem	8	
Purpose of the Study	10	
Research Question	10	
Significance to Nursing	10	
Education	11	
Practice	12	
Research	12	
Public Policy	13	
Philosophical Underpinnings	14	
Symbolic Interactionism	14	

	Grounded Theory	17
	Scope and Limitations of the Study	22
	Chapter Summary	24
CHAPTER TWO: REVIEW OF THE LITERATURE		26
	Introduction	26
	Historical Context	27
	Experiential Context	28
	Pain Assessment	30
	Barriers to Effective Pain Management in the ED	32
	Drug Seeking	32
	Diagnosis as the Priority	33
	Education	34
	Lack of an Established Relationship	36
	Pain Control vs. Patient Satisfaction	36
	Nurses Perceptions on Pain Treatment	38
	Emergency Department Nurses Perceptions Towards Pain	41
	Chapter Summary	42
CHAPTER THREE: METHODS		44
	Introduction	44
	Research Design	45
	Ethical Considerations	47
	Sample	49

Inclusion Criteria	50
Exclusion Criteria	50
Recruitment of Sample	50
Interview Questions	51
Demographic Data	52
Data Collection Procedures	53
Data Analysis	55
Research Rigor and Trustworthiness	58
Peer Debriefers	60
Chapter Summary	61
CHAPTER FOUR: FINDINGS OF THE INQUIRY	63
Introduction	63
Sample of Participants	63
Demographics of Participants	64
Composite	64
Individual Bio Sketches	65
Research Findings	68
Broad Categories	69
Overwhelmed	69
Perceived Non-cohesiveness	75
Frustration	82
Central Core Category	89

(CHAPTER FIVE: DISCUSSION AND CONCLUSIONS OF THE INQUIRY	93
	Introduction	93
	Exploration of the Meaning and Researcher's Interpretation of the Study	94
	Overwhelmed	94
	Perceived Non-cohesiveness	97
	Frustration	100
	Implications of the Study for Nursing Knowledge	105
	Implications for Nursing Education	105
	Implications for Nursing Practice	108
	Implications for Nursing Research	110
	Implications for Nursing Public Policy	112
	Strengths and Limitations	113
	Recommendations for Further Study	115
	Conclusions and Summary	116
]	LIST OF REFERENCES	118
1	APPENDICES	
	Appendix A. IRB Approval Letters	132
	Appendix B. Consent	137
	Appendix C. Transcription Confidentiality Agreement	139
	Appendix D. Counseling Services	140
	Appendix E. Recruitment Flier Consent	141
	Appendix F. Initial Interview Guiding Questions	142

Appendix G. Demographic Data Sheet	143
Appendix H. Model	145
Appendix I. Data Table: Demographic Data of Participants	146
VITAE	149

CHAPTER ONE

PROBLEM AND DOMAIN OF THE INQUIRY

Dr. Angela Mailis, a physician whose expertise is neuropathic pain has said:

There are basically three games that people in my profession play when they are dealing with pain. One: the whole-enchilada game. They use one big diagnosis to explain everything. Two: the ostrich routine. They stick their heads in the sand and hope the pain will go away. You can't measure pain, you can't palpate it or auscultate it – therefore, for these doctors, it doesn't exist. And three: they play the blind men with the elephant game. One man feels the tail and says, 'this is a snake.' Another feels the leg and says, 'this is without a doubt a tree.' The third feels the trunk and says 'it's nothing but a rope.' With pain, if you don't work hard to connect up all the different parts of the picture, you won't get an accurate portrait of the beast. (Jackson, 2002, p. 44)

Introduction

The International Association for the Study of Pain (IASP, 1986) defines pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage" (¶ 34). Thus, pain is a multidimensional phenomenon, and an assessment of pain should include not only physical but psychological and emotional aspects as well. Margo McCaffery, considered an expert on pain and pain assessment, defines pain as "What the patient says it is, and exists when the patient says it does" (McCaffery & Pasero, 1999, p. 5). For clinical purposes, this definition has been further clarified to mean *acceptance* versus *believing* the patient's self-report. Although the nurse may not agree with or even believe the patient's report of pain severity, the nurse *accepts* the patient's subjective

perception and is responsible to act upon and manage the pain appropriately (Harper, Ersser, & Gobbi, 2007).

The amount of pain a patient is experiencing cannot be fully and accurately judged by identifiable or observable injury or tissue damage. Pain, a subjective, personal experience unique to each individual, presents major difficulty with its evaluation (Jackson, 2002; Tran, 2001). Because of the complexity of the individual pain experience, these sensations and meanings may be difficult to communicate to others (Miner, Biros, Trainor, Hubbard, & Beltram, 2006). Consequently, the patient's self report has become widely accepted as the foundation of pain assessment (Lovering, 2006; McCaffery & Pasero, 1999).

Pain is the most common presenting complaint in emergency departments (EDs) and is the primary reason patients seek medical care and take prescription medications (Graham, 2002; Jones, 2001; Stalnikowicz, Mahamid, Kaspi & Brezis, 2005). Cousins (2004) states fewer than half of acute, chronic, and cancer pain sufferers receive adequate pain relief. In 2000, The Joint Commission recognized pain as a large scale, avoidable public health problem and designated pain as the "5th vital sign" in an attempt to make pain more visible and health care personnel more accountable for its treatment (Bijur et al., 2006; Fosnocht, Swanson, & Barton, 2005). A written assessment with documentation of pain levels is now required for all patients complaining of pain when presenting for medical treatment in institutions accredited by The Joint Commission. The standards also mandate that patients have a right to adequate assessment of their pain, as well as individualized pain management and treatment (Bossio, 2006).

In an article focusing on addressing undertreatment of pain in EDs, Ducharme (2001) challenged his colleagues to scrutinize outdated beliefs about pain that obscured effective, holistic treatment. "In the new millennium, it cannot be accepted that patients' illnesses or injuries are treated while their suffering is ignored" (p. 272). Former President Bill Clinton signed a congressional bill in 2000, declaring the first ten years of the new century as the "Decade of Pain Awareness and Research" (Jackson, 2002). Congress has since proposed a bill titled "National Pain Care Policy Act of 2005" to promote increased recognition of pain as a significant US public health problem and to identify barriers to appropriate pain care management (H.R. 1020, 109th Congress 1st session). Guidelines were also established and endorsed by the American Pain Society regarding the treatment and evaluation of patients in pain (Thompson, 2004). Even with this increased emphasis on pain assessment, inadequate management and treatment of pain is still prevalent (Stalnikowicz et al., 2005; Trossman, 2006).

In general, a significant contributor to *oligoanalgesia*, a term meaning poor or inadequate pain management, is the variation in pain itself (Tran, 2001). It is estimated that 25 million Americans experience acute pain annually, with headache and low back pain the most common conditions. Acute pain is a normal and predictable physiological response to an injury and will resolve as the injury heals or the cause of the pain is removed (Ferrell, 2005; Jones, 2001; Tran). Acute pain stresses the body and patients may display outward signs of distress secondary to initiation of the stress response and release of hormones, specifically catecholamines. Acute pain, however, may progress to chronic pain if not treated aggressively and adequately (Huether & McCance, 2008).

Chronic pain, more challenging to manage as it persists after the normal healing process is complete, is commonly defined as pain that continues for three months or more. Bossio (2006) states that worldwide, chronic pain has become extremely prevalent and should be recognized as a disease in its own right (Cousins, 2004). "As little as 1 in 10 and as many as 1 in 2 patients who present to a health care provider may have chronic pain" (Bossio, p. 26). Frequently, there is no identifiable cause that explains the symptom of pain, which leads to increased frustration for both the patient and the health care provider (Bossio; D'Arcy, 2005; Tran, 2001).

Ethics and Pain Management

Giordano (2006) defines *ethics* as a "formal, critical, systematic study of morality that seeks to describe the moral foundations that underlie human intentions and actions" (p. 2). The American Nurses Association (ANA) Code of Ethics (2001) includes these concepts in their interpretive statements. The code states the nurse's primary commitment is responsibility to the patient. This responsibility entails properly assessing the patient, delivery of any medications accurately and safely, and reevaluation of each patient in regard to the effectiveness of the medication administration (Potter & Perry, 2005). A component of responsibility is accountability that ideally leads to the integration of good and proper pain management into one's practice (Innis, Bikaunieks, Petryshen, Zellermeyer, & Ciccarelli, 2004; Spross, 2001).

Pasero and McCaffery (2004) propose the incorporation of comfort-function goals as an aspect of accountability for managing patients' pain. Both patient and nurse collaborate to establish essential functions/activities imperative for recovery or improved quality of life. Discussion of adequate pain control takes place so that achievement of

these functions becomes each individual patient's goal. This exemplifies the essence of patient-centered care and fosters effective nurse-patient interaction, alleviating some of the difficulties clinicians encounter when trying to set measurable goals for pain relief based upon pain scores (Bourbonnais et al., 2004).

Unfortunately, establishment of patient comfort-function goals regarding adequate pain management is typically lacking or nonexistent in EDs. Reasons for this vary but may encompass the briefness of patient encounters combined with the task-centered mentality of the nurse (Byrne & Heyman, 1997). Nurses in particular have an ethical and professional obligation to treat and relieve patients' pain (Ferrell, 2005; Good & Moore, 1996; Thomas, 2007). The Agency for Health Care Policy and Research (AHCPR) states clearly in their guidelines that the foundation of a health care professional's obligation to the patient is to manage and relieve suffering (as cited in Oken, 2002). Therefore, regardless of the intensity of the situation or environment, emergency nurses share this same responsibility and commitment.

The ethical principal of *beneficence*, simply defined as "to do good," is an integral part of proper pain management (Cousins, 2004) and helps the patient reestablish a sense of well-being through a reduction in suffering. Compassion also plays an important role in the health care provider/patient interaction. "Feeling with the patient" demonstrates sensitivity to the pain experience and communicates a caring attitude to the patient and others (Giordano, 2006). Persons with pain who seek care in the ED are literally forced to trust in the righteousness and character of the health care team. Health care professionals are accountable to maintain this trust relationship by showing respect for the patient as an

individual, working diligently towards maintaining their autonomy, and relieving their pain.

As with all medication delivery, there are decisions involving inherent risk versus benefit. An ethical dilemma affecting health care practice is whether to err on the side of compassionate care for the relief of suffering when uncertainty as to the legitimacy of the complaint exists. Pasero and McCaffery (2001) concluded that because pain cannot be objectively verified, patients addicted to narcotic analgesics and who do not legitimately need pain medications will sometimes lie to obtain them. They urge nurses to consistently and appropriately assess and treat every patient complaining of pain. Thus, there will never be a time when they failed to help someone who was truly suffering, and their professional conduct will not be questioned. Bossio (2006) reinforces this by adding that a relatively small population of drug abusers (6-15%) should not lead to undertreatment of pain for the majority of legitimate pain sufferers.

Emergency Nursing

Originally established in 1970, the Emergency Nurses Association (ENA) is the primary professional organization for emergency nurses in the United States (US). This organization establishes the scope of emergency nursing practice within guidelines developed by the American Nurses Association (ANA). The ENA emphasizes accountability, responsibility, communication, autonomy, and collaborative relationships as core professional behaviors for emergency nurses (ENA, 1999).

The role and mission of the emergency nurse is unique in comparison with nurses working on other units in the hospital setting. The ED nurse must be adept in caring for individuals from all age groups, presenting with a wide range of complaints and problems

that have yet to be diagnosed. Mastery of specialized equipment and technology, the ability to interact with pre-hospital personnel (e.g., emergency medical technicians [EMTs] and paramedics), and knowledge of injury prevention and preventative health care measures are also required of nurses working in this specialty area (Alpi, 2006). Other important skills include knowledge of legal implications of practice, discharge planning, stabilization and resuscitation, triage and prioritization, crisis and disaster preparedness, and the provision of interventions in uncontrollable or unpredictable environments (ENA, 1999). Because of this broad nursing scope, emergency nurses are sometimes described as "Jack of all trades and a master of none" (Lyttle, 2001, p. 49). Words commonly used to describe the personality characteristics of typical ED nurses are aggressive, loud, assertive, demanding, and tenacious (Lyttle).

Emergency nurses are well aware of the problem of inadequate pain control. In an ENA Delphi study focused on the identification and prioritization of research questions about ED nurses and health care consumers, three separate surveys were mailed from the spring of 2000 through the summer of 2001 to an expert panel of 320 nurses selected from the ENA member roster. Seventy-nine of the original 320 (25%) nurses completed all three surveys. Concerning health care consumers, the research question identified as most important among these US nurses dealt with pain management (Bayley, MacLean, Desy, & McMahon, 2004).

The Western Australia ENA (ENAWA) modeled their Delphi study on the one previously conducted in the US to prioritize research topics believed by members to be the most important to practice. Two questionnaires were mailed to all 115 ENAWA members in 2003. Fifty percent responded, and 10 research categories were established

from the data analysis. The researchers formed 25 questions from these 10 categories, and these were mailed to ENAWA members for priority ranking. The question the ENAWA membership believed held the highest importance for further research was pain management and the need for nurse-initiated analgesia protocols (Rodger, Hills, & Kristjanson, 2004).

In the majority of cases, the nurse is the first person to evaluate a patient seeking care in an ED. Whether that initial assessment takes place in the triage area or at the bedside, the nurse assesses and determines the severity of the patient's condition and decides how quickly the patient needs examination by the medical physician or practitioner. The initial pain assessment is a part of this encounter. Consequently, it is the nurse who establishes the pain rating with the patient and sets the timeline for pain relief.

Statement of the Problem

It is estimated that 75% of patients seeking care in EDs are experiencing some level of pain, making pain the most common ED complaint (Graham, 2002). However, approximately 70% of patients who present to an ED with an acutely painful condition do not have their pain adequately treated (Stalnikowicz et al., 2005; Todd et al., 2007). The Mayday Fund, an organization founded in 1992 whose mission is to fund projects related to improving pain management, supported the Pain and Emergency Medicine Initiative. These researchers found that ED personnel did an initial pain assessment 79% of the time but only performed a follow-up pain assessment 17% of the time (Thompson, 2004). Additionally, even when reassessed, 50% of patients experiencing pain described inadequate pain relief (Lynch, 2001).

Other findings indicate there is a dearth of documentation, by both nurses and physicians, regarding patients' pain, and the use of pain scales is also limited (Eder, Sloan, & Todd, 2003; Guru & Dubinsky, 2000). If the pain scores are not used to help alleviate the patient's pain, there is little value as to their use. Because pain is so pervasive in patients seen in EDs, other researchers have speculated that nurses and physicians become desensitized and subsequently ignore or grant little importance to pain complaints (Eder et al.; Kelly, 2000; Thomas, 2007). Clearly, there is a need for research to understand why this attitude exists and how it can be overcome to restore compassionate, effective delivery of health care in emergency settings.

Emergency departments worldwide are in a crisis due to overcrowding. Wait times have increasingly lengthened particularly for patients with non life-threatening conditions (Fry & Holdgate, 2002; Fry, Ryan, & Alexander, 2004; Rodgers et al., 2004). Patients are thus forced to endure pain for extended periods of time. Thompson (2004) found that the average wait time was 110 minutes or nearly two hours from the time a patient in pain was triaged until the first dose of analgesia was delivered. Research has shown that patients expect appropriate attention and action towards relief of their pain. This expectation translates into a mean of 23 minutes as a reasonable wait time for analgesia delivery (Fosnocht, Swanson, & Bossart, 2001). Hence, a vast difference between patient expectation and actual pain medication delivery exists.

Not all pain requires the use of pharmacological methods. Basic first aid measures (e.g. elevation, immobilization, application of cold packs, and compression bandages) are standard actions for extremity injuries. White (2007) found that the most important interventions for alleviation of pain for patients with non-life threatening injuries were

correct treatment, planned continuity of care (physical therapy, follow-up appointments), and reassurance. All of these begin and end with the nursing functions of knowledge and communication.

Purpose of the Study

Because nurses play an integral role in pain management in the ED, it is imperative to investigate the process they utilize to interact with patients. For this purpose, a *process* is "a group of sequenced tasks (for example, assessing pain and administering analgesics) necessary to achieve one particular outcome – pain relief" (Pasero, McCaffery, & Gordon, 1999, p. 28). It is further presumed that ED nurses have specific perceptions and feelings about managing patients who present to the ED with pain, thus influencing communication and subsequent nurse-patient interaction. Therefore, the purpose of this study was to (a) develop a grounded theory on the process ED nurses use to manage adult patients' pain and (b) increase understanding of how this process impacts on patients' pain treatment.

Research Question

What is the process ED nurses use when managing adult patients' pain? Adult patients, defined as 18 years of age or older, were the focus of this study. Managing pediatric patients' pain may have involved significantly different nursing perspectives and be incommensurable with pain management for adult patients.

Significance to Nursing

Nurses play a critical role in resolving the problem of under-treated pain in ED patients because they are the patient's first line of support and the patient's most important health care advocate (Clarke et al., 1996; Eder et al., 2003; Ferrell, 2005;

Manworren, 2006; McCaffery & Ferrell, 1997; Negarandeh, Oskouie, Ahmadi, Nikravesh, & Hallberg, 2006; Yee, Puntillo, Miaskowski, & Neighbor, 2006). The term patient advocate is often used in conjunction with the word nurse to explain a basic facet of nursing - that a situation exists requiring one person to represent another person who is vulnerable or in need (Baldwin, 2003; Negarandeh et al., 2006). Baldwin describes three broad categories that essentially encompass this concept of advocating for the patient: valuing, apprising, and interceding. To value patients is to view them as unique individuals with strengths and weaknesses. Valuing fits easily within the existential philosophy for positive health care relationships. Existential relationships are ones whereby patients are respected as individuals and never reduced to *objects of care*. Apprising is exemplified when nurses inform, advise, and educate patients. All of these characteristics relate to the communication aspect of relationships. *Interceding* involves being the intermediary when needed, especially when a situation exists whereby the patient experiences feelings of powerlessness and vulnerability. Any patient seeking care in an ED experiences feelings of uncertainty and vulnerability, due to the unknown and urgency of the situation. Anxiety and fear are a part of ED patients' experiences (Thomas, 2007).

Education

Assessing, managing, and evaluating pain is a core aspect of nursing care. The importance of learning the physiology, the various types, and the unique individual presentations of pain ideally and invariably begins in the academic setting. When instructors emphasize assessment and treatment of pain in all patient encounters, student nurses are more likely to incorporate the importance of pain management early in their

practice. Thus, proper pain management becomes a basic tenet of their nursing philosophy.

This research may illuminate how ED nurses interact with and subsequently manage adult ED patients' pain. Knowledge gained may then be interwoven into educational scenarios simulating urgent patient care situations. In this way, the challenges unique to ED nursing could be practiced at the start of a nursing career, which would be more effective and possibly more safe than attempting to change old patterns of responding later on. As a better understanding of processes used by ED nurses and incorporating this knowledge into nursing curriculum, may also increase both patients' and nurses satisfaction with care.

Practice

Ethically and professionally, nurses and physicians have a duty to identify, treat and relieve the pain of the patients in their care (Good, 2001). Although a multitude of pharmacologic options currently exist that are capable of adequately reducing patients' pain to a manageable level, treating the whole patient, including acknowledgement of fear, discomfort, and/or frustration may enhance the quality of care ED nurses are capable of providing. Before implementing this type of change, however, pragmatic solutions and interventions for nursing practice need to be developed based upon data gathered from the nurses who are already practicing in this setting.

Research

Quantitative studies exist that focus upon the patient's pain experience, satisfaction with care, and pain level rating in emergency departments (Gallagher, Liebman, & Bijur, 2001; Kelly, 2000; Nelson et al., 2004; Thomas & Andruszkiewicz, 2004; Yee et al.,

2006). Many of these have taken place in countries other than the US. Past research has also demonstrated there is substantial variation between patients' and nurses' judgments of the pain experience (Guru & Dubinsky, 1999; Harper et al., 2007; Igier, Mullet, & Sorum, 2007; Puntillo, Neighbor, O'Neil, & Nixon, 2003)

To date, no qualitative study results were found on the process used by ED nurses when encountering adult patients in pain. Because the nurse is an integral part of the health care team and the primary caregiver for ED patients experiencing pain, nurses' pain management process (e.g., assessment, protocols, perceptions, and actions) needs formal elucidation. Knowledge gained from this qualitative study may be used to develop pragmatic interventions for improving the pain experience for the adult ED patient. *Public Policy*

Pain is an epidemic worldwide. Freedom from pain is becoming widely accepted as a basic human right and "should be limited only by our knowledge to achieve it" (Thomas, 2007, p. 41). In conjunction with the World Health Organization (WHO), the European Federation of the International Association for the Study of Pain (IASP) Chapters (EFIC) sponsored the first "Global Day Against Pain" in Geneva in 2004. The overall theme of this first initiative was the universal human right of every human being to have pain relieved. Each year since, the "Global Day Against Pain" has focused on raising the awareness of one aspect of pain in the global community. In 2008, the topic was women's pain; cancer pain is the focus for 2009.

If one of the major goals of health service at the global level is the relief of human suffering, effective and timely pain management in the ED is a necessity (Grant, 2006; Kelly, Brumby, & Barnes, 2005). This study should help illuminate ED nurses'

perceptions of impediments in the ED environment to adequate pain management. This knowledge may serve as an impetus toward change within hospital settings regarding pain management protocols.

Philosophical Underpinnings

Symbolic Interactionism

The philosophical basis for grounded theory is "symbolic interactionism," a branch of interpretivism. Interpretivism emphasizes the understanding or eliciting of meaning derived from social situations (McCann & Clark, 2003). The interaction that takes place between individuals is based more upon each individual's interpretation of the other's actions and behaviors, or symbols, rather than on the actions themselves. When these symbols are encountered, individuals will act upon or modify them via an interpretive process, thus creating meaning (Munhall & Boyd, 2000).

"Language is an evolutionary patterning of symbols specifying meanings for the moment; it is fluid and ever-changing" (Parse, 1997, as cited in Parse, 2000, p. 187).

