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**PARENTAL PRESENCE DURING PAEDIATRIC TRAUMA RESUSCITATION:
HEALTH CARE PROFESSIONALS' ATTITUDES AND BELIEFS**

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Thesis submitted to the
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Abstract

A qualitative study, using interpretive description, was conducted at a tertiary paediatric hospital. Its purpose was to determine attitudes and beliefs of nurses and physicians about parental presence during paediatric trauma resuscitations in the Emergency Department.

Parental presence was believed to have both benefits and problems for patients, parents and the trauma team. Registered nurses and physicians expressed largely similar attitudes and beliefs related to parental presence. These depended heavily on context. Most participants believed presence was appropriate with stable children and when death was imminent. In between these two ends of the continuum, participants had greater variability in their attitudes and beliefs.

Findings provide insight into how health care professionals believe they can deliver the highest quality technical care for the patient while meeting the psychosocial needs of all involved. Relevance of the findings to family centred-care is discussed. Implications for nursing practice, education and research are identified.

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This thesis is dedicated to the paediatric trauma patients and their families that I have had the honour of working with over the past 3 ½ years. Over and over again, you have taught me the true meaning of strength and the awesome power of love. I have been privileged to know each of you and this work should be considered a mark of my respect and commitment.

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ABSTRACT

Over the past several decades, health care has been moving towards models of partnerships with patients and families and collaborative caring. The concept of having family members remain present during invasive procedures and resuscitative efforts has received attention from both health care professionals and the lay public.

A qualitative study, using interpretive description, was conducted at a tertiary paediatric health centre. The purpose of the study was to determine attitudes and beliefs of health care professionals related to parental presence during paediatric trauma resuscitations in the Emergency Department. Fourteen health care professionals, seven registered nurses and seven Trauma Team Leader physicians, participated in the study. Data were collected using semi-structured interviews.

Registered nurse and physician participants expressed largely similar attitudes and beliefs related to parental presence. Data analysis revealed that health care professionals' attitudes and beliefs were tightly linked to context and could change depending on that context. Participants all approached this issue along a continuum of severity of the trauma patient's condition. Most participants believed that parental presence was desirable with conscious, stable children and acceptable when a child's death was imminent. In between these two ends of the continuum, with the child in extremis, participants had the greatest variability in their attitudes and beliefs. Additionally, there were many myths associated with the practice of parental presence. Health care professionals tended to limit presence based on concerns that they acknowledged were not borne out in actuality. Parental presence was seen to have both benefits and problems for the patient, the parents and the trauma team.

Findings from this thesis research provide insight into how health care professionals believe they can deliver the highest quality of clinical care for the patient while attending to the important psychosocial needs of all involved. Relevance of the findings related to family centred-care is discussed. Implications for nursing practice, education and research are identified.

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Some years ago, an Ottawa television station aired a piece about family presence during resuscitation at a local hospital Emergency Department. The story told of a mother whose child was involved in a traumatic event and was brought to the closest, non-paediatric Emergency Department for initial stabilization and treatment of his many complex injuries. The mother was allowed to remain present with her son throughout his care at the adult hospital. The child was later transferred to the Children's Hospital of Eastern Ontario (CHEO) where the mother was ushered to a quiet room, separated from her child. The boy later died as a result of his injuries and at the time of the interview for the television story, several years later, the mother was still obviously distraught at having been separated from him upon his arrival to CHEO, losing the chance to spend last precious moments with him.

As a staff nurse in the Emergency Department when this story aired on television, I was upset and believed that we had clearly failed to meet this parent's needs. This experience happened long before I was a Masters student but it left a lasting impression on me.

It has led me, through time and reflection, to this research study.

CHAPTER ONE: INTRODUCTION

The Problem

Traumatic injury is the leading cause of death in children and youth under the age of 20 and the second most frequent cause of hospitalization in children in Canada (Beaulne, 1997). Children and youth who suffer severe traumatic injuries are often subject to multiple invasive procedures and complex resuscitative efforts in the Emergency Department (ED). In recent years, the ethics and inherent value associated with the practice of automatically excluding parents during this critical time has begun to be questioned.

In Canada, parental presence practices during paediatric trauma resuscitation vary significantly amongst EDs. Most Canadian paediatric hospitals do not have clear, written policies regarding the issue. However, The Hospital for Sick Children in Toronto is currently

developing a formal policy (personal communication, July 2003). Many Canadian hospitals have 'unwritten rules' about parents' presence during resuscitation based largely on the culture, mission and collective past experiences of individuals working in the ED. Many deal with the issue on an individual, case by case basis (TraumaCanada listserve, personal communication, February 2000). The clinical impact of having varied practice associated with parental presence is best illustrated in the personal experience recounted in the preamble to this chapter. I have come to believe that this inconsistency in practice represents differences in attitudes and beliefs related to parental presence during trauma resuscitation among health care professionals. These varying attitudes and beliefs, as well as the paucity of research available on the subject, makes this a potentially rich area for study.

As Coordinator of the Trauma Program, I noticed great variability in my nursing and physician colleagues' practice of parental presence during trauma resuscitations. At CHEO, there had also been some informal demand for practice recommendations or guidelines relating to parental presence during trauma resuscitations in the ED. Two occurrences highlighted for me this need and are offered here as examples.

The first occurred in the spring of 2001 and was a case in which parents were unwilling to leave and remained present throughout a lengthy and complex trauma resuscitation conducted on their young child. At a formal debriefing immediately after the case, staff raised the issue of parental presence throughout the resuscitation. The staff's response to parental presence in this particular instance was obviously polarized. Some staff were open and accepting; others were closed and rejecting. The parents later expressed to nurses in the Paediatric Intensive Care Unit (PICU), in my presence, how important it was for them to remain present, how it helped them to feel a part of the situation and that they were grateful that the team had allowed them to stay.

Staff remained unconvinced and unsure about how they would handle a similar situation when it arose again. The second occasion occurred during a mock trauma code exercise presented as a media event. Members of the media questioned the team after the exercise as to what role the parents would have played in a real life scenario. No one could offer a definite, standard answer to this question. These two examples illustrate that parental presence during trauma resuscitations is a subject of current concern at CHEO.

Study Objective and Research Question

The objective of the research study was:

To describe attitudes and beliefs of Emergency Department registered nurses and Trauma Team Leader physicians in a Canadian, paediatric hospital related to parental presence during trauma resuscitation (trauma codes).

The research question for the study was:

What are attitudes and beliefs of Emergency Department registered nurses and Trauma Team Leader physicians regarding parental presence during trauma resuscitations (trauma codes) in the Emergency Department?

Definition of Terms

Some explanation of key terms is needed before proceeding. For the purposes of this research, a parent was defined as any primary caregiver in a child or youth's life, whether it be a mother, father or other adult parent figure, related by blood or not. Parental presence was defined as the presence of this individual in whatever the patient care setting (i.e., in the field, at home or in the Resuscitation Room), in such a location as to have visual and/or physical contact with the patient during invasive procedures and/or resuscitation. The term health care

professional generally means an individual with special expertise and knowledge in the provision of health care services. However, for this study, a health care professional referred to either a registered nurse or a physician functioning in the specific role of Trauma Team Leader (TTL). These two groups have the most influence over the decision whether parents are present and are the most consistent care providers during trauma codes. Often social workers, child life specialists or members of the pastoral care team are involved with parental presence and may have a potentially important impact, but at the time of the study they were not consistent, around-the-clock members of the trauma team.

Trauma was defined as any injury to body tissues and organs as a result of a transfer of energy. This energy may be mechanical or kinetic, thermal, chemical, electrical or radiant (Emergency Nurses Association, 2000). A trauma resuscitation was defined as a sequence of events, including emergent assessments and complex invasive procedures that are carried out to preserve or sustain life following a traumatic injury. At CHEO, this phase of care is commonly called a *trauma code*. The term *trauma resuscitation* will be used interchangeably with the term *trauma code* throughout this thesis. The procedures and personnel associated with trauma codes will be further described in the following section, entitled *Trauma Codes in the Emergency Department*.

This study aimed to describe health care professionals' attitudes and beliefs. It is therefore imperative to provide a rudimentary definition of both of these complicated constructs as they were applied in this study. An attitude was defined as a 'learned cognitive, affective and behavioural predisposition to respond positively or negatively to certain objects, situations, institutions, concepts or persons' (Aiken, 2002, p.3). Attitudes, in other words, are an individual's way of thinking, acting and feeling. They are developed over time and have an

impact on behaviour and decision making. A belief was defined as the “confidence in the truth or existence of something that is not immediately susceptible to rigorous proof” (Aiken, 2002, p. 6). Attitudes and beliefs are tightly linked. Rokeach (1970) described the relationship between attitudes and beliefs in his definition of attitudes as “a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner” (Rokeach, 1970, p. 112). Therefore, as an attitude is accepted to be an organization of beliefs, for the purposes of this study, it was necessary to consider both attitudes and beliefs as a linked construct. In the findings and discussion sections of this thesis, no definitive attempt was made to separate or define an individual’s beliefs apart from her/his attitudes. They are, instead, described and presented together.

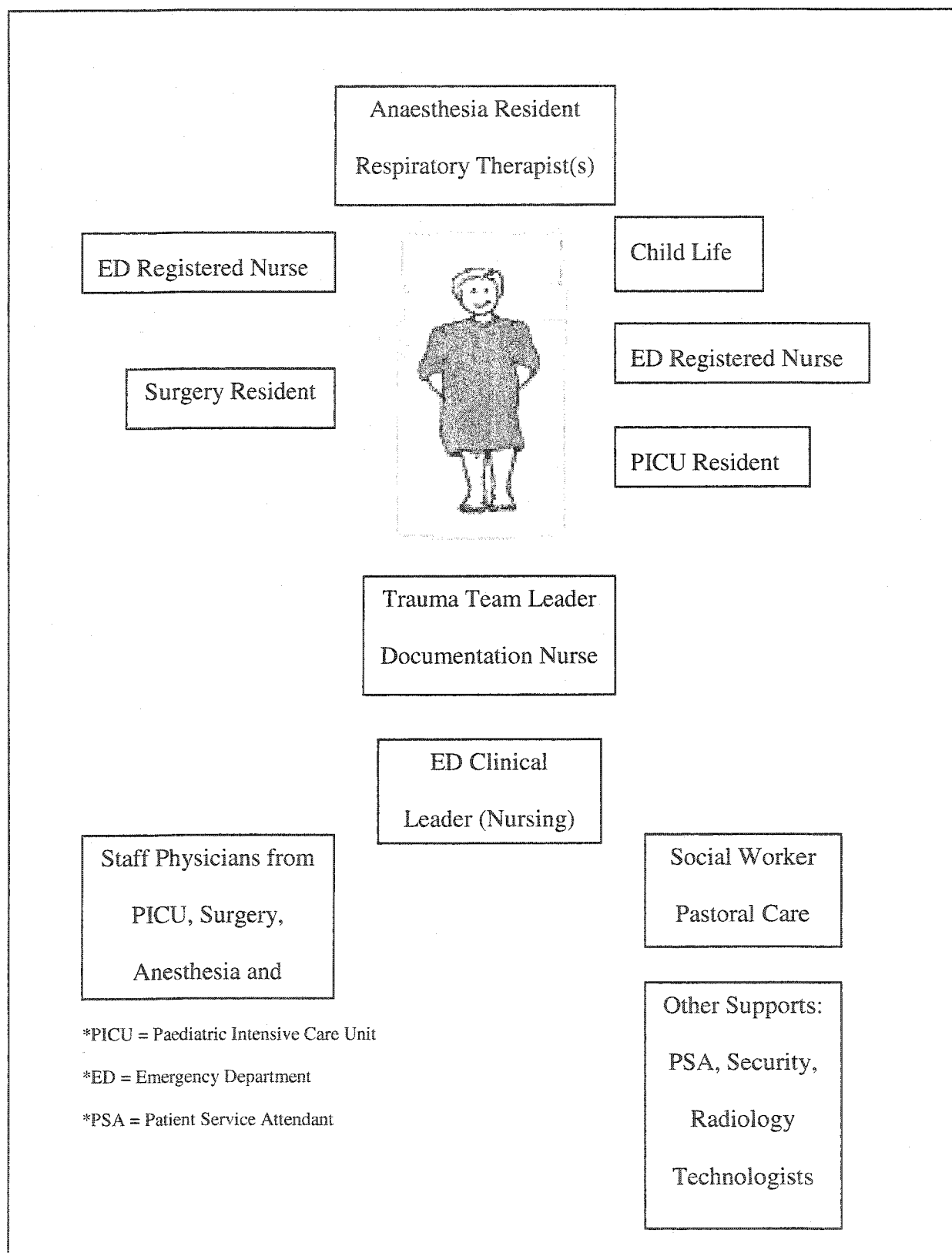
Trauma Codes in the Emergency Department

In order to understand the relevance of the problem and the study design, the reader requires a basic understanding of the current clinical practices related to trauma resuscitations at CHEO. CHEO was designated and therefore funded as a provincial Lead Trauma Hospital by the Ministry of Health and Long Term Care in January, 2000. As a Lead Trauma Hospital, one of the main responsibilities is to ensure that a specialized trauma team is always available, 24 hours per day, 365 days per year, to care for trauma patients in the ED. The arrival of a child who requires emergent medical assessment and interventions as a result of a major traumatic event results in the activation of this trauma team, in other words, the initiating or calling of a “trauma code”.

When a trauma code is initiated, the team, comprised of physicians (both staff and residents), registered nurses and allied health team members including respiratory therapists, patient service attendants, and others as needed, assembles in the Resuscitation Room of the ED

to manage the care of the trauma patients. The physician team membership is made up of the on-call Trauma Team Leader physician as well as residents from the subspecialties of Intensive Care Medicine, Surgery and Anaesthesia. The team may include social workers, child life specialists or a pastoral care worker depending on the time of day that the trauma code is initiated. For instance, social workers are available in-house to respond to trauma codes only Monday to Friday during the daytime. Child life specialists are available within the ED for a wider range of shifts including evenings and weekends but do not work over night. CHEO's large team and a representation of their potential physical positions during a trauma code can be found below (Figure 1).

Figure 1: CHEO Trauma Team



This team is responsible for the complete evaluation and all ED treatment of the major trauma patient. At CHEO, resuscitation of paediatric trauma patients follows a trauma team approach that is taught in courses such as *Basic Trauma Life Support*®, *Trauma Nursing Core Course (TNCC)*® and *Advanced Trauma Life Support for Physicians (ATLS)*®. This approach, which will be described in further detail in Chapter Five, in the section entitled *Introduction to Findings*, consists of multiple steps that make up a primary and secondary assessment. The trauma team model of resuscitative care delivery provides a standardized approach to trauma care in the ED. It is based on evidence that appropriate and timely care significantly improves trauma patient outcomes (American College of Surgeons, 1997).

Relevance of the Study

Paediatric traumatic injury remains a significant problem in Canada. More than 300 children and youth under the age of fifteen years were killed in Ontario alone in the fiscal year 1998 and another 7,116 were hospitalized due to traumatic injury (Canadian Institute for Health Information, 2000). In 2001, traumatic injury in children and youth accounted for 94,167 ED visits nationwide (Canadian Hospitals Injury Reporting and Prevention Program, 2001). Consequently, the issue of parental presence during resuscitation presents itself in some form or another nearly every day at every paediatric tertiary hospital across this country.

Typically, research to elicit feedback regarding health care professionals' attitudes and beliefs about family presence has not been paediatric based. Paediatric healthcare generally espouses a family-centred approach to care (Hutchfield, 1999) and it is entirely possible that attitudes and beliefs of paediatric health care professionals may be different from those expressed by professionals caring for adult patients.

A majority of the published research located on this subject originates in the United States with some research conducted in the United Kingdom and Australia. We know that the health care system in Canada differs significantly from that of other countries. For example, professionals' concerns about the legal risks associated with allowing family presence in the American health care system (Brown, 1989) may exist in different measure in Canada. Therefore, it seems reasonable to suspect that certain aspects of the issue of parental presence, which may be context-dependent, will be different in Canada as compared to other countries. A more complete understanding of the uniquely Canadian perspective of this issue is needed to guide appropriate practice in Canada.

The issue of family presence in critical care areas, during procedures, invasive procedures and to a lesser degree, resuscitation has been studied from the diverse perspectives of the family, of the patient and of the staff (Bauchner, 1991; Bauchner, Vinci, Bak, Pearson & Corwin, 1996; Bauchner, Vinci & Pearson, 1993; Bauchner, Vinci & Waring, 1989; Bauchner, Waring & Vinci, 1991; Boie, Moore, Brummett & Nelson, 1999; Eichhorn, Meyers, Guzzetta, Clark, Klein, Taliaferro & Calvin, 2001; Haimi-Cohen, Amir, Harel, Straussberg & Varsano, 1996; Helmer, Smith, Dort, Shapiro & Katan, 2000; Jarvis, 1998; Jefferson, 1998; Meyers, Eichhorn & Guzzetta, 1998; Meyers, Eichhorn, Guzzetta, Clark, Klein, Taliaferro & Calvin, 2000; Powers, & Rubenstein, 1999; Sacchetti, Carraccio, Leva, Harris & Lichenstein, 2000; Sacchetti, Lichenstein, Carraccio & Harris, 1996; Timmermans, 1997). Health care professionals are the gatekeepers who control whether or not families are ever offered the option to be present. It is therefore important to fully understand both their professional and personal perspectives. With the increased focus and study on family presence published in American health literature, it has

been suggested that staff attitudes are one of the major barriers to family presence practices (Oliver & Fruth, 2000).

Trauma teams function most effectively and smoothly through collaborative efforts and teamwork (Sheehy, 1992). A recent American study discovered significant differences in opinions between physicians and nurses related to family presence during adult trauma resuscitations (Helmer, Smith, Dort, Shapiro & Katan, 2000). That study was initiated in response to the *Family Presence Guidelines* (Appendix A) endorsed by the American Emergency Nurses' Association (ENA) in a position statement. The researchers concluded that setting policies following the ENA's *Family Presence Guidelines* without full consideration of all trauma team members' views could be detrimental to team function and ultimately jeopardize patient care. In light of this conclusion, a clearer understanding regarding paediatric health care professionals' attitudes and beliefs is necessary before any practice change in the paediatric emergency department setting can be recommended. It is for this reason that this study focused on the attitudes and beliefs of both registered nurses *and* physicians.

As mentioned above, in 1995, ENA in the United States passed a resolution and created a position statement in favour of family presence during invasive procedures and resuscitation (Appendix A). Following the position statement came a resource manual entitled, *Presenting the Option for Family Presence* (1995). The manual includes recommendations for developing and implementing family presence programs and an educational offering complete with slides and a teaching guide. Fundamental to the program is the underlying belief that emergency nurses have a responsibility to care for the patient's physical and psychosocial needs as an individual and as a part of a family unit. ENA's program stresses that holistic care of patient and family is a hallmark of quality. Then, in 2000, The American Heart Association, as part of an international

consensus group, published its revised guidelines for resuscitation (American Heart Association, 2000). For the first time, family presence during paediatric resuscitation received a positive recommendation. At the time of the revisions, the Association did not feel that there was sufficient evidence to include this recommendation as part of the adult resuscitation guideline changes and they called for more research in this area. The evolution to supporting family presence during resuscitation by both of these national organizations, expressed in such fundamental documents is perhaps the strongest indicator of the current importance and relevance of this issue to health care professionals.

Outside of the health care world, television dramas such as *ER* and numerous reality television series such as *Trauma: Life in the ER* continue to make health care consumers, the general public, more aware of this issue. Nightly, as people watch television, they are confronted with graphic images of severely traumatized patients, invasive procedures and resuscitations and distraught family members being ushered away from their loved one. Family presence has also received general media attention in items on television news shows (Duthie, 1997) and stories in popular magazines like *USA Today* (Davis, 2000) and *Time Magazine* (Saunders, 2000). Many web sites (e.g., www.trauma.org/nurse/witness and www.nurseweek.com) that are easily accessible by the lay public have recent articles and discussion groups pertaining to family presence.

This is an issue that requires closer investigation as parents become more knowledgeable and assertive and may no longer simply acquiesce to health care professionals' requests for them to wait outside the Resuscitation Room doors. Traditionally, family presence practices have left one of the involved parties feeling that their needs have been compromised. EDs that treat

children must start to consider how best to meet the needs of all – their child patients, their families and the health care team.

CHAPTER TWO: LITERATURE REVIEW

A review of the literature was carried out using the web-based search system, Polaris, prior to designing and conducting this study. The study's research methodology followed an approach called interpretive description, a nursing-specific, qualitative method developed by Canadian nurse researchers, Thorne, Kirkham and MacDonald-Emes (1997). According to Thorne et al., it is both appropriate and necessary to conduct a preliminary review of the literature before embarking on this type of research. Accordingly, they suggest that "nursing's interpretive description ought to be located within the existing knowledge so that findings can be constructed on the basis of thoughtful linkages to the work of others in the field" (Thorne et al., 1997, p. 173). In an aim to fulfil this aspect of the interpretive description method, only relevant literature related to family or parental presence has been included in this review. Supplemental literature pertaining directly to the findings will be presented in Chapter Five as a part of the discussion.

I attempted to locate research literature with both an adult and paediatric focus pertaining to family or parental presence. Databases searched included Medline, PreMedline and the Cumulative Index to Nursing and Allied Health Literature (CINAHL). The key words *family presence* and *parental presence* were initially searched independently. The next step in my search strategy involved combining the key words *family* and *parents* with each of the key words *emergency department*, *trauma resuscitation*, *resuscitation*, *invasive procedures* and *critical care*. Other key words included *family nursing* combined with each of the key words *critical care* and *emergency nursing*. I limited the search to articles written in English or French and did not set any date limits. I chose not to include two relevant studies that had only been published in abstract form.

Most of the research conducted in an ED setting, whether adult or paediatric, can be divided according to its focus on presence during resuscitation or presence during invasive procedures. This review is therefore organized accordingly. An important trend to note is that published studies in adult settings have focused mainly on family presence during resuscitation while studies in paediatric emergency settings have focused largely on parental presence during both simple and invasive procedures, with minimal work to date on parental presence during resuscitation. A brief review of key parental presence research conducted in other clinical settings is also included.

In the course of reviewing the research literature, many discussion papers, review articles, commentaries and editorials relating to the subject of study were also located. They are included briefly in this review. A closing summary presents key findings and gaps identified in the literature.

Introduction to Family and Parental Presence Literature

The family presence movement began in earnest in the 1980s and the bulk of the research pertaining to this often controversial issue has been conducted since that time. Early focus had been mainly on parental presence during dental procedures (Frankl, Shiere & Fogels, 1962), during induction of anaesthesia (Glasper & Dewar, 1987; Kain, Mayes, Caramico, Silver, Spieker, Nygren, Anderson & Rimar, 1996; Daniels & Visram, 2002; Kain, Caldwell-Andrews, Mayes, Wang, Krivutza & LoDolce, 2003) and in the peri-operative period in general (Dew, Bushong & Crumrine, 1977; Hall, Payne, Stack & Stokes, 1995; Munro & D'Errico, 2000). Also, parental presence during burn wound care (Doctor, 1994; Foertsch, O'Hara, Stoddard & Kealey, 1996) and during procedures done in an in-patient or children's ward setting (Merritt,

Sargent & Osborn, 1990; Pejaver & Russell, 1995) have been studied. Recently, focus has begun to shift towards the presence of families in critical care areas, such as the ED and the ICU.

Previous study methods for research questions regarding family and parental presence during procedures, invasive procedures and resuscitation have been predominantly survey methodology. Many of the survey studies have major limitations that will be discussed further. Five quasi-experimental studies with randomization and controls (Bassler, 1999; Bauchner et al., 1996; Bauchner et al., 1993; Wolfram & Turner, 1996; Wolfram, Turner & Philput, 1997) were located in the published literature. Three qualitative studies (Eichhorn et al., 2001; Jefferson, 2001; Timmermans, 1997) were also found and are included in this review.

Early work on family presence during invasive procedures and resuscitation was conducted in the United States but interest gradually spread internationally to include studies from Israel (Haimi-Cohen et al., 1996), the United Kingdom (Jarvis, 1998; Offord, 1998) and Australia (Redley & Hood, 1996). One Canadian opinion paper (Rosenczweig, 1998) exists regarding ethical issues and practical considerations of allowing relatives to witness resuscitation. As well, there is one Canadian qualitative study (Jefferson, 2001) focusing on what factors influence health care professionals' decision making around parental presence during invasive procedures in the Paediatric Intensive Care Unit (PICU). Besides this one study, to date, no other published Canadian research was found.

Family Presence during Resuscitation

As mentioned earlier, the majority of work completed on presence during resuscitation has been conducted in the adult ED setting and focuses on family member presence, that is most often spouses or adult children. Only two studies were located that focused on paediatric resuscitations in the ED. Although there are obviously many differences between caring for

adult and paediatric patients, my preliminary review of the literature revealed that the issue of family presence in both populations was found to elicit similar responses from staff and family members. For this reason, I opted to include a rather substantial review of family presence in the adult ED setting.

Clearly, the issue of family presence during resuscitation impacts on three groups with unique perspectives, the family member, the patient and the health care team. This part of the literature review is divided into studies that focus on family members' perspectives, followed by studies that focus on health care professionals, studies whose participants were drawn from both groups and finally the patient's perspective.

Studying Family Members' Perspectives

Three reported studies (Doyle, Post, Burney, Maino, Keefe & Rhee, 1987; Meyers et al., 1998; Robinson, Mackenzie-Ross, Campbell Hewson, Egleston & Prevost, 1998) examined family presence during resuscitation solely from the perspective of the family members. The work of Doyle et al. (1987) and later a complementary paper by Hanson & Strauser (1992) was based at Foote Hospital in Jackson, Michigan, USA. Following two separate incidents where family members insisted on remaining present during the resuscitation of their loved one, Foote Hospital started a program of planned family participation in resuscitation. This program, introduced more than twenty years ago, appears to be the first hospital program developed to implement standardized family presence practices in the ED. Doyle et al. (1987) mailed questionnaires to 70 family members who had attended the unsuccessful resuscitation of a loved one. Forty-seven family members (67%) returned surveys, a fair response rate according to Dillman (2000). Almost all (94%) of the family members surveyed indicated that they would want to be present in a similar situation in the future; 76% indicated that they believed the

grieving process was facilitated by their being present; and 64% of respondents believed that their presence was beneficial to the dying family member. One potential bias in this study was the fact that they only asked those family members who had attended a resuscitation to complete a questionnaire. They did not survey anyone who had decided not to be present during their loved one's resuscitation. Other limitations include lack of reported details about the survey instrument and its development.

Although reported more as a clinical article than as a formal research report, the study by Hanson and Strawser (1992) found that during the nine years of experience with the program at Foote Hospital, on no occasion did family members interfere in the resuscitation.

Meyers et al. (1998) also used survey methodology to answer the research question, *do families want to be present during CPR?* In 1998, they administered a telephone questionnaire to 25 family members of patients who had undergone cardiopulmonary resuscitation (CPR) and died in the ED. In this study, none of the respondents had been present during the resuscitation of their loved one and most (96%) of the respondents believed that families should have been offered the option to be present. A large number (80%) reported that they would have wished to be present had they been given the choice. A limitation of the method included the timing of the telephone interviews with some respondents being contacted 8 weeks following the event and others not being reached until 15 months later. Although this was a small study (n=25) and it was not possible to determine a response rate due to insufficient data reported, it does appear to complement the finding of Doyle et al. (1987) that a large number of family members wish to be present during resuscitation.

Barratt and Wallis (1998) conducted a small survey of the family members of patients who had recently died after an unsuccessful resuscitation attempt. They found that most family

members (89%) had not been asked if they would like to be present in the Resuscitation Room and many (69%) would have liked to have been offered, even if they might not all have accepted. This study also found that absent family members had huge misconceptions about what actually happened during a resuscitation.

The final report related to the family's perspective of family presence during resuscitation in an adult ED setting is the work of Robinson et al. (1998). In this pilot study, family members of patients undergoing either medical or trauma resuscitation were randomized into two groups. One group (n=13) were given the option to remain present and the control group (n=12) were not given this option and were taken to a family room while their relative was being resuscitated. The study aimed to determine i) whether family members wanted to be present and ii) whether this presence had any adverse psychological effect on bereaved relatives. Once again in this study, most family members (85%) who were given the option to remain present wished to do so. The study found that all family members who had remained present were happy with this decision after the fact and that none of them were frightened or had asked to leave the resuscitation. Most family members (88%) believed that being present had facilitated their individual grieving processes. None of the family members in this study suffered any adverse psychological effects by witnessing the unsuccessful resuscitation of their loved one. Moreover, family members who had witnessed a resuscitation had less post-traumatic stress and symptoms of dysfunctional grief when compared to the control group who had not remained present. Although the sample size is small, this is a methodologically strong pilot study and can be accepted as beginning to challenge the routine exclusion of family members who wish to be present as a best practice in the ED.

Studying Health Care Professionals' Perspectives

The majority of research to examine family member presence during resuscitation in the ED has been conducted from the perspective of the health care professional. Only two paediatric studies were located that focused on parental presence during resuscitation (O'Brien, Creamer, Hill & Welham, 2002; Sacchetti et al., 2000) and both of these studied the issue from the perspective of the health care team.

A small survey conducted by Back and Rooke (1994) supported the idea that family members should be given the option to be present if appropriate support for the family member was available. They also concluded that health care professionals in this adult ED were more open to presence during paediatric resuscitations than adult resuscitations.

Both of the survey studies by Redley and Hood (1996) and Helmer et al. (2000) found that in general, nurses were more open to giving families the option to be present than physicians. The study by Redley and Hood (1996) also identified major staff concerns that included offending the family members, increasing emotional stress for staff, family members becoming disruptive and interfering with treatment and increasing the risk of subsequent legal actions by the family. A major strength of this survey was its high response rate of 83%. Limitations included the lack of reporting regarding sample characteristics, validity and reliability of the survey instrument, or statistical tests of comparisons between the nurse and physician responses.

The largest survey on family presence during resuscitation was conducted by Helmer et al. (2000). They surveyed more than 1,200 nurse members of the Emergency Nurses' Association (ENA) and 368 physician members of the American Association for the Surgery of Trauma regarding family presence during trauma resuscitation. Almost every item included in

the survey by Helmer et al. (2000) showed a significant difference between these two groups. Although neither group believed it was appropriate for family members to be present during all resuscitative procedures, nurses were more likely to include family in a greater range of procedures. In general, surgeons believed that family presence interfered with the care of the patient and increased trauma team member stress. A significantly greater number of nurses had had positive experiences with family presence as compared with the surgeons and more nurses reported being asked by family members if they could remain present. Limitations of the study include a potential sampling bias with a response rate of 43%. No explanation is offered in the report for why the response might have been low. There is no discussion about how the survey instrument was developed or tested for reliability and validity. Although this study had some clear limitations, this did not prevent the authors from publishing some very strong conclusions. From the contentious discussion that arose when this work was first presented as a paper and in letters following its publication, it could be suggested that this study may have been politically motivated. The study's findings countered the activities of ENA who, at the time, were actively promoting family presence during resuscitation, a practice change largely unsupported by surgeons in this study. This was the only study located in the literature that focused exclusively on family presence and trauma resuscitations.

The only qualitative study regarding health care professionals' perspective on family presence during resuscitation in adult care settings used Spradley's technique of domain analysis to determine if staff could be divided into distinct groups characterized by their beliefs. Timmermans (1997) interviewed 57 health care providers from varied disciplines using 15 open-ended, semi-structured questions. The data were analysed following a grounded theory approach. Staff were found to fit into one of three resuscitative perspectives. Those who

subscribed to a survival perspective held that the only goal of resuscitation is to save a life and that the uninterrupted flow of the resuscitative care was most important. The bifurcated perspective had two separate goals, besides saving a life, the second goal of meeting family needs was held to be important. In the holistic perspective, “survival of the patient remains central, as does the goal of informing and dealing with relatives” (Timmermans, 1997, p. 157). Staff who subscribed to the holistic perspective viewed family as more active participants in the process than those holding a bifurcated resuscitative perspective. This is a methodologically strong study but unfortunately it did not describe what disciplines subscribed most frequently to each of the three resuscitative perspectives, which would have been extremely relevant for this thesis research.

The most recent study to focus on health care professionals’ perspectives on family presence was published by MacLean, Guzzetta, White, Fontaine, Eichorn, Meyers & Désy (2003). The study’s objective was to describe the policies, preferences and practices of nurses working in both intensive care and emergency care settings related to family presence during resuscitation. Questionnaires were mailed to a random sample of members of both the American Association of Critical-Care Nurses and the ENA. The study had a response rate of 33%. The study found that most respondents were working in areas that had no formal, written policy related to presence while approximately half of these units allowed it as an informal practice. Most critical care and emergency nurses in the study supported family presence and many had taken or would take family members to the bedside during resuscitation or invasive procedures despite the absence of a formal family presence policy. The main recommendation of this study was that hospitals should consider the implementation of written policies or guidelines for family presence during resuscitation and invasive procedures.

The only quasi-experimental study in this group of research focussing on health care professionals' perspectives concluded that nurses' beliefs about family presence during resuscitation could be significantly changed following an educational intervention (Bassler, 1999). Prior to an educational class, 56% of nurses reported that they were in favour of allowing family presence compared with 89% after the class. This finding suggests that negative attitudes about family presence may be a factor of a knowledge deficit related to the issue and can be changed with education.

There is a relative dearth of studies pertaining to parental presence during paediatric resuscitations. The only two that were located were both studied from the perspective of the health care professionals. Sacchetti et al. (2000) investigated the effects of personal experience on emergency health care professionals' acceptance of parental presence. They concluded that above all other factors, including years of experience in the emergency care of children, health care professionals with past experience with parental presence were significantly more likely to favour the practice than those with no prior experience.

In another study, 245 military and civilian paediatricians, registered nurses and residents were surveyed on their personal views (O'Brien et al., 2002). The results of this study indicate that a large number of paediatricians surveyed were still uncomfortable with the practice of parental presence during resuscitation. They linked greater tolerance of the practice to more frequent contact with critically ill child patients and, similar to the findings of Sacchetti et al. (2000), to past exposure to parental presence.

Studying the Perspectives of Both Families and Health Care Professionals

One study found in the adult literature examined both family perspectives and health care professionals' perspectives on presence during resuscitation (Meyers et al., 2000). A survey

method was used to collect data from both family members and health care professionals. Thirty-nine family members (who had been present during the resuscitation of a loved one) and 96 health care professionals participated in the study. For the family members, standardized, audiotaped interviews were conducted using a 37-item instrument, the *Family Presence Attitude Scale for Families*. The health care professionals were surveyed using a 33-item instrument, the *Health Care Provider Survey*. Overall, families in this study perceived being present as a positive experience and believed that it was their right to be present. These findings were consistent with the study that members of this group had conducted earlier (Meyers et al., 1998). In general, nurses in this study supported family presence more than physicians and staff physicians supported family presence more than residents, another finding consistent with previous studies (Helmer et al., 2000; Redley & Hood, 1996). A major strength of the chosen method was the instruments. They were both tested rigorously and appropriately and found to be valid and reliable. Other strengths include the use of an actual clinical, family presence situation to sample the providers and an excellent health care professional response rate (79%). Some of the limitations include surveying only those physicians who allowed family presence and the family member sample and response rate. The report mentions that there were seven family members during the study period who had declined to be present but these individuals were not surveyed. The authors also do not report a response rate for the family members group.

Studying Patients' Perspectives

One study focussed on the adult patient's perspective on family presence during resuscitative procedures and CPR. Eichhorn et al. (2001) interviewed nine patients, using a semi-structured interview guide, about the effects of having their family members present. They collected both qualitative and quantitative data. Participants reported both negative and positive

effects of having a family member present but overall, they believed that the positives outweighed the negatives. Favourable themes identified by patients included being comforted, seeing family members as patient advocates and as a reminder of personhood for the team and maintaining patient-family connectedness.

Parental Presence During Invasive Procedures

As noted earlier, there appears to be a trend in the family presence research to focus on resuscitation when the patient in the study is an adult and to focus predominantly on invasive procedures when the patient in the study is a child. As with the family presence during resuscitation literature, this part of the review will be organized from the unique perspectives of parents, health care professionals and child patients.

Studying Parents' Perspectives

Three reported studies (Bauchner et al., 1989; Boie et al., 1999; Haimi-Cohen et al., 1996) focused on parents' perspectives on presence during procedures in the ED. The earliest work in this group studying parents' perspectives was conducted by Bauchner et al. in 1989. Parents (n=250) were asked to complete a closed-ended questionnaire about hypothetical parental presence during blood work or intravenous initiation. The questionnaire also collected data about the reasons why parents would or would not wish to be present and whether some teaching regarding the procedure would change their mind if they had indicated that they would not wish to be present. Results indicated that most parents (78%) would want to be present during the procedure with 80% believing it would make them feel better and 73% believing it would help the physician if they were to be present. The likelihood of preferring to be present was associated with (1) having another child who had previously undergone the procedure; (2) being Black; and (3) having a higher level of education. A strength of this study was the large

sample size. Limitations related to the sample included the fact that the majority of the parents surveyed were mothers (88%) with relatively advanced education (68% had completed high school or higher). This limitation makes the study findings somewhat difficult to generalize to other populations.

Following a simple randomization procedure, Haimi-Cohen et al. (1996) conducted a survey to examine parental preference and whether or not parental presence affected parental anxiety. Fifty-seven parents, whose children required lumbar punctures, were randomly assigned to two groups, one group was present during the procedure and the other group was not. There was no statistically significant difference between the groups with respect to anxiety scores. All parents in the group that were present and 25% of parents from the group that were not present reported a preference for staying with their child in a similar situation in the future. Presence was also found to have no effect on the physician performing the lumbar puncture in that the number of attempts between the two groups were relatively similar.

Level of invasiveness has been studied as a factor that may influence parents' decisions to remain present. In a study conducted by Boie et al. (1999), parents (n=400) were asked to complete a self-administered questionnaire comprised of five hypothetical scenarios with increasing levels of procedural invasiveness. The results indicate that most parents would want to be present with their child during invasive procedures. However, as the level of invasiveness increased, parental desire to be present decreased. For example, 97.5 % of parents would want to be present during venipuncture whereas 83.4% of parents would want to be present if their child were unconscious and being resuscitated. Strengths of this study include a high response rate (98%) and a large sample of participants with varied characteristics. A possible limitation was the hypothetical nature of the situations. Hypothetical situations obviously do not invoke the

same degree of emotion as real life situations. It is difficult to determine whether these parents' responses would change in the case of a real situation.

Studying the Perspectives of Health Care Professionals

Only one study in the literature focused exclusively on health care professionals' perspectives of presence during procedures. In an anonymous, written survey, researchers sought to discover attitudes regarding parental presence during painful paediatric procedures performed in the ED (Beckman, Sloan, Moore, Cordell, Brizendine, Boie, Knoop, Goldman & Geninatti, 2002). A majority of nurses and physicians believed that parents should be present during procedures. As the level of invasiveness increased, the support for presence decreased. Results showed that physicians believed that they alone or in conjunction with the parents should make the decision for or against allowing parental presence. Most nurses surveyed believed that they should also be involved in making the decision. This is the only study where physicians were found to have more favourable attitudes towards presence than registered nurses. This finding could be explained because the participants in the study all came from EDs where physician representatives from the P5 Research Group practiced. The P5 Research Group is the Parental Presence during Painful Paediatric Procedures Research Group. It is possible that physician participants in the study were working in departments well versed in parental presence and familiar with the practice, making them more likely to be supportive.

Studying the Perspectives of Parents, Health Care Professionals and Child Patients

A number of paediatric studies focused on parents and health care professionals or parents, health care professionals and child patients. Three studies (Bauchner et al., 1996; Bauchner et al., 1991; Sacchetti et al., 1996) reported findings from the perspectives of both parents and health care professionals. Two studies (Wolfram et al., 1997; Wolfram & Turner,

1996) reported on the effects of parental presence on all three groups, that is, child patients, parents and health care professionals.

One study combined a questionnaire completed by parents (n=50) and health care providers (n=22) with recorded observations by a research assistant to describe the physician-parent-child encounter during a procedure (Bauchner et al., 1991). Similar to findings by previous work by Bauchner et al. (1989), parents in this study were more likely to decide to stay if they had previous experience with staying with this child or another child for a medical procedure. Parental decision to stay was not related to age of the parent, gender, race, marital status or education. The research assistant noted non-verbal cues such as the physician turning their back to the parent or pulling the curtain behind them in more than half (58%) of the encounters in which parents subsequently decided not to stay. The study also found that the parental decision to stay was made largely without discussion with the physician. This study is one of the few studies in a paediatric setting to have some focus on the health care professionals' perspectives. From the professionals' perspective in this study, parents should be allowed to remain with their child for certain procedures only. Reasons given for why parents should not be present for certain procedures, such as lumbar punctures or suprapubic aspirations, included parental anxiety, clinician anxiety, child's reaction to parents' presence, and parents getting in the way. The findings related to health care professionals' fears about increased anxiety and parents "getting in the way" were consistent with findings of research from the adult emergency setting (Redley & Hood, 1996). Some methodological limitations were the fact that the research assistant was only available in the evening and therefore only parents who brought their children to the ED at certain hours were recruited. There may be a difference in characteristics between parents who bring their children to the ED after working hours (in the evening) than those who

bring their children to the ED for care during the daytime. It is unknown if parents coming in the evening may have higher rates of employment that prevented them from coming during the day, these parents may also have higher or lower education levels or social economic status than parents who use the ED during the daytime. The fact that procedures in the study were only those involving needles (venipuncture for blood work or intravenous cannulation for fluid therapy) may also have introduced a degree of bias. Parents may have been more afraid of watching their child have a needle than they would have been watching their child be catheterized, for example.

The same principal investigator (Bauchner) from the previous study led a quasi-randomized, controlled trial to examine whether a parent-focused intervention had any effect on the child's procedural pain, the performance of the procedure, the anxiety of both the parent and the clinician or parental satisfaction with care in the ED (Bauchner et al., 1996). In this study, participants were randomized into three groups: i) parents were present during the procedure and taught an intervention to support their child throughout the procedure (n=153), ii) parents were present but no teaching was provided (n=147) and iii) parents were not present during the procedure (n=131). There were no differences between the groups with respect to the child's pain, the performance of the procedure, clinician anxiety or parental satisfaction with care. However, the study concluded that those parents who were present had significantly lower scores on an anxiety scale than parents who were not present and that parental presence did not negatively effect the performance of the clinician. Limitations of the study include potential sampling bias introduced by pre-randomization, meaning that there is a good possibility that the three groups were not comparable. Parents were told what group they were to be in prior to consenting to participate. More of those parents who refused to participate had been assigned to

the “not present” group, a clear indication that those parents wanted to be present. Other limitations include the lack of a report of inter-observer reliability and limitations regarding the method of pain assessment (cry analysis and a global rating scale).

Sacchetti et al. (1996) studied the opinions and activities of parents and health care professionals related to parental presence during procedures in both stable and critically ill child patients using post-procedure surveys. This study concluded that the practice of parental presence was favoured by both groups, the parents and the ED staff. Less than 5% of the ED staff surveyed reported feeling nervous when parents were present during procedures. The majority of the procedures that children in this study underwent were minimally to moderately invasive, mostly intravenous access and lumbar punctures. The study findings can probably not be generalized to include resuscitative procedures, as only two of the procedures in the study, one instance of rapid sequence intubation and one instance of fluid resuscitation to treat shock, would be deemed resuscitative procedures.

In the first of two published reports, Wolfram and Turner (1996) described their quasi-experimental study in which they randomized 130 children, aged 8 to 18 years old, having blood drawn in the ED into two groups. Children in the first group had a parent remain present during the procedure, while the second group did not. A simple visual analog scale was used to measure the distress of children, parents and health care professionals following the procedure. They concluded that children and parents were both found to have less distress with parental presence and that the health care professionals in the study were not affected by parental presence.

In a companion study, designed to investigate parental presence in younger children, Wolfram et al. (1997) again randomized children into two groups, parent present and parent

absent. During the procedure, the children were videotaped and an independent reviewer used the well-known Children's Hospital of Eastern Ontario Pain Scale to measure distress. Distress of parents and health care professionals was self-reported using a 10 cm horizontal visual analog scale. Similar to their earlier study, in this study conducted on children aged 1 to 7, Wolfram et al. concluded that both children and their parents experienced less distress if the parent remained present during procedures and that experienced health care professionals were not affected by parental presence during procedures.

A limitation of both of these studies, in terms of the current thesis research, was that the health care professionals studied did not include physicians. They were registered nurses, paramedics working in the ED and phlebotomists. As well, the visual analog scale and self-reporting methods used in the studies were not discussed in great detail in the report, leaving some questions as to their reliability. Finally, this was a study about one, very common procedure, venipuncture, and the results probably cannot be generalized to all paediatric procedures.

Parental Presence in Non-ED Care Settings

Studies pertaining to parental presence have been conducted in a variety of different care settings. Many of the findings from this body of literature are consistent with findings from the ED care setting. Similar to the paediatric ED studies, those conducted in the PICU, in-patient care settings and office settings have focused mainly on presence during procedures. One study by Jarvis (1998) focused on presence during resuscitation in the PICU. Peri-operative studies have focused on presence during induction of anesthesia and presence in the Recovery Room.

Studying Presence in the PICU

Conclusions from the PICU studies are consistent with the ED studies: that parents want to stay with their child for all procedures and that most (84%) believed that they would be a source of comfort for the child (Taylor, Bonilla, Silver & Sagy, 1996). Parents who remained present reported that they found their presence to be helpful to themselves, the medical staff and their child. Almost all (94%) of parents would repeat their choice to remain present in future situations (Powers & Rubenstein, 1999). Registered nurses view parental presence more favourably than physicians and residents, with almost all of the registered nurses (94%) in one study identifying presence as helpful to the child and parent (Powers & Rubenstein, 1999).

A qualitative study by Jefferson (2001) revealed that the decision regarding whether to allow parental presence was mediated in large part by what the health care professional believed to be the ultimate goal of the procedure at hand. Two distinct goals emerged, the first being to complete the procedure with maximal efficiency and minimal disruption, the second being to maintain the parent-child relationship. These findings are similar to previously described findings of Timmermans (1997) where there were three different resuscitative perspectives.

Jarvis (1998) conducted the only paediatric study investigating parental presence during resuscitation, in a PICU setting. Jarvis concluded that physicians and nurses have differing opinions related to parental presence, a finding which is in agreement with a number of studies set in the ED (Helmer et al., 2000; Meyers et al., 1998; Redley & Hood, 1996). All of the nurses believed that parents should have the option to be present with their child, compared to 68% of physicians. Jarvis' (1998) study identified perceived advantages and disadvantages associated with parental presence. Some of the advantages included helping with the grieving process, helping parents to have a realistic view of the resuscitative efforts and death, reducing the risk of

suspicion and litigation, and alleviating parents' doubts about what happened during the resuscitation. Disadvantages included needing an extra staff person to be a support person for parents, parents being emotionally distressed and traumatized, increasing stress for staff and the risk of violence and interference by parents. A similar set of disadvantages according to health care professionals is reported in the study by Redley and Hood (1996).

Studying Presence in the In-Patient Care Setting

A survey of paediatricians, house staff, registered nurses, found that paediatricians and parents wanted to remain present during procedures (Merritt, Sargent & Osborn, 1990). A new finding in this study was that parents believed that physicians excluded them from procedures for fear of their emotionally overreacting or interfering in some way. Level of invasiveness influenced health care professionals' practice of parental presence in the in-patient care setting (Merritt et al., 1990; Pejaver & Russell, 1995). The in-patient study by Pejaver and Russell (1995) also highlights another emerging finding from the literature, that is the absence of formal guidelines or policies related to parental presence. In this study, only 10% of paediatricians surveyed indicated that their departments had formal guidelines about parental presence during procedures.

Two studies (Doctor, 1994; Foertsch et al., 1996) focused on the burn unit as the setting for parental presence during wound care. These studies had neutral or unfavourable outcomes in terms of parental presence. A study by Doctor (1994) showed no statistically significant differences between the group of children whose parent was present and the group of children whose parent was absent in terms of verbal, facial and body cues for pain. Foertsch et al. (1996) studied parental presence and the child's behavioural distress. In this study, children exhibited increased levels of behavioural distress in the presence of their parents. They also found that

parents were more likely to effectively use physical comfort measures than verbal comfort measures and in a burn unit, where many of the procedures are conducted under sterile conditions, this finding is extremely clinically significant. Although many studies in the literature highlight both positives and negatives associated with parental presence, this study demonstrated a completely negative relationship between parental presence and child distress.