Because the world is in constant flux, the actions of individuals must be understood within the social context in which they occur. Symbolic interactionism is a perspective described as "a social-psychological theory of social interaction" that is organized around the self, world, and social action (Hutchinson, 1993, p.182). When using this perspective as a philosophical basis, the researcher attempts to construct the social reality for the study participants concerning a specified phenomenon of interest (Munhall & Boyd, 2000). Meanings are created by persons during social interactions with others and influence subsequent behaviors. In addition, by discovering the meanings these symbols hold for persons, a better understanding of what is most important, what areas will be

most difficult to change, and what must be changed in order to correct the identified problem will become evident (Patton, 1990).

Symbolic interactionism began with the Scottish moral philosophers, namely David Hume, Frances Hutcheson, and Adam Smith, empiricists with an interest in understanding the principles of human nature (Stryker, 1980). They theorized about human nature with the use of observation techniques rather than experiments involving manipulation and/or control. Consequently, key concepts for understanding phenomena involved "communication, sympathy, imitation, habit and convention" (Stryker, p. 18).

George Herbert Mead, a philosopher and psychologist in the 1930's, remains one of the most influential people in the development of symbolic interactionism in the United States. Mead taught at the University of Chicago and professed that people themselves determine their reality of the world based upon their social interaction. From interacting with others, personality and social behaviors emerge, all which center on language and communication. Part of this communication between persons involves mutually understood gestures or "significant symbols." Mead believed these symbols were behaviorally defined (Stryker, 1980). Symbols used in communication help persons predict future behaviors for themselves as well as others and allows for adjustment of these behaviors if desired. Because of this, future actions could be altered resulting in more effective and amenable interactions for all involved (Stryker).

The terms "me" and "I" emerged from these beliefs, with "me" representing the anticipated responses or behaviors concerning oneself. The "me" is formed from incorporating societal input via attitudes and expectations of behaviors into the self. The "T" and the "me" are inextricably merged and represent responses of the self to others'

attitudes and thoughts. This creates individual personality characteristics expressed during social interactions (Stryker).

Herbert Blumer, a sociologist and colleague of Mead, elaborated upon Mead's basic premises. Blumer, who actually coined the term *symbolic interactionism*, reasoned that human actions originated from previous exposure and interactions, which led to common understandings between persons. Hence, in order to understand behaviors and actions, the context in which these interactions occurred must be considered. He emphasized that the world is continuously changing, or being "constructed and reconstructed" by persons.

Because of this, if one were to use a positivist or empiricist view (i.e. attempt to discover real or absolute truths concerning a phenomenon), false premises and inaccuracies during data analysis would result (Stryker, 1980). Blumer also believed that to most accurately discover knowledge about the social worlds of others, two types of scientific inquiry are required: exploration and inspection.

Exploration requires a broad, flexible view, free from any preconceived ideas or hypotheses. This broad focus narrows once data are gathered and understood. Methods such as observation, listening, interviewing, reading diaries, or group discussions are used for initial data gathering. Blumer emphasized that the sample must consist of persons who are directly involved and are a part of the focus of inquiry because they are the best informed and most knowledgeable. This type of sample is much more useful for understanding the phenomenon of interest than "any representative sample" (Stryker, 1980).

Following data collection, the researcher moves to the second part of inquiry: inspection. This analysis requires that the data be examined from a variety of angles and

viewpoints without specific, predetermined, or prescribed thoughts. This process ultimately leads to the best description of what is occurring in the empirical world regarding the identified phenomenon (Stryker, 1980).

A challenge inherent to the concept of pain is its subjectivity, coupled with the personal and cultural influences of each individual during expression of the pain experience to others. Pain and pain management have multiple meanings, and the meanings differ depending on the individual (Spross, 2001). Open and honest dialogue between the nurse and the patient is a requirement for successful pain management (Bostrom, Sandh, Lundberg, & Fridlund, 2004).

Grounded Theory

Grounded theory attempts to explore a common social psychological problem that is poorly understood and/or not much is known (Hutchinson, 1993; McCann & Clark, 2003). Grounded theory assumes that individuals who share common circumstances or experiences have similar meanings, thoughts, and behaviors that are not often voiced. Openmindedness, flexibility, and the lack of preconceived hypotheses is required of the researcher (Leedy & Ormrod, 2001; Polit & Beck, 2004). Overall, the goal of research based on grounded theory is to generate a theory or explanation rooted or "grounded" in data gathered from study participants' in the social setting for which the phenomenon occurs. Thus, grounded theory with its philosophical basis of symbolic interactionism, offers an ideal method for exploring the process ED nurses use when managing patients' pain.

Professors of sociology, Barney Glaser and Anselm Strauss, developed grounded theory methodology in 1967 while working at the University of California in San

Francisco. At the time, they were exploring how patients and their health care providers dealt with the process of dying (Charmaz, 2006). Dissatisfied with the application of "a priori" theories taken from the literature to specified groups of individuals, Glaser and Strauss, believed that theories ought to be free from preconceived ideas and grounded in data gathered from the field (Creswell, 2007; Leedy & Ormrod, 2001; Shank, 2006). Thus, the evolved theory "fits" in its description and understanding of the social process the researcher set out to explore (Glaser & Strauss, 1967).

Glaser and Strauss revitalized interest in qualitative research by providing specific, systematic steps for conducting studies focusing on processes or actions used by human beings to provide structure to their world (Charmaz, 2006). They emphasized core procedures researchers utilize when using the grounded theory process. These procedures include (a) simultaneous collection/analysis of data, using constant comparative analysis that results in creation of concepts/categories directly from the data, (not from preconceived hypotheses); (b) use of memos to record new thoughts that may assist in further defining the emerging categories, as well as to identify gaps in knowledge; and (c) sampling directed towards theory development instead of generalizability to populations (Charmaz).

An assumption of grounded theory is that although behaviors and actions of persons in any given social situation may appear haphazard and random, they are, in fact, organized and purposeful (Hutchinson, 1993). Basic goals of grounded theory methodology are to: discover the social process that forms and establishes these behaviors and actions, particularly in regard to a specified phenomenon; to achieve a better understanding of this process; and to generate a theory explicitly derived from the data and not from a

predetermined theoretical perspective (Hutchinson; McCann & Clark, 2003; Speziale & Carpenter, 2007).

Grounded theory is able to incorporate both inductive and deductive methods. Specifically, grounded theory begins with the analysis and interpretation of a specific social process and attempts to build and more clearly explain the process in a general theory. Once the theory has been developed, it can be empirically tested (deductive) and have a predicative value toward understanding the specific phenomenon being studied (Speziale & Carpenter, 2007).

In time, variations in grounded theory philosophies and analysis resulted in diverging methods for generation of theories. Glaser held the belief that the basic social problem emerged directly from the data and researchers discover the problem once data collection and data analysis have begun. He stated researchers have a more general understanding of the problem area of interest prior to data collection and analysis (Heath & Crowley, 2004). Strauss and Corbin's subsequent approach varied from Glaser's as they stated researchers may start with a preconceived problem and use grounded theory methods to conceptually describe it (Polit & Beck, 2004).

Strauss and Corbin (1990,1998) state researchers use "theoretical sensitivity", defined as the "ability to have insight, understand and give meaning to data and to distinguish what is pertinent from what is not" (p. 42). Ways in which the researcher develops theoretical sensitivity are from literature, professional, and/or personal experiences. By using these previous experiences and maintaining an openness to what emerges from the data, a deeper, richer analysis occurs. The researcher is a human social being, and therefore, these previous understandings and experiences help in interpretation and

understanding of the social process being researched (Heath & Cowley, 2004). This researcher based this grounded theory research on the methods described by Strauss and Corbin.

A grounded theory consists of a central core category with linkage to related subcategories and concepts. The establishment of these related subcategories begins with purposive sampling followed by theoretical sampling. In purposive sampling, participants are chosen because they have experienced the phenomenon of interest. This allows a baseline or starting point to be established (Charmaz, 2003; Strauss & Corbin, 1990). The researcher begins theoretical sampling as the theory begins to emerge and new data is needed to further "elaborate and refine" the boundaries of the emerging theory (Charmaz, 2006, p. 96; Strauss & Corbin). Sampling continues until no new information is attained that would further define the concepts or subcategories. This is known as *saturation*. Throughout the study, the researcher performs constant comparative analysis, "a zig-zag" process, whereby data collection and analysis takes place simultaneously (Creswell, 2007; Hutchinson, 1993). To summarize, once analysis of one interview is complete, the next interview takes place and the process continues in this sequence until saturation is reached.

Coding is the process by which the researcher establishes subcategories and related concepts. Strauss and Corbin (1999) describe three types of coding involved in grounded theory: open, axial, and selective. Open coding breaks the data down into basic parts, creating concepts. Conceptual labels are assigned to events that relate to the phenomenon of interest. When concepts are compared and found to pertain to a particular aspect of the phenomenon, subcategories are formed. The term *axial coding* refers to the linking or

connecting of subcategories established by open coding to ascertain a central core category. This process involves identifying factors that cause the phenomenon (causal conditions), strategies (actions) used by participants in response to the phenomenon, the context and intervening conditions that influence the strategies, and the consequences (outcomes) from undertaking these strategies (Creswell, 2007; Strauss & Corbin). Once complete, this process is represented by an axial coding paradigm or visual model.

Selective coding represents the story line and the establishment of propositions (hypotheses), the theory, and the interconnectedness of the categories and subcategories (how they link to the central core category within the model). The theory, considered to be middle range, and the propositions are based solely on the data collected (Creswell, 2007). The generation of middle range theories from "real life" situations can be very useful to practice and further the understanding of human behaviors. Middle range theories, less broad than grand theories of nursing, contain testable hypotheses. They will thus build on the empirical knowledge and advance the science of nursing (Speziale & Carpenter, 2007).

To be applicable to typical situations involving the phenomenon of interest, the developed theory must meet four criteria. These are fit, understandability, generality, and control (Glaser & Strauss, 1967). *Fit*, as discussed earlier, implies that the grounded theory is appropriate in its description and usefulness to the specified area of interest. If the theory is a poor fit, distortion of data occurs. Second, the theory must be clear and easily understood to be utilized in practice. Third, because reality is constantly changing, the theory must be general enough in scope to encompass a variety of different circumstances within the area of interest. The theory should be flexible enough to be used

in a variety of circumstances but not too abstract to lose its sensitivity to the data from which it came. Last, the theory must allow the user some control regarding the process and/or structure of everyday situations as they develop (Glaser & Strauss). For this to occur, the theory must provide enough general, interrelated, easily understood concepts so the user of the theory can adapt it to the circumstances being encountered.

Scope and Limitations of the Study

For grounded theory research designs, it is important that participants be representative of a wide variety of sites and/or areas. In this way, there is increased likelihood of obtaining richer contextual data for the subsequent coding and establishment of categories during the theory building process (Creswell, 2007). In order to obtain the necessary data, study participants are purposively recruited based on having experienced the phenomenon of interest. The size of the sample is not predetermined but continues until saturation is attained (Strauss & Corbin, 1990).

The ability to reconstruct the exact social contexts and the use of purposively selected participants largely limits another researcher's ability to reproduce the original study. In qualitative research, the researcher is the instrument and, therefore, cannot be extricated from the data analysis process. Lack of ability to replicate may appear a limitation, but since the goal is the creation of a new theory that can suggest a new perspective, the importance of replication is minimal (Hutchinson, 1993).

The intent of grounded theory is not to generalize, but rather, to provide insights and increase understanding of the topic of interest. Qualitative researchers strive for analytic generalizability versus statistical generalizability, meaning the ability to "utilize the concepts/constructs to explain" a particular social condition (Flick, 2002; Hutchinson,

1993, p. 190). Smaller numbers of study participants comprise the sample, also limiting generalizability to larger populations (Strauss & Corbin, 1990).

Observations and interviews comprise the primary methods of data collection in most qualitative studies; therefore, it is of the utmost importance that researchers rigorously protect the privacy and confidentiality of study participants (Creswell, 2007).

Additionally, audiotaped, time-limited interviews may be a limitation to full expression of thoughts and descriptions of the phenomenon of interest.

In recognizing and addressing the aforementioned limitations, this study included English-speaking ED nurses from a very limited geographical area in NE Florida. Nurses living in the Southeast United States may be inherently different from nurses in other areas of the country and/or world, limiting generalizability of the theory. The nurses in this study were willing to participate in the study, had at least one year of ED nursing experience, and were currently working a minimum of 24 hours a week in an ED. Nurses in this study were also required to have direct experience caring for adult patients, (18 years or older), who complained of pain. This narrow scope is a limitation of this study.

Limitations also extend to the researcher. Because of the researcher's academic position and work history, some of the ED nurse participants were familiar with or were former students of the researcher. This past knowledge or relationship might have influenced participants' honesty and openness when answering the guiding interview questions.

Because this was the first independent qualitative research endeavor for this author, this should be recognized as an additional limitation. Support from academic peers with grounded theory experience, as well as communication with her dissertation committee

chairperson and members, provided ongoing guidance during the research process. The researcher, having worked as an ED nurse for much of her nursing career, may have held a more *emic* perspective, or insider knowledge of the phenomenon of interest (Leninger & McFarland, 2006). Consistent attempts at epoching (setting aside of preconceived ideas and biases) took place throughout data collection and analysis (Polit & Beck, 2004). Even so, it may be unrealistic to state that these personal beliefs were entirely eliminated during data collection and analysis, regardless of persistent attempts to do so.

Chapter Summary

Trossman (2006) states that "pain is an epidemic across our country and relieving patients' pain is something all nurses need to be passionate about" (p. 29). In today's health care arena, a patient enduring pain for an extended period of time equates to poor practice and cannot be justified. This quote by Primo Levi, an Auschwitz survivor from World War II, sums up this crisis of oligoanalgesia extremely well, "If we know that pain and suffering can be alleviated and we do nothing about it, we, ourselves, are tormentors" (as cited in Dekker, 2005, p.3).

Pain is the most common patient complaint encountered in all EDs. The overall short-term goal of this research was to explore and increase the understanding of the process ED nurses use when managing adult patients' pain. Nurses are strategically positioned to influence the practice of effective pain management in the ED. As patient advocates, ED nurses must address and significantly contribute to the relief of suffering for their patients across this nation and world.

Understanding the process used by ED nurses when interacting with an adult ED patient in pain, and the subsequent theory derived from this exploration, should spawn

further research endeavors either of a qualitative or quantitative nature to test the proposed grounded theory. The ultimate, long-term goal of this research is progress towards improving the effectiveness and timeliness of pain management for adult ED patients.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

A minimal review of the literature relating to the area of interest is conducted when using grounded theory methodology. The review serves to "sensitize" the researcher to what is currently known about the phenomenon of interest without directing or unduly influencing data collection or subsequent theory development (Burns & Groves, 2005, p. 95-96).

For this introductory discussion, the online databases CINAHL, MEDLINE, EBSCO, PsycINFO, and PUB-MED were searched. The key words included: *emergency department* or *emergency room*, *nurse*, *pain*, *analgesia*, *grounded theory*, *qualitative*, and *perceptions*. Citations were limited to articles published in English with imposed publication dates within the past 10 years (1998-2008).

This review will begin with the historical context and present status of ED care in general, and the problems associated with pain management in the ED setting. The researcher's personal knowledge and experiences influencing the choice to research this topic will be described, as well as how biases and preconceived ideas were acknowledged and managed. The literature describing pain assessment and the difficulty health care providers, have in general with its assessment will then be presented. Next, barriers to pain management specifically related to the ED setting will be discussed. Chapter Two will conclude with a summary of literature examining perceptions ED nurses have about pain in the patients for whom they care.

Historical Context

Emergency departments provide health care to anyone in need. It is estimated that 120 million people seek emergency care in the United States annually (ACEP, 2008). The ED, often viewed as the "safety net" or "back bone" of health care, has evolved into a primary care facility for many patients without access to a primary care physician or who are uninsured/indigent (ACEP; Blanchard, Haywood, & Scott, 2003). EDs have 24-hour availability, and federal legislation is in place to ensure that all persons, regardless of ability to pay, clinical problem, gender, race, or ethnicity, have access to emergency health care services.

In a recent report by the American College of Emergency Physicians (2008), EDs across the nation received an overall C- rating for their ability to provide the level of care patients expect. Moreover, a rating of D- was assigned to the subcategory *access to care*. The state of Florida received a rating of F in access and a D- in public health and injury prevention. On a positive note, in the subcategories of quality/patient safety and disaster preparedness, ratings were A-. Overall, Florida's C- rating for level of care expected by patients was congruent with the nation's. Reasons for unsatisfactory scores relate to issues of overcrowding, lack of on-call physicians as well as primary care access for follow-up, and the increasing number of uninsured patients. The ACEP authors cite the lack of governmental support as a primary reason for the present state of ED care.

One of the fundamental aspects of nursing practice is relief of patient suffering. All nurses, no matter the area of specialization, have an ethical and professional obligation to treat patients humanely and ease patient suffering. Inadequate pain management is well established in the ED setting. As stated previously, pain is the most common ED

complaint, and approximately 70% of adult ED patients do not perceive that their pain has been effectively managed (Graham, 2002; Stalnikowicz et al., 2005; Todd et al., 2007). As patient advocates, ED nurses can and should make an integral and essential contribution to correcting and improving undertreatment of pain in the ED (Eder et al., 2003).

Until there is better understanding of the process that occurs between the ED nurse and the adult ED patient experiencing pain, it will be difficult to correct the problem of inadequate pain control in this setting. Describing the process used by ED nurses to manage patients' pain is an essential first step toward understanding how to best approach a solution, and that was this study's primary aim.

Experiential Context

The need for the researcher to maintain awareness of preconceived beliefs, judgments, suppositions, and values was necessary throughout this study to decrease bias associated with any participant's perception of reality. A basic expectation of research with grounded theory as its guiding frame is the researcher's continual reflection on attitudes, beliefs, and feelings. Journaling, epoching, bracketing, and member checks are used for a variety of purposes. A primary purpose is to reveal the researcher's biases to help decrease their potential influence on perceptions about concepts, subcategories, and categories emerging during data analysis (Creswell, 2007; Speziale & Carpenter, 2007).

Writing down the researcher's personal thoughts and ideas (journaling) throughout data collection and analysis helps the researcher stay focused on what is emerging from the participants' words and experiences (Speziale & Carpenter, 2007). Epoching is an active process whereby the researcher practices self-reflection and acknowledges

personal biases and prejudices in an attempt to obtain a clearer perspective. This process functions as a safeguard, so data analysis is not unduly influenced (Patton, 1990). A method of epoching is "interviewing the interviewer" and involves the researcher answering the interview questions as would an actual participant. This practice assists in illuminating biases prior to commencement of data collection. Bracketing occurs when these biases, prejudices, and preconceived ideas are actively "set aside" in order to ensure that the researcher remains as objective as possible during the entire research endeavor. Even after thoroughly employing all of these strategies, however, qualitative researchers acknowledge that removal of all subjective influences on the final data analysis is not typically possible (Speziale & Carpenter, 2007).

This researcher has been involved with and interested in the quality of ED nursing for over 27 years. A part-time student nurse working week-ends in a large teaching ED, to working as an RN in EDs all over the United States and Europe, I have been immersed in ED culture. Additionally, since beginning postbaccalaureate education 14 years ago, pain control in the ED setting has been of increasingly great interest.

As an academician, I continue to have the opportunities to educate baccalaureate nursing students about multiple facets of ED nursing. At my present place of employment, a Critical Care course is part of the core nursing curriculum. All students are required to complete this course successfully for continued progression towards graduation. Part of my teaching role involves taking each student into the ED for 16-24 hours of hands-on clinical experiences. In this way, I have remained connected to ED culture, albeit not on a consistent basis. It became progressively more apparent to me during these limited clinical encounters that pain management in this setting was

inadequate. This revelation fueled my desire to focus my efforts in an attempt to understand how social processes/interactions between ED nurses and their patients affected management of pain.

Prior to commencing with the actual interviews, the researcher answered the proposed research questions as if she were a study participant. Dr. Pat Moore, PhD, RN, a researcher familiar with grounded theory, conducted this interview. The researcher transcribed the interview verbatim. After years of ED nursing experience and the study of pain management in the ED, this activity helped to identify the researcher's biases and preconceived thoughts prior to starting data collection. Some preconceived thoughts and beliefs about ED nurses were revealed as follows: those with more experience cope better with the constant stressors of the environment; they want to help their patients and strive to eliminate pain whenever they are able; they desire more independent control over managing their patient's pain; they are often caught in the middle between the patient's desires and the ED doctor's plan of care; and they hold preconceived prejudices, judgments, and stereotyping behaviors towards specific patient populations (e.g. repeaters, and sickle cell patients). In addition, I believed most of these biases had a detrimental effect on the interaction between ED nurses, their patients, and pain management.

Pain Assessment

To date, pain analog scales provide the most accurate method for assessing an individual's pain, not observation of physical signs. The visual analog (VAS) and numeric rating scales (NRS) are used the most frequently for evaluating pain, as they are easily administered and require no verbal or reading skills. These tools have been studied

extensively and found to be valid and reliable in the assessment of pain in acute care settings (Ho, Spence, & Murphy, 1996; Lee, 2001). They provide a common language between all persons involved in the pain experience by translating the patient's perception of pain to the health care provider and decreasing the chance of value judgments influencing the decision to treat (Bourbonnais, Perreault, & Bouvette, 2004; McCaffery, 2002; McCaffery & Pasero, 1999; Spross, 2001). Generally, pain that has been rated a score of 4 or higher on a 0 to 10 pain rating scale is believed to interfere with overall function and quality of life (McCaffery & Pasero, 2001, p. 81). Pain assessments with documentation confirm that the patient's pain was adequately assessed.

Studies have demonstrated that pain documentation and the use of pain scales in various health care settings are deficient (Ferrell, 2005). Eder et al. (2003) conducted a study in one urban hospital in Chicago to evaluate how well The Joint Commission requirement of pain assessment documentation by physicians and nurses was progressing. The researchers used a retrospective chart review combined with a patient survey to gather data about patients' pain management while in the emergency department. The final sample consisted of 302 English-speaking patients over the age of 18. Chart review revealed that 86% of the 302 charts were complete, meaning that notes from a triage nurse, a resident, a bedside nurse, and an attending physician were all contained in the chart at the time of review. Eder et al. found that an initial pain assessment was done 94% of the time but the use of a pain scale (i.e. a numeric rating scale), was used only 23% of the time. After the initiation of treatments, reevaluation of pain was performed 39% of the time, with pain scale use at 19%. Patients who presented with a severe pain complaint, chest pain, or after delivery of potent analgesic medications were the ones

who had the most documentation. Nurses were found to document a pain assessment 2.5 times more often than physicians. The authors speculated that this difference could be explained because nurses had more frequent contact with patients than physicians. These findings lend a degree of support to the idea that nurses need to be the primary advocates for pain assessment and documentation (Heins et al., 2006).