Studying Presence in the Dental Office Setting

One of the earliest works found in the literature related specifically to parental presence during procedures is a study of children's reactions to separation and non-separation from their mothers during dental procedures (Frankl et al., 1962). Prior to this time, most of the research about separation of the child from his or her parent, maternal deprivation in particular, focused on the effects of long term separations such as occurs in institutionalized children (Bowlby, 1960; Spitz, 1945).

Frankl et al. (1962) found that pre-school children benefited from having their mother present during dental procedures. Older children were found to have insignificant differences in their behaviour whether their mother was present or not. In all age groups, this study concluded that the mother's presence did not have a negative impact on the child and that with proper teaching and encouragement, mothers could be of great value when establishing a rapport between the dentist and child.

Studying Presence in the Perioperative Care Setting

As interest in parental presence has increased in other areas, so is the case in peri-operative care settings. Some initial research focused on parental presence in the Recovery Rooms, during the postoperative period (Dew, Bushong & Crumrine, 1977; Hall, Payne, Stack & Stokes, 1995) but recent years have seen an immense increase in studies focusing on parental

presence during induction of anesthesia, either in Induction Rooms or right in the Operating Room itself. Interestingly, while parental presence during post-operative recovery periods remains uncommon, presence during induction of anesthesia has become considered more favourable by clinicians (Daniels & Visram, 2002; Glasper & Dewar, 1987; Kain, Caldwell-Andrews, Mayes, Wang, Krivutza & LoDolce, 2003; Kain, Mayes, Caramico, Silver, Spieker, Nygren, Anderson & Rimar, 1996; Kain, Mayes, Wang, Caramico & Hofstadter, 1998).

Many well-designed and important studies have recently originated from a research group associated with the Yale University School of Medicine (Kain et al., 2003; Kain et al., 1998; Kain et al., 1996). The objectives of these randomized controlled trials included to determine if parental presence at induction of anesthesia is effective as a behavioural intervention (Kain et al., 1996), to determine whether parental presence during induction of anesthesia is associated with potentially detrimental parental physiological and behavioural indicators of stress (Kain et al., 2003) and to determine parents' preferences for presence as a preoperative intervention (Kain et al., 1998). Relevant conclusions from these works are that certain children benefited from presence during induction, that although presence is associated with heightened physiological markers associated with stress in parents, it is not associated with any increased incidence of potentially dangerous electrocardiogram abnormalities and that parents of children undergoing subsequent surgeries preferred to be present during induction regardless of their past experiences.

Similar to other clinical settings, parents of children undergoing surgery consistently express a desire to be present during induction of anesthesia (Kain et al., 2003) and postoperatively (Dew et al., 1977; Hall et al., 1995) and health care professionals have a variety of concerns associated with parental presence (Daniels & Visram, 2002).

Non-Research Family Presence Literature

In addition to the research literature, more than 25 anecdotal and discussion papers, as well as letters to the editors and review articles were found when searching the literature. This literature was located predominantly in nursing journals, many from the Journal of Emergency Nursing, and in one medical journal. Anecdotal papers often focused on the telling of a clinical story in which family were or were not allowed to remain present and the result of this decision from the perspective of the health care team and the family (Dolan, 1995; Fina, 1994; Goldsworth & Bailey, 1998; Mason, 2000; Meyers, 2000; Post, 1989; Winslow, 1995). All of these papers concluded that, although often challenging, family presence should be offered to families as an option during resuscitation or invasive procedures in the ED.

Other articles offered a review of the literature and discussion points regarding the positives and negatives associated with family presence (Eichhorn, Meyers, Mitchell & Guzzetta, 1996; Hanson & Strawser, 1992; Oliver & Fruth, 2000). Letters to the editor from both nursing and medical literature presented arguments from both sides of the issue (Cox, 1993; Crisci, 1994; Hatchett, 1994; Kueck, 1992; Martin, 1991; Osuagwu, 1993; Osuagwu, 1995; Shilling, 1994;). One of the most poignant articles, that was the subject of much debate in the British Medical Journal, was co-written by the sister of a trauma patient who was allowed to remain with her brother while the team attempted to resuscitate him (Adams, Whitlock, Higgs, Bloomfield & Baskett, 1994). Included in this article were comments from four physicians, all with varying opinions, ranging dramatically from one physician who believed that families should always be allowed to remain to another physician who believed that good information and time with the body once the resuscitation has been unsuccessful are more important than being present during resuscitation.

Chapter Summary

Similar themes of problems and benefits associated with presence from the perspectives of family members and health care professionals were repeated throughout the literature. Some key findings in the literature with respect to this thesis were that parents consistently wanted to be present and that they felt it was helpful to them and to their child. Parents believed that presence not only helped them cope with the situation at hand, but as well it facilitated grieving if their child went on to die. Almost all parents believed that, at the very least, they should be given the opportunity to decide for themselves whether or not to be present. Health care professionals are the primary group that has the ability to offer parents this option. That being said, the literature revealed that most health care professionals made decisions regarding parental presence alone, without input from anyone else, and that a wide range of health care professional attitudes towards parental presence exists. Especially interesting were the apparent differences between registered nurses and physicians. Therefore, it was imperative to gain a clearer understanding of paediatric health care professionals' attitudes and beliefs regarding parental presence, which was the basic goal of this research.

Furthermore, a number of key gaps in the current state of knowledge regarding parental presence during resuscitation were identified. The first important gap was that there was limited paediatric research that described ED health care professionals' perspectives about parents being present during resuscitation in general and trauma resuscitation specifically. Also, no Canadian research about parental presence in the ED was found in the published literature. Evidence from previous studies suggests that physicians and nurses have differing attitudes regarding this issue but this data came mainly from the adult care literature. The numerous surveys conducted identified how significant a difference existed but failed to capture exactly what these two groups

of health care professionals believed about this issue. This is clearly a limitation of survey methodology and the amount of survey research that has been conducted without resolution of this issue was taken as an indication that it was time to examine parental presence using a different methodology.

The three qualitative studies located in the literature uncovered rich, detailed descriptions of the adult patients' perspective (Eichhorn et al., 2001) and health care professionals' perspectives in an adult ED (Timmermans, 1997) and a PICU (Jefferson, 2001). None of these studies were set in a paediatric ED and none focused specifically on trauma resuscitation, which is a different kind of resuscitation than a medical resuscitation, with its own challenges and issues. I believe that the differences between a trauma resuscitation and a medical resuscitation potentially include the suddenness and unexpectedness of the event, the often disfiguring nature of the injuries sustained and the presence of large amounts of visible blood, both from the traumatic event and as a result of resuscitative procedures. Only one study from the adult literature (Helmer et al., 2000) focused on family presence during trauma resuscitation specifically. In addition to the research literature, the volume of non-research literature regarding family presence was an indication of the interest and amount of controversy that continues to exist among health care team members.

From this review of the literature, it was apparent that there are benefits and problems associated with family presence during resuscitation and parental presence during invasive procedures that potentially impact the parent and child patient, as well as the health care team. Little is known about parental presence during resuscitation in general and specifically about health care professionals' attitudes and beliefs about parental presence during trauma resuscitations. This research sought to fill this clearly identified and important knowledge gap.

CHAPTER THREE - METHODOLOGY

Research Design

In this study, I used a qualitative approach to answer the research question and to fill some of the identified gaps in knowledge in this area of study. The need for rich, descriptive information related to the subject led to my decision to approach the question qualitatively. Much of the research published at the time of this study's development had used survey methodology (Bauchner et al., 1989; Boie et al., 1999; Helmer et al., 1999; Jarvis, 1998; Merritt, Sargent & Osborn, 1990; Pejaver & Russell, 1995; Meyers et al., 1998; Meyers et al., 2000; Powers & Rubenstein, 1999; Redley & Hood, 1996; Sacchetti et al., 1996; Sacchetti et al., 2000). Upon careful review of these studies, I believed that there was insufficient qualitative data about the subject to know what types of items should even be included on a survey instrument to meaningfully answer the research question. Additionally, some of the general characteristics of qualitative research designs summarized by Janesick (1994) contributed to my decision to use a qualitative method, they include:

- ◆ Flexibility of the method and the capability of adjusting to what is being learned as data is collected,
- ◆ Holism and the striving for a more complete understanding of the whole,
- ◆ A focus on understanding a situation, not necessarily making predictions about it and,
- ◆ The use of self as a tool to collect research data.

The specific qualitative approach was an innovative, nursing-based research method called *interpretive description* (Thorne et al., 1997). I chose this method as I believed it to be both well suited to the research question and the current state of knowledge in the field. An introduction to the method will be discussed in greater detail in the following section.

Introduction to Interpretive Description

The qualitative research method interpretive description, was developed in the 1990s by Canadian nurse researchers, Thorne et al. (1997) at the University of British Columbia, School of Nursing, to meet the unique needs of nursing practice research. The method was designed to have a better fit with nursing science than traditional methods of qualitative inquiry that were originally developed for disciplines such as philosophy and sociology. Interpretive description aligns itself better with nursing's unique philosophical foundations and objectives because its purpose is to "describe and interpret a shared health or illness phenomenon from the perspective of those who live it" (Thorne et al., 1997, p. 171). It therefore lends itself to studying the type of phenomena that nurses are interested in and have a responsibility to study. It allows the researcher to derive of clinical nursing knowledge based on the interpretation of the health issue under study. In the thesis research, the registered nurse and physician participants provided the descriptions, while I completed the interpretations through an elaborate process of data analysis.

Interpretive description was chosen as the qualitative method for this study for a number of reasons. As a novice investigator, grounded in nursing, this method's nursing-based approach appealed to me. Morse (1989) questions whether methodologies from other disciplines, with their own assumptions, paradigms and goals, can be transferred to nursing without modifications. The interpretive description method did not require modifications or fitting the research question into a more rigidly defined, traditional qualitative methodology. The selected research question

was clearly a practice question and this method allowed for the inductive development of nursing knowledge without “sacrificing the theoretical or methodological integrity (of) traditional qualitative approaches” (Thorne et al., 1997, p. 169).

In qualitative research such as interpretive description, researchers must be aware of their own biases related to the subject under study and the potential influence that these biases may have on the interpretation of the data. This self-awareness gives the researcher a clear frame of reference when interpreting the data to “promote honesty in finding the truth and decreases the influence of bias on data interpretation” (Streubert & Carpenter, 1999, p. 209). To that end, I was cognizant of my own personal circumstances and beliefs that could have led to biases and acknowledged them early in the research process. A further discussion of sources of possible bias that I identified and strategies that were employed to minimize their potential impact will be attended to in the section entitled, *Enhancing Methodological Rigor*, page 51.

Sampling Method

A form of theoretical sampling was used to gather the sample for the study. In theoretical sampling, the participants are selected intentionally, as opposed to randomly, to meet the specific needs of the study (Morse, 1989). Thorne et al. (1997) have stated that theoretical sampling is an appropriate sampling technique to apply in interpretive description research.

In order to understand the sampling strategy, the reader must recall the description of trauma code procedures presented in Chapter One, in the section entitled *Trauma Codes in the Emergency Department*. For the purposes of this research study, the primary trauma team members identified as potential study participants were the Trauma Team Leader (TTL) physician and the three or more nursing team members that were involved in trauma codes during the study period. Upon arrival to the ED, the TTL assumes overall responsibility for the

care of the trauma patient. At the time of the study, the TTL group was comprised of thirteen staff physicians with representation from the subspecialties of Critical Care Medicine (n=5), Surgery (n=4), Emergency Medicine (n=3) and Anaesthesia (n=1). The nursing team are members of the ED registered nursing staff and are assigned to the trauma team by the ED Clinical Leader or Nurse in Charge.

Following each trauma code during the data collection period, potential participants were invited to enrol in the study. All ED registered nurses and TTLs who participated in trauma codes that occurred during the study's data collection period (April 26, 2002 to August 15, 2002) were considered potential study participants. ED registered nurses who participated in a trauma code included both the bedside nurses providing the clinical care to the patient and the nurses who acted in leadership roles related to the trauma code (Clinical Leaders or Nurse in Charge on shifts when a Clinical Leader is not working).

Sampling in this manner, using trauma codes to identify study participants, was beneficial for two reasons. First, it prevented any potential sampling bias that could have been present if I were to have simply selected participants to interview. Also, it allowed for a starting point for discussion when interviewing participants. The recent trauma code experience was discussed, as a 'jumping off point', and then the discussion moved from the one specific case to a general discussion about parental presence.

Prior to beginning recruitment, I gave brief presentations at both an ED nursing staff meeting and at a TTL meeting, alerting registered nurses and TTL physicians to the possibility that they might be contacted and asked to consider participating in the study. The primary purposes of the presentations were to provide information regarding the study and to generate interest among possible participants. The registered nurses and TTLs were also given the

opportunity to ask questions at this time. For those registered nurses and physicians who did not attend the meetings, the minutes of both meetings reflected the details presented. An advance notice handout was distributed to all ED registered nurses and TTL physicians in attendance at the meetings. For those TTL physicians not in attendance, a copy of the handout was placed in their hospital mailboxes. For those ED registered nurses not in attendance, a copy of the handout was posted prominently on bulletin boards throughout the department - in the nursing lounge, in the Medication Room and in the Communications Book. The advance notice handout was printed on colourful paper so as to be eye-catching and included basic study and contact information.

Potential registered nurse and TTL participants were initially contacted by phone or in person and invited to participate in the study. Following a brief description of the study and an opportunity to ask questions, possible participants had the options to either decline participation in the study, to request more information about the study or to agree to be interviewed. None of the registered nurses or TTL physicians contacted requested any additional information before making their decision. Those who agreed to participate had a meeting time and location set for the initial interview and were then given an information letter (Appendix B) for their review at the interview prior to signing the consent form.

The method described above was to be the primary sampling method, however, as the study progressed and if the need arose, it was pre-planned that an attempt would be made to identify participants who might have differing attitudes and beliefs regarding parental presence. The ability to activate this primary control over the sampling method is key in qualitative designs (Morse, 1989) and contributed to the whole understanding of health care professionals' beliefs and attitudes regarding this issue. However, only one participant was specifically selected in

this manner. The reader is asked to refer Chapter Four's section entitled *Description of Participants* for complete details.

The sample size was estimated to be six to ten registered nurse participants and six to ten TTL physician participants (Morse, 1989). Sandelowski (1995) alludes to the difficulty in calculating sample size in qualitative designs by postulating that an adequate sample size is one that is not too big – leading to confusion and difficulties with analysis of large amounts of data and not too small – leading to insufficient data to develop of a rich, detailed understanding of the subject under study. A main determinant of the sample size in qualitative research is the concept of data saturation. This means that rather than deciding beforehand how many participants will be needed, the sample must be large enough to reach the so-called saturation point. Saturation is an indicator of data adequacy and Morse (1994) describes saturated data as data that appear rich and complete. A hallmark of saturation according to Leininger (1994) is that redundancies and repetition of ideas, experiences and descriptions become obvious to the researcher. Recruitment of participants continued until the Thesis Committee and I decided that the data saturation point had been reached.

The sample was evaluated throughout the study. Means for evaluating qualitative research samples include testing for appropriateness and adequacy (Morse, 1989). “The appropriateness of the sample is evaluated by examining methods of sampling and determining if the methods used and the sample obtained facilitates understanding of the research problem” (Morse, 1989, p. 123). Adequacy was assessed by critically examining the relevance, completeness and amount of information obtained (Morse, 1989) at various points during the interview process. Appropriateness and adequacy were ensured by virtue of my former

relationship with the Trauma Team and the ability to have primary control over the composition of the sample had it been more frequently required (Morse, 1989).

Data Collection Method

Data Collection Setting

I arranged interviews with participants at mutually acceptable times and places. The data collection setting was completely at the discretion of the participants. All participants were also given the option to be interviewed at their home or a location away from the hospital but all preferred to remain on-site. When determining a setting, consideration was given to ensuring privacy and confidentiality of participants. I always attempted to find quiet locations to interview participants, with minimal chance of interruption, away from the ED. However, three registered nurse participants agreed to be interviewed while on their breaks and were uncomfortable to re-locate too far away from the ED in the event that they were urgently required to return to work. These registered nurses were interviewed in the ED conference room. Other registered nurses were interviewed in conference rooms within the CHEO Research Institute and all TTL physicians were interviewed in the privacy of their own offices.

Data Collection Procedures

Prior to beginning each interviewing session, I reviewed the information letter with each participant, informed consent was obtained (Appendix C) and demographic data were collected using the demographics sheet (Appendix D). Participants were given the opportunity to voice any questions or concerns at the outset of the interview, before the tape was turned on, and were advised that they should feel free to request the tape be stopped if any questions or concerns arose during the interview.

May (1989) proposed that a challenge of using interviews as a qualitative data collection technique is attaining and maintaining a good balance between flexibility and consistency. The interviews were *semi*-structured in nature and this allowed for a fair amount of flexibility *within* each interview while maintaining a consistent approach *across* all interviews. To maximize the data supplied by the individual participants, flexibility was required in terms of scope and questioning; some participants required more prompting and open-ended questioning than others. Consistency was recognized as essential to the interview process so that accurate descriptions of participants' attitudes and beliefs could be rendered; consistency was maintained by referring to the interview guide at certain times throughout each interview. Being aware of the need to maintain a sense of balance between the flexibility and consistency in the interview process ensured that the data collected were meaningful and representative.

The semi-structured interview guide (Appendix E) was developed following a review of the literature and with assistance from the Thesis Committee. Additionally, I was fortunate to be able to consult with CHEO's bioethicist prior to interviewing participants and the tool was modified slightly to eliminate wording that was deemed potentially biased. This interview guide was adjusted slightly as data collection continued after early data analysis revealed that minor changes were needed. The changes made to the guide were the elimination of the questions pertaining to how the actual decision about whether to allow parents to be present was made. I decided that, although interesting, these two questions were not providing me with data that actually answered my research question and I opted to eliminate them in the final four interviews. All interviews were audiotaped and then transcribed. An experienced medical transcriptionist did the transcriptions and I reviewed each transcript carefully while listening to the tape.

Every interview began by asking the participant to discuss the recent trauma code experience with regards to parental presence. The semi-structured interview guide was then used to collect data regarding the benefits and problems that participants identified related to parental presence during trauma codes. The benefit of using an open-ended interview approach was that participants were encouraged to fully explain, in their own words, their personal attitudes and beliefs about parental presence (Streubert & Carpenter, 1999).

As a beginning researcher, I relied heavily on my already existing rapport with participants. As a skilled and experienced registered nurse, I possess excellent interpersonal and communication skills. In order to ensure that these skills transferred to the research interview process, transcripts of the initial audiotaped interviews were reviewed with the thesis supervisor and one committee member. Both of these individuals were well qualified to assist me in this regard. The thesis supervisor is an experienced qualitative researcher and the committee member is an experienced psychiatric nurse with advanced skills in communication. This review of early interviews allowed for opportunities to refine my technique and improve my interviewing skills. Subsequently, I practiced my interviewing technique and was also interviewed using the interview guide by one of the committee members. This role-playing session and ensuing discussion, allowed me to maximize areas of strength in my interviewing technique, work on areas of weakness and additionally gave me a realistic feel for what it is like to be a participant in an interview.

I maintained field notes as recommended by May (1989); these notes were included as pieces of data in the overall data analysis. Notes were made discreetly during the interview or more often, immediately after leaving the participant, in the margins of the semi-structured interview guide. My notes included personal observations regarding the interview, including

participants' facial expressions and body language, and any important details that came up at the end of the interview when the tape was turned off. As well, at the recommendation of the Thesis Committee, notes were made regarding the nature of my personal relationships with some of the participants. In order to be aware of possible bias associated with my personal views, reflections of this nature were also kept in a separate, reflective journal. These extensive notes, both the field notes and journal notes, were reviewed and analysed frequently throughout the process as recommended by Fontana & Frey (1994) and were discussed with Thesis Committee members.

As discussed previously, the data collection phase ended once the Thesis Committee and I deemed that data adequacy or saturation had occurred. Data collection stopped following the fourteenth interview, that is, following seven registered nurse interviews and seven TTL physician interviews. At that time, I believed that the descriptions collected would lead to knowing about participants' attitudes and beliefs regarding parental presence as fully and comprehensively as possible. In other words, data collection ceased when I believed that no new information would be gained by interviewing additional participants.

Data Analysis Method

Data Analysis Plan

Qualitative data, in the form of words and not numbers, are not amenable to statistical analysis and require a different, often complex process of analysis. In accordance with Thorne et al.'s (1997) interpretive description methodology, an inductive analysis technique was used to analyse the data in this study. Also, in harmony with their commitment to viewing the gestalt of a phenomenon, Thorne et al. (1997) recommend the avoidance of complex coding systems and suggest instead ongoing immersion in the data combined with endurance and patience as more fruitful. A common belief regarding qualitative data analysis is that data collection and analysis

should be tightly linked and take place concurrently (Miles & Huberman, 1994; Morse, 1994; Streubert & Carpenter, 1999). One rationale for cycling back and forth between the data being analysed and the data being collected is the possibility of, while analysing data, coming up with new strategies for collecting richer, better data. Qualitative data analysis is a huge, potentially overwhelming activity; Miles and Huberman (1994) suggest that data analysis beginning early in the study will help to keep the data analysis process motivating to the researcher and keep it moving forward. For these reasons, data analysis in this study was considered an ongoing process beginning nearly at the outset of the data collection phase.

The method of analysing interview transcripts described by Burnard (1991) was modified slightly and used to analyse the data in this research study. Burnard's (1991) fourteen-stage method (See Table 1) was originally adapted from several other approaches and is basically a method of thematic content analysis. This method was deemed appropriate because it was specifically created to deal with interview data; moreover, it is relatively simple and therefore fits with Thorne et al.'s (1994) recommendation to avoid complex coding systems when analysing data generated using interpretive description methodology.

Table 1: Burnard's Method of Analysing Interview Transcripts in Brief

Stage 1	Following each interview, the interviewer makes personal notes.
Stage 2	Transcripts are read through and notes are made on general themes.
Stage 3	Transcripts are read again and multiple early categories are identified.
Stage 4	The list of categories is reviewed and grouped together or collapsed under higher order sub-headings.
Stage 5	This new list of sub-headings is reviewed and repetitious or similar headings are eliminated.

Stage 6	Two independent reviewers read the transcripts and generate their own category systems that are then discussed and changes are made.
Stage 7	Transcripts are re-read with the final list of categories and sub-headings in hand to ensure that the developed system captures all data contained within the transcripts.
Stage 8	Each transcript is coded according to the list of categories and sub-headings.
Stage 9	The coded sections are cut out and all sections that belong to each code are grouped together.
Stage 10	The cut out sections are pasted on to sheets under the appropriate sub-headings and categories.
Stage 11	Participants are asked to review the category system as a validity check.
Stage 12	All sections are filed together so they may be referred to directly when writing up the findings.
Stage 13	The findings are written up.
Stage 14	The discussion is written up.

Burnard's method was published in the literature more than ten years ago. Modifications to the method were required in order to be able to use the advanced computer technology available to qualitative researchers today. The first modification of Burnard's method was the use of the computer assisted data analysis software, NUD*IST (NVivo version) to code, manage and manipulate the data for ease of analysis. NUD*IST was an appropriate software choice for the neophyte researcher working on a simple project as its structure and set routines made it relatively easy to learn and easy to use (Barry, 1998).

The second stage of Burnard's method is comparable to the data analysis technique of *memoing* outlined by Miles and Huberman (1994). "Memoing preserves emerging hypotheses, analytical schemes, hunches and abstractions (Streubert & Carpenter, 1999)." I wrote memos during the initial stages of data analysis whenever the need to keep track of an idea or thought arose. These memos included ideas of how certain data fit together, ideas of better ways to ask interview questions, notes to myself to look back at other transcripts for similar ideas and were often the beginnings of general themes that seemed to be emerging. I used the memoing function of the NVivo program to keep the memos organized and easy to access and retrieve. The memos were dated, saved according to their key concept and linked to where they came from, either in the field notes, reflective journal or the transcribed data.

The transcribed data was imported into NUD*IST (NVivo version) and data was reviewed following the steps described by Burnard (1991). Burnard's terms *themes, sub-headings and categories* were modified to *themes, categories and sub-categories*. This change was made to describe the different levels of data in the study simply because these terms were more familiar and made more sense to me. In Stage Six, the categories and sub-categories that had been generated initially by hand, after reading each transcript multiple times, were reviewed with the Thesis Committee. Once the categories and sub-categories were approved, the data was reviewed again and coded using the computer. The coded data was then manipulated into categories and once again into main themes using the software. Multiple copies of the project were saved in NVivo, which allowed me to test out various ways of organizing the data into the most appropriate themes. Analysis and interpretation of the data was completed for the registered nurse and physician groups combined (the complete data set) as well as minimal comparative analysis across the two groups.

Stage eleven of Burnard's (1991) method calls for selected participants to review the categories and sub-headings in conjunction with their own transcripts to ensure that they feel they are well represented in the data. This serves as a means of checking that the data is valid. Another modification that was made to Burnard's (1991) method was at this point at stage eleven. A point-form summary of all findings was taken back to selected participants to review and discuss rather than their individual, transcribed interview. This strategy is endorsed by Thorne et al. (1994). I chose to do follow-up interviews with two registered nurses and two physicians that I thought had the greatest variability in their attitudes and beliefs when compared to the group. In follow up interviews lasting approximately one hour, I reviewed the summary with these participants and then asked them to share with me whether they thought that their unique beliefs and attitudes were captured in the findings. All of the follow-up interview participants agreed that their attitudes and beliefs were included as part of the findings. The final writing of the findings chapter was significantly influenced by two participants who made similar suggestions around changes to the format and the elimination of an area of repetition.

Enhancing Methodological Rigor

Thorne et al. (1997) clearly state that it is naïve to think that all bias can be eliminated in qualitatively designed research, methods that require the use of self as a research tool. Instead they recommend being explicit about biases that are brought to the study by the researcher. The following potential biases were identified up front and were considered on an on-going basis throughout the research process. First of all, I was formerly a staff nurse in this ED. During the data collection phase, it had been three years since I had left the role of bedside nurse in the ED. At the time of writing this thesis, I was on a leave of absence from my role of Trauma Coordinator. As the Trauma Coordinator and a member of the Surgical Patient Service team, I

was quite visible within the ED; I attended weekday trauma codes in the ED and was involved in staff education and quality improvement initiatives. The close relationship I had with many of the possible participants, by virtue of being a past emergency nursing colleague and as the Trauma Coordinator, may have led to some bias, in the form of participants editing or censoring their responses. However, I believe my past relationships were used to my advantage when interviewing and engaging participants.

In my role as Trauma Coordinator, I was not responsible for supervising or evaluating any possible participants in any way. However, as Trauma Coordinator, I was responsible for system-wide trauma quality improvement. I felt that it was possible that participants' answers may have been modified to reflect their perceptions that someone, such as the Trauma Coordinator, who supported family centred trauma care would be in favour of presence. In order to overcome this limitation, I reminded all participants at the beginning of each interview that this project was a student research project and not at all related to the Trauma Program's activities or quality improvement initiatives. I asked them to think of me as a student investigator and not as CHEO's Trauma Coordinator.

As well, my personal beliefs and nursing philosophy regarding this issue were acknowledged to be a source of potential bias. As a registered nurse experienced in emergency, trauma and family centred-care, I came to this study with a bias in favour of parental presence. Initially, I believed that early parental presence and parental presence throughout the resuscitative phase of care, even though challenging to the team, were always in the best interests of the trauma patient and the patient's family if it was what the family wished. To overcome this potential source of bias during data collection and data analysis, I worked hard to suspend this belief in order to effectively gather and carefully interpret the data. To that end, a number of

strategies were used. The Thesis Supervisor and one Thesis Committee member reviewed transcripts of initial interviews, critically examining for moments that revealed any of my personal bias and provided suggestions to minimize revelations of bias in future interviews. Additionally, the reflective journal that I kept and discussed with the Thesis Supervisor was another key in overcoming this limitation. It was used throughout to check that the interpretation of the findings was grounded in the data and had not come from or been influenced by my personal beliefs.

It was a surprise to me that after listening to and learning from the thoughtful answers provided by the study participants and analysing the data gathered, my own views on this subject have changed. I would now acknowledge that situations do exist when parental presence throughout is not entirely appropriate. Also, I have shifted to thinking that what is important is that parents are *offered the option* to be present during their child's resuscitation, not necessarily that they are present. This change in my personal opinions as a result of conducting the interviews appears to support the active suspension of personal beliefs as a strategy to truly hear qualitative interview participants.

The goal of obtaining rigor in qualitative research is to ensure that results accurately reflect study participants' perspectives of the subject under study. Qualitative data that is trustworthy can only be collected from a study designed to be methodologically rigorous (Polit & Hungler, 1999). Trustworthiness of qualitative data can be judged in terms of the following four desired criteria: *credibility, dependability, confirmability and transferability* (Polit & Hungler, 1999; Streubert & Carpenter, 1999). Each of these criteria and strategies to achieve them will be discussed in the proceeding sections.

Strategies to enhance *credibility* improve the likelihood that the data collected in the course of study are true. The use of actual trauma codes to identify possible study participants served to enhance credibility. Four additional strategies to enhance credibility were used in the study: prolonged engagement, peer debriefing, participant checks and searching for disconfirming evidence (Polit & Hungler, 1999). The data were collected over a number of months through in-depth interviews with participants. This prolonged engagement with the subject under study helped with achieving credibility. Reviewing findings with the Thesis Supervisor, and occasionally Thesis Committee members, at various stages in the research served as peer debriefing. I completed participant checks by taking my preliminary findings back to selected participants in the form of a point-form summary. The participants were encouraged to review the data with a critical eye to ensure that the findings were grounded in the data, accurately reflected the participants' perspective and were not biased from my interpretation or an error in design or instrument. The final method to address credibility in this study was the search for disconfirming evidence. As presented in the sampling method section, the participants' demographics were periodically reviewed to ensure that potentially conflicting or differing attitudes were sought out. One participant was purposefully selected in order to ensure that both genders were represented in both the registered nurse and physician groups. In the end, the sample was found to be widely representative, including a mix of age groups, mix of parental status, mix of genders, and a range of experiences.

Dependability of qualitative data relates to how consistent the data is over time and under different conditions. The criterion of *confirmability* refers to the neutrality or objectivity of the data (Polit & Hungler, 1999). Strategies to achieve confirmability and dependability included maintaining an audit trail, a detailed record of what was done throughout the project and cross-

checking interpretations of findings with my own personal beliefs. The audit trail served as a record to corroborate study findings and periodic cross-checking of interpretations identified areas where researcher bias may have been introduced. The audit trail included raw data in the form of field notes, reflective journal notes and data transcripts, data analysis notes, in the form of memos and diagrams (Polit & Hungler, 1999). All notes taken at Thesis Committee meetings and email updates provided to the Thesis Committee members related to student progress demonstrate the auditability of this research project.

The fourth criterion for determining rigor in qualitative work, *transferability*, has also been called *fittingness*. In other words, to what extent do the findings from one research study *fit* in other settings or with other groups? Although it is generally accepted that it is up to the potential user of the findings to determine whether findings fit in their setting or with their population (Streubert & Carpenter, 1999), one strategy may be used to increase the ability of others to transfer the research findings. This strategy is the provision of thick description when presenting research findings. Thick descriptions are “rich and thorough description(s) of the research setting or context and of the transactions and processes observed during the inquiry (Polit & Hungler, 1999).” Thick descriptions of the data are provided in the findings chapter of this thesis.

Protection of Human Rights

The study proposal was presented to and approved by the CHEO Research Ethics Committee. The CHEO Research Ethics Committee is an approved clinical agency according to the University of Ottawa Research Ethics Board and therefore double submission of the proposal to both Ethics groups was not necessary.

Informed consent (Appendix C) was obtained prior to interviewing and audiotaping each participant. It was reinforced to participants, both verbally and in writing on the consent form, that their participation in the study was completely voluntary and that they could decide to withdraw or refuse to participate in any part of the study without any fear of negative consequences. In the consent, participants were made aware that there were no known risks or direct benefits to participating in this study. Participants were advised that their identity would be protected by the use of pseudonyms when reporting the findings. The consent stated that an increased awareness about personal attitudes and beliefs might turn out to be helpful to some individuals' professional practices and might be an indirect benefit to some participants. Interestingly, at least three participants acknowledged this to be true in informal discussions following the interviews.

A transcriptionist was employed to transcribe all of the taped interviews except the first one which I transcribed myself. Transcribed data was kept secure and confidential on my home computer only. Word files and NUD*IST (NVivo version) files containing transcribed data were password protected to ensure that only I had access to them. Data was copied onto computer discs to maintain a back-up during the study period. To ensure anonymity, any information that could be used to identify participants found on the transcripts was edited. Participants were assigned pseudonyms. Additionally, names of any persons, patients, family members or other staff, mentioned in the transcripts were also changed to pseudonyms. As another method to protect anonymity, the dates and times of the individual trauma codes were not included in the analysis or this thesis. The only individuals to have access to the transcripts besides me were the Thesis Committee members and the transcriptionist. Following the completion of the study, transcripts of the interviews and the computer discs containing the transcribed data were locked

in a filing cabinet at my home and will be kept for a period of seven years prior to being destroyed. The audiotapes will be destroyed at the end of the study, following my defense of this thesis.

CHAPTER FOUR: FINDINGS

Description of Study Participants

Fourteen health care professionals, seven registered nurses from the ED and seven TTL physicians participated in interviews conducted between April 28, 2002 and August 15, 2002. Eight of the study participants were women and six were men. In total, 16 health care professionals (eight registered nurses and eight physicians) were invited to participate in the study, either in person or in writing. All but two of the 16 health care professionals that were approached participated in the study. I was unable to schedule an interview with one prospective participant and another did not respond to either the written request for participation nor messages left with a secretary.

Of the 14 participants, the first 12 (six registered nurses and six TTL physicians) were identified by their participation in trauma codes that occurred during the data collection period. After a preliminary review of the interview and demographic data and consultation with the Thesis Supervisor, I decided that an additional TTL physician with a surgical background and a registered nurse in a clinical leadership role should be included in the study. I made preparations to deliberately select two participants meeting these descriptions. It was both coincidental and fortunate that the next trauma code was lead by one of the surgeon TTLs, who subsequently consented to participate. One of the Clinical Leaders in the ED was invited to participate and agreed.

Demographic data for both the registered nurse and physician participants is presented in Table 2. I tried to include participants in the study that I believed might have held varying attitudes and beliefs about parental presence. Therefore, I chose to have people from a variety of

different age groups, experience and educational levels well represented. I also wanted to ensure that I captured the views of people who were both parents and non-parents. I included both men and women participants, but did not try to balance participants in terms of gender, simply because it is an accurate portrayal of current reality to have more women make up a sample of registered nurses.

TABLE 2: Demographic Characteristics of Study Participants

Characteristics	Registered Nurse Participants	TTL Physician Participants
Age (years)		
≤ 25 years	1	0
26 – 35 years	1	2
36 – 45 years	2	3
46 – 55 years	2	1
> 55 years	1	1
Sex		
Male	1	5
Female	6	2
Parental Status		
Parent	4	5
Non-Parent	3	2
Level of Education		
RN diploma	5	n/a
Baccalaureate degree in Nursing	2	n/a
Medical degree & specialty certification	n/a	5
Graduate level education (Master's)	0	2*
		(* also held medical degrees and specialty certification)
Experience Level (years since graduation)		
Mean	16.57	9.85
Range	5 – 34	0 – 20
Experience with trauma care (years)		
Mean	12.50	9.85
Range	5 – 34	0 – 20
Experience with parental presence during trauma resuscitation		
Yes	5	7
No	2	0

Introduction to the Findings

In keeping with the interpretive description method of inquiry that seeks to describe the gestalt, or whole, of the subject under study, findings from the complete data set will be presented together. I also decided it was appropriate to present findings from the registered nurse and TTL physician participants together because, although the literature indicates significant differences between the attitudes and beliefs of these two groups of professionals, they were not widely apparent in this study. There were far more consistencies than inconsistencies when comparing registered nurse and physician attitudes and beliefs on this subject. Prominent differences between the two groups will be pointed out throughout this chapter.

Direct quotes from study participants have been included to illustrate key findings. I found that when using quotes in this way, especially quotes describing specific clinical examples, it was sometimes a challenge to protect participant or patient and family anonymity. In some cases, the quotes have been abridged because they were too revealing. Some quotes were also abridged for length. Abridged quotes can be recognized by the inclusion of three dots (...). To avoid any confusion, I have used the word 'pause' in brackets to denote moments when the participants paused in their speaking. As discussed in Chapter Three, all names of participants and the patients and families they mentioned have been changed to pseudonyms. I have purposely selected gender-neutral pseudonyms. I have selected exemplars that I thought best represented the idea or finding that I was presenting. In most cases, I have used only one quote but have chosen to use two quotes in some instances, to illustrate where the registered nurse and physician participants demonstrated contrasting attitudes and beliefs or consistent ones in an area that was unexpected. I did choose to indicate the professional designation of the

participants throughout, both for interest and to highlight the instances when there were differences or unexpected similarities.

General Findings

In this study of health care professionals' attitudes and beliefs about parental presence, a number of interesting general findings emerged. When asked directly if they were in favour or opposed to parental presence during trauma codes, five participants indicated that they were unequivocally in favour, two participants were opposed and seven of participants were neutral in their response.

Overall, the attitude towards parental presence could be described as one of ambivalence. Physicians in this study were more likely to openly oppose the practice than registered nurses. Two physicians were opposed, while three registered nurses and two physicians were in favour. For the seven neutral participants, there were specific instances where the practice was deemed more or less favourable. In terms of overall attitudes, there were no consistent divisions along professional or gender lines. No consistent divisions emerged based on whether participants had children of their own. As was previously mentioned, there was a lot of common ground in the attitudes and beliefs of registered nurses and physicians. Usually the differences that I noted between the two professional groups were a matter of degree, with one group expressing stronger beliefs one way or the other, rather than diametrically opposed views.

One of the most repeatedly stated beliefs was that 'not all resuscitations are created equal' (Mackenzie, MD). I found that participants' attitudes and beliefs about parental presence were tightly linked to the context in every instance where parental presence was considered. For example, no one believed that either parental presence or the exclusion of parents throughout the

entire resuscitation was *always* the best practice. Participants clearly did not believe that you could discuss parental presence out of context.

Individuals' attitudes and beliefs about parental presence were also linked to their past experiences. Almost all participants could readily recall both positive and negative experiences of parental presence. Some said they were more influenced by the positive experiences and others were more influenced by the negative ones. Those that had had largely positive past experiences, which were described as situations where the parents had coped well and were able to comfort their child, tended to be more accepting of the practice. Conversely, if they had had mostly negative past experiences or even one extremely negative past experience, such as parents becoming hysterical or unable to cope, they were often more reluctant and hesitant to consistently have parents present.

The health care professionals in this study described their attitudes and beliefs regarding the benefits and problems that the practice of parental presence presented for the distinct groups involved, that is, the child patient, the parents and the members of the trauma team. Parental presence was seen to change the interactions, the dynamic, which typically existed between the groups, in either a positive or negative way. Participants readily identified benefits and problems associated with parental presence for each of these groups, both individually and interrelatedly. In the end, this research question is an interpersonal one and the findings will be presented according to the different persons that are affected: the child trauma patient, the parents, the trauma team as a whole, and the individual trauma team member.

The Paediatric Trauma Patient

Despite the fact that the main focus of paediatric trauma resuscitations is obviously the child patient, in this study there were relatively few findings that related solely to the child.

However, after considering that many of these children are extremely unstable and are unlikely to be conscious, this finding made more sense. The first theme to be presented in the thesis research, *The Paediatric Trauma Patient* describes those findings that pertain directly to the child patient. It includes implications of parental presence for the conscious child patient, as well as describing what participants believed were potential implications for the child's clinical care. Specific implications for parents that are related to the child's condition are presented here as well. Findings under this theme are presented using the two categories, *Health Status* and *Optimal Clinical Care*.

Health Status

One of the major contextual findings, raised by every participant, was that their attitudes and beliefs changed depending upon the severity of the child patient's health status. The patient's status, in terms of level of consciousness, overall severity, likelihood of requiring invasive procedures and probable, predicted outcome, all significantly influenced how willing both physician and registered nurse participants were to support parental presence.

Unlike adult care settings, where trauma code patients are generally critically ill and require emergent life saving measures such as cardiopulmonary resuscitation, the trauma team tends to be initiated at a lower threshold in paediatrics. For example, a paramedic en route with an injured child will call in prior to arrival so that the ED has some time to prepare for the child. Then, based on criteria specified in CHEO's Trauma Team Activation Guidelines, such as the mechanism of injury, specific obvious injuries or the child's status in the field, staff in the ED may decide to initiate a trauma code without first seeing the patient. In these cases, there are times when trauma codes are initiated for children who arrive and turn out to be extremely

stable. This is referred to as over-triage of trauma patients and is considered to be an acceptable, safe practice, especially in paediatrics (American College of Surgeons, 1998).

Participants acknowledged that the practice of over-triage exists at CHEO and everyone discussed child trauma patients on a continuum from the stable patient to the unstable patient to the dying patient. All participants agreed that it was most appropriate and ultimately beneficial for parents of stable, conscious children to remain present with them throughout the team's assessment and care in the Resuscitation Room. For stable children, their parents' presence was clearly identified as a practice that could generally be calming and comforting during the often frightening and sometimes painful experiences associated with trauma resuscitation.

(The parents' presence) could be just about as important as oxygen being given. I think that if a child is calling out for them, even if it's just a touch, even if it's just a couple of words, it may be the support they need to get through that period ...

(Chris, RN)

Participants identified that the only time it was problematic for stable children to have their parents remain present was if the parents were too upset and unable to cope. In that instance, participants believed it was in the child's best interest to have the parents remain outside the Resuscitation Room. A parent's extreme emotional reaction to witnessing the resuscitation had impacts on the team that will be subsequently discussed, but perhaps more importantly, according to certain participants, a parent's reaction impacted on the conscious child patient as well. Many participants, both registered nurses and physicians, saw the negative effect that a distraught parent could have on the child as a major problem associated with parental presence.

I think it affects the child more because if the parent is anxious then the child is anxious, right? Just as if the parent is ok and calm, then the child is ok with it, no matter what you're doing, but they sense that anxiety and then they just escalate ... it makes our job a little harder to do and it definitely makes it harder on the patient.

(Brook, RN)

If the parent is losing it and is not comforting to the child, it is much better to have them out ... because some parents don't help the situation, they make it worse (pause), they're just making the child more scared and more worried.

(Terry, MD)

Beyond the conscious child patient who might have positive or negative impacts of parental presence, the rest of the findings in this category pertain to parental reaction to the child patient's health status. Participants expressed the most striking differences in their attitudes and beliefs when it came to unstable or potentially unstable children. This is the group of children that make up the largest number of the trauma patients seen in ED. Some participants thought that there were occasions when it was appropriate for parents to be present throughout where others thought that in the case of the unstable trauma patient, it was best for everyone if the parents were not consistently present.

Much of the concern raised by participants about parental presence in these unstable patients related to the level of procedural invasiveness. The emergency equipment used to resuscitate paediatric trauma patients is highly complex and foreign to most non-medical people. Participants worried that the sight of all the unfamiliar, invasive-looking equipment around their child could be frightening to parents and could affect their ability to cope.

Their child might be, you know, having lines and intubation, like an endotracheal tube in and all the rest of it ... they're going to be hooked up to monitors and pumps. That all of this is going on ... for a lay person walking in, just seeing that *without* their child on the table, just seeing all that equipment, I think is a lot to take in and then their child is there ... in the *middle* of it all.

(Terry, MD)

Some participants thought that parents should not be present during specific procedures. These participants discussed procedures on a personally pre-determined scale of increasing hierarchy, with those more simple procedures being suitable for the parents to witness and those more complex, invasive procedures being inappropriate for parents to witness.

Because I think it does make a difference whether it is just an IV being started or an LP or, you know, full blown CPR, intubation, chest tube. Like, I really think it breaks out, if you're just doing a minor procedure, I think parents should be with them. I think they can be there when they're having a catheter, they could be there when they're having an IV, they can even be there when they, if they want to, when they're having an LP. I think that, you know, if it helps calm the child so you can do the procedure more efficiently then I think that's helpful. But once you get to the really invasive stuff, intubating, placing chest tubes, I don't like them to be there.
(Mackenzie, MD)

However, for some registered nurse participants, the type of procedures being done seemed to have no bearing on their willingness to accept parental presence. These participants acknowledged that they were generally used to having parents present for most procedures in the non-urgent care they provided to patients. Therefore, some were comfortable and willing to have the parents remain present regardless of what procedure was being completed.

I, I think if they're going to be there, they need to be there the whole time, regardless of what we're doing, for the same reason as I was saying, I do think that they benefit from seeing the progression, they see the child get a little bit better or getting worse and then, you know, I do, I think that they see that and they process it which means that there should be, there should be flow from beginning to the end and I think it starts when it starts and it ends when it ends.
(Leslie, RN)

If participants were farthest apart in their attitudes and beliefs when it came to the unstable child, they were closest in their attitudes and beliefs when discussing the dying patient. If the team suspected that a child was going to have an imminently poor outcome, that they were likely to die in the Resuscitation Room, participants unanimously agreed that the parents should be given the option to be present for at least some parts of the resuscitation.

Subjectively, I think it's a benefit for the parent to be present especially if their child is going to die, in terms of that last (pause) just to spend that last few minutes (pause), the fact that they're present and *there*, you know, right before the child expires is probably of great benefit ... (Kelly, MD)

The acceptance of parental presence at times when the trauma team believes that the child patient is likely to die as a result of her/his injuries will be presented in greater detail in the second theme, *Bearing Witness*.

Optimal Clinical Care

Regardless of their discipline, all participants believed that the priority goal of the trauma team was to provide optimal clinical care to the trauma patient. When using the term 'clinical care', participants were evidently focusing on the hands-on, technical care required by the child. Their use of this term in this way will be further explored in the discussion chapter that follows. Most participants believed that the main problem with parental presence was its potential to negatively impact the trauma team's ability to attain the priority goal of optimal care of the injured child.

Participants' attitudes and beliefs about the benefits and problems associated with parental presence appeared to be congruent with their attitudes and beliefs about the overall goal of the resuscitation event. Most registered nurse and physician participants were resolute that in critical, life and death situations, the goal of the trauma resuscitation was to provide patient-centred care, that the first priority and at times the only priority, was to aid the trauma patient in sustaining life. The physician participants were the most adamant in expressing their concerns that parental presence affected their ability to attain this goal. Registered nurse participants echoed this belief but were more likely to do so in a manner that also expressed concern for the parents.

It's not that you don't care about the parents, it's just that your focus is different at that point in time. I'm very, very empathetic with parents whose children are in a difficult circumstance ... but when you're working directly with (a critically injured trauma patient), you have to lift yourself above that emotional plane and be able to function as a

professional and, and be able to do what you do best at that moment because they don't need you to cry for them, they need you to save their child.
(Chris, RN)

In simplest terms, most participants believed that in situations where parental presence negatively affected the priority goal of the resuscitation in any way, it was detrimental to the child patient and contraindicated. No one believed that having parents present improved the calibre or quality of the care being provided to the trauma patient or that the team worked harder in the presence of parents.

I think before you said parents *must* be present during arrests, trauma or otherwise, you would have to look hard about how that is going to affect functioning because we may hinder our overall and most important goal, which is to provide the best care to the child, for the sake of a theoretical benefit of having mom present. (Pause). The most important thing is not that we must have the parents in the room, the most important thing is the overall quality of care given by the trauma team...
(Sam, MD)

All participants were willing to allow parental presence as long as it didn't compromise delivery of the best possible care to the child. Some registered nurse participants talked about family-centred care and that they believed that the parents were also their patients but most participants believed that at the critical time of resuscitation, it was imperative that the sole focus be the child. Some registered nurse participants acknowledged that, although they recognized that the parents needed care and attention, they were more comfortable delivering the hands-on, technical care of the patient. A number of registered nurses believed that social workers were better equipped to deal with parents in crises than they were.

I think we (nurses) would rather, personally, *I'd* rather be at the bedside and if I had the choice of, you know, dealing with the sick or injured child or the parent, I'd be with the child, no question, so that's my comfort level ... I think a lot of nurses would feel that way too because it's so hard dealing with someone that's stressed and upset and going through these events, you know. Like we do it, I've done it, like when I'm in charge or whatever, but it's not my most comfortable spot to be.
(Morgan, RN)

Although physician participants spoke of the need to provide care to both the child and family, they did not use the term family-centred care and did not refer to the parents as their patients. Some even pointedly expressed the belief that the parent was not their patient.