To determine the prevalence of pain in the ED, Cordell et al. (2002) conducted a retrospective study in Indiana over a seven-day period in an urban, tertiary-care emergency department. All patient visits during this period were included in the data analysis regardless of age or time of presentation. The final sample consisted of 1665 encounters with 1602 patients. Fifty-three patients were seen twice, and five were seen three times. Of the 1665 encounters, 61% of the patients had a complaint of pain. Of those, 89% described pain as their chief complaint. Overall, researchers noted that approximately 52% of patients who accessed the ED during the study period had pain as their chief reason for seeking care. Study limitations existed such as the utilization of only one hospital ED during a very limited time (one seven-day period). Results of this study further validated the prevalence of pain as the primary complaint in the ED.

Barriers to Effective Pain Management in the ED

Drug Seeking

The literature is replete with barriers to adequate ED pain management. One of these concerns the belief by physicians and nurses regarding addiction and dependency. A common practitioner misconception is that the patient is over-reporting or exaggerating pain in an effort to get drugs (D'Arcy, 2005; Ducharme, 2000).

Miner et al. (2006) conducted an observational study that examined whether the treating physician's perceptions regarding accuracy of the patient's pain report influenced pain relief. The prospective study encompassed one year and involved a total of 1663 patients. Inclusion criteria consisted of age ≥ 18 years, having a painful disorder defined as back, extremity, neck, abdominal, dental pain or headache, and able to provide consent. Results showed that only 71% of patients who presented to the ED complaining of pain received any type of pain relief while in the setting. Additionally, once triaged, patients in this study waited an average of 40 minutes prior to receipt of this intervention.

The authors proposed two related predicators for poor pain control in the ED: the patients' and physicians' perception of the interaction and whether or not the physician believed the patient was exaggerating pain in order to receive analgesia. The latter was based almost exclusively upon a subjective evaluation. The authors concluded that despite the fact that drug-seeking patients exist, it is better to treat the pain: "Which is worse, treat a patient with pain medications who does not need them, or not treat the patient who needs pain medications but whose behavior may suggest drug seeking?" (Miner et al., 2006, p. 145). The time of day parameters of 0700-2300 (7:00 a.m. – 11:00 p.m.) and the use of only one teaching hospital were limitations of the study. Physicians working the night shift and patients seeking care during the night were not included in this study and might have influenced the outcomes.

Diagnosis as the Priority

Another barrier to effective pain management in the ED involves the overall goal of the patient visit. The medical model focuses on the pathology, rather than symptoms, as the priority of treatment. Therefore, for many ED physicians and practitioners, the goal is to diagnose the disease process, not treat the pain itself (Ducharme, 2001; Fosnocht et al., 2005). Thus, patients' pain needs are frequently put on the back burner. One specific example of this practice involves the treatment of abdominal pain.

Abdominal pain is one of the primary reasons patients seek medical care (Cole, Lynch, & Cugnoni, 2006). It has been a long held medical belief that patients who complain of pain, especially abdominal in origin, be given an examination before analgesia is administered. Because of the vast number of possible causes of abdominal pain, it is thought that the symptoms of the disease could be "masked," thereby delaying the diagnosis (Pasero, 2003).

This practice has been challenged by various studies, which have demonstrated that treating pain prior to discovery of the cause of the pain does not interfere with the outcome of accurate diagnosis. It may, in fact, facilitate the process (Kelly et al., 2005; Rupp & Delaney, 2004; Wolfe, Lein, Lenkoski, & Smithline, 2000). To date, there remains much controversy concerning this issue. As the debate continues, patients are suffering in the ED setting, sometimes for hours, awaiting examination.

Education

The misconception that a patient experiencing pain displays physical signs and symptoms that indicate suffering is another barrier to adequate pain management in the ED. Nursing and medical schools emphasize symptoms most frequently used to corroborate a complaint of pain. These are sweating, tachycardia, hypertension, dilation of pupils, nausea, grimacing, and muscle tension (Huether & McCance, 2008; McCaffery & Pasero, 1999). Although these symptoms may typically indicate pain, physiological signs of distress sometimes normalize with time, and classic signs and symptoms of pain

may be absent. This is especially true with chronic pain. The lack of observable symptoms is due to the body seeking to reestablish homeostasis or equilibrium. Because of the misconception that all pain presents in the same manner, health providers become skeptical and may question the patient's self-report of pain intensity levels when the patient doesn't fit this model of acute pain.

The key to correcting this misconception is education. Nurses need to be knowledgeable of proper titration of opioids and advocate for stronger doses as necessary (Manworren, 2006). This requires a solid knowledge of pain pathophysiology, pharmacology, and management (Thomas, 2007). Hill (1995) states that "Education of health care professionals may not change behavior about treating pain, but change cannot occur without it" (p. 1881).

Innis et al. (2004) conducted their pre/post test study using patients and nurses from one internal medicine unit in one large teaching hospital. A convenience sample consisted of 50 different patients for pre and post-tests. A total of 93 registered nurses used in the pretest with a follow-up survey of 75 of the same nurses for the posttest. There were three mechanisms of data gathering: patient surveys to measure satisfaction with pain management, nurse surveys to measure nurses' knowledge and attitudes about pain management, and chart audits to measure actual pain documentation by nurses.

Upon completion of the surveys from the pretest, a brief but intensive nursing education segment covering pain assessment and management was conducted. Results demonstrated that three months following this inservice, nurses' scores on a Pain Knowledge and Attitude Survey were significantly higher (p < .001) when compared to the scores prior to the inservice. Even more importantly, nurses' documentation of

patients' pain increased 48% compared to documentation performed prior to the inservice, adding to data supporting the importance of education in improving pain management. Patient satisfaction with pain management increased from 62% to 82% (p = .046), a 20% increase (Innis et al., 2004).

Lack of an Established Relationship

Lack of an established trust relationship between nurses-patients and physicianspatients is a primary reason for poor pain control specifically linked to the ED setting. ED
patient visits are episodic and brief, and for many uninsured or indigent patients without
access to a primary care physician, the ED has evolved into a primary care facility, a last
or only resort (Rupp & Delany, 2004; Wolf & Calmes, 2004).

EDs are open 24 hours a day, 7 days a week, and are required by law to see all patients regardless of complaint or ability to pay (Rupp & Delany, 2004). Past medical histories and medical chart access are limited and not easily retrieved, adding to lack of knowledge about the patients' conditions. Other obstacles involve an attitude of suspicion by the health care providers, a culture of ignoring the problem, and extremely slow change in practice (Fosnocht et al., 2005). Lack of trust in regard to patients' motivations and/or purposes for seeking ED care is evident during the interaction process.

Pain Control versus Patient Satisfaction

Todd et al. (2007) completed the first prospective, multi-centered study assessing current ED pain management practices. Eight hundred and forty-two patients (86% of all eligible patients) at 20 United States (US) and Canadian hospitals participated. Any patient eight years of age or older complaining of moderate to severe pain during the 11-day study period was eligible for enrollment. Study participants were interviewed by a

research assistant at discharge concerning pain rating at arrival, discharge, and overall satisfaction with pain management.

Results showed that the median time from triage to analgesic administration was 90 minutes and only 60% of patients received these medications. Patient satisfaction with overall pain treatment and staff responses were relatively high, with median scores of 5 on a 6-point Likert scale, despite only slight reductions in pain intensities reported. Initial documentation of pain was found to be high (83%), but follow-up assessments were not. The authors concluded that pain for patients in the ED is of a high intensity, and analgesics continue to be delayed and underutilized (Todd et al., 2007).

Findings that patient satisfaction with care was high despite inadequate pain control adds to existing data that patient satisfaction does not equate to pain relief. Multiple studies report that caution must be used when interpreting patient satisfaction ratings to monitor patients' level of pain control (Afilalo & Tselios, 1996; Fosnocht et al., 2005; Innis, et al., 2004; Yee et al., 2006). Kelly (2000) also concluded that relief from pain may be a component of patient satisfaction with pain management, but it is not enough to ensure it.

Kelly (2000) conducted a prospective observational study for one week on patients ≥ 16 years of age who presented to an ED between the hours of 0800-2400 (8:00 a.m. − 12:00 a.m.) complaining of acute pain. Patient VAS pain scores were collected upon admission and discharge from the ED, and patients' satisfaction with pain management was measured using verbal reports of "poor," "so-so," "good," and "very good," during their stay. The sample consisted of 54 patients. Results showed no correlation between admission or discharge VAS scores and patient satisfaction (r = 0.20 and 0.146,

respectively). Kelly stated that patient expectations, communication, satisfaction with health care workers, and other aspects of care might be more important influences on satisfaction than actual pain levels. Though the limitations of small sample size and short timeline exist, these findings lend support to the fact that health care providers need to keep evaluation of pain medication effectiveness, via patients' report, separate from patients' satisfaction with care.

Nurses Perceptions on Pain Treatment

McCaffery and Ferrell (1997) contend that one of the most significant predictors for poor control and analgesic delivery is when a disagreement exists between the patient and the health care provider regarding the pain intensity rating. Harper et al. (2007) were interested in exploring how British military surgical nurses rationalized their postoperative pain decisions based upon their assessments. The authors chose an ethnographic approach for their study, emphasizing that ethnography "focuses on how people make sense of their everyday activities to behave in a socially acceptable way" (p. 603). Twenty-nine military registered nurses who were working in either a surgical or an orthopedic setting were purposively chosen for inclusion in the study. Audiotaped, semi-structured interviews were conducted over a four-month period, with all participants providing consent with assurances of confidentiality.

Harper et al. (2007) reported that data analysis suggested nurses used two types of stories, cultural or collective, when describing their post-operative decision-making. Cultural stories supported the military nurses' norm and social world. In contrast, collective stories were used to describe the subjective or "commonsense" knowledge used to justify or defend actions away from the norm. An example of this was when the

nurses said they "always believed what patients said about their pain" (cultural story) but then stated, "I can tell how much pain a patient is experiencing" (p. 604). This collective story was based upon previous experience, non-verbal behaviors, and objective changes in patients' conditions.

The study revealed that when a disagreement between the nurses' perception of the patients' pain and the patients' self-report existed, these nurses used the collective story to rationalize their actions. The authors concluded that the positivist influence and the importance of cause and effect might still be considered more important in nursing science versus an interpretative explanation of a situation. Harper et al. (2007) concluded that nurses need to be aware of the effect of personal cultural norms and how these can unduly influence pain assessment, as well as pain treatment decisions, in the patients for whom they care. Limitations of the study involved the small sample size and the sole use of military nurses on select nursing units. Non-military nurses, other hospital settings, and nurses in other countries may have yielded different findings.

In France, researchers used an experimental design to examine how nurses, student nurses, and nurses' aides judged pain levels using vignettes centering on an elderly female patient with osteoarthritis (Igier et al., 2007). The sample consisted of 84 nurses ranging in age from 25 to 55, 47 nurses' aides ages 22 to 59, and 83 student nurses from 20 to 36 years of age.

The authors wanted to examine the effect of five cues commonly identified as indicators of pain in a patient with osteoarthritis on the sample's rating of pain. The five cues were facial grimacing, the maintenance of an abnormal body position, restriction of body movements, verbal complaints of pain, and signs of depression translating to a

difficulty with making social contact with the health care provider. Forty-eight vignettes were designed combining these five factors in all possible combinations while holding constant other patient information (age, gender, and medical condition (osteoarthritis) (Igier et al., 2007).

For the familiarization phase of the study, each participant was read 24 vignettes about an elderly female patient with osteoarthritis and asked to rate the patient's pain level. The participant was allowed to go back and make changes to the rating after all 24 stories were completed if so desired. During the experimental phase of the study, the same participants were given all 48 vignettes and asked to do the same pain rating procedure. They were forbidden, however, to go back and make any changes to the pain rating (Igier et al., 2007).

Results established that the three most important factors for judging pain were the reluctance of the patient to move, maintenance of abnormal body position, and the difficulty health care personnel had in making social contact with the patient.

Interestingly, this last factor affected nurses more than it affected the aides or student nurses. Aides rated patients' pain lower than nurses and student nurses, respectively.

Lack of education about pain physiology and assessment may explain this difference.

Patients' verbal pain rating was not a significant factor in the judgment of patients' pain (Igier et al., 2007). This is an important finding as it provides more evidence about the practice of discounting or adjusting patients' verbal pain reports while focusing on other facets of pain assessment.

Limitations of this study included a convenience sample from one hospital in France and the use of only five cues for pain in a story format versus real patients. In regard to the three study groups, the ages of the nursing students were statistically significantly different (p < .001) from the nurses and nurses' aides. The authors recommend further study of how nurses weigh and integrate different key indicators of the patients' degree of pain into their judgments about the level of pain the patient is experiencing (Igier et al., 2007).

Emergency Department Nurses Perceptions Towards Pain

Because of the uniqueness of the ED setting and the inherent qualities and characteristics of the nurses who work there, study results cannot be generalized from other hospital settings examining nurses' perceptions of patients' pain. When examining ED personnel perceptions, Guru and Dubinsky (2000) conducted an observational, prospective study to assess pain evaluation using objective measures (e.g. visual analog scales [VAS] or numeric rating scales [NRS]) versus the providers' personal perceptions of patients' pain. The study was implemented for five months at a tertiary teaching hospital ED. The convenience sample included all ED patients 18 years of age or greater who presented to the ED with acute pain on varied shifts when the researcher was

The final patient sample size was 71. There was an even distribution between the two genders and a mean age of 35.5 ± 15.7 . Findings revealed that both ED nurses and physicians rated patients' pain lower than patients did, and nurses demonstrated the greatest disparity in rating (p < .025) (Guru & Dubinsky, 2000). The small sample size and use of only one hospital ED site limited generalizability of the findings. Why nurses' pain ratings were farthest from patients' pain rating is an important area for further research.

available.

Puntillo et al. (2003) conducted a study to examine the differences between patients' pain intensity ratings by ED triage nurses and ED clinical nurses. They also wanted to identify any significant change in patient's pain intensity rating between triage and arrival to the clinical area. The sample consisted of 157 patients and 37 nurses on the West Coast. Statistically significant differences were found between patients', triages, and clinical nurses' pain intensity ratings. Nurses underestimated patients' pain consistently, both in the triage and clinical setting. There was no significant difference in patient pain intensity ratings from triage assessment to arrival in the treatment area. This study supported other findings indicating inaccuracy and underestimation of a patients' pain intensity by nurses and physicians (Cordell et al., 2002; Ducharme, 2001; Miner et al., 2006; Rupp & Delaney, 2004; Stalnikowicz et al., 2005).

Chapter Summary

Most of the research on the phenomenon of inadequate pain control in EDs has been quantitative in nature and has been based on a medical perspective. Selection of pre-identified variables (e.g. diagnoses, race, ethnicities, culture, age, and patient perceptions) were the primary focus of many of these studies (Cone, Richardson, Todd, Betancourt, & Lowe, 2003; Dekker, 2005; Green et al., 2003; Heins et al., 2006; Tamayo-Sarver, Hinze, Cydulka, & Baker, 2003; Todd, 2001). Research focusing on nurses' perceptions of patient pain is scant, however, and most studies have taken place in countries other than the United States. Furthermore, no studies were found in this review of literature that explicitly examined the process ED nurses use when managing a patient with pain, and no researchers proposed a grounded theory for this process.

This author believes a logical method for exploring the process that occurs between ED nurses and adult ED patients with pain and the subsequent treatment of the patients' pain must begin with a study of ED nurses themselves. This original, qualitative exploration sought to provide insight toward a better understanding of what influences nurses in this process and the impact on adult patient pain treatment in EDs. The resulting grounded theory might then be empirically tested or further explored and refined to improve this interactive process and ultimately, patient pain management in the ED.

CHAPTER THREE

METHODOLOGY

Introduction

Historically, the social sciences have primarily used quantitative research methods to generate knowledge within the disciplines. Quantitative research focuses on an objective view of reality and is based on an assumption that measurable truths exist. These views stem from the philosophies of logical positivism and empiricism (Polit & Beck, 2004; Rogers, 2005). Social context is of little importance and researchers attempt to compare groups or relationships between variables to establish an association: a cause and effect. Quantitative research questions are often concerned with answering *why* questions, and the approach is typically deductive in nature. Researchers use deductive analysis when they move from broad, conceptual models or hypotheses to specific outcomes or conclusions. The goal is to produce conclusions that are reproducible and generalizable to larger populations (Polit & Beck).

Conversely, qualitative research designs follow a holistic approach with the intent of gaining a general, multidimensional portrayal of a phenomenon of interest with the nuances and complexities associated with it (Leedy & Ormrod, 2001; Munhall & Boyd, 2000). If one assumes a qualitative perspective, knowledge is based more on the postmodern view that reality is more interpretative and is created from the understanding of meanings. The historical, political and cultural context must be considered in all human interaction; therefore, these contextual elements will impact significantly on a qualitative interpretation (Remshardt & Flowers, 2007). Research questions are few in

number, open-ended and non-directional, in an attempt to gain a picture of *how* and *what* rather than *why* (Creswell, 2007).

The qualitative approach is an excellent choice for examining persons' actions and interactions (Leedy & Ormrod, 2001). The individual experiences of study participants are the core of qualitative analysis prior to examining data for general patterns (inductive analysis) (Remshardt & Flowers, 2007). Overall, the goal is to gain a deeper understanding of *meanings* of phenomena in the real world rather than discovering absolute truths or facts (Patton, 1990).

Research Design

Qualitative methodology can be an ideal fit for conducting research in a social discipline such as nursing, which is based, to a great extent, on human interaction. Specifically, one of the basic premises of the qualitative method of grounded theory is the human interaction process. Hutchinson (1993) explained that grounded theory could be classified as applied research in that this approach is expected to generate practical theories and implications for phenomena about which little is known (as well as to create a new way of examining an old problem).

Behaviors of populations of interest and the meanings these behaviors represent in social contexts are the focus of researchers' inquiries (Benoliel, 1996). As stated previously, pain is the most common complaint of patients' seeking care in EDs. Overall, pain is poorly managed, leaving many patients suffering for extended periods, which may ultimately result in dissatisfaction with care. ED nurses are the first health care professionals to interact and assess ED patients with pain. The purpose of this study was to develop a grounded theory on the process ED nurses use to manage adult patients' pain

in the ED and to increase understanding of how this process impacts on patients' pain treatment. Human interaction is the core of this inquiry; thus, the qualitative research method of grounded theory was a practical choice. It was assumed ED nurses held specific perceptions and feelings about managing adult patients with pain; therefore, identification of barriers, facilitating factors, consequences, and goals of this nurse/patient interaction should be the starting point towards improving ED pain management.

Five key aspects of grounded theory unique from other qualitative research designs, are as follows:

- The conceptual framework of grounded theory is generated from the data rather than from previous studies.
- 2. The researcher attempts to discover dominant processes in the social scene rather than describe the unit under investigation.
- 3. The researcher compares all data with all other data.
- 4. The researcher may modify data collection according to the advancing theory: that is, the researcher drops false leads or asks more penetrating questions as needed.
- 5. The investigator examines data as they arrive and begins to code, categorize, conceptualize, and write the first few thoughts concerning the research report almost from the beginning of the study.
 (Stern, 1980 as cited in Speziale & Carpenter, 2007, p. 138)

Strauss and Corbin (1990, 1998) proposed the grounded theory approach that guided this research. One part of these guidelines emphasizes the importance of researcher

theoretical sensitivity. The researcher must possess the ability to extrapolate from data that which is important and meaningful but not overtly obvious. Insightfulness and creativity are key characteristics in the process of data analysis (Strauss & Corbin). The authors emphasize there are various ways to develop theoretical sensitivity: through the study of literature, from personal and professional experiences, and from the research process itself (data analysis). This researcher utilized all three prior to and during this research endeavor.

As described by Strauss and Corbin (1990), data analysis involves three types of coding: open, axial, and selective. Open coding, the breaking down of each sentence line-by-line with the emergence of more well-defined concepts, begins immediately following the first interview. Concepts are grouped and compared for similarities and differences, and categories are established. Axial coding links the categories to subcategories focusing upon the conditions, actions, and consequences of the topic of study. Refinement and integration of these findings (selective coding) leads to the establishment of a core (central) phenomenon. A model is created conceptually illustrating the resulting grounded theory.

Ethical Considerations

The risk of breaching confidentiality of participants could be viewed as a weakness of grounded theory. Participant observations and interviews comprise the primary methods of data collection. Researchers must be diligent and rigorously protect the privacy and confidentiality of study participants (Creswell, 2007). Data obtained from participants in this grounded theory study were and remain confidential.

Institutional Review Board (IRB) approval from Barry University was obtained prior

to the commencement of data collection (Appendix A). Participants were assured of confidentiality procedures during the informed consent process (Appendix B) and occasionally during interviews when hesitancy to answer particular questions was apparent. Demographic data sheets and signed consent forms remain separate from data collection records. All written data are presently maintained in a locked file in the researcher's home office. Data will be kept no longer than three (3) years and will then be destroyed. Finally, although the researcher has specialized in ED nursing for 25 years, she is not currently employed in an ED setting. No study participants were, therefore, current co-workers.

Audiotaped interviews were recorded without identifiers or links to identifiers. To ensure protection of identities, each participant was referred to by a pseudonym. By using pseudonyms and lack of linking identifiers during the entire interview process, breach of confidentiality risk was all but eliminated.

The researcher hired a transcriptionist to transcribe all interviews verbatim. The transcriptionist signed a confidentiality statement prior to access to audiotapes (Appendix C). Audiotaped interviews were destroyed within 24 hours after transcription once the researcher verified their accuracy.

The foreseeable risks to participants of this study were expected to be minimal. However, because of the nature of ED nurses' professional roles, the recalling of events and verbal discussions of situations involving pain management might have evoked feelings of increased anxiety or discomfort during or following the interview. Hence, at the conclusion of the initial interview, a written list of counseling services was provided to participants for follow-up in the event it was needed (Appendix D). Utilization of the

employee assistant program (EAP) in respective hospitals of employment was another option for follow-up.

Though no direct benefits existed for participants, this study sought to identify the process by which ED nurses manage adult patients experiencing pain. The theory that emerged from the research should be useful in providing insights for developing strategies to improve pain management in ED settings. Some indirect benefits for individual study participants might have included time spent with the researcher and opportunities to voice personal feelings and beliefs about the study topic.

Sample

In grounded theory, sample participants are chosen because of their knowledge and ability to accurately describe experiences relating to the phenomenon of interest and add to development of the theory (Creswell, 2007). This researcher began with purposive sampling and moved to theoretical sampling as the theory began to emerge. Purposive sampling established the key concepts surrounding the process ED nurses use when managing pain in adult patients. Subcategories were created from these concepts leading to identification of broader categories describing this process. Theoretical sampling was useful in further defining the categories and subcategories and the eventual emergence of the overall core phenomenon.

Grounded theory literature suggests a sample size of approximately 20-30 in order to formulate a rich, dense exploration of meanings, behaviors, and actions accounting for variability in the population under study (Creswell, 2007). These numbers are an estimate, as sampling continues until saturation is achieved. Saturation occurs when no

new information being gathered further expands or defines the established categories (Creswell; Seidman, 2006).

Inclusion Criteria

The criteria for inclusion in the study were: (a) licensed registered nurses (b) English-speaking (c) currently working full or part time (a minimum of 24 hours a week) in EDs in Northeast (NE) Florida (d) a minimum of one year ED experience (e) responsible for direct care of patients 18 years of age or older. All ED nurses included in the study provided consent to an audiotaped interview.

Exclusion Criteria

Exclusion criteria included: (a) non English-speaking nurses (b) working less than an average of 24 hours a week (b) less than one year experience in ED nursing (c) no direct care to patients 18 years of age or older.

Recruitment of Sample

A description of the study with an invitation to participate was presented at the September 16, 2008 meeting of the local chapter of the Emergency Nurses Association (ENA), of which the researcher is a current member. Fliers describing the study specifics, researcher's contact information, and an invitation to participate were distributed to members present at this meeting (Appendix E).

The local ENA chapter president sent an email copy of the flier to the general membership in an attempt to reach those unable to attend the September meeting.

Although fliers were distributed to over 200 local ENA members, the final study sample was comprised of less than half of ENA members. Because ED nurses who are members of their national specialty organization may have qualities inherently different from other

ED nurses, the study's credibility and resulting grounded theory may have been bolstered by this final sample composition.

Fliers were also posted in several local hospitals and on Jacksonville University's nursing webpage after permission was obtained from hospital administrators and the Dean of the School of Nursing. The fliers served to provide access to the population of interest only, as nurse participants voluntarily initiated contact with the researcher for participation in the study.

All interviews took place during participants' non-working hours or unpaid breaks to eliminate interference with work responsibilities. The ability to recruit participants for this research study did not prove to be problematic because of the 11 hospital-affiliated emergency departments located in NE Florida. The final sample of nurse participants were from six of these area hospitals resulting in a good diversity of various types and sizes of EDs.

Interview Questions

Interviews are a way to gather rich, thick descriptions of a topic of interest from the perspective of the interviewee. The interviewer helps guide the exploration and discussion by asking a main, overarching question with follow-up, guiding, or probing questions for elaboration purposes (Rubin & Rubin, 2005). During this process, the researcher listens intently for key words, or phrases, asking for clarification or concrete examples when necessary.

Participation in the study entailed an initial individual audiotaped interview and a follow-up member check meeting that consisted of an email message and/or phone call. Initial interviews began with a broad, open-ended question. Specifically, nurses were

encouraged to respond to the following: "Please describe what it is like to manage an adult patient's pain in the ED." Open-ended questions establish the general topic but allow participants to choose the direction and depth of their answers. Open-ended questions do not presume answers but imply interest in the participant's experiences and views related to the topic of interest (Rubin & Rubin, 2005; Seidman, 2006).

Following the general, initial open-ended question, guiding questions are used to further explore participant statements and/or described examples. In this study, as interviews progressed, guiding questions were asked to expand upon pain assessment, goals and barriers to adequate pain management in EDs, a description of ideal pain management, and differences between EDs compared to other hospital floors focusing specifically upon pain management (Appendix F).

Utilizing the grounded theory process as described by Strauss and Corbin (1990), open coding combined with constant comparative analysis helped identify preliminary concepts. Eventually, theoretical sampling, selection of purposively chosen participants to validate and better clarify the emerging categories and subcategories took place (Strauss & Corbin, 1998). More defined follow-up and guiding questions were asked and these questions, which evolved from the actual interviews and analysis, were more focused than the broader, open-ended questions used initially.

Demographic Data

Baseline demographic data were collected at the time of the initial interview (Appendix G). In order to generate a theory that encompasses all variations among a select group, participation of ED nurses of differing ages, education, ethnicity, and genders was essential. Other demographic data gathered included participants' marital

status, current work status, age when originally licensed as a registered nurse, years of ED experience, type of ED currently working in, and age range of patients cared for in the ED in which they were presently employed.

A rich, description of the research sample is generated by inclusion of demographic data. Age helps to estimate the level of maturity of the participant. Years of ED nursing experience can be an important contributor to the interaction process and subsequent management of pain because of the multitude of exposures to various patient scenarios. Men and women also have different ways of interacting with others; therefore, inclusion of both genders was paramount in this exploration. Educational background may also strongly influence how nurses manage patients with pain. Formal instruction and knowledge have been cited in the literature as important antecedents to improving pain treatment (Innis et al., 2004; Manworren, 2006; McCaffery & Pasero, 1999). Ethnic background is an integral component of the interaction process as well and may significantly influence perception and management of pain in adult patients (Heins et. al., 2006; Todd, 2001). Finally, the type of ED environment (suburban, urban, trauma category) is extremely important to document because of the types and severity of patient conditions and impact on overall ED census.

Data Collection Procedures

Once Barry University IRB approval was achieved (Appendix A), data collection was initiated. Interviews began in August of 2008 and were completed by mid-January 2009. All interviews took place at a mutually agreed upon location between the researcher and study participants. These included nurse participants' residences, the researcher's office, a quiet room or secluded patio area at the nurse participant's hospital of employment, and

the participant's office. Phones were turned off or silenced, and doors to rooms were locked to decrease likelihood of interruptions.

Prior to commencement of the initial interview, nurse participants were asked to sign the informed consent (Appendix B) and complete the researcher-designed demographic data sheet (Appendix G). Confidentiality of participants' identities was assured by use of pseudonyms chosen by each participant prior to taping.

The researcher answered any preliminary questions helping to eliminate any possibility of perceived deception. The researcher assured participants that participation was voluntary throughout the study's duration, meaning that they could refuse to participate or could withdraw from the study at any time for any reason. Specifically, participants were told they could refuse audiotaping, have the tape turned off at any time during the interview, or refuse to answer any question(s). No participants chose to do so.

The amount of time required for the first interview ranged from 45 minutes to one (1) hour and fifteen minutes. At the start of each interview, the researcher showed consideration of participants' time by assuring them that the study time limitations would be closely monitored. The interview was audiotaped and occasional note-taking by the researcher occurred to prompt follow-up, clarifying questions or note key words or phrases used by participants. Interruptions were kept to a minimum. At the conclusion of the initial interview, a token \$10 restaurant gift certificate was presented to participants for appreciation of their time. This gesture was extremely appreciated by each interviewee.

A hired transcriptionist transcribed the interviews verbatim. The researcher then listened to the audiotapes and compared them to transcripts to ensure accuracy. The

researcher corrected all discrepancies and inaccuracies prior to commencement of data analysis. Study participants were contacted via email or phone call following transcription and analysis to verify accuracy of interview transcripts and researcher interpretation. Asking for input about concepts, categories and subcategories derived from data analysis and confirmation of the transcript is known as *member checks*, and is one aspect of the qualitative researcher's attempts to establish credibility (Bloomberg & Volpe, 2008; Creswell, 2007; Speziale & Carpenter, 2007). Face-to-face follow-up interviews were not necessary in this study, as communication between the researcher and participants who agreed to the follow-up proved to be adequate by phone or email discussions.

Data Analysis

In qualitative research designs, data analysis involves scrutiny of raw interviews for the purpose of "evidence-based interpretations" that can then be used as the basis for future research studies (Rubin & Rubin, 2005, p. 201). The researcher's goal is to formulate descriptions and knowledge based on the words of study participants so a better understanding of the research interest is realized. This process is inductive whereby the researcher begins analysis with openness and without any preconceived ideas or hypotheses. In this way, the words of the participants formulate the concepts, categories, themes, and subsequent theory (Charmaz, 2003; Seidman, 2006).

Using Strauss and Corbin's (1990) grounded theory methodology, data analysis commenced upon completion of the initial interview and transcription. All transcribed interviews were uploaded into a qualitative software program, QDA Miner developed by Provalis®. A qualitative data analysis computer program increases ease in data

organization by color-coding emerging concepts and themes. Retrieval of exact words/phrases is also simplified because the program is able to quickly sort and scan data once coding has taken place (Seidman, 2006). Care must be taken that the rich, contextual accounts of the discourse are not lost. These programs are convenient tools to help the researcher organize and retrieve copious amounts of dialogue. However, analysis, the creation of emerging themes, and the interpretation of their meanings is the researcher's realm of responsibility, one that demands critical and painstaking diligence (Bloomberg & Volpe, 2008).

Initially, the researcher did *in vivo* coding, a part of the open coding process. *In vivo*, a term meaning from life or nature, involves the identification of exact words or phrases used by participants, themselves, to establish initial concepts and their properties (Strauss & Corbin, 1990). The process is a line-by-line, detailed reading and analysis of the text. The bulk of the transcript is reduced to meaningful variables with varying perspectives that center upon the phenomenon of interest (Shank, 2006). Line-by-line coding also keeps data free from insertion of biases, motives, or personal assumptions of the researcher. The researcher creates category labels and ensures they not only logically represent characteristics of the data contained within them but preserve a level of abstractness to avert constraint (Strauss & Corbin). As part of this process, this researcher began with headings derived from the key topics of the guiding questions, (e.g., assessment, facilitators, barriers, and goals) for managing adult patients' pain.

Journaling is a method used by qualitative researchers to document systematic progression during the study. It also serves as a record of the researcher's reflections, including insights, perspectives, thoughts, questions, and concerns as they develop.

Bloomberg and Volpe (2008) emphasized the need for researcher journaling with reflection as it serves as a means to reconstruct experiences, thereby leading to creation of meanings. This researcher journaled immediately following each interview and during confirmation of the transcriptions with audiotapes as new thoughts, questions, and ideas about themes and categories emerged. These notes helped to further organize and collapse the initial headings or labels into broader, more abstract categories.

Implementing the technique of constant comparative analysis, interviewing of ED nurses who met the study criteria continued until saturation of the established categories occurred.

By way of axial coding, a core varibale emerged and was identified as the central core category of the theory regarding ED nurses and adult patients' pain management. The axial coding process attempts to identify connections or relationships between the central core category, broad categories, and subcategories. A theoretical model is then created that is representative of the central core category and linkage with subcategories that shape and define it (Strauss & Corbin, 1990, 1998). Using theoretical sampling, the researcher returned to previously analyzed data, as well as new data to further define or illuminate the identified central core category. Causal conditions, strategies used, intervening circumstances, and consequences from using identified strategies were explored and analyzed (Creswell, 2007).

In the last phase of analysis, selective coding was employed to establish and formulate hypotheses and the overall theory. The researcher integrated the themes that emerged from the data analysis and created an analytical story line. Statements and relationships exemplified by the theory emerged from the data and are therefore considered grounded.

The outcome is a holistic representation of the phenomenon of interest within a specified context (Bloomberg & Volpe, 2008). For this research, the context was the ED setting and the phenomenon was the process used by ED nurses when managing the adult patient with pain.

Research Rigor and Trustworthiness

The quality and accuracy of a qualitative research design is judged on its trustworthiness. The terms *credibility*, *dependability*, *confirmability*, and *transferability* are used in place of the quantitative terms *internal and external validity*, *reliability*, *objectivity*, and *generalizability* (Creswell, 2007; Polit & Beck, 2004; Speziale & Carpenter, 2007).

Credibility is the primary criterion for assessing qualitative study results. As the theory and data analysis progresses, study participants are asked to verify the researcher's accurate portrayal of the social phenomenon. This is referred to as *member checks*. Other methods used to increase credibility of results are "prolonged or persistent observation in the field," and utilization of various researchers (peer debriefing) (Flick, 2002, p. 228-229). Peer debriefing occurs when the researcher meets with peers who are not involved in the research in order to obtain unbiased feedback on hypotheses or themes being generated from analysis.

Dependability refers to the stability and consistency of results. Triangulation is a method used to increase dependability. Triangulation involves the use of multiple and/or different methods, resources, investigators, and theories to confirm the evidence or analysis (Creswell, 2007; Speziale & Carpenter, 2007).

Confirmability, like objectivity, examines data for lack of researcher biases. A record of the process used during data analysis serves as a guide for other researchers for study replication or for understanding the researcher's analysis (Polit & Beck, 2004). How clear the research process and analyses are written is referred to as transparency. Using as much detail as possible in describing the entire research process increases the transparency and rigor of the study (Smith, 2003).

Transferability, the last criterion for judging the rigor and trustworthiness of a qualitative research design, addresses usefulness of the resulting theory and data analysis to other similar groups or situations. It refers to the "fit" of the theory in relation to the phenomenon under study. Whether or not the researcher's grounded theory is transferable rests with potential users' opinion of the theory (Speziale & Carpenter, 2007).

As per this researcher's protocol, the methods utilized to establish trustworthiness during the research process involved journaling, persistent bracketing during data collection and analysis, member checks, and utilization of peer debriefers. The researcher's dissertation committee members, who possess extensive knowledge about qualitative methodology, the topic of interest, and/or the nursing specialization, also supplied expert guidance and feedback throughout the protocol.

As discussed in data collection, study participants at the initial interview were asked to consent to a follow-up meeting to establish accuracy of the interview transcription. The participants were also asked to expound on concepts that were ambiguous or unclear and to provide feedback on the researcher's interpretation of the data. Each study participant was contacted by email or phone. Transcripts were sent in electronic format to participants once they agreed to this member-check follow-up. The researcher's model of

concepts and themes derived from data interpretation was also sent electronically, so participants had opportunities to provide feedback. Sixty-seven percent (10 of the 15) participants participated in the member check phase of data collection. All confirmed accuracy of their interview transcription and agreed with the model depiction of the theory derived from analysis.

Peer Debriefers

Because the researcher's interpretation of data is an integral component of data analysis in qualitative research, it is important to obtain objective feedback from content experts who are not involved in the study itself. Therefore, four ED nurses, two still actively working at the bedside, and two who teach ED nursing in the academic setting, were asked to serve as peer debriefers for this study. They provided honest opinions and constructive feedback on the themes and categories that emerged from data analysis and were described by the researcher.

During the study period, Peer Debriefer #1 was a 32-year-old, married Caucasian female who earned a bachelor's degree in nursing. She worked full-time in a Level II trauma center caring for adult patients only. She obtained her RN license between 26-30 years of age and had 1-5 years of ED experience. Peer Debriefer #2 was a 54-year-old, married, Caucasian female who earned a master's degree in nursing. She worked full-time in an academic setting and continued to work part-time in acute care. She obtained her RN license between 20-25 years of age and had 6-10 years of ED nursing experience. Peer Debriefer #3 was a 34-year-old, married, Caucasian female who was primarily an academician. She earned a master's degree and obtained her RN license between the ages of 20-25 years. She worked in a university-affiliated ED that cared for adult patients only

and had 1-5 years of ED nursing experience. Peer Debriefer #4 was a 67 year-old, married, Caucasian female ED nurse who holds a bachelor's degree in nursing. She worked prn at a Level II trauma center caring for both adult and pediatric patients. She obtained her RN license between the ages of 41-45 years and has 21-25 years of ED experience.

Once peer debriefers agreed to serve in this capacity, the researcher met with each individually. A depiction of the theory model and verbal descriptions of each category and subcategory were explained with concrete examples derived from the actual study participants' words. Feedback from the four debriefers about the theory consisted of the following comments: "Exactly what I experience," "This makes total sense," "Hit the mark with the categories," "It covers it very well." None changed the established categories, subcategories, or core phenomenon. Of interest, the peer debriefing discussion of the study's findings elicited increased animation and personal examples of their own experiences, all of which confirmed agreement with the theory. The use of peer debriefers for this research further adds to the trustworthiness of results.

Persistent attempts at bracketing and epoching took place prior to and throughout data collection and analysis. Being interviewed as if a study participant, the researcher made an effort to identify preconceived biases that may not have been revealed or acknowledged otherwise.

Chapter Summary

Because pain is so prevalent in EDs and nurses are positioned to positively impact assessment and treatment of pain, the process they use for managing adult patients' pain is of value to nursing and health care in general. This chapter provided a rationale for use

of grounded theory methodology to explore this phenomenon. Ethical considerations surrounding qualitative methodology and strategies employed to safeguard the confidentiality of nurse participants were presented.

Purposive and theoretical sampling, inclusion and exclusion criteria, and sample recruitment procedures were explained. Based on grounded theory methods described by Strauss and Corbin (1990, 1998), the systematic collection of data through interviewing of ED nurses led to creation of a theory that may help contribute to improved understanding of this process. Interviews employed open-ended and follow-up questions to gain richly contextual answers and to clarify any ambiguities or unclear responses. Questions were designed to elicit specific information about the process utilized and subsequent decisions and actions by ED nurses when interacting with adult patients in pain. Interview analysis and use of open, axial, and selective coding to identify the central core category, broad categories, and subcategories that influence it were described.

Techniques used to decrease researcher bias were outlined. These consisted of self-interviewing, epoching, and journaling throughout data collection and analysis, which served to reveal preconceived biases and ideas and to preserve new thoughts. Finally, a description of how member checks and peer debriefing served to provide credibility to the researcher's explanations and descriptions of the emerging theory were explained.

CHAPTER FOUR

FINDINGS OF THE INQUIRY

Introduction

The purpose of this qualitative study was to develop a grounded theory on the process ED nurses use to manage adult ED patients' pain and to increase understanding of how this process impacts on patients' pain treatment. Inadequate pain control in the ED setting is a well established topic in the literature. To date, a grounded theory has not been created describing this process.

Fifteen ED nurses in Northeast Florida were individually interviewed. The central core category that emerged from analysis of the transcripts highlighted the ED environment as inconducive to helping ED nurses demonstrate caring when relating to adult patients with pain. Feeling overwhelmed, perceived non-cohesiveness of the health care team, and frustration were the three broad categories identified as barriers to caring. This chapter will elucidate the method used to derive these broad categories, subcategories contained within each broad category, and the resulting central core category. The 15 study nurse participants will first be described as a group, and then individually.

Sample of Participants

Grounded theory requires that study participants be chosen who can contribute to theory development regarding the phenomenon of interest (Creswell, 2007). The number of study participants is not predetermined but continues until saturation is achieved. For this study, saturation was reached following the 12th interview. An additional three nurse participants were interviewed to ensure that saturation had been attained; therefore,

the final sample consisted of a total of 15 ED nurses. Recruitment of these 15 nurse participants was through the dispersal of fliers, requests for participation by the researcher through a local emergency nursing meeting, and word of mouth.

Demographics of Participants

Composite. The study sample should encompass as much diversity as possible within the identified population; therefore, both genders, with wide ranges of age, educational backgrounds, and experiences were intentionally chosen for inclusion (Appendix I). The importance of this variation cannot be overstated, as gender, experience, educational background, and ethnicity may significantly influence perception and management of pain in the adult patient. For example, a master's prepared bedside ED nurse was purposively recruited to contrast her perspective of pain management with participants who hold a lesser academic degree. Additionally, an ED nurse with some administrative responsibilities was purposively recruited for comparison of her views with nurses working strictly at the bedside.

Of the 15 nurses, the youngest was 24 and the oldest was 56, with a median age of 42.5. Five (33%) of the 15 nurses were male and three (20%) were of an ethnicity other than Caucasian. Five (33%) were single, over half were married (53%) and two were divorced (13%). Educational level in the sample was evenly distributed between a bachelor's degree in nursing (47%) and an associate in arts or science (AA, AS) (two-year degree (47%). As stated previously, one (6.6%) participant was purposively selected because she held a graduate degree. At the time of the interview, four (27%) participants were currently enrolled in courses to increase their academic educational level. The majority of participants worked full-time in the ED (73%), three worked part-

time (20%), and one indicated working on a 'prn' or as-needed basis (6.6%). All met the study criterion of working at least 24 hours a week.

The majority of the participants indicated they obtained their RN license between the ages of 20-25 (40%) or 26-30 (33.3%). Two (13%) were licensed between 31-35 years of age, two (13%) between the ages of 41-45. There were wide variations in years of experience as an ED nurse. Of the 15, six (40%) had 1-5 years of experience, three (20%) had 6-10 years, another 20% had 11-15 years, while two (13%) had between 26-30 and 31-35 years' experience.

A surprising finding was that many of the nurse participants were unsure of the type or level of ED they presently worked in. Trauma level designations are made by the state legislature based on explicit criteria outlined in hospital licensing and regulations statutes (the Florida legislature website, n.d.). Most indicated they worked in a Level II trauma center (47%) with Level I, Level III, and urban settings at 13%, 13%, and 30% respectively. Most of the nurses were more comfortable with categorizing the ED's as urban, suburban, or rural, or by the size and services provided. Nurse participants were also evenly disbursed between EDs exclusively caring for adult patients (53%) or the combination of adults and pediatric patients, commonly defined as ages 0-17 (47%).

Individual Bio Sketches. All nurse participants in this study were referred to and are consistently described by a self-chosen pseudonym. The pseudonyms help to ensure confidentiality of participants' identity when describing study findings. It is useful to have a synopsis of each individual participant's demographic data in order that a richer, contextual understanding of the data interpretation is realized (Creswell, 2007). The following paragraphs are demographic sketches of each nurse participant (Table I).