I don't really care if the mom is happy with her presence there or not, that's a secondary concern. I shouldn't say I don't care, it's a secondary concern of mine whether the mom's needs are being met. The primary focus *has* to be on the child getting the best care we can provide and if the mom's presence hinders that ability to provide that care then it's a bad thing, so you have to try and balance all of those things together ... keeping in mind that the parent is not our patient.

(Sam, MD)

Physician participants in this study believed that the care of the parents was of secondary importance to the child's emergent medical care. Family-centred care in the ED will be the focus of part of the discussion in the following chapter.

Bearing Witness

The second theme, *Bearing Witness*, pertains to participants' attitudes and beliefs about direct implications that parental presence during resuscitation has for the parents. Participants could definitely see both benefits and problems for the parents related to their presence or absence. The four categories identified by participants under this second theme are: *i) Seeing is Believing*, *ii) Maintenance of the Parental Role*, *iii) The Resuscitation Room Environment* and *iv) Consequences of Bearing Witness*.

Seeing is Believing

Many participants thought that having parents present during a trauma code, in particular one involving a child likely to have a poor outcome, was important and beneficial for the parents. They linked seeing or witnessing the resuscitation to knowing: knowing that everything that could be done was being done for their child, knowing that the child was gravely ill and knowing that their child was potentially not going to survive the injury. At the most fundamental level,

both registered nurse and physician participants believed that being present in to the Resuscitation Room, to actually see their child, confirmed for parents that their child was still alive.

I bring them in ... and I think that that allays some of their fears that the child may have died, may have passed away ... they get to see that their child is, is alive ...
(Mackenzie, MD)

I can't specifically think of any greater benefit for the parent than the relief for the parent to see that the child is actually alive ...
(Sandy, RN)

Both physician and registered nurse participants linked seeing parts or all of the resuscitation in progress with a basic parental need. The parents *needed* to know that the team was doing everything possible for their child at this critical time. Having parents present and seeing the whole team hard at work fulfilled this basic need according to many participants.

I think that they need to know that we are working our best and our hardest. Um, in this case, it wasn't a very successful outcome at all, I mean, we didn't manage to succeed in resuscitating but I think as a parent if I were on the other side, it would be, I would need to know that somebody was doing the best they can for my child.
(Chris, RN)

I think also um, ah, if somebody is really sick and the outcome is not going to be good then the parents need to see that happening and they need to see the effort you are doing on their child's behalf so if they can be satisfied ... that we did everything we possibly could.
(Quinn, MD)

Participants positively associated parental presence with the development of the parent's relationship with the team. Participants believed that forming a relationship with parents whose child was being resuscitated was easier when the parents were present and that this was beneficial for both the parents and team. The openness and honesty associated with having parents witness the team's resuscitation efforts fostered trust between the parents and the team, many participants believed.

Parental presence adds to the sense of trust that the family has with the team. So I find whenever possible if the parents can be there it's easier, they can see for themselves instead of, I leave the room and try to explain to them that everything is fine or going through the specifics, they've already seen it for themselves and then you can get to that next level of your relationship with them.
(Terry, MD)

The participants acknowledged that when the parents had access during the resuscitation, it helped to dispel some of the fears of the unknown that parents may experience while sitting in the hallway or quiet room, outside the Resuscitation Room doors. Both registered nurse and physician participants thought that the parents' imagination of what could be going on behind the closed doors of the Resuscitation Room was often worse than the real thing. For these participants, a benefit of parental presence and having parents see what was going on was that these fears could begin to be allayed.

Otherwise not knowing all the time and making the parent wait outside is also very anxiety-provoking, you know, (pause) just going out to speak to the parents about the nature of the injury and the parents are not allowed to see the child is even worse, you know, because they use their imagination ...
(Lee, MD)

So you have one stressed out parent walking around the halls crying their eyes out, you know, because it is the most horrible thing they could ever imagine being done to their baby. And it's worse if you can't see what's going on ... because you think the worst...
(Morgan, RN)

In some instances, participants believed that the parents' presence obliged the parents to have a more realistic view of their child's medical condition and that this was a positive outcome of parental presence.

She also could realize how acutely ill her daughter *was* and there's the point, the possibility that she was going to die.
(Jean, RN)

I think having them watch what happens can emphasize to them how unstable or how sick their child is and how despite everybody's best efforts the child doesn't look as if they're going to survive an accident or injury...
(Jo, MD)

By being present and therefore obtaining a more realistic view of the child's status, parents may occasionally be involved in decisions to terminate resuscitative efforts. Participants discussed whether parental presence had any impact on this type of care decision, especially around timing. Participants reflected that this was always a sad and difficult situation and most believed that having parents remain present did not affect team decisions to cease futile resuscitation efforts.

Is it really going to affect your decision? Would you continue resuscitative efforts past the point of futility? Would you continue resuscitative efforts longer if the parent was there than if they're not? I don't know. I don't know that it would affect *me*, just, I guess I can only speak personally but as the trauma team leader I would say it probably doesn't make much difference.

(Sam, MD)

I don't think the parent's being there prolongs things unnecessarily ...not from my experiences, I think, I think, in fact maybe the parent spoke up first in my experience in looking back ... I don't remember them saying things like "That's enough", but I remember having the sense that they felt that that was enough ... I think everyone in the room kind of comes to that at one point ... you kind of see a process where they are following that this is not going to be a good thing, a process that they wouldn't have gone through if they weren't there because I don't think then they really see what's happening unless they're there ...

(Leslie, RN)

Some participants also indicated that they believed that having parents see the resuscitation progress from less urgent to more urgent made it easier for the parents to hear and understand the news that their child would not survive their traumatic injuries. They also believed that it was important for parents to feel like they were included and had been a part of the process.

It may be a little easier for the parent to grasp a bad situation when they see the gradual augmentation in level of care and invasiveness of care that is being undertaken ... as opposed to the parent that walks through those doors towards the end of the resuscitation...

(Jo, MD)

At least (the parents) feel that they are doing something and ... they have no control in that situation. And also like I said, you know, to know what's happening and to go through it instead of being an outsider, you know, wondering what's happening and if the child dies you weren't even there, you couldn't even go through it, be a part of it and say good-bye ...

(Morgan, RN)

Participants believed that when a child dies, the grieving process may be facilitated for those parents who remained present. In the case of dying children, some registered nurse participants believed this was the most important benefit to the parents of being present and bearing witness. All participants believed that parents who witnessed the resuscitation event may take comfort in the fact that they truly knew that everything possible was done and that the team had worked their hardest to save their child. Registered nurse participants were more likely to indicate that they thought that these parents would be less likely to be plagued with questions and doubt after leaving the hospital than those parents who had not been present and that this would lead to a better grieving process.

I believe that most people cope better with being at the bedside during death than to be tucked away somewhere else and have to be told ... and then have to be brought in. You know, there's that saying "seeing is believing" and I think that is a realistic part of the grieving process... that people, of course, they will go through the denial and all that but I think that being there is what will bring them back to realize that, yeah, it's true, the child is gone.

(Brook, RN)

Maintenance of the Parental Role

Participants believed that presence facilitated parents' maintenance of their role as parents. Although participants varied on what they believed to be the parents' role in an emergent situation, such as a trauma resuscitation, maintaining the parental role in some manner, was believed by most participants to be beneficial. The aspects of the parents' role about which most participants shared the same attitudes and beliefs revolved around providing support and

comfort to the child, acting as a guardian for the child, and being recognized as the person who knew the child best.

All study participants could see value in the parents being present when a child was conscious and aware of their parents' presence. As previously discussed, this was identified by many participants as being the most important benefit, overall, to parental presence during resuscitation. The comfort that parents could provide to the child trauma patient, participants believed, was unmatched. The support and comfort provided by the parents took the form of touch, verbal communication and simple presence, just being there. This act of comforting the conscious child patient was seen to benefit everyone. The child was less afraid, the parents were less anxious and felt they were contributing to their child's care and the team's work was often easier because the child was more co-operative in the presence of parents.

... And you get much more out of them if you have the parents with them, who can calm them because you are trying to assess this kid and they are calling for their parents and in that sort of case, yes, have the parent in the room, let the parent help. The parent can help calm and they can actually make your job more effective ...calming the child for the exam ...

(Mackenzie, MD)

Participants believed that parents who remained present during a resuscitation were able to maintain another aspect of their parental role, that of their child's guardian. Some participants described this part of the role as the parents acting in a supervisory role to the team, someone to ensure that everything possible was done and done correctly. Others described the role more as being the child's protector.

They can see that nothing is being done to purposely harm their child. People are working to save their child, for the benefit of the child and we're not doing anything that we shouldn't be doing to the child.

(Jean, RN)

So if you can't do anything to help your child, you want to be damn well sure that the people you are observing are doing their best ...and that's your job, you're sort of like the foreman in a way, although we don't give them credit for that ... but that's what they are. (Quinn, MD)

Part of being a child's guardian is being fully aware and understanding completely what is going on with the child. In maintaining their parental role by being present, both physician and registered nurse participants believed that communication between the parents and the team was enhanced. Participants thought that a greater effort was made to explain things and to include parents if they were actually in the room during parts of the resuscitation. Sometimes providing current information about the child's status was the only intervention the trauma team at work could easily provide for the parents.

I think they feel more involved when they're in the room, I think that they're spoken to more often, more frequently and by more people, I think, when they're in the room than out of the room. I think nurses have more contact in particular if a parent is in the room than if they're out of the room, 'cause I think, like, we don't come out and talk to them very often whereas when they're in the room I think we talk to them a lot, so that's a benefit for them I think that they have better communication. (Leslie, RN)

I think communication is probably easier, you know, parents can see what you're talking about, you don't have to go out of the room and paint a picture. It also gives you discussion points, you can say, "This tube does this, this tube does that, this is why we are doing that," so I think the communication is enhanced because, you know, you've got better visuals for your talk. (Quinn, MD)

The participants in this study clearly believed that parents were the people who knew the child best. Knowing the child and being able to give a detailed history, both of the event and the child's past medical experiences was considered to be another beneficial aspect of maintaining the parental role through parental presence. Giving consent on behalf of their child was also facilitated when parents were present in the Resuscitation Room. Some physician participants recognized that these were vital components of the parent's role but they believed that these

exchanges of information did not necessarily need to take place within the Resuscitation Room and could just have easily taken place somewhere else.

Information and history are the most important (benefits) especially about previous medical conditions, allergies, drugs, etc, but also the history of the acute event.
(Sam, MD)

... especially like the chronic kids, well, any kid really, because we don't know them and the parents do, so we can, you know, say "Well, is this normal for him?" or, you know, you can get medical information from them at the time.
(Morgan, RN)

The Resuscitation Room Environment

All participants expressed strong attitudes and beliefs that pertained to the physical realities of the Resuscitation Room as the environment in which the practice of parental presence takes place. Nearly all participants identified the Resuscitation Room environment as potentially problematic for the parents.

Participants pointed out that the size of the room used for the resuscitation of trauma patients in the ED at CHEO is relatively small and that the number of people who respond to a trauma code is potentially great. They thought that this combination of a small room and a large trauma team could lead to a sense of chaos or confusion in the room. Participants expressed concern that this perception of chaos and/or confusion might be disturbing for parents.

The confusion in the room always, always, they call a trauma code and people come out of the woodwork and I don't think that parents need to see that confusion.
(Chris, RN)

Both registered nurses and trauma team physicians also identified the physical layout of the room as an issue that makes parental presence more difficult. The limitations of the physical layout are twofold. Firstly, because of the small size, participants felt that the parents could physically be in their way at crucial times, standing between them and the patient in need of critical care or some urgently needed piece of equipment.

In terms of parents being in the way, participants varied notably in their attitudes and beliefs and in how willing they were to make the environment work *for* the parents. Some felt that with some focus on organization and planning, the physical limitations of the Resuscitation Room could be and should be overcome and adapted to facilitate parental presence. Others did not share this belief.

Number one, they're in the way and I find that's always been a problem during trauma, especially now that we have trauma codes. I can't get to the bed and it's *really* frustrating to have to try and do something quickly and efficiently and step over people that ... I was going to say, don't need to be there, of course, the parents need to be there but if they're in my way between the suction and his face and he's vomiting and he's on his back, I've *got* to get there ... so in the way, big time, that's a, a big dilemma, that's the biggest problem ...

(Sandy, RN)

Well, I think some people might think they're in the way, I don't think so, I think there is an appropriate spot to put them. I think you need to sort of work that in to your little scenario. It depends on how bad the trauma and how many people are trying to get their little thing done but only one thing can be done at once and I think there is always a way of finding a spot for that family member. I think it depends, I think it's the team, it's up to us to get used to, to readapt ourselves to having family present at all times, no matter what, if the family is willing to.

(Brook, RN)

Upon further exploration about parents being in the way of the team, many participants reflected that when they had experienced parents being present in the past, parents were actually quite aware and apprehensive of potentially being in the way. They acknowledged that in reality, parents seemed to hesitate, to stand far back from the bed and often needed encouragement to approach their child. In their experience, parents appeared sensitive to the possibility that they could be in the way and were afraid to negatively affect the team's performance by being too close. Many participants went on to acknowledge that in their past experiences, access to the patient had rarely been compromised by parental presence.

They stand back because people are smart enough to realize that all these people are busily looking after their kid and they don't want to mess that up because the child is in trouble. Most parents seem to instinctively, you know ... it's interesting ... people who are family members tend to stand off to the side, *watch* everything, but they don't get in the way because they are hoping you know what you're doing and they want you to do your job because they know how important it is ...

(Quinn, MD)

The Resuscitation Room at CHEO is set-up to allow for the resuscitation of more than one patient at a time by different teams; there are three resuscitation bays all open to one another within the same small room. Participants felt that the second major limitation of the physical layout of the room presented itself when more than one patient was being cared for in the Resuscitation Room at a time. This situation allows one child's parent to witness the other patient in the room being resuscitated. They were concerned about confidentiality and privacy for each child and family and about emotional reactions, internal or external, of the parents to the potentially disturbing scenes in the next bed.

Again it is a small resuscitation room and it's very difficult to provide privacy for the families and family members. If there are other families and other children in the room that are going to be greatly distracted by the presence of somebody else's parents or if there is, you know, other, more importantly I think if there are other things happening in the room with other people's children that are going to be greatly distracting to the patient's parents then I am going to try and shield them from that.

(Jo, MD)

For me a big factor is multiple patients in the room that aren't necessarily the same family...and that I think that that makes it more difficult because they're hearing what's happening in the other bed and I think that they hear stuff that's confidential ...

(Leslie, RN)

Consequences of Bearing Witness

All participants believed that being present during their child's resuscitation following a traumatic injury had definite consequences for the parents. They discussed their concerns about the potentially negative effect that being present could have on parents both in the long and short term.

The long-term effects on parents who have witnessed their child's resuscitation were believed to be a potential problem by a few participants. They thought that witnessing aspects of their child's resuscitation could have long lasting, detrimental psychological effects on parents, such as the development of post-traumatic stress disorder.

Is it also going to be part of the post-traumatic stress they're going to encounter? It's hard to predict, different people react differently and I think for some people it may be horrible to see their child being instrumented, you know, being assaulted by the team (pause) and on the other hand (pause), you know, if they don't see, I think the worst thing would be to see the doors closed and be, you know, not see your child for an hour and then the doctor coming out and saying your child is gone (pause), but the scenes that you would have with you in your mind, all those years subsequently would be horrible too (pause) and I don't know where the balance lies.

(Quinn, MD)

Besides the emotional reaction of parents seeing their traumatized child in distress, some of the short term, physical effects that participants worried about included nausea and vomiting, fainting, and the exacerbation of previous medical problems.

I think that the only time you might want to, um, I guess, limit presence, would be something that might endanger the parent, um (pause) if the parent has a known medical condition that could cause problems, if they have blood pressure problems, cardiac problems, history of seizures, you know, I might be concerned about those sort of things.

(Taylor, RN)

Participants were concerned about these physical reactions out of concern for the parents and child's well being, as well as for the potential that the parents might require care and ultimately become patients themselves. This finding about the team's concerns over having to care for the parents as patients will be further discussed within the next theme, *Drama Within a Crisis*.

Drama Within a Crisis

Dolan (1995) observed that the presence of relatives during the resuscitation of a loved one is like a drama within a crisis. I have chosen to use his wording as the title of the study's

third theme about the participants' attitudes and beliefs related to the impacts, both actual and potential, both positive and negative, that parental presence has on the trauma team. Most of these findings are related to the effect that being observed, as if giving a performance, has on the team. The largest amount of data gathered from participants in this study was related to this fourth theme. The four categories contained within this theme are: i) *Playing to an Audience*, ii) *Changing the Script*, iii) *Losing Focus* and iv) *Staying in Control*.

Playing to an Audience

I mean, if you brought your car to the mechanic to get it painted or fixed, do you think they'd feel more comfortable if you were standing there watching them the whole time? I mean, that's just human nature right? ... I think in general, human nature dictates that if you are being watched, it makes you feel more stressed.
(Kelly, MD)

The category, *Playing to an Audience*, includes evidence that participants believed that having parents watch them work during the resuscitation of their traumatized child made the resuscitation feel like a performance. The trauma team became the performers, the resuscitation of the child patient formed the dramatic action while the parents became the audience; an often ill informed, ill prepared audience that some participants believed watched every aspect of the performance intently and critically and might misperceive the actions of the team.

The feeling of playing to an audience came up as both registered nurse and physician participants discussed their apprehensions about parental misconceptions of the team's actions or communications during the resuscitation effort. Some participants believed it is this apprehension about parental perceptions that makes the trauma team behave and communicate differently in the presence of parents.

I just think that the time (for parental presence) is obviously not during a big procedure that could be perceived in a bad way or, you know, that might be disturbing ...
(Kelly, MD)

It's not yet organized, it's not yet even cleaned up sometimes. I don't really know if I want the parent to come in and see vomitus all over the kid's face because we haven't happened to clean it up yet because we have been doing something else that was maybe a little more important, yeah, we might have suctioned their airway but have we cleaned up their face, no. You know, a trauma that comes in with blood everywhere that's dried and cracked ... the parents might think, "Oh my God, why didn't they clean him up?"
(Sandy, RN)

Participants expressed most discomfort related to having the parents present when the child's physical appearance was visually disturbing, when the Resuscitation Room was in disarray or when a painful or unpleasant-looking procedure had to be performed. Trauma patients may be covered in blood, debris, glass or dirt. They may have open wounds, open fractures or deformities. The Resuscitation Room often appears messy, with blood, bandages and empty packaging all over the floor, or disorganized, with all types of equipment and supplies that seem to have been haphazardly thrown everywhere. Participants acknowledged that cleaning up a trauma patient's physical appearance and tidying up the room were clearly low on the list of priority actions taken by the trauma team during a trauma resuscitation. However, participants expressed that the presence of blood or debris on a trauma patient, especially around the head and face, or blood all over the Resuscitation Room floor made them uncomfortable in the presence of parents.

If we have a little bit of a chance to clean things up a bit, you know, get the asphalt out of the skin, you know, things like this, so it *looks* a little more presentable ... you can put a saline gauze on the, a gauze for the hair to make it look less, because, you know, old blood in the hair that's there visually, it looks horrible. I don't think we realize it as medical people, you know, how awful it looks ...
(Lee, MD)

I mean there are certain points where I would prefer to withdraw the parents during, I guess, certain, how can I say this, sometimes I think the patient should be I don't know, cleaned up and (wounds) dressed a bit before the parents come in so it's not as horrific.
(Taylor, RN)

Apart from the appearance of the child and Resuscitation Room, participants also identified that having parents watching while certain painful or unpleasant-looking procedures were being done could make completing the procedure more difficult for the team. Not that it made the performance of the skill any more or less difficult but that it might slow things down or make the person performing the skill feel uncomfortable.

I guess the other thing, again this comes with confidence and experience, but there are some things that we have to do in trauma settings that are not pleasant, they don't look pleasant, they can be uncomfortable for the child and there may be some hesitancy to do those things with parents present where they'd be done, ah, perhaps more expediently without the parents present.

(Jo, MD)

Registered nurse and physician participants had similar attitudes and beliefs about how they believed parental presence affected their performance of skills and their stress level during a resuscitation. Both groups believed that the team's actual performance was unaffected by parental presence but that presence of parents could increase the level of stress felt by the team at times of crises.

I don't think it is ever less stressful to have parents in ... I think that everyone's stress level goes up. Now whether it makes their performance any different, I doubt it. I think we all work as hard as we can and I don't think we change our management of cases because the parents are present.

(Kelly, MD)

Some physicians aren't comfortable having parents present during procedures and some don't care. I think some, I think, let's say an LP, um, it's stressful for the doctors to do it. It's stressful for the parents to see the child go through it when we crunch them up and everything and I think the parents' "ooh, ahh", you know, and I think it just distracts from their concentration. I think they just prefer not to have the parent there, less pressure and stress to do it.

(Morgan, RN)

Junior staff and students were believed to be the most negatively affected by parents' presence, however participants acknowledged that anyone could be nervous or uncomfortable when being watched by parents. Participants expressed that it was an individual's level of

confidence with their skills and knowledge as opposed to actual years of experience that influenced whether a team member was nervous in the presence of parents.

I'm sure that perhaps some of the younger nurses may be a little bit intimidated by parents' presence, I am not at all. I know that they can't do better than I'm doing ... I know I'll do the very best that I can and if I miss an IV, so be it ... I don't think that it affects my performance.

(Sandy, RN)

Um, individual people that make up part of the team will have varying degrees of confidence in their own skills and abilities ... I think that is true for every individual on the resuscitation team, they might be more self-conscious, they might be a little more nervous about what they're doing ah, in front of the parents.

(Jo, MD)

Changing the Script

This category describes the participants' beliefs that patterns of communication changed within the Resuscitation Room when parents were present. Earlier, I presented the finding that communication between the team and the child's parents was perceived by many participants to be positively affected by parental presence. On the contrary, communication amongst team members was perceived to be negatively affected by parental presence by both registered nurse and physician participants in the study.

Participants thought that when parents are present during a critical situation, such as a trauma resuscitation, team members were less open when communicating with each other; they were more likely to censor themselves or be reluctant to openly discuss the patient's prognosis or plan of care out loud.

Potential harms? Detrimental effect on team functioning by self-censorship of thoughts or ideas or communications and also increased nervousness or anxiety about performing procedures by junior people, usually, but it could be anybody really, about having mom present may hinder them from doing their job most effectively.

(Sam, MD)

I have discussed, talked with people who have told me that they find when they have parents present in the room, (cough) they try not to say certain things that would alarm

the parents. They might want to say something, you know, but will try to maybe get up closer to the doctor to inform him of something that might be a little bit alarming ...
(Taylor, RN)

Participants further believed that those in a learning situation, junior staff and students, were the groups whose communication was most likely to be negatively affected by the presence of parents. Participants thought that learners might refrain from asking questions about management and treatments for fear of looking unprofessional or as if they didn't know what they were doing in front of the child's parents.

Well (pause), I think that trainees who normally would have asked "What's the dosage of Midazolam again?" or "How do I do that?" ... might not do it because they see the parent over their shoulder and then there's this feeling of, you know, often times in a code people make suggestions and say, "Well, what about, should we give them a bit more fluid?" or "Should we do this now?" or "Should we do that?" and people are free to talk out ideas. I think with parents there and, you know, I may be wrong on this but I think people would tend to be less throwing out ideas, because of the perception that it means that you don't know what you're doing ...
(Mackenzie, MD)

Most participants agreed that parental presence changes the way that the team communicates with each other in the Resuscitation Room. Some participants believed that ideally this should not happen, that the team should be communicating in exactly the same manner regardless of the presence of parents but these participants acknowledged that, in reality, this was not the case.

... things are much more ... stifled when the parent and maybe they shouldn't be, but they are stifled as soon as the parent walks in the room, you can just tell that they're there, communication changes and, um, there's just not the same exchange of information between everybody ...
(Sandy, RN)

Participants had differing attitudes about the use of humour as a communication strategy or coping mechanism during trauma codes. All participants agreed that black humour, in particular, was inappropriate and that care to avoid its use should be taken when working in the

presence of parents. Participants indicated that, in general, the team needed to be careful of what was expressed and how it was expressed in front of parents.

... you have to be very careful what you say when a parent is present because the black humour has got to go away, because a lot of people react to stress by black humour and you have to be very careful not to say the wrong thing when somebody is in the room.
(Quinn, MD)

So in the perfect world where you have a quiet trauma code and everything is said and done in a very professional way with no sidelines and no joking then yes, I think the parents should be there.
(Sandy, RN)

While some participants thought that humour of any kind was inappropriate during critical medical situations, some physician participants indicated that they believed humour could be useful and effective in some situations. They believed that humour could be used to lighten things up and relieve tension in the Resuscitation Room and that this benefited both the team and the parents.