Lilly is a 29 year old, single, Caucasian female presently working full-time at a Level 1 trauma center with both pediatric and adult clientele. She has a bachelor's degree and is presently pursuing a master's degree in nursing with a family nurse practitioner (FNP) focus. She obtained her registered nurse (RN) license between the ages of 20-25 years. She has 1-5 years of ED experience.

Fitch is a 33-year-old, single, Caucasian female who was licensed as a RN between the ages of 26-30 after earning a bachelor's degree in nursing. She works part-time at a Level II ED that only serves adult patients. She reported having 1-5 years of ED experience. She is presently enrolled in a FNP program.

Erin is the youngest participant (age 24). She is married, Caucasian and presently works part-time at a Level II trauma center caring for both adult and pediatric patients. Erin earned her bachelor's degree and obtained her RN license between the ages of 20-25. She has 1-5 years of ED experience. Erin is presently in her last semester of graduate studies for a master's in nursing with a FNP specialization.

Jagmike is a 42 year old, Caucasian, married male working full-time in an urban ED in NE Florida. He has a bachelor's degree, and was originally licensed as an RN between the ages of 41-45. He is pursuing his master's degree and FNP licensure. Jagmike cares for both pediatric and adult patients and has between 1-5 years of ED nursing experience.

Miller is a 52-year-old Caucasian male, with 11-15 years of ED experience. He is married, has earned an associate's degree in nursing and obtained his RN license between the ages of 20-25 years. He works full-time in an urban ED and cares for adult patients.

Lou describes himself as a Hispanic ED nurse, who works 'prn' at both a Level 1 trauma center and an urban ED. He is 39 years of age, married, and has a bachelor's

degree in nursing. He obtained his RN license between the ages of 26-30 and has 11-15 years of ED nursing experience. He cares for adult patients where he is presently employed.

Carrie is a 56-year-old, married, Caucasian female and works full-time at a Level III trauma center caring for both adult and pediatric patients. She obtained her RN license between the ages of 26-30 after earning an AA degree. She has the most ED experience of all participants (31-35 years).

Sparky, a 30-year-old, married, Caucasian female, has 1-5 years of ED experience. She works full-time at an urban ED and is responsible for the care of adult and pediatric patients. She obtained her RN license between the ages of 26-30 after completing her AA degree.

Bob is a 56-year-old, divorced, Caucasian female. She earned her AA degree and obtained her RN license between the ages of 20-25. She has 6-10 years of ED nursing experience and presently works full time in an urban ED setting caring for both adult and pediatric patients.

Lighthouse describes herself as a 56-year-old, single, Caucasian nurse with 6-10 years of ED experience. She was licensed as an RN between the ages of 31-35 years after earning her AA degree. She works in a Level III trauma center and is responsible for the care of both adult and pediatric patients.

Leoni, a 50-year-old, Asian male has 26-30 years of ED nursing experience. He is married and earned a bachelor's degree in nursing. He works full-time at a Level II trauma center caring for adult patients only. He received his RN license between the ages of 20-25 years.

Cello is a 41-year-old, Hispanic, married man working full-time in an adults only
Level II ED. He has his AA degree and was licensed as an RN between the ages of 31-35.

He has 1-5 years of ED nursing experience.

Tarheel, a 34-year- old, married, Caucasian female has a bachelor's degree and 1-5 years of ED experience. She works full-time in a Level II ED and cares for adult patients only. She obtained her RN license between the ages of 26-30.

Carlie did not document her age on the demographic data sheet. She is a single,
Caucasian, full-time, female nurse with 11-15 years of ED experience. She earned her
AA degree and obtained her RN license between the ages of 41-45. Carlie is an assistant
nurse manager in the Level II, adult-only ED where she is employed.

Tristen is a master's prepared nurse with 6-10 years of ED experience. She is divorced, 52 years of age, and Caucasian. She works part-time in a Level II ED and cares for adult patients only. She obtained her RN license between the ages of 20-25 years.

Research Findings

Using the grounded theory methodology described by Strauss and Corbin (1990, 1998), constant comparative analysis of ED nurses' interview responses was performed with emergence of the central core category describing the process used by ED nurses to manage adult patients' pain. This central core category identified the ED environment as inconducive to helping nurses demonstrate caring when relating to adult patients' pain. Three broad categories helped formulate this central core category: feeling overwhelmed, perceived non-cohesiveness among the health care team, and frustration (Figure 1). These three broad categories emerged from the subcategories that were formed during the open coding process.

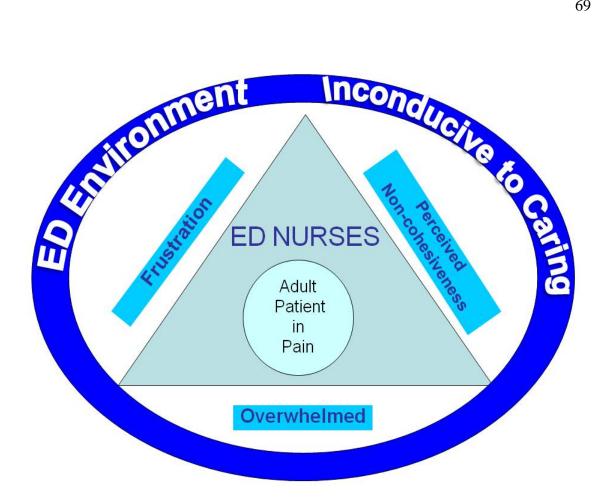


Figure 1: Model of the Process Used by the ED Nurse when Managing Adult Patients' Pain (Bergman, 2009).

Broad Categories

Overwhelmed

The word overwhelmed is defined by Webster's New World Dictionary and Thesaurus (2002) as "the feeling of being buried beneath something or crushed by a large load" (p. 456). Every ED nurse participant referred directly or indirectly to feeling extremely overwhelmed when working in the ED setting. One contributor to the perception of being overwhelmed related to the volume of patients either waiting to be evaluated or waiting for an inpatient room to become available. The practice of holding patients in the ED, referred to as "boarding," is very stress-provoking particularly since nurses remain

responsible for new ED patients as well as functioning as a floor or Intensive Care Unit (ICU) nurse at the same time. There is a large disparity between the two roles. To exemplify this situation, Cello reported that on some days patients stayed in the ED 18, 24, or 36 hours while waiting for an inpatient bed to be assigned. Once admitted to the hospital, the orders for patient care convert to the admitting physician's orders and protocols. Managing inpatient care with routinely scheduled medications versus the common ED practice of episodic or one-time ordering is difficult for ED nurses to coordinate.

Patients seeking ED care are also more acutely ill which often requires a longer time span to stabilize them. Leoni expounded on the high acuity level of patients commonly evaluated in the ED: "You could have 4-5 critically ill patients. They are very sick. They need my attention." The high volume and acuity of ED patients combined with difficulty/delays in moving them out of the ED to admitted beds, is in large part the reason ED nurses felt overwhelmed. The feeling of being overwhelmed is supported by three subcategories: constant prioritizing, being short-staffed, and lack of control.

Constant prioritizing. One of the subcategories of feeling overwhelmed pertains to the need for continuous prioritizing by ED nurses in this study. Prioritization is a key and necessary element of ED nursing in general. Patients with life-threatening or more severe illnesses or injuries must be cared for prior to those with less acute conditions. As stated by Erin, "You just have to prioritize. I mean, a cardiac red [arrest] comes before pain medication. You have to do the whole A, B, C thing." Jagmike had similar feelings: "I get caught up with a patient with a code red, and I spend 45 minutes with them. If I have 4 other rooms, those patients aren't going to be seen for those 45 minutes." These

statements communicate that when a life-threatening condition such as a cardiac arrest occurs, the management of the airway, breathing, and circulation must and does take priority over delivering pain medication to other patients. As Tarheel summed it up:

"Pain is up there as a pretty high priority, but in my environment, airway, breathing, and circulation are more acute and what we are supposed to deal with, because I have to take care of those patients so they don't die before I can take care of somebody's back pain."

These statements illuminate why ED nurses experience feeling overwhelmed. Pain, of course, is a top priority to the patient, but is not, unfortunately always the ED nurses' first priority. Because of this, a disconnection between the patient and the nurse may occur. Lilly stated, "Pain never killed anybody . . . everyone's pain is their top priority so you have to weigh it out. Sometimes the pain just has to wait." Lou expressed a similar sentiment when he stated, "You're not going to die from that broken arm, but this guy is going to die over here. We'll get back to you when we can." Other nurse participants concurred that pain is important but may not be assigned the level of significance as other aspects of patients' care (e.g. potential diagnoses or basic first aid measures). For example, Lighthouse commented "... the pain thing is easier for some reason, valid or not, to put on the back burner." Though these statements may be construed as callous and uncaring, ED nurses are taught the fundamentals of life-saving procedures, and these must always be the priority in the care of any patient, no matter the complaint or level of pain. Thus, ED nurses may not have the option of demonstrating a caring attitude to all patients when critical necessity dictates they prioritize care of some above care of others. On some level, that, alone, may be overwhelming.

Short staffed. Because of the sheer volume of patients and the associated workload, most of the ED nurse participants (80%) identified lack of staff, both nursing and support, as a contributor to feeling overwhelmed and an influence on their ability to manage adult patients' pain. The nurses expounded on the increasingly complex role of the nurse working in direct patient care. Lou discussed how, in his 13 years as a nurse, more and more responsibilities have been added to the job, requiring more time away from the bedside. Using ancillary and support staff to help with typically "non-nursing tasks" was discussed as a viable solution.

If I could have someone doing the blood sugars and vital signs and report it to me [rather] than me doing that. . . [pause]. I short my patients because I can't get to the pyxis [drug delivery system] for the medications because I have got all of these things I have to do. They are paying their housekeeper [person feeding and performing non-nursing tasks] a lot of money and I'm pointing to myself. (Bob)

Other nurse participants supported the suggestion that non-nurses could clean the patients, provide food, socks, and empty bedpans and urinals as ways to alleviate workload and allow more time for direct care and interaction with patients. No participants stated that these tasks were out of nursing's realm of care, merely that these types of tasks might be delegated to others with the educational capabilities for doing them. "At least helping turn the patient from side to side or even raising or lowering their head, getting them a pillow, or getting them fluid [would help]" (Tristen). Leoni described the problem of being short staffed very succinctly: "Nurses are overburdened with work, and we need some help."

Lack of Control. The last subcategory contributing to the feeling of being overwhelmed is an overall perception of lack of control. A unique characteristic of all EDs is the inability to control patient flow. Patients arrive constantly either by ambulance, rescue units, or by private vehicles with a multitude of complaints and conditions. Though the ED may be full to capacity in terms of available stretchers and patient rooms, unlike other hospital floors or units, the ED is never too full to turn a patient away. Thus, it is not surprising that ED nurses in this study described a chaotic, uncontrollable working environment. The phrase most often used by participants to describe the ED was "controlled chaos." Lou stated that it is like "Putting out fires we're so busy, just going from one patient to the next to the next. . . . "

Despite this, emergency departments in the US are fast becoming providers of primary care, which leads to overcrowding and long wait times. The excessive amount of patients is causing a tremendous burden on the health care staff working in the ED (ACEP, 2008). Carlie described how the ED has become the primary care office for patients without insurance and those who are unemployed, and how "out of control" the situation is.

There are times when you are taking care of eight different patients and your name is on 15 different charts at one time. You almost have to have ADD [attention deficit disorder] to work in the ED; let's face it. You are pulled in a lot of different directions and sometimes forget. We are constantly taking the blame for a lot of things we really have no control over, there is a lack of control. (Fitch)

The perception of lack of control may extend to the physical environment, itself: noise, bright lights, patient stretchers in the hallway, and various ancillary staff initiating laboratory or diagnostic procedures. Perceived lack of control, particularly in an environment in which one is responsible for people's lives, can be severely overwhelming; in some instances, the ED nurses expressed this as a primary reason for colleagues quitting or transferring out of the ED. "Burn out" was the term most often used to describe the consequence of feeling overwhelmed. Miller stated, "The older you get and the longer you do this [working in the ED], the more prone you are to burn out. It's harder and harder in the ED today because we see such a volume of patients." Carlie discussed how rapid changes in patient conditions and the need for ED nurses to be constantly engaged in critical thinking leads to burn out very quickly. She added that the media portrays working in an ED in an unrealistic light, and new nurses are unprepared for the reality of ED work and the responsibilities that accompany it. Tristen also referred to the unrealistic portrayal by the media of how quickly ED care can be delivered when she stated, "You look at television and you see these hospital shows, and it's like they go in there and do it and that's it, but you know it may be quite a while."

All 15 nurse participants in this study expressed being overwhelmed in the ED settings in which they currently work. They attributed most of this to the sheer volume of patients requiring constant prioritizing of care and being short-staffed. There was consistent discussion about lack of support personnel to help with non-nursing tasks and inability to control the environment in which they were practicing. Through the interviewing process, ED nurses communicated that while juggling a multitude of patients with varying acuity levels, diagnoses, and treatment interventions, the ability to adequately and promptly manage pain may become a lesser priority or be perceived as less important in the overall plan of care. Sheer workload also led to feeling pressured to "catch up," despite specially

trained technicians in the ED who functioned as support staff. Nurses still felt responsible for the bulk of work, particularly in the areas of pain alleviation, as this could not be delegated to a technician.

Perceived Non-cohesiveness

The term *cohesive* means to adhere or stick together (Webster's, 2002, p. 117). The broad category of non-cohesiveness related to ED nurses in this study describes the perceived lack of teamwork or support from various health care providers. Two of the sample ED nurses described the ED as a place of self-preservation, meaning that at times, they were working "solo" as a direct result of this lack of collaboration between coworkers. This perception can be extremely detrimental to the climate of the ED itself. Teamwork is a core requirement for working in the ED because of the critical nature of the services provided. The three subcategories that emerged from interviews established that the perception of non-cohesiveness encompassed nursing colleagues, administrative personnel, and ED doctors.

Nursing colleagues. Various personalities and characteristics make all interpersonal relationships strained from time to time. In an area such as the ED, where staff works in close proximity to one another in high stress situations, it is not surprising that conflicts arise. Some of the ED nurses in this study described the core personality characteristics of the typical ED nurse similarly to the published literature: "aggressive," "loud," "thick-skinned," "assertive," and "confident." Because many ED nurses have a straightforward personality-type, conflicts often arise under stress (Lyttle, 2001). The level of vehemence and outrage expressed about difficult coworkers, however, was unexpected. More than half of the sample conveyed this level of extreme dissatisfaction with some of their ED

fellow nurse colleagues. Of interest, nurses did not agree as to what nursing characteristics may have been responsible for a lack of teamwork mentality.

Some participants targeted younger ED nurses as lacking the "calling" to be a nurse and invested, more or less, as a way to make money. Leoni, whose nursing career spans almost 30 years, described a change in attitude in the new nurses with whom he has been working with recently. "Sometimes the new nurses are less compassionate... They want more money and less job." Bob agreed there is a difference in the younger nurses working in the ED. She described their motivation as based on "adrenaline rushes or exciting patients and procedures" and added that they complain when caring for the mundane, nonemergency, less exciting cases. She also observed that some nurses are more interested in surfing the internet or watching television than taking care of their patients. Bob summed up her feelings of lack of support from other nurses in this way:

It's like being on one of those old-fashioned merry-go-rounds on the playground, that spins around. I'll try to get on one of those merry-go-rounds and it's hard to catch it. Some of the nurses on it have their feet out. It is a very interesting environment.

Other ED nurses felt that the older, more experienced nurses in the ED were less likely to offer help or support. Jagmike observed that younger nurses with less experience were more apt to seek help for their patients, especially those in pain, than a more experienced nurse. He attributes this to a callousness that develops once a nurse has worked in the environment for a length of time. Lou corroborated this, stating that the longer nurses work in the ED, the less they care: "There are some that are absolutely content to do nothing for their patients." Lilly brought up another factor regarding

perceived lack of support from coworkers, this time in the area of competence: "I know a lot of nurses that have been nurses for a long time and I don't think they are very experienced. I would not trust their assessment skills."

Other nurses in the study did not stipulate age, attitude or competence as factors in lack of teamwork but pointed out a social variable that was not uncommon in their experience: "the clique." This Carrie referred to when describing nurses whose primary interest is discussing each other's social lives or other non-work related issues. She went on to elaborate that if you were not a part of the clique, there would be a "delayed response" when you asked for or needed help. Lack of support from other nurses in the ED may also easily translate into inadequate pain management for patients if and when the primary nurse is busy, off the floor, or on break.

Administration. ED nurses expressed an overall dissatisfaction with nursing administration's understanding for what the nurse at the bedside endures on a daily basis. The terminology commonly used was being "out of touch". ED nurses also expressed that nurse administrators place unrealistic expectations on the bedside nurse and that communication is lacking on both sides as to these expectations.

Administrators closely follow surveys reflecting patient satisfaction with received care in the hospital departments for which they are directly responsible. Therefore, public relations and interactions are closely scrutinized and quickly addressed when problems occur. Nurse participants in this study described patient dissatisfaction with pain management in the ED as a key area for improvement, according to patient satisfaction surveys (Sparky, Lighthouse). Consequently, improved pain management for ED patients is being emphasized by hospital administration in most of the ED's represented in this

study. Again, both administrators and nurses share a common goal, patient satisfaction, but lack of supervisory support or a gulf in perception may exist regarding how to handle specific situations regarding pain management.

Lilly described a situation in which she was the night shift charge nurse and had an unruly patient who demanded a stretcher be brought to the lobby because of his pain and discomfort. The requested action was against standard practice. As Lilly was telling the patient this, he began cursing her and making a scene. The nursing supervisor was called. Lilly recalled that the supervisor "overrode [her] decision" and put him on a stretcher, despite her protestations. When asked how this made her feel, Lilly replied, "I felt underminded by her and it was completely and totally inappropriate. Did anyone go and ask any of the rest of the patients out there if they needed a stretcher?"

Tristen described another example of how an administrator's actions can be perceived as unsupportive or incomprehensible to the ED nurse working at the bedside. She described taking care of a patient who needed cleaning. The patient was very large and two people were needed to properly cleanse the patient and change the sheets on the stretcher. Each nurse where she is employed carries a mobile phone, so when questions arise concerning patients, these nurses can be easily reached. Her phone started ringing, but she was unable to answer it because of her soiled gloves and the work she was doing. As Tristan explained:

The administrator comes into the room and says, 'Why aren't you answering your phone' and I'm like...I'm working. My phone did go off like 4-5 times, and I mean it's just impossible sometimes. I got really aggravated because I felt I was getting my hands slapped because

they get so concentrated on you answering the phone. And they don't realize that maybe there's a reason you can't answer it, because maybe you're doing patient care! I mean, you really have to put yourself in the nurse's shoes to know what is going on in the whole picture. Patient care takes time. It really does, and I just don't think they have any concept of how it is.

Lou expressed similar feelings about administrators forgetting what it is like to be the nurse on the floor. "They keep coming down with more attacks and more additional requirements from their office and then you still have to squeeze the patient care into that."

Finally, ED nurses discussed another area of perceived lack of support by administrators: pressures to move patients out of the department once inpatient rooms were assigned. Nurses described administrators as "unconcerned" and consistent in disregarding what the ED nurse was involved with at the time. Erin was forthright in her comments relating to the perceived lack of cohesiveness between management and ED nurses in her department. "I know they don't get it sitting up there in their air conditioned office and they have peed five times before lunch, and you know its 3:00 p.m. and they have a full stomach because they got to eat. . . . They just don't get it."

As the above examples illuminate, when a gulf exists between administrator/nurse perceptions of care protocols and care priorities, frustrations mount and nurses may feel alone and unsupported by their supervisors. In addition, collaborative decision-making between nurses and administrators, a process that should, ideally, take place prior to supervisory actions affecting ED nurses and their patients, appeared to be nonexistent.

Thus, respectful, collaborative communication between ED nurses and administrators is paramount to nurses feeling supported and to provision of quality care. This translates to pain management when nurses feel pressured to complete various "non-patient care" tasks through directives of administration. In this study, ED nurses felt their valuable time was often wasted, and patient care was negatively impacted because of these other responsibilities or mandates.

ED Doctors. Every nurse interviewed for this study mentioned that nurse-doctor relationship affected his or her ability to manage pain in the adult patient. Some discussed the inability to obtain the proper order for medications in a timely fashion, while others discussed how some doctors are too quick to prescribe narcotic medications for the patient. Regardless of outcome, the overall perception was that collaboration between ED nurses and ED doctors was lacking when treating patients' pain. Miller stated, "We [the nurses] are really at the mercy of what the physician wants to do. Sometimes it's easy to get orders and sometimes you can't get orders from them. The nurse is really powerless."

Doctors are responsible for giving or writing the pain medication orders. Because of this, nurses are often caught in the middle between patient and doctor when pain is poorly controlled. Miller described his helplessness when patients complained about inadequate medications for pain alleviation: "The doctors are who control the keys to the kingdom, not the nurses." Tarheel concurred by stating, "As a nurse, I can only go to the doctor and say the patient is in pain, but I can't *make* [italics added] the physician write the order for pain medication."

Of interest, despite the discomfort associated with lag time in getting prescriptions to treat patients' pain, most nurses in the study did not want the responsibility, particularly

since a doctor/practitioner is present at all times in the ED. Nurse participants did not feel this responsibility should transfer to the nurse, even if standing orders or protocols were established and supported.

Trust is a large component of developing a positive working relationship; this is especially true in the ED environment. A common description of how trust is established between ED doctors and nurses was encapsulated by study participants in the word "prove." The nurse had to "prove" to the physician his/her competence, responsibility, pain assessment skills, and accurate communication of findings to the physician. No participant stated that the same expectation existed for the doctor. The onus was with the nurse and appeared to be one-sided. Consequently, participants indicated that if this trust is not established with the resident physician (including incompatible nurse-physician personality characteristics), the nurse could expect delay of orders to treat patients' pain. In addition, some physicians insist on evaluating the patients, themselves, prior to treatment, however long the wait is for the patient. At times, because of the nature of emergency departments, this leads to extreme patient dissatisfaction with care. This in turn, creates stress for nurses, who are helpless to intervene (except with non-pharmacologic measures).

Alternatively, some nurses expressed concern that orders for pain medications are prescribed too freely by physicians without input from nurses who ultimately carry out the order. Some participants suggested that ED doctors did not want to be bothered with having to justify their decisions or waste time arguing with patients as reasons for this more liberal prescribing practice. "Sometimes it is just easier to give them [the patients] what they want than to argue with them - the path of least resistance. I guess they think

they [the physicians] are helping, but in the long run they really are not" (Erin). When the nurse's view is not a part of this decision, a lack of teamwork exists.

We are allowed to assess them [the patients], and we are allowed to chart about it, but it doesn't really play into what the doctors think.

Not really. We are not a team, it's not going to happen. We're the nurses and they're the doctors and that's it. (Miller)

Leoni offered that he occasionally works in other EDs and continually experiences the doctors as barriers to adequate pain management. When asked to elaborate on this he stated, "Sometimes doctors don't believe; they don't know me and they don't trust me. I'm a stranger."

Nurses interviewed for this study had an overall perception of non-cohesiveness in the ED environment, specifically a lack of teamwork in their working relationship with other nursing colleagues, administrators, and ED physicians. This perception and the feelings it evoked impacted their ability to care for patients seeking treatment in the ED. When asked if he felt teamwork was an important aspect of ED care Leoni's response was immediate, "Teamwork? There is supposed to be teamwork. That is what the ED needs, teamwork with a big "T." I feel bad because we're supposed to be here to help each other and work as a team and we're not."

Frustration

Frustration was the term used most frequently by all ED nurses in this study. The root of the word is defined by Webster (2002) as "to cause to have no effect, to prevent from achieving a goal or gratifying a desire." Synonyms such as "disappointment, impediment, failure, prevent, and defeat" (p. 278) were also used and describe sentiments of ED nurse

participants when working with adult ED patients in pain. Subcategories for *frustration* included patient abuse of the ED, pain complexity, and unrealistic patient expectations.

Patient abuse of the ED. Drug-seeking behaviors elicited extreme feelings of frustration in all ED nurses interviewed. Interestingly, the majority of nurses noted that on average, this population comprised approximately 15-20% of their overall patients: most encounters with patients in pain did not fit this category. Nevertheless, every participant referred to the drug-seeking patient as an integral part of the discussion of ED pain management. Because the ED provides care 24 hours a day, seven days a week, nurses view the ED as an ideal environment for patients to attain narcotic medications to feed drug habits. More than a third of nurse participants described feeling like their role in the ED was that of a legal "drug pusher." Sparky stated, "I worry about being taken advantage of. I really do. . . I'm not a drug dealer. I don't want you coming into get your fix and then leave me." As this comment illustrates, for some people a perception of the ED as a drug depot, with nurses as accessories, does exist. Many nurses suggested that patients with drug addiction problems be referred to drug rehabilitation centers and complained that often these patients are "given what they want." The main reasons offered for this involved time - that giving them the drugs was easier than taking the time to educate and/or referring for help. Because of this attitude and practice, most ED nurses felt helpless and frustrated. "I feel we are rewarding bad behavior" (Jagmike). Miller, however, offered a uniquely insightful view: "The perception of narcotics is that they're bad and that they control your life. That may be true, but pain will control your life too."

Another aspect of this subcategory regarding abuse of the department relates to the rights of all persons to seek care and be evaluated in an ED by a physician or practitioner

regardless of ability to pay for services. Nurses complained that because of this, the ED is increasingly being used for minor, non-emergency visits or for convenience. "We get an influx of patients with all kinds of different complaints that could be taken care of at their primary care doctor's office or urgent care centers" (Tarheel). The terms "frequent fliers" and "regulars" describe those patients who are known to the ED staff by name because of their repeated visits to the same ED. If these patients have a pain complaint, the nurses are suspicious and "take it with a grain of salt." Some nurses even used the word "liars" when discussing this category of patient.

Most nurses referred to an increase in the indigent population and lower socioeconomic status of patients seeking ED care as further adding to the potential for abuse. Lack of access to care and inability to follow-up after the ED visits creates a revolving door atmosphere particularly with these patients. ED nurses articulated sympathy and understanding for these life circumstances but frustration because of it.

Some ED nurses added that they chose to be ED nurses because of the excitement, the variety of patients, and the ability to be involved in saving lives or impacting another person's life every day. Patients who abuse the ED for non-emergency complaints were described with phrases such as, "Wasting my time, taking time away from my patients who need me, and backlogging the system."

Distrust of patients, stereotyping of particular patient populations, and forming judgments are a few of the consequences caused by these types of patient encounters.

Miller stated "I came up with a little thing in my head. People who act like they're in pain usually aren't." Others expressed having to be a "tougher audience, "losing faith in people", or ignoring or avoiding interactions with patients perceived as ED abusers.

Pain complexity. All nurse participants agreed that pain is the most common complaint of patients seeking care in the ED. Whether the primary purpose or part of the overall reason for the visit, nurses assume the majority of ED patients have pain. Because of its prevalence, nurses may develop a degree of callousness, desensitization, or apathy regarding pain complaints. "Maybe after you hear it 15 million times that you're like, 'Oh, they're just in pain' "(Fitch). Lighthouse also articulated a similar feeling when she stated, "You are just saturated with it. Almost every complaint is pain in some form."

When asked to describe pain, most ED nurses repeated the standard pain definition taught in textbooks or learned in the academic setting: "Pain is what the patient says it is," but they admitted that their assessment and practice did not support this belief. The numeric rating scale is the standardized, most commonly accepted tool used by all participants in their place of employment. The scale is used as a starting point when assessing patients' pain; the number on the 0-10 scale was consistently reported as the number recorded in nursing notes. Comments from this group, however, indicated that recording the pain scale number is primarily for meeting The Joint Commission's requirement that pain be assessed and documented rather than for its actual usefulness. One nurse, Lighthouse, offered that she had worked in a unit that had a place on the patient's flow-sheet for the nurse's assessment of the patient's pain level. She found this useful when the patient's perception of pain did not correlate with her own. Overwhelmingly, nurses communicated that it was their assessment and personal judgment based upon patient behaviors and vital signs that determined the severity of patients' pain and subsequent treatment plans.

Patients in "legitimate" pain exhibit signs of distress such as tachycardia, restlessness, clammy skin, higher blood pressures, crying, guarding, and facial expressions that communicate pain (e.g. grimacing and wincing). Nurses use these patient characteristics to validate that the patient is experiencing true pain. Additionally, there are patient behaviors that invalidate patients' own verbalized pain level and create feeling of distrust and frustration for nurses (e.g. talking on the cell phone, eating, drinking, sleeping, and carrying on normal conversations with others). Nurses described having a gut feeling when patients present with pain. "You can tell when someone is in pain and when the patient presentation doesn't equate with the verbalization [i.e. number from the 0-10 scale]. I really don't believe the patient is experiencing that level of pain" (Lilly). These statements summarize the overall attitude and belief of the ED nurses interviewed for this study.

Frustration with manipulation of the pain scale was commonly discussed during the interviews as well. Patients were said to exaggerate their pain level for a variety of reasons.

A lot of times in the ER, they [patients] will tell you a specific number because they think they will be treated quicker than if they give you a lower number. I think some people do try to be completely honest and tell you exactly what it is, but it is manipulated a lot. (Tristen)

Another reason nurses gave for lack of pain scale usefulness was that patients do not understand it, and that culture, language, and educational level impact this lack of understanding. Most nurses said that patients must be educated about the tool by providing clues or specific examples for the numbers on the scale. For example, "I tell

my patients that a 10 is like having a baby. You do not look like you are having a baby. I think they don't understand it [the pain scale] or they just make that judgment in order for me to get them some attention" (Cello). The nurses admitted that after this type of explanation, they will ask the patient for a reassessment of pain level. This reevaluation or redirection may influence the subsequent pain scale number indicated by the patient. Even so, when the nurse does not believe the patient is experiencing the level of pain being verbalized, frustration ensues and ultimately affects the nurse's pain management efforts.

Unrealistic patient expectations. ED nurses interviewed for this study shared the belief that the ED visit is meant to rule out emergencies or health care conditions that are more life- threatening as well as to initiate the process for follow-up care outside the ED setting. Nurses readily agreed that in certain situations, patients' expectations of the ED visit might not coincide with this view, leading to unrealistic expectations in outcomes. Examples for this disparity centered on the ED's limited resources. One visit may not always "fix the problem," yet, patients want immediate satisfaction and resolution. In general, nurses expressed that patients need to understand they, too, have a responsibility in their own health care and comply with follow-up and referrals when warranted.

When the expectations of patients are unrealistic, nurses experience frustration because the likelihood of achieving patient satisfaction with care is very low. Lilly stated, "It can lead to feeling defeated. You know you will never satisfy some patients no matter how much you do." Most patients have been waiting in the lobby for a significant length of time prior to being escorted to a treatment room. Once in the treatment room, the patient expects the nurse to be there responding to requests. Starting intravenous lines,

ordering laboratory and diagnostic tests, and performing assessments are tasks that take time. Most ED patients need these procedures done prior to being examined by the physician. These tasks further delay the time to analgesic administration and can even escalate into abusive situations.

They [patients] pace. They are standing and looking outside the door.

They get angry when they leave, they will throw papers down if they
don't get treated. They verbalize their dissatisfaction and anger. So that
is our most sensitive area; it is the pain management area. (Lighthouse)

Specifically, regarding pain treatment, nurses offered comments such as "The patients expect too much from the nurses. They come to the ED in pain and they want pain medications immediately. They want pillows, blankets, food. We are like a waiter or waitress, but no tip" (Leoni). Jagmike offered the view that patients need to be more willing to accept what the nurse is able to do for them.

Some patients are just set on what pain medication they need and there are other things that can help them, but they are not willing to try those things. They want Dilaudid, and they want it now. They put me in a position that maybe I can't help them. I want to help them; that's why I'm a nurse.

Overwhelmingly, nurses replied the goal when managing patients in pain is to achieve comfort, to make the pain more manageable, but not necessarily to eliminate the pain.

Observing behavioral and physiological signs of relaxation, decreasing heart rate, respirations, and blood pressure communicate to these nurses that an acceptable comfort

level has been reached. Unfortunately, when the patients' expectation is to be pain-free, the nurses experience frustration, as this is often unachievable.

Managing the side effects and adverse reactions that can occur with the delivery of potent narcotic analgesics was also a primary concern of ED nurses. Sparky referred to instances when patients received potent narcotics for their pain and had to be resuscitated secondary to respiratory depression. "I want to make them comfortable and keep them safe. One lady coded on me after receiving Dilaudid, so I want good vital signs, nice heart rates and respirations." Thus, overdosing with too high a dose of narcotic medication is a major concern of the ED nurses.

All ED nurses interviewed for this study experienced a great deal of frustration in the ED setting ultimately impacting patient pain management. The primary reasons voiced for this feeling involved abuse of the ED by drug seeking individuals or for nonemergency care, the inability to use their experience and skills to more subjectively assess pain in their patients, and unrealistic patient expectations (particularly regarding the nurse's ability to independently manage care).

Central Core Category

The broad categories of feeling overwhelmed, perceived non-cohesiveness, and frustration ultimately resulted in ED nurses perception of working in environments inconducive to demonstrating caring for patients. *To care* is defined as "to be concerned, have consideration, forethought, regard, thoughtfulness" (Webster's, 2002, p. 91). Interestingly, synonyms describing "to care for" were "provide for, attend to, nurse" (p. 91). Caring is an integral part of nursing in general, regardless of where one practices. Clearly, nurses interviewed for this study wanted to care and defined themselves as

caregivers and patient advocates, but because of the environmental factors, the ability to adequately and satisfactorily care for patients in pain in the ED environment is rapidly becoming lost.

It's daunting to walk through the waiting room as you're documenting and you see 112 people sitting there. . . You know it's going to be 112 people when you leave. And, for the whole 12 hours you know somebody is going to be pissed off at you, whether it's going to be the resident or the nurse, because you didn't help them or the patient because you couldn't help . . (Lou)

Most of the nurses expressed feelings of helplessness or guilt, feelings that affected them after they left the workplace. They verbalized concerns about spouses, significant others, and even pets that may have suffered while they decompressed from emotions still roiling from their shifts. Disappointment with themselves was another consequence with which some nurses grappled and were not able to resolve. Particularly with pain management, the inability to reassess or educate the patients and/or families caused profound feelings of disappointment in the ability to provide quality nursing care.

Some nurses stated they "feel bad" when they leave to go home. They worry and ruminate about what they could or should have done for their patients. Tristen stated that after some shifts she would have to talk to herself and come to the realization that she did the best she could do under the circumstances. "You just do what you can do and then you just kind of have to let it go when you leave because if not, you can worry yourself to death." Carlie ended her interview with these statements:

As an ED nurse you have to have that personal contact with the patient.

You cannot put the patient in the room and look through a monitor. You cannot treat the monitor; you have to treat the patient. It is not often done. I'm not making any excuses, but this is because of the environment of the ED.

The ED nurses interviewed for this study primarily expressed feelings of being overwhelmed, a perceived lack of cohesiveness in their workplace EDs, and frustration. These three broad categories created perceptions of a working environment where demonstrated caring for patients was extremely difficult to achieve (Appendix H). By describing various examples, every nurse gave this researcher the impression that caring for patients in pain is still very much a priority in their practice but that the ED environment, itself, makes the act of caring extremely difficult. Fitch's summary of thoughts in the following passage serves as a highly representative example of overall outcomes of this exploratory research project: "Whether it's physical, mental, emotional-whatever it is - they [the patients] come to us because we're supposed to care, and we have lost the caring."

Noteworthy, the following communication serves to emphasize the internal dilemmas that both experienced and inexperienced nurses experience when personal beliefs or professional pressures collide with actual practice. It also affirms the importance of nursing research in discovering and giving voice to nurses who need it. After the initial interview, Miller thanked the researcher for allowing him to voice various feelings he had been experiencing concerning pain management in the ED. He stated he was unaware how upset and saddened he had become with his nursing peers and with ED nursing in general. In his member check communication a few months later, he again thanked the

researcher for allowing him to be a part of this study. He expressed how being allowed to honestly and openly discuss suppressed emotions on this subject as a cathartic. To the researcher's knowledge, there was no follow-up counseling necessary for this participant.

The transcriptionist used for this research is a junior-level nursing student. After transcribing ED nurse Miller's interview, this student wrote the researcher the following in an email and granted permission for it's inclusion in the study:

I was crying my eyes out at the end of this interview. This nurse completely encompassed my reason for becoming a nurse. He really put things into perspective for me. This interview was amazing and eye opening. A part of me feels guilty for losing sight of why I even wanted to be a nurse. I was so caught up in the tests and projects that I forgot my purpose as a nurse. His words need to be shared so that he can inspire others. This one truly touched my heart and came at the perfect time in my nursing school career. I really needed to hear his words.

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS OF THE INQUIRY

Introduction

The purpose of this study was to (a) develop a grounded theory on the process ED nurses use to manage adult patients' pain and (b) increase understanding of this process's impact on patients' pain treatment. Grounded theory and the philosophical foundation of symbolic interactionism guided the researcher's study of this human social process. Symbolic interactionism focuses on meanings persons place on events they experience in their everyday lives. Behaviors and subsequent actions are a direct result of persons' interpretations of these meanings and are understood within the social context in which they occur (Byrne & Heyman, 1997; Stryker, 1980). Strauss and Corbin's (1990, 1998) methods for conducting grounded theory research were used during the data gathering and analysis. This original study is an initial step towards improving adult pain management in ED settings.

This final chapter begins with a discussion of the meaning of the study and the researcher's interpretation of the three broad categories, the three subcategories contained within each, and the overall central core category experienced by the nurse participants. Examples of current literature consistent or inconsistent with these interpretations is cited and discussed. Implications for nursing education, practice, research, and public policy are presented. Finally, study strengths and limitations as well as recommendations for future research endeavors are summarized.

Exploration of the Meaning and Researcher's Interpretation of the Study

Data analysis from interviews with 15 nurses working in EDs in NE Florida yielded
three broad categories with linkage to the overall central core category. The central core
category created from data analysis and interpretation described the ED environment as
inconducive to caring. Each of the three broad categories, specifically, feeling
overwhelmed, perceived non-cohesiveness, and frustration, has three interrelated
subcategories that influence one another in the process employed by ED nurses to
manage adult patients' pain.

Overwhelmed

One of the three broad categories that emerged from data analysis highlighted ED nurses' feelings of being overwhelmed. Contributing to the establishment of this category were the following factors: constant prioritization of care, lack of nurses and support staff to help with basic patient care needs, and an overall sense of lacking control over one's nursing practice. These perceptions were primarily associated with dramatically increased patient visits in EDs across Florida resulting in extreme overcrowding. ED nurses in this study cited boarding of admitted patients as a key component to the overcrowding issue.

Nurse participants' perceptions of overcrowding were not unfounded. Patients experiencing a wide variety of illness and/or injuries are increasingly seeking care in EDs. In a recent executive summary report published by the American College of Emergency Physicians (ACEP) (2008), *The National Report Card on the State of Emergency Medicine*, the authors document a 32% increase of patients seeking ED care in the last decade. During this same time period, the number of EDs has decreased by 7%. Reasons for ED closures cited in the ACEP study involve lack of reimbursement

from insurance carriers as well as noninsured patients. Recent estimates report 1 out of 6 Americans are presently uninsured (Millard, 2007). ED staff, physicians, and oncall specialists for managing complex patient conditions are diminished or completely lacking. This disparity in availability and access is anticipated to worsen in the decades ahead (ACEP).

The ACEP (2008) report also notes the number of geriatric patient (≥ 65 years of age) ED visits is projected to steadily increase. Older patients have longer ED visits and are more likely to be admitted to hospitals than younger patients. This increases the likelihood of ED boarding, further adding to the overcrowding issue.

Data analysis during the study period revealed immense numbers of patients seeking care or being held in EDs awaiting inpatient room assignments. This results in constant prioritizing of care delivery by ED nurses, a daunting task. Coupled with lack of ancillary or nursing staff, a seemingly endless list of tasks required to care for the burgeoning volume contributes to ED nurses' overall sense of being overwhelmed.

ED nurse participant perceptions regarding lack of adequate nursing or support staff was supported by a study conducted by Magid et al. (2009). A total of 3562 ED clinical workers in 65 US EDs were surveyed about patient safety issues. Participants reported staff working in EDs was insufficient to adequately care for patients seeking treatment. The authors reported 66% of respondents believed nursing staff was consistently inadequate to manage the volume of patients, and the majority of nurses responded that ancillary staff was also lacking. Ultimately, this translates to an unsafe environment. Another contributor to ED nurses' perceptions of being overwhelmed is inability to control the type of patient care they are able or desire to deliver. Pain control is one

aspect of care delivery negatively influenced when nurses experience being overwhelmed by overcrowding and inadequate support.

A recent study by Hwang et al. (2008) supports the study finding that ED pain management is suboptimal when overcrowding or boarding occurs. The objective of the authors' retrospective study was to evaluate quality of ED adult pain care related to three ED crowding factors: overall ED census, number of patients being held (boarders) awaiting admission, and "boarding burden," defined as number of boarders divided by overall ED census.

Records of adult patients seeking care for painful conditions at one urban, academic ED during the months of July and December 2005 were reviewed. A total of 1068 patients were included in the final data analysis. Hwang et al. (2008) found when ED census was high and a high number of boarders were in the ED, quality of pain care was negatively affected. Specifically, patients in pain waited 55 minutes longer for pain assessment and up to 43 minutes longer to receive analgesic medications when census was high. Additionally, the authors reported delays in pain assessment and analgesic delivery when both census and ED boarders were high. The authors concluded ED crowding (the sheer number of patients) has a direct negative impact upon documentation and delivery of pain medications. Study limitations exist with regard to use of one hospital setting and patient visits from only two months of the year. Nevertheless, this study is one of only a few linking overcrowding in EDs to poor quality care outcomes, specifically pain control.

Perceived Non-cohesiveness

The second broad category that emerged from data analysis was the perception of non-cohesiveness between nursing colleagues, administrators, and ED physicians with managing patient care. Study participants voiced a sense of solitary practice or working without a team approach. Teamwork was viewed as a necessary component to managing adult patients throughout their stay in EDs; lack of teamwork was perceived a significant barrier to ideal pain management.

Findings from Magid et al. (2009) diverge from this study's nurse participants' perceptions regarding lack of teamwork between ED nurses and ED physicians. The authors found 67% of nurses and physicians included in their survey believed patients' care plans were well communicated, and 87% responded that nurses and physicians worked well together in ED settings. Magid et al.'s study was consistent with this researcher's finding that nursing administrators are more concerned with completing tasks than supporting improvements in patient safety in EDs. Though results from Magid et al. were not specific to pain control, these findings do lend to the premise that generally, ED nurses and administrators are lacking a collaborative approach towards improvement of care for ED patients.

Dr. Laurence Savett (2004), a retired primary care internist, shared some opinions about nurse-physician relationships when moderating a conference breakout discussion between a nurse and physician educator. He stated that nurses have the greatest influence on patient care because of time spent with patients and families. Subsequently, nurses and physicians must learn to function as a team. He discussed key elements necessary to improving and sustaining teamwork: communication, trust, honesty, and respect (Savett).

The terms *trust* and *respect* were also emphasized by ED nurses in this study as key criteria for developing a productive and mutually satisfying relationship with the ED doctors with whom they worked. When these characteristics were missing, all aspects of patient care, including pain management, were negatively influenced.

A finding of this study exposed some characteristics voiced by ED nurses involving overall unwillingness to help and support nursing peers with ED patient care. Some interviewed nurses felt younger nurses were lazy and not as committed to their patients or the nursing profession. Others expressed older nurses were callous and uncaring.

Teamwork within the department was affected by these attitudes and beliefs. A consequence specific to lack of teamwork results in "burn out" and nurses leaving EDs to work elsewhere.