Oh, in fact, I use (humour) a lot *for* the parents. Like, I find when the parents are there I use that quite a lot as well because they are often more stressed than anybody else ... and I find I use humour a lot, carefully, but I use it to help them to feel OK and to try and normalize it if you can, you know, given what is going on ... so I find I use it intentionally for the parents as well as for myself and the team.
(Terry, MD)

Losing focus

Participants believed that having parents present during trauma resuscitations could be distracting to them in their work. There were various ways that participants acknowledged that the presence of parents caused them to be distracted and potentially lose focus. This was one of the most readily identified problems associated with parental presence in this study and was another area of consistency between registered nurse and physician participants.

But the thing is, at this time and place and if I've got to focus, I want to focus here (with the patient) and I'll focus there (with the parents) after and I have no problem with that, I have no problem spending time with parents afterwards and for as much time as they

need and there is no problem with that and I am definitely not anti-parent but I just ... think that in those situations, again the severe cases I don't, I don't want to even have them as part of the equation, I can't be distracted.
(Kelly, MD)

All participants identified the parents' possible reactions to the scene they are witnessing as a problem that could jeopardize the ultimate goal of running an efficient and smooth trauma resuscitation. Potentially disruptive behaviours and unpredictable emotional reactions were the main responses that participants worried about; behaviours or noises that could be distracting to the team in the midst of undertaking the complex task of resuscitating an injured child.

Participants were most concerned about parents' potentially uncontrollable emotional reactions. This type of reaction was believed to be detrimental to the trauma resuscitation for a number of reasons. Primarily, participants thought that a hysterical parent could distract the team from the work at hand.

You know, it is very distracting because the parent comes in and starts losing it and crying and screaming and, you know, it can be distracting to what we are doing. Not that I think that they should be asked to leave, that's my personal belief, but, um, but (pause) yeah, it is very distracting when they come in and they 'freak'.
(Morgan, RN)

The distraction could be simply related to the noise and behaviour causing the team to lose focus or could be related to the trauma team member's individual response to the upset parent, for example in the quote below, where the registered nurse felt distracted by her inability to meet the parents' needs.

The number of times that I look over and the parents are standing alone, crying, and that disturbs me *more than anything*. I feel like stopping everything that I'm doing and going over ...
(Sandy, RN)

I think the emotion of the parents plays a big part and, you know, you expect them to be emotional, I mean you'd be cold if you said they weren't to be emotional but I think, you know, depending on the *amount* of emotion being expressed that's always a very difficult

thing and I think that that might adversely affect members of the team so I think just that the whole mood of the room is likely to be influenced ... I think it might be hard on people to hear and if you're in a room for an hour...and you've had a parent in there that's been, you know, wailing or something the whole time, I can see that being very hard on people who work in that environment for that amount of time, it's distracting ...
(Kelly, MD)

Participants noted that parents exhibited a range of reactions to witnessing their child in a resuscitation scenario and that they believed cultural differences existed. They believed that people from certain cultures were more prone to be more outwardly emotionally expressive than other cultures. Some of these culturally different responses to death and dying, grief and stress were thought to be potentially upsetting and distracting to the team members.

I can remember one experience that I had that just haunted me for days. It was a cultural experience. (Pause). I had, I had not been accustomed to the way that some people um, wail and howl, and I can remember um, a child, I think he was either Lebanese or Italian ...the child was dying and it was an oncology patient and the parents were for all intents and purposes *ready*, they knew that there was no hope and this was kind of the final good-bye. But I wasn't prepared for the entourage of, of relatives that came in and began to mourn and wail and to me that, that frightened me and haunted me for days and I wasn't, I still think of it and the hair on my arms stands up, and I think, "Oh my God, that's dreadful, a dreadful thing", I know their loss was deep and their pain was deep, but that to me, because I think that death should be peaceful, that just haunted me.
(Chris, RN)

Culture not only was believed to affect the parents' emotional reactions at the time of a trauma resuscitation but also may influence how individual parents would interact with the health care professionals and vice versa.

But there are also cultural differences amongst parents, some people who may come from more patriarchal medical systems, countries that have patriarchal medical systems, and may be completely comfortable being told they are to wait outside, whereas others may have high expectations of being present through the whole thing.
(Sam, MD)

The cultural background of a team member involved in the resuscitation was also believed to affect how comfortable that team member may be with the practice of parental presence.

I think it's more personal ...more related to culture, we have so many people of different cultures in our different (medical) sub-specialties and I think very often that their response to parents (being present) is more personal and based on their different cultures. (Sandy, RN)

To a lesser degree, participants talked about parents' physical behaviour as problematic during trauma resuscitation. One registered nurse recalled a situation where parents physically attempted to stop her from doing a procedure that was perceived by the parent to be hurtful to the child. This was an uncommon experience among participants. Although many other participants worried about the possibility of something like this happening, only this one registered nurse had actually experienced any kind of physical interference from a parent.

... the tendency of the parent to reach in or, um, intervene physically (laughing) is a bit of a problem (pause), you know, moving to stop you doing an IV, trying to grab your arm to stop you ...you know, it's distracting, it ...was ... sort of intimidating ... (Leslie, RN)

It was not only the parents' physical behaviours and emotional reactions that participants believed could be distracting to the team. Participants expressed that parents could be disruptive by calling into question the team's management of the patient and interrupting the care of the trauma patient to ask questions of the trauma team leader or other team members. The team's inability to meet certain parents' needs for information at the same time as resuscitating the child was believed to be a problem by some.

Occasionally you have parents that have a greater need to be constantly asking questions about what's happening and that can be a distraction, that can slow things down. The parent that's constantly, that recognizes who the team leader is and constantly is asking questions of the Trauma Team Leader can slow things because every step that you make, you have to then turn and explain it (pause) it, it can cause you to lose your rhythm, it breaks your concentration for a moment. (Jo, MD)

An interesting finding that was specific to physician participants emerged in this area. As the Trauma Team Leader responsible for leading the care team, physicians indicated that

sometimes they were not aware if the parents were present in the Resuscitation Room or not. Clearly, the parents' presence in these situations did not cause these physicians to lose focus because they were completely concentrated on the child patient, so much so that they were unaware of anything else going on in their surroundings. No registered nurse participants indicated that they had had experiences with not noticing parents being in the room.

Because a lot of times during the assessment and resuscitation part, especially if it's a kid who's always dropping their blood pressure or you know that sort of thing, I don't know how aware we are of the peripheral. We may not even necessarily know that the mom is there.

(Lee, MD)

Staying in Control

All participants raised the issue of control in a variety of ways. The trauma team members, acting as the gatekeepers to the Resuscitation Room, are in a position to control almost all aspects of the resuscitation. However, situations such as the arrival of a severely traumatized child to the ED can feel very out of control for health care professionals. The child arrives suddenly, sometimes with little warning, and requires immediate urgent medical care. This situation can be unsettling, even to experienced trauma team members, and many participants believed they needed to get the resuscitation situation under control before they could even consider parental presence. Getting control of the situation involved immediate stabilization of the child including the many invasive procedures that are possible during the trauma primary assessment period.

People have often said "Can the parents come in yet?" and I have thought to myself "No!" and I felt why, why not yet? And I feel it's because the atmosphere in the room isn't ready yet for them.

(Sandy, RN)

The issue of control was also apparent as participants admitted that as trauma team members they needed to physically control the 'who, when, where and how' of parental presence. That is, they needed to control access to the Resuscitation Room initially, to control the timing of when parents were allowed in, to control the actual numbers of people present in the Resuscitation Room at any given time, and to control where in the physical space the parent would best fit.

You would think for the majority of the parents it might be better until (the initial assessment) was over with, they sort of quickly assess what the situation is, what the priorities are and get that started (pause), at least started your ABCs, (pause) I think that after the initial assessment and all right, this is our plan, this is what we are going to do for this child and then once that's done the team might feel more positive about having the parents come in.

(Jean, RN)

So the timing of when they see the child I think is the most important. It's not a black and white in terms of they should never be there or they should always be there but I think they should be there depending on their case, you know, when things are calmer but if they are not calm and they are not stable, I don't think we should call them in.

(Lee, MD)

Interestingly, although all participants discussed the need to control the timing of when parental presence occurs, unclear lines of authority for the decision were apparent. Registered nurses, physicians, the paramedics who transported the child and family to the ED, and social workers were all named by participants as possible individuals who make the actual decision to include the parents during resuscitation. Many of the registered nurses believed it was currently the physician who had the responsibility for the decision, while some of the physician participants believed it was a nursing decision.

Right now it is always the doctor who decides and you know, I do it myself, "Dr. Mitchell, can the parents come in?" ... I don't know, I am just programmed here to ask (the doctor). Where I worked before we didn't ask, I just brought them in. So you would just make a statement like, "Everyone be aware, parents are coming in" and they'd come in.

(Morgan, RN)

Some participants indicated that they were not sure if it was really a matter of making a specific decision either in favour or opposition of parental presence. For example, if the parents came with the paramedics in the ambulance, then they accompanied the child and paramedics in to the Resuscitation Room and often remained present.

I don't know that you can really say there is a distinct decision that is made about it, it's more just how the situation evolves (pause), I don't, if the child arrives with the parents then the parents are simply brought into the Resus(citation) Room and just stand in the background while we're doing our resuscitation. If the parents arrive afterwards, I suppose they would ask the nurse at the triage desk who would then direct them into the room so in a way it is the nurse at the triage desk that decides.
(Sam, MD)

The only consistency in this area was with the two surgeon participants. They both indicated that they believed the decision about whether to have parents present or not must rest with the trauma team leader.

The most senior person in the room (makes the decision). You have to have a captain. He or she is making all the decisions about chest tubes and intubation and all this business or being the final arbiter of that so that would be the person I would think, so in our set up, the trauma team leader.
(Quinn, MD)

Both registered nurse and physician participants identified that physicians were found to need control in a different way. Physicians needed to control the timing of when they had to deal with the parents, in terms of delivering updates or bad news. They felt pressure to be able to tell the parents something, anything, when the parents were present and many did not want parents present until such time as they actually had reliable information that they could relay to them.

Sometimes the physicians prefer a little bit of time before they want to bring the parents in. They want to be able to answer all the questions when the parents are in there as well.
(Taylor, RN)

The parents could have visited earlier than they did but it was just sort of in retrospect now, at the time it just seemed that we weren't ready for them to come in until they came (pause). Also part of it was because, you know, we didn't have the CT scan. We wanted the CT scan so I didn't *know* enough to really, sort of, want to have to deal with talking to them, that was part of it, I wanted more information before I took them aside and chatted with them.

(Quinn, MD)

Designated Support Person

Participants in this study offered what they believed to be a remedy to this problem of losing focus and staying in control. Regardless of whether they believed the practice of parental presence was beneficial or problematic overall, all participants agreed that in order for it to actually be practiced there needed to be a designated support person assigned to accompany, or perhaps more accurately, to chaperone the parents at all times while they were in the Resuscitation Room. Participants described this role as a multifaceted one. The most important aspect of the role was believed to be that of an information broker for the parents, preparing parents for the experience prior to entering and then explaining procedures and processes as they occurred once within the Resuscitation Room.

I think if parents are going to be present during resuscitation, there has to be somebody with them to explain at some level what's going on and why, and why are they putting that tube in your child's mouth and why are they putting that hole in your child's chest. I think without that explanation it can be a terrifying time for parents but I think if somebody is present with them and solely responsible for caring for the parents as they watch the resuscitation, I think it can be more positive or at least less negative experience for them ...

(Jo, MD)

The designated support person, participants believed, needed to be providing emotional support throughout and encouraging the parents to meet their physical needs. Participants believed that the designated support person needed to assess the parents' readiness to be present and ability to cope while in the Resuscitation Room. They acknowledged that some parents

would need to be given permission to leave the room should they be unable to cope with what they were witnessing.

I think so long as you have someone with the parents that's keeping an eye on them, you know, just making sure that they can cope with what's going on or tell them what's going on and say "If you can't handle it ...", give them an out. Let them, you know, they might not feel they should leave but give them an out if they need it, if it's getting a little crazy. (Morgan, RN)

Participants discussed who they believed to be the best person to assume the designated support role in a trauma resuscitation. Many participants believed that, if human resources were not an on-going issue, registered nurses were the most appropriate team member to take on the role because not only could they provide support for the parents, they could also provide knowledgeable information and explanations about the clinical progress of the team and child.

I think it's probably, we can't afford to have a nurse just doing that so it's probably ... a child life worker or social worker. I would think that would be ideal, if you did have a nurse that would be good, that would be better probably, to start describing some of the medical issues as well ... (Terry, MD)

I think nurses probably would be, I know I'm biased, but I think we're the best support people because I think we work holistically. I think we look at them as part of our, you know, it's family centred care, we look at them as part of the patient unit and I think that that we know medical things, we can explain it in layman's language. So personally, I think that nurses are probably the best choice of a support person but um, current numbers just don't allow it, in the vast majority of cases. (Leslie, RN)

As previously mentioned, some registered nurses who expressed a lack of comfort with the role believed that social workers or child life specialists were the most suitable health care professionals to act as the designated support person.

In an ideal situation it would be nice to have um, social work available, right there as a, a support for the family and, if we can, if nursing has time, but I think social work works a lot better in that situation ... because of a lot of nurses' comfort. I think we would rather, personally I'd rather be at the bedside and like if I had the choice of dealing with the sick or injured child or the parent, I'd be with the child so that's my comfort level ... (Morgan, RN)

While most participants believed that the designated support person's role should be to focus on caring for the parents, for the parent's well being, others had a different view. Some physician participants believed that the designated support person's key role should be to ensure that the parents' presence had the least impact possible on the team, in terms of distractions and interruptions.

But personally, I think it is a good idea to have (parents) in ... as long as for the ones who have a hard time coping with the situation, especially when the child is doing badly, that we have a team member who is devoted to helping them not interfere with the team's function.

(Sam, MD)

The Personal Realm

Although participants largely talked about parental presence from their perspective as a member of the whole trauma team, some more personal and individual attitudes and beliefs came through during the interviews. The issue of parental presence during trauma resuscitations contained ethical elements for participants. They believed that there were ethical reasons both for and against parental presence, making the decision to select one option over the other an ethical dilemma for them (Canadian Nurses Association, 2002). The final theme in this study includes the more intimate, individual reflections expressed by participants as they relate to the practice of parental presence. The three categories of data are: i) *The Ethics of Exclusion and Inclusion*, ii) *Where Would You Want To Be?* and iii) *Coming to Terms*

The Ethics of Exclusion and Inclusion

Many participants raised ethical obligations they believed they had towards the patient and the family. These participants believed that there were ethical considerations associated both with the inclusion and exclusion of parents during a trauma resuscitation.

Participants believed at a most basic, fundamental level that as health care professionals, they did not have the right to separate a child from her/his parents, even during emergent medical situations. They acknowledged that if a parent were to demand to remain present, that they would allow it. Physicians were more likely to include a caveat with this belief that they would not separate parents and child, unless the parents were adversely affecting the resuscitation.

The parent that insists on being in the Resuscitation Room should be allowed to be in the Resuscitation Room (pause) there's no, you know, we can't forcibly separate parents from children, *unless* they are interfering with the resuscitation, they should be allowed to be there.

(Mackenzie, MD)

Participants believed that it was the parents' right to choose, their right to make their own informed decision about whether they wished to remain present and that their wishes should be followed. In fact, for some registered nurse participants, the only time they were not supportive of parental presence was if, when given the option to be present, the parents themselves chose not to be.

Ask them! Because some of them might chose to, totally, "No, I can't go in there" and you know, that's fine, that's their decision but I don't think they should be told they *can't* go in there (pause), it has to be up to them.

(Morgan, RN)

Participants expressed concern that parental presence could develop into an expectation, that all parents would be expected to remain present during resuscitations. They were very clear that if particular parents believed they would not be able to cope with a situation, then those parents should not be made to feel they were required to be present.

I think we may be doing a disservice to some people by seeming to require them to watch difficult things being done to their children.

(Sam, MD)

By offering a choice, some participants thought that they were setting parents up to feel guilty if they chose not to attend their child's resuscitation. There was clearly a difference in

how registered nurses and physicians believed parents should be approached regarding their decision to remain present.

I think they should always be asked, no matter what and I think they should be more ... encouraged because I think it's a hard decision, when you are under that kind of stress, to make and I think they should be encouraged to come in.
(Brook, RN)

I would put it to them that, um, "If you'd like to come in, you are welcome to come in" not, "Are you ready to come in now?" because I think that, you know, parents feel that they've got to go in and be with their child but if they can't stomach it then, you know, I would never want to put anybody in that situation ...
(Terry, MD)

Registered nurse participants expressed that they had an obligation to protect the patient's dignity and privacy during certain procedures. These participants cited very personal procedures, such as the insertion of a urinary catheter, as times that they are reluctant to have parents present. This was totally related to maintaining and protecting the child's dignity and privacy, even from parents and especially in situations involving adolescents. The physician participants, who are not as likely to be performing personal procedures, did not raise this as an issue.

I just don't feel comfortable if I'm just going to catheterize someone and their legs are spread and the curtain is open, I just don't want the parents walking in at that moment. I just want their child to be dignified when they walk in.
(Sandy, RN)

Participants believed that, as trauma team members, it was their role to advocate for both the child's and parents' best interests. In terms of the child's best interest, this meant ensuring that the child patient received the most competent clinical care available. In the first theme, *The Paediatric Trauma Patient*, participants' beliefs that the priority goal was the optimal clinical care of the child were clearly demonstrated.

Some participants believed that being present throughout their child's resuscitation was not in the parents' best interest. Physician participants, in particular, believed that by denying parents the option to be present during the resuscitation, they were doing them a favour and protecting them from the grisly experience of witnessing their child being resuscitated. Although participants believed this was something they were doing to care for the parents, out of concern for the parents' welfare, there was a certain amount of paternalism noted when physician participants spoke about protecting the parents.

I guess I don't want to sound so cold because when I say I don't want the parents to be involved, it's because I also care about the parents and I care about their perception and I care about, you know, what they are going to intake and what they are going to see ... So in an indirect way, I think I am also doing it for their benefit ... I think it's protective ... I mean parents should be there if they can and I really want them to be there but, and this will sound very paternalistic, but when I'm in that 'zone', in that mode for those patients, I don't want them, I don't want to be bothered, I just want to get the job done.
(Kelly, MD)

As with other ethical dilemmas, both registered nurse and physician participants in this study realized that they sometimes made decisions to keep parents out of the Resuscitation Room because it was easier for them as health care professionals.

Yes, like I can admit as a nurse, it ... certainly is sometimes easier without the parents there, one less stress, one less thing to deal with, but as a person and if I was a parent ... they have every right to be there and that's what it comes down to.
(Morgan, RN)

The easy answer here is to keep parents out. That's what we've always done because we said that from a patriarchal approach to parental involvement in children's care, we've said that they should stay out because it is not good for them to be present and also from the team's standpoint in terms of protecting team function, we've said team function is better when they're not present or we come up with lots of reasons behind it, like sterility and parental anxiety, team anxiety etc.
(Sam, MD)

Where Would You Want To Be?

I asked participants if they would want to be present during a trauma code involving their child or loved one. It was interesting to note that in the registered nurse group, all but one of the participants expressed consistent views about parental presence whether they were considering it from a personal standpoint or from the perspective of a patient's family. Most registered nurses who believed it was a favourable practice for parents, would want to be present themselves, while the one who was opposed to the practice, would not want to be present if personally confronted with the situation. The only registered nurse with inconsistent views, believed that parents should be offered the option to be present, but would not want to be present should her family member be in need of resuscitation.

This was an area of difference between the registered nurses and physicians in the study. Some of the physicians expressed consistent views, that is, if they thought parents should be present, they thought they should be present if they were ever in the situation of having a child or loved one undergoing resuscitation, but many were completely inconsistent. Most of those physicians who had notable inconsistencies in their beliefs, believed that parents should be given the option to be present but that if they were in a similar situation, that they would not want to be present.

I don't know, Allyson, to be honest with you, you know, and my gut feeling is to say, "Absolutely, like, yes, no doubt" but ...I would think if it were me personally, I would almost worry about getting too critical of the people doing the job ... But yes, I think I would want to be but then at the same time I think, "Man, that's going to be so difficult" and so maybe in that situation I wouldn't want to be. Maybe I would just want to be kind of at ear's length, outside, you know, hopefully updated. That's a good question because actually my gut feeling when you first asked it was absolutely but maybe not, because maybe that would be too hard, to be a bystander.

(Kelly, MD)

Only one physician, who believed that parental presence was not a sound practice for parents, expressed that he would want to be present if the situation arose that his child needed to undergo a trauma resuscitation. He believed that because he was a physician experienced and knowledgeable in trauma care, he could possibly contribute medically to his child's care. He believed that his presence would be both appropriate and desirable for the team.

Coming to Terms

Participants varied in how they believed parental presence affected their own individual abilities to cope with emotionally charged situations in the Resuscitation Room. Some registered nurse participants thought that they personally coped better with the death of a child patient or in resuscitation cases that did not go well when the parents had been present and that this was a personal benefit to them. Presence gave them a sense of doing all that they could for the parents as well as for the child patient. It was highly satisfying to know that they had helped the parents deal with a devastating situation. Some spoke of the ability to have closure on an upsetting case as a personal benefit of parental presence.

In general, like the whole outcome, just looking at cases, you know, where parents have been there or not been there for me, I think it's made the process a better process ... you take them up to ICU, my last contact is always with the parent, I always go and speak to them before I leave and that for me is sort of a bit of closure on the event and that's been really helpful, um, I always do that ... and that's really helped me I think to be able to sort of compartmentalize that, to be able to move on especially when you have to come back on to your shift ... so I think for me that, that kind of puts it all together at the end.
(Leslie, RN)

A physician participant found that the presence of parents humanized the situation and that this was a personal benefit of their presence as well.

It humanizes the situation a bit too because you get into a trauma, especially if the child has been disfigured by the trauma, it becomes a little depersonalized and having the undisfigured parents standing over you repersonalizes it. And I think that's a benefit. It reminds you of what you are fighting for.
(Jo, MD)

On the contrary, more physician participants than registered nurse participants believed that it was harder for them personally to cope with an emotionally disturbing situation while the parents were present. They preferred to cope with these situations privately and not share the experience with a distraught parent. These participants wished to maintain a distance from the parents in order to cope effectively themselves. They considered this difficulty related to coping with the emotion of a situation as a problem that can be associated with parental presence.

... the negative thing is that if you have a child who is very sick and you're already upset about it and worried and concerned and everything, it's even harder when you have to share it with parents, much harder. So ah, but that's not negative really, that's the down side of the professional side of this ...
(Quinn, MD)

Chapter Summary

This fourth chapter presented findings related to health care professionals' attitudes and beliefs regarding parental presence during paediatric trauma codes. The four themes illustrated contextual findings and findings related to the potential impacts that parental presence has on the parent and child and on the health care professionals, both professionally in terms of team functioning and personally.

Registered nurses and physicians in this study had many attitudes and beliefs in common. They readily identified benefits and problems, for the parents, the child, the health care professionals and for themselves as individuals. Many complexities and ambiguities related to the practice of parental presence emerged in the findings. Selected themes from this chapter will be further discussed in Chapter Five, Interpretation and Discussion.

CHAPTER FIVE: INTERPRETATION AND DISCUSSION

Introduction

This thesis research sought to describe health care professionals' attitudes and beliefs related to parental presence during trauma codes in the Emergency Department. The qualitative method used to answer the research question, interpretive description, allowed the research participants to provide their descriptions of the subject under study, while my analysis led to an interpretation of those descriptions. This discussion chapter is my interpretation of the findings already presented.

The research question was: *what are attitudes and beliefs of ED registered nurses and TTL physicians regarding the benefits and problems associated with parental presence?* Past experiences and underlying beliefs about the problems and benefits associated with presence influenced the participants in this study to hold a range of attitudes. These attitudes ranged from definite opposition, through one of ambivalence and tolerance, to being strongly in favour of the practice. Participants' attitudes were clearly not static. Depending on the many contextual variables described in the previous chapter, participants described their attitudes towards presence as changing from situation to situation.