Weingarten (2009) wrote an article specifically discussing perceptions that various generations of ED nurses share about teamwork. The four generations discussed in her work involved Veterans, Baby Boomers, Generation X'ers, and Millennials. Her discussion of when "generations collide" is congruent with the general views expressed by ED nurses in this study. For example, Weingarten states when nurses are working in a "toxic environment" stress and unhappiness ultimately lead to nurses leaving the unit and going elsewhere to practice (p. 29). In high stress workplaces such as EDs, this type of work environment can compromise patient care and perpetuate the shortage of experienced ED nurses. Weingarten stresses open dialogue, active objective listening, and refusing to ignore unresolved conflicts as paramount to begin establishing "cohesive" ED working environments.

Within the subcategory of ED doctors and perceived non-cohesiveness, study participants expressed that a barrier to ideal patient pain management is the inability to order analgesic medications. ED nurses are dependent upon physicians for these pain medication orders. Standing orders for narcotic analgesics were nonexistent in EDs included in this study. Even so, most nurse participants did not feel standing orders should exist for narcotics in EDs, and most stated they would not utilize them if they did exist.

Reasons expressed by nurses for this stance were the constant presence of physicians, liability issues, and adverse effects that may arise from their use. A stated concern involved dispensing of pain medications prior to the physician's exam may be considered a form of "prescribing" and beyond the practice role of a registered nurse. This perception may be due to personal, contextual experiences or philosophies of the institution where each nurse is employed. Regardless, this attitude or belief contrasts with recent research initiatives taking place in other geographical locales.

Wong, Rainer, and Ying (2007) completed a study in a Hong Kong ED evaluating a nurse-initiated analgesia protocol for patients presenting with minor musculoskeletal injuries. Typically, these types of injuries experience a longer wait time for medical examination and interventions, though recognized as painful conditions. A pretest/post-test design utilizing a sample size of 196 patients was completed. The findings demonstrated both statistical and clinical significance. Time to analgesia was decreased after initiation of nurse-initiated protocols as well as decreases in pain level expressed by patients. These findings have been supported by other studies in other countries and a few

within the United States (Beel, Mitchiner, Frederiksen, & McCormick, 2000; Fry & Holdgate, 2002; Fry et al., 2004; Kelly, 2000)

A study by Kelly, Brumby, and Barnes (2005) found nurse-initiated analgesia provided pain medication 26 minutes faster when compared to a non-nurse-initiated analgesia protocol. Importantly, neither group experienced adverse side effects. This particular protocol initiated analgesia in treatment areas utilizing intravenous (IV) opioid medications. The researchers stated this type of protocol provided nurses more decision-making responsibilities as well as control for individualizing pain treatment.

If nurse-initiated analgesia gains acceptance in EDs, exposure and knowledge about this one possible solution for improving ED patients' pain may change the opinions of the study ED nurses. Because pain protocols involve more of a team approach between nurses and physicians, an approach one hopes is based on a foundation of trust and mutual respect, ED nurses' perceived non-cohesiveness may improve. Another potential benefit would be a greater sense of control ED nurses may experience regarding the management of individual patient care.

Frustration

The final broad category that emerged from data analysis was a feeling of extreme frustration. Subcategories of frustration involved patient abuse of EDs, complexity of the pain complaint, and unrealistic patient expectations of ED visits. Persistent feelings of frustration were expressed repeatedly in various ways by each and every ED nurse interviewed.

Overall, nurses experienced frustration concerning ED abuse with drug seekers and patients with minor or non-emergent complaints taking up valuable time and space in an

already overcrowded setting. Patients believed to be seeking ED care solely for obtaining narcotics for bogus pain complaints were viewed disdainfully by study participants.

These strong opinions and emotions are consistent with the literature.

A grounded theory study by Morgan (2006) examined perspectives and strategies used by hospitalized substance abusers in attempts to have their pain adequately addressed by health care personnel. The author also utilized a focus group of nurses who worked with the specified population of interest (admitted patients on a medical/surgical unit). Substance abusers described feelings of disrespect for them as human beings and discounting of their needs, fears, and pain by hospital staff. The researcher described a "punitive" attitude and approach by nurses interacting with this patient population. An interesting perspective voiced by one nurse participant was that substance abusers are "rule breakers" and the profession of nursing is one that values and adheres strongly to rules (p. 38). Though this study did not specifically include ED nurses, it is feasible to assume many nurses hold similar beliefs and attitudes.

Semonin-Holleran (2009) discusses the increasing abuse of controlled substances in our present society. This escalation translates into more ED visits from this population. She emphasizes that ED nurses are in the "middle" of an increasingly common problem, and one of the results is a "difficulty to truly care" for these patients (p. 2). Even though drug-seeking behavior appears to be on the rise, Millard (2007) emphasizes chemically dependent individuals account for 10-15% of the overall ED population. Therefore, though this percentage is increasing, it is still a minority. Because perceived drug-seekers elicit such strong negative emotions in ED health care providers, Simonin-Holleran (2009) provides recommendations as possible solutions for these difficult patient

encounters. She advocates improving education on pain and pain management, and the utilization of case managers to work specifically with this patient population.

Abuse of EDs extended to indigent/uninsured patients as well. As reported in the ACEP (2008) report on the status of ED care, the federal government mandates that all persons seeking care in EDs have the right to a medical screening exam regardless of ability to pay for this service. These types of visits are rapidly increasing. Because of the Emergency Medical Treatment and Active Labor Act (EMTALA) and decreasing affordability of health care insurance, EDs are increasingly caring for patients who use the setting as a primary care office. ED nurses in this study described feelings of frustration with this population because of interference of care for patients believed to be in greater need of their attention.

Pain has long been a difficult patient complaint to manage. Pain is complex and aspects of the pain experience have wide variations between persons. ED nurse participants expressed a dichotomy between ideal and actual pain definition and assessment in daily practice. Specifically, ED nurses in this study placed the most value on objective assessments of their patients' pain than patients' subjective reports. "Distrust," "skepticism," and "manipulation," were terms nurses used to describe their feelings and perceptions of why certain patients sought ED care. These findings are congruent with the original literature review presented in Chapter 2 regarding barriers to effective ED pain management.

Observing patients with complaints of pain laughing, eating, talking on the phone, or otherwise engaged in normal everyday activities nullified verbal pain reports according to ED nurses represented in this study. Assessment data corroborating that patients are truly

experiencing pain continues to be limited to physiological parameters involving changes caused by the normal stress response. Examples given of these measurable physiological changes include: hypertension, tachycardia, tachypnea, guarding, lack of movement, and sweating.

Marco, Plewa, Buderer, Hymel, and Cooper (2006) explored the association between a patient's vital signs (heart, respiratory rates, and blood pressure) and self-reported pain scores. The authors found no significant association between the two. The study utilized a sample of 1063 adult patients (> 17 years of age) seeking care from May 2004-April 2005 with confirmed painful conditions (kidney stones, myocardial infarctions, small bowel obstructions, fractures, burns, crush injuries, stab wounds, amputations, corneal abrasions, and dislocations). Though few studies exist that explored this association, results from this study support the premise that to discount patients' subjective pain scores based on objective data is incongruent with evidence-based research. Pain scores might best be used for trending purposes, specifically reevaluation of patients' pain during their hospital stay. After establishment of baseline pain scores, increasing or decreasing scores communicate how well pain is being managed from the patients' perspective. This practice supports a patient-centered care interaction.

Pain literature exists that describes pain as multidimensional and encourages all aspects of the pain experience to be incorporated into the assessment of pain. "A single pain score offers little usable information, providing no context and no baseline for comparisons" (Millard, 2007, p. 482). Silkman (2008) identifies seven pain dimensions that comprise a comprehensive pain assessment. Because of the complexity and individuality of the pain experience, the author recommends each of these dimensions be

a part of each patient's pain assessment. The seven dimensions of pain are: physical (anatomy, prior medical history), sensory (quality and severity of pain), behavioral (verbal and nonverbal responses to pain), sociocultural (culture and social background effects), cognitive (attitudes, beliefs, motivations), affective (emotions, feelings), and spiritual (meaning and purpose attributed to the pain). Silkman explains that in order to understand the personal pain experience of patients, these seven dimensions should be a part of nurses' pain evaluations. The easily observed, outward behaviors are just one recommended parameter for pain assessment.

Nurses interviewed for this research study experienced frustration when patients held unrealistic expectations involving the ED visit and the ability of nurses to independently manage their pain. This subcategory links in part to lack of control by nurses, demonstrating the interrelatedness of the theory categories. Wilson's (2007) study on nurses' knowledge of pain confirms this frustration by ED nurses in regards to the inability to manage patients' pain themselves. The author states that in general, nurses experience mismanagement of patients' pain on a daily basis without effective means to intervene. The lack of autonomy can lead to feelings of low self-efficacy, learned helplessness, and a term coined as *cognitive dissonance* (p. 1018).

Cognitive dissonance might cause nurses to rationalize, deny, or distance themselves from present situations and increase feelings of frustration. In the ED, nurse participants described behaviors of avoidance, lack of patience and overall apathy towards patients in pain - either directly or indirectly. Examples of these behaviors are illustrated by a few quotes from ED nurses included in this study. "You have to develop a thick skin [working in the ED] because people will get angry and people will curse at you. We

avoid physical contact, we keep our three foot space. . ." (Carlie). "Some nurses don't engage. They will go in, start a line [intravenous access], draw labs, hook them [patients] up to the monitor, run a strip, put the chart in the rack, and will not go back into the room unless there is an order" (Bob). Lastly, Fitch stated, "We [ED nurses] see a stranger that was here last week, and is here for the same thing again and you know, I think a lot of times you just don't really care anymore."

Implications of the Study for Nursing Knowledge

Current literature continues to support the fact that pain is the most prevalent patient compliant in EDs (Decosterd, et al., 2007). Because nurses are patients' most important health care advocates and the first people to interact with them, the process nurses use to assess and manage patients' pain and the barriers nurses perceive to doing an effective job are important areas for investigation. Effective changes and improvements in ED patient pain management might be realized from research leading to development of interventions to help nurses working in ED settings with this defined patient population. *Implications for Nursing Education*

Future nurses incorporate and begin to form lifelong behaviors during the educational experience. Effective communication skills, critical thinking, analysis of complex patient conditions, and planning proper care and outcomes are a few mandatory skill-sets formulated in academic settings. These skills are foundational and necessary for nurses to learn and apply in clinical settings.

This study disclosed areas of ineffective communication between ED nurses, their nursing colleagues, managers, and physicians with whom they work on a daily basis.

Poor communication can perpetuate an increasing lack of trust or respect between health

care teams resulting in a sense of non-cohesiveness. Various methods of therapeutic, effective communication are taught throughout nursing curriculums, particularly emphasizing communication with patients and families. More emphasis might be placed on peer and physician communication skills. Scenarios incorporating role-play are productive and insightful methods of teaching effective communication strategies in a non-threatening atmosphere. Combined with reflective logs from actual patient experiences, "true to life" case studies with immediate instructor feedback might be used to enhance and improve communication skills for novice nurses.

Nursing education extends to clinical settings as well. The importance of communicating with patients and families during ED visits is another important finding of this study. When patients' have unrealistic expectations of the ED visit, explaining to them the parameters of care they *can* expect may help both nurses and patients in the long run. In the short run, however, the time it may take to do this with each patient/family is not always available, particularly when EDs are overflowing and staffing is limited.

Despite the obvious hurdles, brief but effective communication, even to a whole room full of people, may reduce some patients' frustration with waiting and the angry outbursts that can result from poor communication.

Davidhizar, Mallory, and McCoy (2009) discuss the art of developing patience in oneself and others. Patients seeking ED care are stressed and need reassurance that their needs will be met. The authors suggest various strategies nurses can use to increase patience in ED patients. Providing accurate and ongoing information are two recommended strategies as they communicate respect and support for patients.

Acknowledgement and explanations for delays should also be discussed. Patients

establish a sense of control when reassured that they have not been forgotten and reasons for delays in their care have been explained. These small, outwardly insignificant actions can make a huge difference to ED patients and influence overall satisfaction with care they receive. In her interview, Carlie stated it best:

They [ED nurses] just need to make contact. Introduce yourself, tell them [patients] who you are and what you are going to do and the last thing you say when you leave that room is 'Is there anything else that I can do for you?' Communication with the patient is a must. It's amazing how that helps the patient and it doesn't require a physician's order.

Another important finding of this study is increased need for education surrounding pain physiology itself. Morgan (2006) recommended that nursing programs, both undergraduate and graduate, spend more time educating students about pain management and substance abuse. Differences between presentation of acute versus chronic pain and the natural physiological responses to each may help in dispelling some of these biases. Learning the subtle but extremely significant differences between true addiction versus tolerance and dependency to narcotic analgesics is also important. Addiction involves a psychological aspect as well as a physiological dependency. Cravings linked to behaviors to obtain the needed drug in any way possible describe addiction. Physical dependency will occur with long term narcotic treatments whereby withdrawal symptoms will occur if the drug is stopped, and tolerance refers to the need to increase the dosage of a medication to achieve desired results of pain relief (Huether & McCance, 2008). This area of knowledge is needed and should evolve into a broader scope of assessment, documentation, and advocating for patients in pain.

Education of ED staff about pain is another recommended intervention. Decosterd et al. (2007) instituted guidelines for managing acute pain in ED patients using an experimental pre/post design in one tertiary-care teaching hospital in Switzerland from April – July 2003. All adult patients (> 16 years of age) with acute or recent pain (< 3 months in duration) were eligible for inclusion in the study. A total of 249 patients were included in the pre-intervention phase and 192 in the post-intervention phase. Two months separated the two phases. During this two-month gap, pain management guidelines were introduced and implemented by ED staff. The authors reported the percentage of patients receiving analysesia post-intervention was 63% compared to 40% pre-intervention. Patient satisfaction with pain management was statistically significant (p < .001) from pre- to post- intervention as well (13% to 69% respectively). Interestingly, frequency of pain assessments by nurses increased but remained unchanged in physicians who took part in the study. Although this study only included one ED and a limited time period of patient sampling, results support an improvement in analgesia delivery, nursing pain assessment, and patient satisfaction with pain management after the education and adoption of specified guidelines for treating acute pain. Implications for Nursing Practice

Findings from this study may have the greatest impact on ED nursing practice.

Increased understanding and knowledge of how ED nurses in NE Florida perceive and are influenced by personal interactions and environmental conditions, and how these effect management of patients' pain were the outcomes of this grounded theory research.

One implication for ED nursing practice is the need for peer support and teambuilding. The need for a cohesive team approach is necessary to begin the process of

reducing stress and frustrations experienced by ED nurses. ED environments demand teamwork to function ideally. Stress is an accepted and expected component of being ED nurses, but when perceptions exist that support, respect, and trust are missing, ED nurses are dissatisfied with practice and some leave the environment altogether.

One method described by Griffin (2008) that might be used to enhance support and decrease ED nursing turnover is establishment of a formal emotional-support mentoring program. Buy-in is the first step in instituting this type of program and begins with leadership and ED nurses themselves. The author recommends training of peer mentors and monthly meetings between support group members. Guest speakers may be invited to speak on various topics that might enhance coping skills and stress reduction. Overall, a caring atmosphere may develop, a sense of belonging and being appreciated, with the realization that ED nurses are more alike than they are different.

Another implication of this study for practice (previously discussed implications for nursing education), involves drug seeking patients in pain and the effect this patient population has on overall attitude and actions of practicing ED nurses. Because EDs offer round-the-clock access to care and this will not change, it is necessary to ensure the health of society as a whole. Patients seeking care in EDs are typically strangers to health care teams. This, combined with limited medical chart access, creates challenges in obtaining information to make sound clinical care decisions. When patients demonstrate behaviors suspect of drug seeking, ED personnel become frustrated and patient encounters can become more adversarial than productive and caring (Millard, 2007).

To address issues of suspected drug seeking in EDs, the Illinois legislature supported an initiative in 2007 to increase monitoring of controlled substances by select health care

providers. This increase in surveillance resulted in the establishment of an online Prescription Monitoring Program (PMP) that allows all Illinois registered pharmacists and emergency physicians immediate online access to patients' controlled substance prescription histories. Since July 2008, 38 states have legislation in place to institute similar PMP's (Pulia, 2008). Users of the programs cite feelings of "empowerment" due to objective evidence of patient controlled substance usage instead of the previous feelings of suspicion, distrust, and frustration. Objective validation of patient drug abuse or lack thereof may positively impact patient and health care providers' interactions with patients and plans for pain management.

Implications for Nursing Research

ED nurses expressed feelings of frustration, being overwhelmed, and a perceived non-cohesiveness among co-workers. The potential impact of these feelings on the overall psyche of ED nurses cannot be overstated. The need for awareness of how these feelings impact nurses personally, and ultimately their ability to care for patients, should be acknowledged and further studied.

In their book *The Nature of Suffering and the Goals of Nursing*, Ferrell and Coyle (2008) state "Providing care for others without caring for oneself is unsustainable" (p. 20). This profound statement emphasizes the need for nurses to practice self-care in order to adequately care for others.

Dr. Jean Watson's Caring Science Institute (WCSI) in conjunction with HeartMath LLC is in the process of establishing National *Caritas* HeartMath Pilot programs to enhance self-caring in nurses. The goal is to teach individual nurses "knowledge, skills, and techniques to practice intentional conscious, heart-centered, *Caritas*-loving

approaches for self and others" (Dr. J. Watson, personal communication, March 18, 2009). The program is based on interactions between the brain and heart and how the two, working together, can shift attitudes to maintain consistent caring practices in stressful situations. Nurses are taught methods to increase awareness of stress as it is being experienced (in the moment) and intentionally shift the focus and energy to one of caring for oneself and one's patients (Dr. J. Watson, personal communication, March 18, 2009).

Presently, one such pilot program is being considered at a NE Florida health care facility to work with currently employed ED nurses. This researcher was invited to be a part of the initial discussions between Dr. Jean Watson, Robert Browning (Director Project Development for HeartMath), the Chief Nursing Officer (CNO), and select nursing leadership of the identified hospital facility. As discussed during the open forum, ED nurses may be in the most need of this type of self-caring intervention because of the high-stress environments in which they work. This researcher was able to add to roundtable discussions by relating some of the study findings.

After the implementation of this program, further research on the impact and desired outcomes of the *Caritas* HeartMath program on nursing retention, turn-over, and patient satisfaction scores would be analyzed. Because of this researcher's interest and grounded-theory findings, Dr. Watson discussed the possibility of this researcher joining the hospital research team after the *Caritas* HeartMath methods were taught to the facility ED nurses (Dr. J. Watson, personal communication, March 18, 2009). Though informal, this discussion with Dr. Watson demonstrated that, though very limited and small in scope, all nursing research has the potential to promote nursing science and to transfer

findings to nursing practice. For this researcher, this realization and confirmation is invaluable.

Implications for Public Policy

Study findings support the fact that ED overcrowding issues impact the quality of care, patient safety, and ultimately, pain management. The ACEP's report (2008) recommends each state's governmental leaders examine their state's report card and actively campaign towards improving identified problem areas. The authors also suggest national health care reform to increase ED resources and reimbursement for services.

Passage of the "Access to Emergency Services Act" is one identified recommendation to meet this goal (ACEP, 2008).

Education of the public as to proper use of community EDs might also be practical. The country is in a crisis related to ED care, with utilization far exceeding availability. With ED closures a fiscal reality, consumers (general public) must be made aware of the monetary drain and refrain from utilizing ED environments strictly for convenience. Additionally, monetary reimbursement for oncall specialists and ED practitioners to sustain and continue with care for indigent/uninsured patients is a part of the federal "Access Act" (H.R 1188, 111th Congress 1st session, 2009).

Florida is one of the remaining states without availability of the PMP for monitoring scheduled drug histories, although legislation to do so is in process. Adoption might greatly improve frustration levels ED health care providers presently experience when interacting with patients suspected of drug seeking behaviors.

Data analysis concerning the impact of ED boarding on overall ED quality of care is suggested. This analysis might result in development of standards and guidelines

regarding this practice. One example might consist of requiring specified nurse-patient ratio numbers, as other hospital areas do, to ensure adequate nursing staff when these types of situations occur. The use of on-call or agency nurses with ED specialization who could be called upon for immediate support might be another resource for alleviating this burden. At a microsystem level, Morgan (2009) recommended institutional polices supportive of delivery of "respectful, competent pain management" by nurses may have a trickle down effect to encourage other institutions to develop similar polices or programs (p. 38). The author notes unless institutional commitment exists and policy changes are established, habitual behaviors of staff who manage patients' pain are unlikely to change.

Strengths and Limitations

All nursing research endeavors, quantitative or qualitative, have specified strengths and limitations. This research study is no exception. The literature supports the fact that oligoanalgesia is a primary shortcoming of EDs in general and ED patients' pain is poorly managed. The purpose of this research was to develop a grounded theory on the process ED nurses use to manage adult ED patients' pain and to increase understanding of how this process impacts on patients' pain treatment. With this knowledge and increased understanding, pragmatic solutions that influence and ultimately improve this interaction may begin to be addressed within this environment. Therefore, a major strength of this research is timeliness considering the current crisis in ED health care and the important role ED nurses have in patient pain management.

Purposive sampling of 15 ED nurses, both male and female, with varying educational levels, experience, ethnicities, ages, and types of ED work settings was used to recruit participants for the study. It is important to obtain a representative sample with multiple

perspectives of the population of interest to increase trustworthiness of research findings (Creswell, 2007). Of the 15 nurses interviewed, six of the 11 area hospitals were represented.

English-speaking ED nurses working at least 24 hours a week in EDs in NE Florida, with one or more years of ED nursing experience and responsibilities of caring for adult patients, were eligible to participate in the study. These criteria were narrow; ED nurses who agreed to participate may have held different views than those who did not. The small geographical location for participation in the study was another obvious study limitation. The ability to generalize findings to ED nurses working in other areas of the United States or foreign countries was a study constraint.

Audiotaped interviews could be viewed as a strength and limitation. Capturing the words of nurse participants with the inflections and embedded conversational nuances provided rich information during data analysis. Knowledge that participants were being taped and the limited amount of time specified for interviews could have influenced the spontaneity of participants' responses.

Another limitation of the study that should be recognized concerns the researcher herself. The researcher is an ED nurse with much knowledge of the culture and topic of interest. Of the 15 nurses interviewed for this study, 66% (10 of the 15) were previously known to the researcher. Although no coercion of any type was used to recruit participants and all freely consented to participate in the study, participants' responses to interview questions may have been unduly influenced by this relationship.

Lastly, this research study was the first for this researcher. Being a novice implies a learning curve in proper procedures, analysis, and final interpretation during the entire

research process. Reliance on the expertise and guidance of her committee members and employing suggested methods for increasing credibility of study findings (peer debriefers and member checks) ought to have, in some part, increased trustworthiness of the study outcomes.

Recommendations for Future Study

To this researcher's knowledge, this is the first grounded theory study specifically exploring the process used by ED nurses when managing adult patients' pain. Because of geographical limitations, this study's basic overarching prompt, "Describe what it is like to manage adult patients' pain in the ED" might be explored in other areas of the United States. A broader understanding of this process may be discovered by including a greater number and more diverse sample of ED nurses. This awareness would further add to nursing's body of knowledge in this specialty area.

This study focused on adult patients with pain, but literature supports pediatric ED patients' pain is ill-managed as well (Campbell, Dennie, Dougherty, Iwaskiw, & Rollo, 2004; Zempsky & Cravero, 2004). Lack of communication and/or language barriers and parental input are a few potential barriers that may influence pediatric versus adult pain management. Because of this, the process pediatric ED nurses use to manage this population is likely to be substantially different from the process investigated in this study, and it warrants further inquiry. Initially, a qualitative perspective, including grounded theory, may be the most useful methodology for this exploration.

One of the goals of grounded theory is to develop a theory that helps to explain a poorly understood human social process. Once developed, the theory could be empirically tested using a quantitative approach. Ideally, qualitative and quantitative

research methods complement one another to enhance nursing science. Relating specifically to this study, once interventions have been developed to address ED nurses' increased frustration, perceived non-cohesiveness and feelings of being overwhelmed, a reexamination of ED nurses' perceptions could be measured qualitatively or quantitatively to note whether or not they improved perceptions.

Conclusions and Summary

Nursing education and the support systems to sustain nurses in practice must surround technical proficiency with human compassion. Nursing care is always performed in relationship with two people: one a caring nurse and another a human in need of support. (Ferrell & Coyle, 2008, p. 9)

Hearing the stories of ED nurses actively working at the bedside and how they manage encounters with adult patients' in pain was fulfilling and extremely enlightening for this researcher. The short-term goal of this grounded theory study was to increase understanding of the process ED nurses use when managing adult patients' pain. This purpose was achieved.

By interviewing 15 ED nurses in NE Florida with varying demographic backgrounds, the overall central core category that emerged from analysis of transcripts identified the ED environment as inconducive to demonstrating caring by nurses when managing adult patients' pain. The three broad categories identified as contributing to this central core category were: overwhelmed, perceived non-cohesiveness, and frustration.

Constant prioritizing of patients, lack of adequate staff (nurses and ancillary) to complete tasks, and a perception of lacking control of ones' practice comprised the category of overwhelmed. ED nurses perceived a sense of non-cohesiveness among

nursing co-workers, management, and ED physicians to adequately and ideally manage pain in the adult patient. Lastly, feelings of frustration were expressed concerning abuse of EDs by drug seeking or non-emergency patients, patients with unrealistic expectations related to the nurses' ability to independently manage their care, and with the complaint of pain itself.

The ED nurses who consented to be interviewed for this study clearly communicated that caring for patients with pain was a very important part of their nursing role. Nurses are present for and with their patients more so than any other health care providers. Patients depend on nurses to be their voice and advocate for them when they cannot, particularly patients seeking care in EDs. They are in critical need of caring, understanding, and support. Caring, at the core of nursing ethics, is demonstrated no more poignantly than when it is focused on the alleviation of patients' pain and suffering. Only by discovering the perceived reality and barriers confronting ED nurses as they attempt to perform this crucial part of their role can practical solutions for addressing this phenomenon begin to be occur.

Betty Ferrell and Nessa Coyle, nurses whose careers have focused on pain and quality of life issues for cancer patients for over 25 years, speak eloquently for the profession: "It is the core of our contract with society and the mandate of our privilege to be nurses. The profession of nursing could benefit from greater emphasis on the relief of pain as a fundamental human right" (Ferrell & Coyle, 2008, p. 52). With this as a foundation, the long-term goal of this research is progress towards improving the effectiveness and timeliness of pain management for adult ED patients. The ED nurse is an active and integral contributor in achieving this goal.

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Appendix A

IRB Approval Letters

Appendix A



OFFICE OF THE PROVOST
INSTITUTIONAL REVIEW BOARD

11300 NE Second Avenue Miami Shores, FL 33161-6695 **phone** 305-899-3020 **toll free** 800-756-6000, ext. 3020

fax 305-899-3026 www.barry.edu

Research with Human Subjects Protocol Review

Date: June 23, 2008

Protocol Number: 080612

Title: A Grounded Theory on the Process Emergency Department Nurses

Utilize When Managing Adult Patient's Pain

Meeting Date: June 18 2008

Name: Cheryl Bergman

Address: Jacksonville University School of Nursing

2800 University Blvd. N. Jacksonville, FL 32211

Sponsor: Dr. Sandra Walsh

School: Nursing

Dear Ms. Bergman:

The members of the Barry University Institutional Review Board (IRB) reviewed your protocol at its convened meeting, on June 18, 2008 and have accepted your proposal pending receipt of the following changes:

- 1. Consent form needs to specify that demographic data completed at time of interview
- 2. State total time involved should be 2 hours and 15 minutes total time.
- 3. Specify actual dates such as: July 1, 2008 through June 30, 2008
- 4. Specify that Dr. Walsh is a member of the IRB
- 5. Specify right to refuse audio-taping or to turn off tape and right not to answer questions.
- Keep tapes separate from consent forms and from coding system until they are destroyed.
- 7. Reference transcription of tapes and 3rd party conference and storage with destruction of tapes and date.
- 8. Provide a list of counseling services available.

All changes must be made to the protocol not the dissertation. Also, the changes must be provided to the IRB office in writing and approved prior to data collection. Please submit 2 copies of the protocol. One copy should have the changes highlighted and numbered and the other copy should be a "clean" copy (no markings).

Regards,

Doreen C. Parkhurst, M.D., FACEP Chair, Institutional Review Board

Assistant Dean, SGMS &

Program Director, PA Program

Barry University

Box SGMS

11300 NE 2 Avenue

Miami Shores, FL 33161

cc: Dr. Sandra Walsh

Note: The investigator will be solely responsible and strictly accountable for any deviation from or failure to follow the research protocol as approved and will hold Barry University harmless from all claims against it arising from said deviation or failure.



OFFICE OF THE PROVOST
INSTITUTIONAL REVIEW BOARD

11300 NE Second Avenue Miami Shores, FL 33161-6695 **phone** 305-899-3020 **toll free** 800-756-6000, ext. 3020

fax 305-899-3026 www.barry.edu

Protocol Review

Date: August 4, 2008

Protocol Number: 080612

Title: A Grounded Theory on the Process Emergency Department Nurses

Research with Human Subjects

Utilize When Managing Adult Patient's Pain

Meeting Date: June 18, 2008

Researcher Name: Cheryl Bergman

Address: Jacksonville University School of Nursing

2800 University Blvd. N. Jacksonville, FL 32211

Faculty Sponsor: Dr. Sandra Walsh

School: Nursing

Dear Ms. Bergman:

On behalf of the Barry University Institutional Review Board (IRB), I have verified that the specific changes requested by the convened IRB on June 18, 2008 have been made. It is the IRB's judgment that the rights and welfare of the individuals who may be asked to participate in this study will be respected; that the proposed research, including the process of obtaining informed consent, will be conducted in a manner consistent with requirements and that the potential benefits to participants and to others warrant the risks participants may choose to incur. You may therefore proceed with data collection.

As principal investigator of this protocol, it is your responsibility to make sure that this study is conducted as approved by the IRB. Any modifications to the protocol or consent form, initiated by you or by the sponsor, will require prior approval, which you may request by completing a protocol modification form.

It is a condition of this approval that you report promptly to the IRB any serious, unanticipated adverse events experienced by participants in the course of this research, whether or not they are directly related to the study protocol. These adverse events include, but may not be limited to, any experience that is fatal or immediately life-

threatening, is permanently disabling, requires (or prolongs) inpatient hospitalization, or is a congenital anomaly cancer or overdose.

The approval granted expires on August 7, 2009. Should you wish to maintain this protocol in an active status beyond that date, you will need to provide the IRB with and IRB Application for Continuing Review (Progress Report) summarizing study results to date. The IRB will request a progress report from you approximately three months before the anniversary date of your current approval.

If you have questions about these procedures, or need any additional assistance from the IRB, please call the IRB point of contact, Mrs. Barbara Cook at (305)899-3020 or send an e-mail to dparkhurst@mail.barry.edu. Finally, please review your professional liability insurance to make sure your coverage includes the activities in this study.

Sincerely,

Doreen C. Parkhurst, M.D., FACEP

Dover C. Gardens

Chair Institutional Review Board

Assistant Dean, SGMS &

Program Director, PA Program

Barry University

Box SGMS

11300 NE 2 Avenue

Miami Shores, FL 33161

cc: Dr. Jo Ann Kleier

Note: The investigator will be solely responsible and strictly accountable for any deviation from or failure to follow the research protocol as approved and will hold Barry University harmless from all claims against it arising from said deviation or failure.

Approved by IRB

Date:

Signature 1

AUG - 4 2008

Barry University
Informed Consent Form

Appendix B

rue C. Quelmet, MO; FAC

Your participation in a research project is requested. The title of the study is "A Grounded Theory on the Process Emergency Department Nurses Utilize When Managing Adult Patients' Pain". The research is being conducted by Cheryl Bergman, MSN, ARNP, CEN, a student in the doctoral program of the nursing department at Barry University, and is seeking information that will be useful in the field of clinical nursing. The aims of the research are to discover the process that emergency nurses use when caring for adult patients with pain and to generate a theory based upon this process. In accordance with these aims, the following procedures will be used: semi-structured, audiotaped individual interviews. We anticipate the number of participants to be a maximum of 30.

If you decide to participate in this research, you will be asked to do the following: agree to an audiotaped individual interview at a mutually agreed upon location for approximately one (1) hour and 15 minutes, with a second meeting, lasting no longer than one (1) hour, to confirm accuracy of transcripts and interpretation. This second meeting may also be audiotaped and could take place in person or if mutually agreed to, by phone or email. At the initial interview, you will also be asked a few questions such as your gender, age, and professional role to be completed by you on a demographic data sheet. The total time commitment for this study is anticipated to be no more than two (2) hours and 15 minutes. Following the initial interview, you will receive a \$10 restaurant gift certificate as a token of appreciation for your time. Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects to you. You have the right to refuse audio-taping or to have the tape turned off at any time during the interview. You also have the right to refuse to answer any question(s).

The risks of involvement in this study are expected to be minimal, however because of the nature of your professional role, the recalling and verbal discussion of situations that involve pain management may evoke feelings of increased anxiety or discomfort during or following the interview. At the conclusion of the first interview a written list of counseling services will be provided to you for follow-up in the event you need it. Utilization of your hospital employee assistance program (EAP) is another option (Appendix E)

Although there are no direct benefits to you, your participation in this study may help our understanding of concepts involved in how ED nurses manage adult patients' pain. The ultimate goal of this research is to develop a theory that will be useful in developing strategies that may lead to the improvement of adult patient pain management in ED settings. Some indirect benefits might include time spent with the researcher and the opportunity to voice personal feelings and beliefs about the topic.

As a research participant, information you provide will be held in confidence to the extent permitted by law. Any published results of the research will refer to group averages only. Quotes from the interview will be cited for illustration purposes only and no participant names will be used in the study. Data will be kept in a locked file in the researcher's office. Audiotaped interviews will have no identifiers of participant's names and be kept separate from consent forms and from the coding system being utilized in this study. A transcriptionist may be hired to transcribe the audiotaped interviews verbatim. The transcriptionist will be required to sign a confidentiality statement prior to their access to the audiotapes. Audiotaped interviews will be destroyed within 24 hours after transcription and confirmation verification of data with audiotape. Your signed consent form and demographic sheet will be kept separate from the data

collection records. All data will be destroyed after three (3) years.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Cheryl Bergman, at (904) 256-7282, my supervisor, Dr. Sandra Walsh, at (305) 899-3810, or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020. If you are satisfied with the information provided and are willing to participate in this research, please signify your consent by signing this consent form.

Voluntary Consent

I acknowledge that I have been informed of the nature and purposes of this study by Cheryl Bergman and that I have read and understand the information presented above, and that I have received a copy of this form for my records. I give my voluntary consent to participate in this study.

Signature of P	articipant	Date		
$\alpha \cdot 11/1$		8/10/		
per su	2 man	719/08	3	
Researcher /		Date /	Witness	Date
(Witness sign	sture is required	l only if research	n involves pregnant wom	en, children, other
vulnerable pop	pulations, or if r	nore than minin	nal risk is present.)	

Appendix C

Transcr	ription Confidentiality Agre	eement
I,a research study entitled "A Grou Nurses Utilize When Managing Bergman, a doctoral student at I confidential information about t indicating my understanding of following:	Adult Patients' Pain", bein Barry University. I underst he study participants. By s	s the Emergency Department ng conducted by Cheryl and that I will have access to signing this statement, I am
 I agree not to divulge persons or to the pubstudy that could iden I understand that all by me in the course of otherwise make know specifically authorize response to applicable need. I understand that I are participants, or any of participants for my of the purpose of performed. I understand that a be action, and may included. I agree to notify my actual breach of confirmation. 	letely confidential. e, publish, or otherwise malplic any information obtained atify the persons who particular information about study particular particular information about study particular information about study particular information and the protocol or court order, of the protocol or court order, of the protocol or court order, of the protocol information are other confidential document own personal information by the protocol or confidential duties of the protocol or confidential ity manual termination of employr supervisor immediately should be a protocol or confidential tymanual termination of employr supervisor immediately should be a protocol or confidential tymanual termination of employr supervisor immediately should be a protocol or court order.	ed in the course of this research cipated in the study articipants obtained or accessed. I agree not to divulge or any of this information unless color by a supervisor acting in or public health or clinical and records concerning study tts, nor ask questions of study ut only to the extent and for on this research project. The grounds for disciplinary ment. The puld I become aware of an ch could potentially result in a
Transcriptionist Signature	Date	Printed Name

Date

Printed Name

Witness Signature

Appendix D

Counseling Services

Baptist Behavioral Health-Outpatient Multiple sites available

Phone: 376-3800

http://community.e-baptisthealth.com/services/psych_care/index.html

Catholic Charities Bureau 134 East Church Street Jacksonville, FL 32202 Phone: 904-354-4846

Counseling Group 943 Cesery Blvd. #G 32211

Phone: 745-3111

Lynnette Kennison, ARNP, MA in counseling 6817 Southpoint Parkway
Suite 304 32216
Phone: 904-296-3113

Frank Palmieri, LCSW 1667 Atlantic Blvd. Jacksonville, FL Phone 904-399-1818

Women's Center of Jacksonville 5644 Colcord Ave. Jacksonville, FL Phone: 904-722-3000

www.womenscenterofjax.org

Beth Wombough, ARNP, LMHC 10175 Fortune Parkway Jacksonville, FL Phone 904-363-6999

Appendix E

Seeking Emergency Nurses

To discuss how emergency nurses manage adult patients' pain.

The study is entitled "A Grounded Theory on the Process Emergency Department Nurses Utilize When Managing Adult Patients' Pain". As part of the study, you will be asked to consent to

- Complete a demographic data sheet about your role in the workplace
- ➤ An audiotaped individual interview lasting approximately one (1) hour that will take place at an agreed upon location.
- A second meeting, lasting no longer than one (1) hour, to confirm accuracy of transcripts and interpretation.

The total time commitment for this study is anticipated to be no more than two (2) hours and 15 minutes. If you are interested in participating in this study, please contact Cheryl Bergman, MSN, ARNP, CEN a doctoral student in the School of Nursing at Barry University at cbergma@ju.edu, or call directly to (904) 256-7282





Appendix F

Initial Interview Guiding Questions

Researcher will say: All comments are confidential. The purpose of our discussion is to explore the process emergency nurses use in the management of patients' pain. So to begin

Please describe what it is like to manage an adult patient's pain in the ED?

Possib	le follow-up questions or statements
1.	How do you assess pain in the adult ED patient?
2.	Describe the goals, if any, for pain management in the ED.
3.	Describe any barriers to pain management in this setting.
4.	What is ideal pain management in the ED setting?
5.	Is pain management in the ED different or unique from other clinical areas? If yes, how is it different?

Appendix G

Demographic Data Sheet

Please co	mplete this	demographic	survey in	order to	obtain	some	general	information	about	you.
Your resp	onses are c	confidential.								

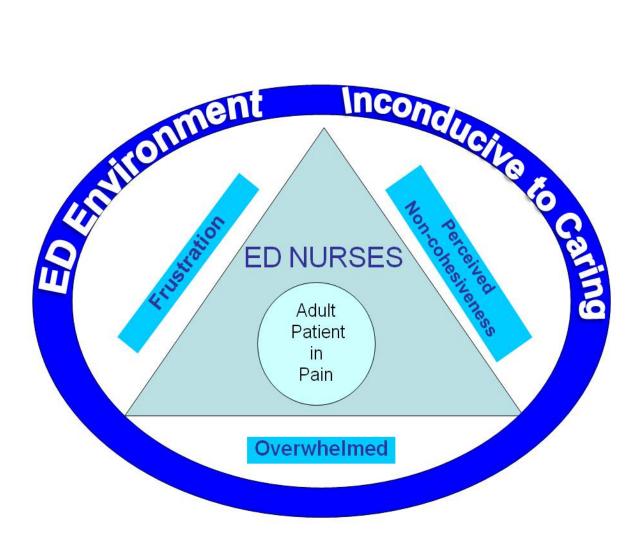
Please write in (where appropriate) or circle the number of your response.

1.	Your age:		
2.	Gender:	1. Female	2. Male
3.	Marital statu 1. Sing 2. Mar 3. Sepa 4. Dive 5. Wid	le ried arated orced	
4.		nnic 1	hnicity?
5.		oma elors Degree	ster's Degree, Ph.D., etc)
5.		ime (minimum o ime (40 hours/w	of 24 hours a week) eek)
7.	1. < 20 2. 20-25 3. 26-30 4. 31-35 5. 36-40 6. 41-45 5. 46-50	years of age	

- 8. Years of ED nursing experience:
 - 1. 1-5 years
 - 2. 6-10 years
 - 3. 11-15 years
 - 4. 16-20 years
 - 5. 21-25 years
 - 6. 26-30 years
 - 7. 31-35 years
 - 8. 36-40 years9. > 40 years
- 9. Type of ED where presently employed. (circle all that apply)
 - 1. Level 1 Trauma center
 - 2. Level 2 Trauma center
 - 3. Level 3 Trauma center
 - 4. Urban
 - 5. Rural
 - 6. University affiliated (teaching hospital)
- 10. What are the ages of the emergency clientele you care for where you work?
 - 1. Pediatrics only (17 or younger)
 - 2. Adults only (18 and older)
 - 3. No separation by ages

Appendix H

Model of the Process Used by the ED Nurse when Managing Adult Patients' Pain



Appendix I

Data Table

Table I. Demographic of Study Participants

Demographic Profile of Participants

	AGE	Gen- der	Eth- nicity	EDU Level	Work Status	Age when obtained RN license	YRS ED Exper- ience	Type of ED	Client- ele
Nurse 1 'Lilly'	29	F	С	BSN	FT	20-25	1-5	Level 1	Peds and adults
Nurse 2 'Fitch'	33	F	С	BSN	PT	26-30	1-5	Level II	Adults only
Nurse 3 'Erin'	24	F	С	BSN	PT	20-25	1-5	Level II	Peds and adults
Nurse 4 JagMike	42	M	С	BSN	FT	41-45	1-5	Urban	Peds and adults
Nurse 5 'Miller'	53	M	С	AS Para- medic	FT	20-25	11-15	Urban	Adults only
Nurse 6 'Lou'	39	M	Hispa nic	BSN	PRN	26-30	11-15	Level 1 and urban	Adults only
Nurse 7 'Carrie'	56	F	С	AA	FT	26-30	31-35	Level III	Peds and adults
Nurse 8 'Sparky'	30	F	С	AA	FT	26-30	1-5	Urban	Peds and adults
Nurse 9 'Bob'	56	F	С	AA	FT	20-25	6-10	Urban	Peds and adults
Nurse 10 'Light- house'	56	F	С	AA	FT	31-35	6-10	Level III	Peds and adult
Nurse 11 'Leoni'	50	M	Asian	BSN	FT	20-25	26-30	Level II	Adults only

Nurse 12 'Cello'	41	M	His panic	AA	FT	31-35	1-5	Level II	Adults only
Nurse 13 Tarheel	34	F	С	BSN	FT	26-30	1-5	Level II	Adults only
Nurse 14 'Carlie'		F	С	AA	FT	41-45	11-15	Level II	Adults only
Nurse 15 'Tristen'	52	F	С	Mas- ters	PT	20-25	6-10	Level II	Adults only

S = single

C = Caucasian

D = divorced

AA = Associate in Arts

AS = Associate in Science

BSN = Bachelors of Science in Nursing

FT = full-time (40 hours or more a week)

PT = part-time (minimum 24 hours a week)

VITAE

October 17, 1958	Born – Tacoma, WA
1981	BSN, University of Kansas Lawrence, KS
1981(July) - 1981(Nov.)	Emergency Room Staff RN, Medical/Surgical and Nursery RN Dale County Hospital, Ozark, AL.
1982-1985	Emergency Department staff Endoscopy Nurse Jennie Stuart Medical Center, Hopkinsville, KY.
1986-1987	EMS Instructor City Colleges of Chicago, Stuttgart Germany.
1989 – 1999	Emergency Department RN Baptist Medical Center, Jacksonville, Fl.
12/1998	MSN, University of Florida Gainesville, FL
1995-2001	Adjunct clinical faculty Jacksonville University Jacksonville, FL
1999-2001	ARNP. Part-time Dr. F. Nadal, Family Practice Jacksonville, FL
2001-present	Assistant Clinical Professor Jacksonville University Jacksonville, FL
2006-present	Undergraduate Director Jacksonville University Jacksonville, FL