The registered nurse and physician participants shared a great deal of common ground in their attitudes and beliefs. In fact, registered nurse and physician participants in this study had more attitudes and beliefs in common than divergent attitudes and beliefs. This finding is different from what has been reported in the adult emergency literature where registered nurses and physicians were shown to have diametrically opposed views on presence (for example, Chalk, 1995; Helmer et al., 2000; Meyers et al., 2000). In this study, the differences between the

two professions were largely a matter of degree. In many instances, both physicians and registered nurses identified similar problems or benefits but one of the groups appeared to have stronger views than the other group. The differences in strength of views between the two groups were often linked to differing attitudes related to family-centred care and to their different functions and roles. The differences in registered nurse and physician attitudes and beliefs noted in this study will be further discussed in this chapter.

The discussion will begin by focusing on three key attitudes and the underlying beliefs about the benefits and problems that I discovered in this study. The key attitudes were: i) being in favour of presence, ii) being opposed to presence and iii) being ambivalent towards the practice. I will link these key attitudes and the beliefs that underpin them to the existing body of knowledge about both family and parental presence. Fears about parental presence that surfaced in this study and that are not well substantiated in the literature will be discussed in the section entitled, *The Many Myths of Presence*. Part of the discussion will centre on the needs of the various groups involved in this issue, whose needs current practices are meeting, and future considerations. I will explore family-centred care in the emergency department and how the practice of parental presence fits with this. Methodologic and study limitations will be discussed. Finally, implications for nursing practice, education, and future research will be elucidated.

In Favour of Presence

None of the participants in this study were always in favour of parental presence, and likewise, none were always in opposition to presence. In fact, very few participants subscribed consistently to one attitude or belief at all times; instead their attitudes and beliefs were in a state of flux depending on the context. These are subtle findings that a qualitatively designed study such as this one was well suited to uncover. When asked directly, five participants, three

registered nurses and two TTL physicians indicated that they were generally in favour of parental presence.

There were three conditions where both registered nurse and physician participants alike were in favour of offering the option of parental presence: i) when the parent strongly indicated a preference and insisted upon remaining present; ii) when the child patient was stable and conscious; and iii) when the child patient was expected to die imminently.

The first condition, where a parent insists on remaining with her/his child and health care professionals' willingness to accept their presence, is linked to what participants considered to be a parent's right. Participants indicated that they did not believe that they, as registered nurses and physicians, had the right to separate a parent and child. Some physician participants set a qualifier to this belief, which was they believed they had no right to separate a parent and child as long as the parent was not interfering with the resuscitation. Parental rights as a rationale to support parental presence is not well documented in the literature. The closest finding in the literature was that 94.5% of parents surveyed believed that they had the right to make an informed choice about presence at their child's bedside, not the physician (Boie et al., 1999). Much of the literature from the family's perspective is in relation to adult family members as the patient. This could explain why the right to remain present is not reported in the literature as a research finding; perhaps health care professionals' beliefs about adult patients' families' rights are not as clear as their beliefs about the rights of parents to be with their children.

In the same vein as not having the right to separate parents from their children, was the importance of maintaining the parent-child relationship. One of the benefits identified by health professionals in this study was that parents maintained their role as parents. Participants identified a number of parental roles that presence supported, such as being a comforter and

supporter for the child, being the history provider and being the child's guardian. A qualitative study based in the PICU examined registered nurse and physician decision-making around presence during invasive procedures (Jefferson, 2001). Jefferson concluded that health care professionals' decisions about parental presence were linked to their beliefs about the primary goal for a procedure, whether it be the technical success of the procedure or the maintenance of the parent-child relationship. In that study, if participants thought they had to make a choice between the two goals, the PICU staff would generally chose to fulfil the first goal, the technical success of the procedure. In the thesis research, both registered nurse and physician participants also acknowledged that their first priority during a trauma resuscitation was the delivery of competent, technical care of the child. For any given situation, if parental presence interfered with that priority in any way, their attitude dramatically shifted to opposition to the practice.

The second condition where parental presence during trauma codes was unanimously supported was with stable, conscious trauma patients. As discussed in Chapter Four, this situation often arose when a child was not severely injured but a trauma code was initiated nonetheless. Parallels can reasonably be drawn between this situation and the situation of parental presence during invasive procedures, such as venipunctures, in general paediatric emergency care. Parental presence during invasive medical procedures is an area that has more commonly been studied in paediatrics than presence during resuscitation. Participants believed that in conscious children, their parents' presence decreased the child's distress during trauma resuscitations. Two existing studies that focused on this belief were located. Wolfram and Turner (1996) and Wolfram et al. (1997) found that not only did presence during procedures decrease the child's distress but it also decreased the parent's level of distress as well. A study by Bauchner et al. (1996) seems to be contradictory in its findings that parental presence was not

effective in reducing children's pain scores during procedures. However, they only studied measures of children's pain during procedures, not markers of the effect parental presence has on distress levels and this must be considered when comparing these works.

Participants in the thesis research did not believe that parental presence affected their ability to perform technical skills proficiently. This is consistent with the previously reported finding that parental presence does not negatively affect performance of procedures (Bauchner et al., 1996). Participants in the thesis research did suggest that junior staff and those in a learning role might have greater difficulty performing skills in the presence of parents. The only pertinent literature related to those in a learning role are two surveys that suggested that residents were less accepting of the practice of parental presence than were staff physicians or registered nurses (Meyers et al., 2000; Redley & Hood, 1996). The surveys do not give reasons for why the residents were less accepting, but one could reflect that it may have been related to heightened stress levels and fears about affecting clinical performance. No research was found that measured skill performance difficulties in junior staff or those in a learning role related to parental presence.

Additionally, both registered nurse and physician participants in this study indicated that parental presence could raise their stress levels. However, increased stress may be balanced by the enhanced personal coping that some participants in this study attributed to having parents remain present. Studies by Wolfram and Turner (1996) and Wolfram et al. (1997) found that stress levels of health care professionals were not affected by parental presence during venipuncture, while work by Hanson & Strawser (1992) found that staff reported some increased stress when parents had been present during cardiopulmonary resuscitation. These inconsistencies serve to further illustrate the point raised by many participants that 'not all

resuscitations are created equal' and that contextual factors have an impact on the experience of parental presence for the team members. Clearly, parental presence during procedures such as venipuncture, is contextually different from parental or family presence during resuscitation. Contextual factors surrounding parental presence during trauma resuscitations and the impact on junior staff and learners will be an important area for discussion when recommending implications for practice later in this chapter.

Participants believed that all parents should be offered the option to be present, at least for a period of time, if a child was expected to die as a result of her/his injuries. This is the third condition where parental presence was unanimously considered favourable. That health care professionals generally support presence in the face of imminent death appears to be a new finding in relation to the existing body of research. However, some of the most significant benefits for families as identified by both health care professionals and families have been demonstrated in numerous studies related to a dying loved one (Doyle et al., 1987; Eichhorn et al., 1996; Hanson & Strawser, 1992; Meyers et al., 2000; Oliver & Fruth, 2000; Timmermans, 1997). Generally, the participants in the thesis research expressed beliefs that are consistent with previous findings related to the benefits of presence when a loved one is dying.

In studies of family members whose loved ones had undergone resuscitation, family members perceived a number of benefits related to being present at the bedside. They gained a sense of closure and believed that their grieving was facilitated (Doyle et al., 1987; Hanson & Strawser, 1992; Meyers et al., 1998; Meyers et al., 2000). They had fewer unanswered questions and persistent doubts about the resuscitation. Because they were there as witnesses, they left the ED confident in the knowledge that everything possible had been done for their loved one (Bauchner et al., 1991; Doyle et al., 1987; Hanson & Strawser, 1992; Meyers et al., 2000).

Participants in this study raised all of these benefits to parental presence during trauma codes when it was suspected that the child was likely to die. However, even in the face of these benefits, some participants were uncertain about potentially detrimental long-term effects that remaining present may have on parents. A study of the psychological effects of witnessing resuscitations on bereaved relatives found that those that remained present tended to have lower degrees post-traumatic stress and symptoms of unresolved grief at three months after the resuscitation (Robinson, 1998).

These findings are consistent with previous research, where perceived benefits of family member presence when death is imminent, as identified by health care professionals, included knowing that everything possible had been done and facilitated grieving (Meyers et al., 2000; Timmermans, 1997). Previous research evidence from the perspectives of family members and health care professionals has largely come from adult studies and the thesis research contributes by extending these findings to paediatrics.

One paediatric study in the literature concluded that physicians and registered nurses had significantly different attitudes about the benefits that presence provided for parents' grieving processes (Jarvis, 1998). Significantly more (76%) registered nurses than physicians (37%) surveyed in a study by Jarvis (1998) believed that the grieving process is helped for those parents who were present during resuscitation. The difference was not apparent in the thesis research where both professional groups appeared to believe equally in the benefits of presence in this situation. This inconsistent finding could be attributed to a number of factors. Jarvis' study was set in a PICU rather than an ED, in the United Kingdom and is more than five years old. It is possible that physicians' attitudes towards parental presence are different in an intensive care setting, in a different country, or that they have changed with the onset of more studies and

knowledge about the subject. Also the study report did not provide any demographics about participants. The study took place in a PICU in a large, general teaching hospital and it is possible that the physicians differed from physicians in the thesis research in terms of paediatric specialty training and knowledge.

As previously mentioned, a new finding from the thesis research is that health care professionals' negative attitudes towards presence can change radically in a situation where a child's death is expected. Even participants who were generally opposed to parental presence expressed a change in their beliefs related to dying children and their parents. This is a relevant finding with major clinical implications especially considering that these health care professionals may have had limited experience with parental presence and may totally shift to supporting parental presence at an already incredibly stressful time. They may be unprepared to deal effectively with the parents, not having given the issue that much thought, and then be confronted with parental presence during a time of crisis. Clearly, these are practice implications that require further discussion.

Outside of the three aforementioned conditions that participants considered favourable for parental presence, other benefits to parental presence were found. Most of these benefits were consistent with findings from previous research. Presence facilitated the development of a relationship between team and parents (Robinson et al., 1998), a rapport that can be difficult to establish during high tension situations like trauma resuscitations. Parental presence also benefited the team by facilitating history gathering and assisting them completing their assessments as the child was often calmer and quieter in the presence of parents (Bauchner et al., 1991; Sacchetti et al., 1996; Wolfram & Turner, 1996; Wolfram et al., 1997).

The finding that some registered nurse participants in the study believed that parental presence helped them to cope personally with emotionally difficult situations is not completely consistent with previous findings. One registered nurse in this study described an isolated incident where she was emotionally distressed by the unfamiliar sounds of wailing made by parents present at their dying child's bedside. Although she had clearly been upset by this incident and became tearful when describing it to me during our interview, she later articulated that she believed that other past experiences when the parents were closely involved in a child's death had given her the opportunity to gain closure. Others also believed that they had a greater sense of closure on the event and that they could be satisfied that they had cared for both the child and family to the best of their abilities when the parents had been present for parts of the resuscitation. In the adult literature, fears about increased emotional distress of team members involved in a resuscitation with family member presence has been discussed as a problem that might cause difficulty coping, making technical procedures more difficult to complete and therefore potentially having a negative effect on patient outcomes (Hanson & Strawser, 1992; Post, 1989). The evidence from the adult literature that family presence might cause difficulty coping emotionally should not preclude us from the practice of parental presence, especially when this study provides early evidence that some health care professionals believed it to be beneficial for their own personal coping. However, in light of the adult evidence and even though only one of the fourteen participants described being emotionally upset by one instance of parental presence, the emotional impact on health care professionals has clinical implications that need to be considered and will be discussed later.

In Opposition to Presence

As stated previously, in general, more physician participants in this study held attitudes that were in opposition to parental presence than registered nurses. When asked directly, the only participants who stated outright that they did not support the practice were two TTL physicians. However, some registered nurse participants opposed parental presence at specific instances, regardless of their general attitude of favouring the practice. The single largest factor that drove this opposition was the belief that parental presence might disrupt the smooth and efficient running of a trauma code and adversely effect health care professionals at a time that is already stressful. In Chapter Four, I introduced the concept that health care professionals' attitudes and beliefs varied according to a continuum that is based on the patient's status. Participants clearly had different attitudes and beliefs about benefits and problems associated with parental presence with conscious, stable children; dying children; and those in between, the trauma patient in extremis. The situation where both registered nurse and physician participants were most often opposed to parental presence was in middle of the continuum with the trauma patient in extremis, that is the extremely unstable child, who required emergent assessment and treatment.

Fundamentally, with a patient in extremis, if participants thought that parental presence would compromise the delivery of clinical care in any way, it was considered to be a problem and they opposed the practice. This is consistent with Jefferson's (2001) findings regarding parental presence in PICU, discussed previously. Interestingly, participants consistently used the term 'clinical care' to mean the technical, physical care of the patient. This finding will be further discussed in the section entitled, *Family-centred Care in the Emergency Department*.

Participants in the study expressed notable concerns about being observed by parents throughout the resuscitation of an injured patient. Parental presence made the resuscitation seem like a performance for the trauma team and participants worried that this could compromise care delivery. They worried about parental misconceptions, a finding consistent with Redley and Hood's (1996) survey of staff attitudes, where staff worried about offending family members by their actions and communications throughout the resuscitation. This worry about compromising the delivery of care is incongruent with the lack of evidence that health care professionals' level of technical ability, their performance, is adversely affected by parental presence during invasive procedures (Bauchner et al., 1996; Wolfram and Turner, 1996; Wolfram et al., 1997).

Participants discussed their comfort with parental presence during procedures based on a hierarchy of invasiveness. As the level of invasiveness increased, in general, their comfort with parental presence decreased. This is consistent with findings in the literature, related to parental presence and parent participation in children's care in general. Helmer et al. (2000) found that both registered nurses and physicians were less likely to endorse the practice as the level of invasiveness increased. Similarly, as the technical level of care increased, Brown and Ritchie (1990) found that nurses were generally less comfortable with parental participation in care.

Physicians in the study expressed more concerns than registered nurses about the inappropriateness of having parents witness certain procedures, especially procedures that they themselves would be doing, such as intubations and chest tube placements. A probable explanation for this difference may lie in the practice differences between physicians and registered nurses in this ED. Registered nurse participants indicated that they rarely asked parents to leave during procedures that they were doing and that they believed that nurses in general had more familiarity with performing skills with parents in attendance.

Participants from both professions believed that parental presence adversely affected team communication. They believed that professionals were less likely to speak openly about prognosis and plans of care, and were less likely to ask questions if parents were present. Communication during trauma codes, with a large team, is often difficult and is an area that the CHEO Trauma Program has worked to improve with the implementation of mock code drills. This concern that communication further deteriorates when parents are present is disturbing because of its potentially negative impact on the care delivered to the trauma patient and again is supported by previous research about health care professionals' attitudes towards presence (Helmer et al., 2000).

Ambivalence and Ambiguity

From the review of the literature and findings of this study, it is clear that health care professionals focus on a large number of potential problems or fears as a way to support their decisions to refuse parental presence. Most of these potential problems are not well substantiated by research and will be further challenged in the section that follows entitled *The Many Myths of Presence*. The prevalence of myths and the lack of research about certain aspects of parental presence lead to health care professionals making individual decisions about parental presence based on their personal values and past experiences. The lack of evidence in this area clearly leads to attitudes of ambivalence and much ambiguity around the practice, which offers an explanation for why such variation in practice currently exists.

There were many instances during interviews where participants acknowledged that they really did not know whether some aspects of parental presence were beneficial or problematic. These attitudes of ambiguity have both research and education implications for discussion that follows.

When asking participants directly how they felt about parental presence, the number of neutral responses I received surprised me. More participants expressed neutral personal opinions about the practice than those generally in favour or opposed. Seven of the participants, four registered nurses and three TTL physicians indicated that they held neutral attitudes. Neutral responses included, 'It doesn't bother me' (Morgan, RN), 'It's not a negative thing for me' (Jo, MD) and 'In general, I don't have a problem with it' (Chris, RN). I believe that these participants' neutrality is another indication of the degree of ambivalence that continues to surround the practice of parental presence in EDs. There are obviously large implications for future research and practice change related to findings of ambivalence in health care professionals' attitudes towards parental presence.

The Many Myths of Presence

The thought of having a parent at the bedside during a trauma resuscitation elicits varied responses from health care professionals. Many traditional arguments for the exclusion of parents can be found throughout the literature and in this study. However, many of the arguments of the past are not borne out in current reality. In a discussion paper focusing on families in paediatric critical care, Giganti (1998) discusses the existence of similar unfounded fears and calls for efforts to dispel them. In that paper, unfounded fears included fears of increasing infection, of families being in the way or behaving badly, and of breaching patient confidentiality. Albarran and Stafford's (1999) review of the literature led them to conclude that many of the arguments against family presence reflected traditional opinions of clinical staff and had not been systematically researched to determine whether or not they were sound.

Study participants' past experiences did not support or confirm some of their major reservations about parental presence. In discussion with both registered nurse and physician

participants, it became apparent that as many of them engaged in analysis of this issue, they were able to recognize the difference between what they imagined the problems could be, what I am calling myths, and what were actual problems, things that they had witnessed or experienced themselves. I chose the term *myth* deliberately based on its definition as 'a traditional or imaginary story ... usually explaining the origin of natural events and forces' (Gage Canadian Dictionary, 1983). The inclusion of the reference to tradition and its being used to explain something led me to believe the term *myth*, although potentially contentious, was appropriate in this context.

All participants talked about their fears of parents getting in the way as one reason for excluding them from the Resuscitation Room. During trauma resuscitations, where minutes, even seconds, count, participants worried that parents in the way would slow them down and cause disruptions in the care. When probed further, most participants acknowledged that in reality parents seemed to hesitate, to stand far back from the bed and often needed encouragement to approach their child. In their experience, parents appeared sensitive to the possibility that they could be in the way and were afraid to negatively affect the team's performance by being too close.

Another myth raised by participants was the fear of parents physically interfering with the staff involved in the resuscitation. Only one registered nurse recounted one incident of a parent inappropriately physically intervening. The rest of the participants had had no similar past experience.

Participants worried about parental presence increasing the risk of infection and used the example of excluding parents from presence during lumbar punctures to avoid infection and contamination. From past studies conducted in the neonatal ICU population, this fear of risking

infection or contamination during procedures is unfounded (Hamrick & Reilly, 1992; Solheim & Spellacy, 1988). Some participants acknowledged that sterility and fears of contamination could be used as an excuse to make parental exclusion more readily acceptable.

Participants worried that parents would be unable to cope and would faint at the sight of their child being resuscitated, thus unwittingly becoming another patient for the team to care for. This fear of having two patients at once was linked to limited staffing and the potential negative effect on the team's function should the team become distracted or lose a working member because someone had to become involved in caring for a stricken parent. Parents' fainting and requiring care was another myth that was not borne out by the past experiences of participants in the study.

A problem that has been raised in the literature regarding family member presence at the bedside during any type of resuscitation is the fear of litigation. A study from Australia (Redley & Hood, 1996) and a number of papers and letters from the United States and Great Britain (Brown, 1989; Martinez, 2001; Osuagwu, 1993; Stewart & Bowker, 1997) suggest that health care professionals worry about the increased potential of litigation if family members are present during resuscitations. Specifically, their concerns are about family members later questioning what they saw or heard, assuming some malpractice had occurred and launching a lawsuit. Tsai (2002) suggests that this fear of increased litigation is actually a myth. In fact, according to two American sources, the presence of parents at the bedside during resuscitation probably reduces the doubts and unanswered questions that parents may have that could lead to a lawsuit (Brown, 1989; Mitchell & Lynch, 1997).

Interestingly, in this Canadian paediatric study, no one mentioned increased risks of litigation as reason for opposing parental presence. This is one finding that is directly linked to

our Canadian health care context, where legal actions by patients' families are much less common than in the United States where health care professionals have heightened awareness of risk management in their every day work lives.

Most of the reasons for exclusion were very specific concerns about protecting optimal team functioning. Despite health care professionals' concerns, both in this study and previous research (Doyle et al., 1987; Hanson & Strawser, 1992; Robinson et al., 1998; Sacchettin et al., 2000), no evidence exists that parental presence has a detrimental effect on team functioning.

Myths about what parents might do (for example, faint, contaminate a sterile field, launch legal action) or how parents might behave (for example, get in the way of the team) during trauma resuscitations are pervasive among health care professionals. A possible interpretation is that trauma team members have been socialized to believe these types of problems with parental presence are the norm rather than the exception and that they should be expected. There is much peer pressure around this issue, with some very vocal and strong team members making their negative views well known. However, limiting parental presence based on myths or the pressure of others is unreasonable. Even though participants in this study recognized that some of their fears about detriments to team function related to parental presence did not really happen, they still relied on many of these myths as rationale for not routinely implementing parental presence. The existence of these so-called myths is a probable explanation for the great degree of ambiguity that exists for health care professionals around the practice of parental presence.

Parental Presence and Family-Centred Care

Historical Context

A British paediatric surgeon, James Spence, began advocating that mothers should stay with their hospitalized children in the 1920s, but it took the work of Psychology researchers in

the 1940s and 1950s to bring about any change in thinking towards families in hospitals (Young, 1992). By the late 1960s, research had begun to focus on the role of the parent in the child's care. Evidence of the day resulted in health care professionals conceding, almost grudgingly, that "the involvement of parents in the paediatric care of their children has been, under appropriate conditions, minimally troublesome and maximally beneficial for both the child and the parent" (Seidl & Pillitteri, 1967, p. 71). Over the past fifteen years, family-centred care has been adopted as the tenet or philosophy upon which paediatric nursing should be based (Berman, 1991; Brown & Ritchie, 1990; Hutchfield, 1999; Newton, 2000).

The CHEO Context

The first line of CHEO's corporate mission statement is to 'provide exceptional care for children, youth and their families'. Similarly, the Trauma Program's primary mission statement is 'to promote exceptional regional trauma care for children, youth and their families within a multicultural environment'. At a unit level, the ED itself has a mission statement that also details a commitment to patients *and* their families. Although the term, *family-centred care*, does not appear in any of these mission statements, the fact that each statement focuses on both the child or youth patient and family implies that the hospital, its programs and its departments subscribe to a family-centred approach to caring. Additionally, all registered nursing staff have been educated in family systems nursing (Wright & Leahey, 1994) which is introduced during their nursing orientation period.

Family-Centred Care: A Philosophy

Parental presence during trauma resuscitations is an example of moving family-centred care from philosophy into practice. Consequently, with family-centred care as a foundational principle of paediatric nursing care, it seems most appropriate to discuss the findings of this

study about parental presence within this context, first in general paediatric care and then specifically as it relates to care in the ED.

In a family-centred approach, the family, rather than the child patient is viewed as the unit of care. The family is recognized as the constant in the child's life and its role in the child's health care is valued and respected (Brown & Ritchie, 1989; Caty, Larocque & Koren, 2001; Coyne, 1995). Although this term *family-centred care* has become a natural part of the paediatric health care language, parents and health care professionals continue to have difficulty describing exactly what it means. Many complex definitions of family-centred care exist. For the purpose of this discussion, I have selected the definition of family-centred care as developed by Nethercott (1993). According to Nethercott's concept analysis, the central elements of family-centred care are:

1. The family must be viewed in its social, cultural and religious context.
2. Roles of individual family members must be evaluated to provide support for their physical and emotional needs.
3. The family needs clear information on the child's illness to enable participation.
4. Care plans should be developed and evaluated with the family.
5. The family's willingness to be involved in technical care should be assessed and accommodated.
6. The child's normal routine and care should be promoted in hospital.
7. The effect of the child's illness on the family should be assessed and support provided accordingly in hospital or home (Nethercott, 1993).

Four specific elements of family-centred care presented by Nethercott (1993) are particularly relevant to parental presence and will be used to guide the following discussion.

They are evaluating the roles of family members in order to meet their physical and emotional needs (#2), the need for clear information to enable participation (#3), assessing and accommodating the family's involvement in technical care (#5) and assessing the impact of the child's illness and supporting the family accordingly (#7).

Family-Centred Care in the ED

In the study, registered nurse participants used the term *family-centred care* to describe the care they provided. They said they believed this meant that the parents were their patients too, therefore they had a responsibility to care for the parents as well as the child. Some physician participants clearly did not share this belief. One physician stated that he did not believe, at the time of resuscitation, that the parent was his patient. Other physicians acknowledged the importance of working with the parents as a part of paediatric medicine, but they still did not go so far as to describe the parent as patient.

Even though registered nurse participants valued family-centred care, when push came to shove, as it often does in resuscitations, they were always patient-centred first, as were their physician colleagues. By being patient-centred first, health care professionals were responding to what they considered to be their first obligation, to provide competent technical care to the patient. Consistent with the ambivalence toward parental presence expressed by participants in this study and described earlier, Gill (1987) suggested that discrepancies exist between what health care professionals say they believe about family-centred care and their practices. Is there a tension between family-centred care and technically expert or optimal patient care? The registered nurses in this study thought so. Some seemed to be making apologies for being single-focused and child-centred during resuscitations versus holistic and family-centred. On the

other hand, physicians make no apologies for being single-focused, patient-centred during resuscitations.

When they're in that room (the Resuscitation Room), when they're in trouble, my job is to correct their physiology. That's it, (pause) that's my job.
(Sam, MD)

I think there are different ways of thinking about (parental presence), nursing versus medicine. I think although, you know, it is a children's hospital, it's family centred care, and I think, you know, we're pretty good here all around, but ah we're, I don't know how to say it... I don't know, we (nurses) spend more time with the family, we have a closer relationship than the doctors have.
(Morgan, RN)

Advancing Technology

An interesting, yet perplexing, finding from this study was health care professionals' use of the term, *clinical care*. When describing their fears that parental presence could be detrimental to the *clinical care* of the child, participants were clearly focusing on the technical, hands-on care of the patient. Both registered nurses and physicians were found to be using a medical model definition of the term, *clinical care*, such as the definition from the Gage Canadian Dictionary (1983) that defines the word *clinical* as related with the diagnosis and treatment of disease by observation of the patient. Using a truly family-centred philosophy, clinical care includes care in the physical realm but also psychosocial, emotional and spiritual care (Hutchfield, 1999).

Participants' use of the term clinical care to mean technical care is linked to the use of the advanced technology involved in delivering emergency, resuscitative care today. A qualitative study by Chesla (1996) identified that critical care nurses were more likely to focus on the technological biomedical care of the patient. Many of the nurses in Chesla's study were more technically focused than holistic in their approach to patients. Similarly, the ED nurse

participants in the thesis research described being focused on the technological, biomedical care of the child trauma patient during resuscitation. Smith, Kupferschmid, Dawson & Briones (1991) suggest that critical care nurses gravitate towards patients requiring technologically complex care. Some registered nurse participants acknowledged that they were much more comfortable at the bedside, providing emergent clinical care to the patient than they were dealing with the parents.

Timmermans (1997) contends that ethically if you are going to give highly technical care to a patient, it must be balanced with a 'high touch' approach to the patient's family. He describes the presence of relatives and friends at the bedside during resuscitative efforts as a way to provide 'high touch'. Findings from this thesis research, plus the limited published research evidence, indicates that not all ED nurses are comfortable with the provision of 'high touch' care during resuscitation. In light of this finding, there are important implications for education and practice to be further discussed at the end of this chapter.

Competing Needs

Findings from the study indicate that trauma team members are primarily driven by a desire to meet the patient's clinical needs at the time of resuscitation, with the meeting of parental needs being secondary. Unmet parental needs are not without repercussions. Evidence exists to suggest that unmet parental needs create additional stress in an already highly stressful situation (Twibell, 1998). Even ignoring the consequences of unmet needs, by accepting a philosophy of family centred care in the ED as described by Nethercott (1993), consideration must be given for striving to consistently meet parental needs. Participants in the study described parental presence as placing the needs of child, parents and team in tension. They believed that while parental presence may assist the parents to meet their needs, it can cause the

trauma team to feel that their need to provide clinical care and the child's great need to receive clinical care were being compromised.

Parental Needs

Previous research has been published on the needs of families with critically ill members. One paediatric study set in the PICU was found (Kasper & Nyamathi, 1988). Using semi-structured interviews, they identified that the needs of parents of critically ill or injured children were similar to the needs of families of a critically ill adult member. The clearest difference between the needs of families of critically ill adult and those with critically ill child members, however, was that the most important need consistently identified by parents of critically ill children was the need to be present with the child as much as possible. Additional parental needs included participating in the child's care in any way possible, receiving information, and being assured that their child was receiving the best care.

Six studies addressed the needs of families with adult members who were critically ill (Bouman, 1984; Daley, 1984; Leske, 1986; Marthis, 1984; Mendoca & Warren, 1998; Molter, 1979). Most of these studies used questionnaires delivered in an interview setting to collect their data. Although they generally have small sample sizes and certain methodological limitations, their relative consistency lends credence to their findings. Some of the most frequently reported needs of families of critically ill adults are: to feel hope, to have questions answered honestly, to be informed about the patient's condition, to know prognosis, to feel that staff care about the patient, to feel that the patient was receiving the best possible care, and to be with patient or see patient frequently.

Parental presence enables parents to meet many of the needs described by Kasper and Nyamathi (1988). In the thesis research, both registered nurse and physician participants

identified many of these same parental needs and recognized that presence was a way for parents to fulfil these needs.

Trauma Team Needs

The previous discussion focused on the needs of family members of critically ill patients. But what about the needs of the health care team? What do they need in order to cope with the experience of resuscitating a critically ill child? Research on this subject is limited. In the thesis research, every participant described the need to control almost all aspects of parental presence. Routinely excluding parents from the Resuscitation Room was one way in which team members could meet their need for control.

Trauma patient management is highly regimented and methodical. The successful resuscitation of a trauma patient in the ED requires a well-coordinated and organized team providing the right care at the right time. A systematic approach to initial trauma patient assessment and management that ensures that potentially life threatening problems are addressed in a priority fashion has been adopted in most developed countries world-wide (American College of Surgeons, 1997). To ensure consistency in approaches, courses such as, *Trauma Nursing Core Course*® (TNCC), *Advanced Trauma Life Support for Physicians*® (ATLS) and *Basic Trauma Life Support*® (BTLS) all teach nurses, physicians and other health care professionals the same step-by-step process.

In this regimented and very controlled plan for resuscitating the trauma patient, where does parental presence fit? Parental presence introduces an element of unpredictability and the uncontrolled. It seems contrary to how health care professionals have been taught to manage and care for trauma patients. However, in recent years, the Emergency Nurses Association (ENA) in the United States has become more and more vocal in its support for family presence in the ED.

In its most recent version, their *TNCC* course (ENA, 2000) included an evidence-based discussion supporting the option of family presence during trauma resuscitation. As well, the *TNCC* teaches an alphabetical mnemonic as a tool to recall the order of priority for trauma team actions and the recent change has seen the letter 'F' of the mnemonic stand for obtaining a full set of vital signs, completing five interventions and facilitating family presence. By adding this information to their course content, the ENA is taking a step towards changing how nurses are taught to care for trauma patients in the ED and is making a holistic approach to these patients more valued. The bulk of the course is still very focused on hands-on, technical care but now some lecture time is dedicated towards psychosocial care of patients and families, including encouraging nurses to offer family presence as an option for families of critically injured patients.

Balancing Needs

It is questionable whether all of the needs of each different, unique group can be met during a trauma resuscitation. Findings from this study and others (Jefferson, 2001; Timmermans, 1997) indicate many health care professionals believe that the priority in a critical situation is to meet the resuscitative needs of the patient. But what does that mean? Whose needs should take precedence in a family-centred ED?

In the case of resuscitating a severely injured child, participants expressed the need to control all aspects of the resuscitation. In a study about nurses' perceptions of parent and nurse roles in caring for children, Brown and Ritchie (1990) identified that, in general, a need for control often influenced the psychosocial care given to parents. They described nurses' need for control as fitting with a medical model of helping (Brickman, Rabinowitz, Karuza, Coates, Cohn & Kidder, 1982; Cronenwett & Brickman, 1983). Brown and Ritchie (1990) suggested that a

medical model of helping still predominated in hospital cultures of the early 1990s. More than ten years later, findings from this study would suggest that there are instances in hospitals today that show evidence of a medical model of helping. The trauma team as the gatekeepers to the Resuscitation Room, controlling all aspects of parental presence and taking responsibility for the protection of the parents are behaviours that could all be attributed to a medical model approach.

Many registered nurse and physician participants identified that parents needed to be protected from the grisly sights and sounds of a trauma resuscitation and potential psychological trauma associated with witnessing resuscitations. Interestingly, none of the family participants in the critical care family needs research described above self-identified the need for protection. When participants in this study reflected about needing and wanting to protect parents, some came to the conclusion that this was paternalistic and had roots in outdated practices and attitudes. Others firmly believed that they were acting in the parents' best interest when they denied them access to the Resuscitation Room and that the need to protect the parents was valid.

Much debate continues to rage in the medical literature with respect to paternalism. Some contend that there is no place for paternalism in modern health care and that health care professionals should be striving towards partnerships with patients (Coulter, 1999). Still others argue that "a degree of paternalism is a necessary part of almost every social contract (and that) the important issue is a mutual understanding of where the line is drawn and why" (Lee, 2003, p. 62). A paper using an ethical framework to explore presence during resuscitation compared principles of respecting autonomy with the counter-argument, benevolent paternalism (Walker, 1999).

While a broad discussion of paternalism in children's health care is outside the scope of this thesis research, evidence would suggest that varying degrees of acceptance and tolerance for

paternalism in approaches to patients and families continue to exist, even with the advent of family-centred care approaches in modern paediatrics. From an ethical standpoint, questions about whether it is a parent's right to witness resuscitation require further exploration.

For the team acutely involved in the resuscitation of a traumatized patient, engaged in a struggle between life and death, a medical model approach to that patient's medical management is completely justified and appropriate. But is it necessary for all team members to have this approach? It seems plausible that someone could remain family-centred and focused on the parent by enabling presence, should the parent wish it. In the implications for nursing practice section that follows, suggestions for practice change and increasing awareness may help mediate the influence of a medical model approach on the practice of parental presence.

Discussion of Method

To date, surveys have been the methodology of choice to answer questions about health care professionals' attitudes and beliefs regarding family or parental presence. A potential problem with survey research, especially when studying a controversial subject such as family presence, is the introduction of researcher bias by poorly designed survey instruments (Boudreaux, Francis & Loyacano, 2002; Polit & Hungler, 1999). The published reports of family presence surveys contain little information about how the surveys were developed and pilot tested. As well, many sample sizes were small and the results tended to be overinterpreted. There were a number of issues with the existing body of research on this subject. I believed that conducting another survey, albeit in a different location with different participants was unlikely to add significantly to the body of knowledge. I thought this method, which encouraged the use of interviews as the vehicle for data collection, would gather more detailed information to answer the question more fully. Also, because my interest was in parental presence during

trauma codes, a time when it is not very easy to ask people questions or involve them in a complex research process, I decided that interviews shortly after the fact were my best option. Finally, I firmly believed that a major strength of the methodology was its specificity to nursing and its relevant fit with this practice question.

At the conclusion of this process, my expectations of the interpretive description method were fulfilled. The data are much richer and more comprehensive than any survey data that could have been collected. Specifically, findings where much ambiguity lay, where participants simply were not sure if the practice was a benefit or a problem, and the findings that attitudes depended on context and could change radically in certain situations would probably not have been uncovered, even in a well designed survey. I believe the quality of the data has led to a comprehensive understanding of the various health care professionals' attitudes and beliefs. Flexibility during the interviews allowed me to really flesh out certain areas and deviate from the semi-structured tool depending on the individual participants' style. These strengths, combined with the identification of consistent themes from participants early on, plus careful consideration of my saturation point makes me confident that I have accurately reflected participants' views.

Overcoming Limitations

One of the early potential limitations of the study was participants' lack of understanding and familiarity with qualitative research. I originally believed that this might limit the success of recruiting participants. Although this particular ED had a history of conducting and supporting many quantitative studies, this was the first purely qualitative study to be conducted. Several early strategies were used to overcome this possible limitation. I consulted with an epidemiologist at the CHEO Research Institute who is experienced in conducting qualitative research with health care professionals, physicians in particular. This assisted me in gaining

insight and confidence into how to successfully use a qualitative approach with clinically focused individuals. As recommended by this consultant, a one-page, qualitative research primer was prepared that briefly explained qualitative research and explained certain qualitative terms in relation to quantitative terms. This was offered to participants who had questions about the method. Another strategy was to gain the support of the Trauma Program Medical Director. This physician, who is well respected for his experience in conducting clinical research in the ED, clearly communicated his support of the project to the ED registered nurses and Trauma Team Leader physicians.

A potential limitation was that I previously knew all of the participants. This may have impeded some of the participants from answering honestly or fully because they may have been embarrassed or shy to reveal their feelings to me. I wondered if they might have been aware of my particular views on this subject or made assumptions that as CHEO's Trauma Coordinator, that my views may lie in a certain direction. If they believed their own views to be conflicting, then they might have chosen to censor themselves when talking with me. During the data collection and analysis phase, I was not aware of any indications that my previous relationships with participants were limiting at all. In fact, quite to the contrary, I believe participants who trusted and respected me as a clinician, were comfortable to readily open up to me as a student researcher.

A characteristic of this work, as with all qualitative research, is its lack of generalizability to other populations. Participants were all from the same paediatric health care centre and the responses of these 14 health care professionals from CHEO may not be generalizable to all trauma health care professionals. Besides our particular culture at CHEO, which has been influenced by mandatory family systems nursing workshops for all nursing staff, the way we

organize and run our trauma resuscitations are slightly different from other paediatric health centres. We use experienced staff physicians from a variety of different subspecialties of medicine as our Trauma Team Leaders, making the TTL physician group relatively heterogeneous. At other centres, fellows may be used as Trauma Team Leaders with little staff physician involvement. Physicians with more experience, such as the physician participants in this study may be more comfortable with parental presence than fellows.

I believe that these findings are a true reflection of attitudes and beliefs of health care professionals at CHEO, that they are credible. The credibility of the findings is clearly of the utmost importance if they are to be used to support practice change in the ED. The diverse nature and number of participants, the breadth and depth of the data collected, careful attention to enhancing rigour and a thoughtful, lengthy data analysis process allow me to be confident in these findings. Furthermore, although the findings may be not generalizable beyond this study population, the general themes, with their many consistencies to the existing research in this field, will be useful to other researchers or professionals in other paediatric hospitals when addressing parental presence in their own settings.

Time for a Change? Implications for Nursing Practice

This study demonstrates the existing struggle that health care professionals face when dealing with the practice of parental presence during trauma resuscitations in the ED. Wide variability in attitudes and beliefs, coupled with a fair amount of ambivalence towards the practice, has led to unclear, wavering practices for parents of children requiring resuscitation in the ED. Based on findings from this thesis research, registered nurses are in an obvious position to lead a change of practice in this area. The fact that nurses are more likely than physicians to be approached by parents and family members about remaining present (Helmer et al., 2000;

Redley & Hood, 1996) is one reason that registered nurses are the natural leads on this issue. Additionally, in the thesis research, there were conflicting beliefs about where decision making authority for parental presence during resuscitation rests. This is consistent with Chelsa & Stannard's (1997) finding that when it came to family care in an ICU setting, unclear lines of responsibility existed. Most of the nurse participants in the thesis research thought the decision to have parents present rested with the TTL physician and many of the TTL physician participants thought it rested with registered nurses. As presented in Chapter Four, this was another area where much ambiguity was found.

This is a golden opportunity for registered nurses to exercise leadership and advocacy in an interdisciplinary environment. Most of the TTL physicians who participated in this study, representing more than half of the TTL physicians at CHEO, seemed willing to have nurses take responsibility for this practice. This finding is in contrast to findings by Beckman et al. (2002) who, in a survey of emergency physicians, found that the physicians believed they alone or in consultation with parents, should make the decision about presence. The registered nurses surveyed believed that they should also be involved in the decision. A possible explanation for this difference is that the physician participants in Beckman et al.'s survey were emergency physicians, not TTL physicians, and they were asked about presence during procedures, not necessarily resuscitation. In the thesis research, many of the TTL physicians indicated that while they were resuscitating a severely injured patient, they were not focused on the parents and did not have time to make decisions about presence. They felt it was more appropriate to have another team member be responsible for the decisions about parental presence.

Another reason that makes registered nurses, in consultation with parents, suitable decision-makers around the option of parental presence is that nurses have shown leadership in

this area for some time, both internationally and nationally. Since 1994, the practice has been endorsed by the ENA in the United States in a position statement (Emergency Nurses Association, 1994) and recently by the National Emergency Nurses Association (NENA) in Canada.

Based on findings from this study and a review of the literature, I recommend that we begin offering parental presence more consistently as an option to all parents during trauma resuscitations. Change in this area must be initiated at many levels if it is to be successful. Organizational and unit-level supports and expectations must be addressed. A strategy at the unit level to help team members reflect on their attitudes and beliefs and attempting to change some of the negative beliefs based on myths and unfounded fears will be necessary. At the individual level, registered nurses must develop skills needed to work with families and demonstrate their commitment to family-centred care by valuing the family at all points in the ED visit, even during resuscitations. In preparing for a change of practice, findings from this thesis research would be useful at all levels as discussion points around the problems and benefits that health care professionals believe are inherent in the practice of parental presence. Additionally, any plans for change would be stronger and potentially more successful if they took into account current research and theory about practice change and implementing best practices.

Findings from this study suggest that merely creating a rigid protocol as a way to implement the change would clearly not work. There are too many contextual variables that influence whether the practice is generally favoured or not and specifically, whether the benefits of presence outweigh the problems or vice versa. However, in conjunction with some of the practice change recommendations described above, establishing a formal parental presence

program as a strategic way to implement change should be considered. At the heart of such a program should be practice supports as well as an educational and research focus as discussed in the following section. The most functional practice support may be well publicized guidelines pertaining to the practice, using the best evidence available. Guidelines that could be adapted freely given the situation would be easier to implement and more acceptable to staff than rigid, prescriptive policy. Findings from this study could be useful in creating such a tool to ensure that parental presence is consistently offered in a way that both meets parental needs and is acceptable to health care professionals. Given that attitudes and beliefs around presence are tightly linked to context, a useful guideline would be one that dealt with how to proceed once the decision for parental presence has been made. Therefore, a nurse would use clinical judgement of individual situations and assessments of the parents' willingness and/or desire and ability to cope to make the decision about presence. Then a guideline could spell out how to make it acceptable. It could include things like how to prepare parents for the experience, best times to offer parental presence, who will support parents and what those support activities might be. From a quality improvement perspective, written guidelines might help to ensure that all health care professionals in the ED are made aware of their accountability for the care of parents as well as the child patient.

A practice implication that comes to light from this study is the challenge of working with parents within the ED environment, an often busy environment characterized by relatively short term encounters between health care professionals and patients and families. Whether a practice change occurs or not, the environment in the ED will not change, but it could be modified to better support family-centred care. If possible, the issue of space in the Resuscitation Room and implications that lack of space has upon confidentiality and

patient/family privacy should be addressed in the upcoming plans to renovate our ED. Ideally, plans should include a place for parents, a designated 'Parent Zone' within view of the stretcher for the times when they are unable to be close to their child's side. The creation of a 'Parent Zone' would facilitate knowing when a parent was in the room. Right now, with the small space and a large team, parents can get lost in the confusion and as discovered in the study, certain team members may not even know if the parents are present in the room.

Participants very clearly communicated the need for someone to be with the parents at all times when they are in the Resuscitation Room. This role, which has been called the *designated support person*, would be a multi-faceted one as described by study participants. If a practice change to consistently offer parental presence in the ED during trauma codes was implemented, staffing would need to be evaluated to ensure that a designated support person was always a part of the team. Increases to nursing baseline staffing, creating nursing on-call schedules or changes to the social work on-call schedule might ensure that someone is always available after-hours. Additionally, a written role description would be helpful to ensure that all people taking on this role operationalize it in a similar fashion, are aware of the complexities of the role and are accountable to practice within the ED guidelines on presence. The role description could be based upon the family support person role within ENA program, *Presenting the Option for Family Presence* (Emergency Nurses Association, 1995). In this program, the role description includes a detailed description of support interventions including conducting a brief family assessment, providing information about the patient's status, preparing the family to enter the Resuscitation Room, and accompanying the family to their loved one's bedside. Another value-added aspect of the support person is she/he is instrumental in evaluating the team's emotional needs post resuscitation and triggers critical incident stress debriefings as needed.

Nurses in leadership roles, be they directors or clinical leaders at the unit level or advanced practice nurses (APNs), have a key role to play as change agents. Changing practice around parental presence is not without risks to the trauma team. To connect emotionally with patients and families, as in parental presence, constitutes a significant risk (Hamric, Spross & Hanson, 1996). As change agents, negotiating this risk will require competencies such as assertiveness and conflict negotiation. A role of these change agents will be to model behaviour for others and to support all staff but especially those who are junior or are in a learning role. A final and important role for nurse leaders is to ensure that the caregivers are cared for, that is that the emotional toll of providing truly family-centred care in a paediatric trauma resuscitation is assessed and managed appropriately. This is especially important given that findings from this study and previous research (Chesla, 1996; Smith et al, 1991) indicates that many nurses involved in caring for critically ill patients are more comfortable with the hands-on, technical side of their job than they are providing emotional care.

Remaining Questions: Implications for Research

This thesis research provokes questions that demand further research. First and foremost, it became clear that additional research should be completed from the perspective of parents who have remained present while their child has undergone resuscitation. To date, the limited research about parental presence during resuscitation has focused on the perspectives of health care professionals (Jarvis, 1998; O'Brien et al, 2002; Sacchetti et al, 2000). Further qualitative studies, especially those of a longitudinal nature, to explore the short and long-term experiences of parents witnessing their child being resuscitated would be extremely helpful. Knowing what the experience was like when caring for parents, positive aspects could be enhanced, especially the positive support behaviours of staff and negatives could be reduced. While this study's

findings are congruent with studies that suggest that the grieving process is facilitated with family presence during resuscitation, targeted research in the field of paediatrics is required. Also a number of findings emerged related to cultural differences with respect to parental presence that should be further studied. For example, studies to determine whether health care professionals' decisions to offer parental presence is influenced by the parents' culture or if health care professionals' stress or emotional level were influenced by different cultural responses to presence such as wailing or chanting.

Gaining a national perspective of this issue is important. Using survey methodology, attitudes, beliefs and preferences of both health care professionals and parents at paediatric trauma centres across Canada could be determined. Findings from this thesis research would be invaluable to guide the development of survey items.

With respect to this study's findings, clearly a primary role of the APN focuses on research. Having identified parental presence practices as a nursing practice problem, the next step is to ensure existent research, having been interpreted, is disseminated. This study found that there were many myths associated with presence and a general knowledge deficit around research findings in this area. Presenting the thesis research findings at Nursing Rounds or Emergency Rounds, with a comprehensive review of the literature, is one way in which to begin translating research evidence in to practice. Publishing findings from this thesis research in key emergency nursing journals is another way to disseminate the findings. Further studies in the key areas discussed above could be led by the APN.

Dispelling the Myths : Implications for Education

Many implications for education came to light as a result of this study. In the section, *The Many Myths of Presence*, the myths that health care professionals associate with presence

were described. Fundamentally, education about parental presence should focus on dispelling these myths. Bassler (1999) demonstrated that an educational program was effective at changing nurses' attitudes and beliefs about presence of family in the Resuscitation Room. A multi-disciplinary, educational program based on research findings from current studies and using a case study approach to lead discussion and reflection could be used with all professional staff. Non-professional staff, such as patient service attendants, who participate in the activities in the Resuscitation Room would need targeted, appropriate education as well.

The use of mock resuscitation scenarios has been found to be an effective teaching technique in trauma care (Cappelle & Paul, 1996). The goals of mock codes are to make participants proficient in resuscitation management and to decrease anxiety about paediatric resuscitation through simulation and repetition (Roback, Teach, First & Fleisher, 1998). As a part of our commitment to trauma education at CHEO, we currently have mock trauma codes once per month during the academic year. At this point, the focus of these codes is on resident teaching; registered nurses participate infrequently and Trauma Team Leaders are not involved at all. As part of a change strategy related to parental presence, a change in our mock code model to include TTL physicians and ED registered nurses should be considered. Team building, the on-going development relationships between the ED nursing staff and the TTLs is imperative for running smooth and efficient resuscitations (Sheehy, 1992). Scenarios that incorporate parental presence could be easily developed and role-played. Practicing these scenarios in mock situations could assist staff in developing strategies for working in the presence of parents, especially the development of strategies to minimize the impact of parental presence on team communication which was an area of concern in the thesis research.

A final educational implication that findings from the thesis research point to is around the role of designated support person. Social workers, child life specialists, pastoral care staff and registered nurses currently perform an informal parental support role around parental presence. Whether practice around parental presence changes or not, there is evidence from this study and from the literature, that trauma team members would benefit from education sessions about providing support to parents whose children are undergoing resuscitation in the ED. A multi-disciplinary approach, given the diverse nature of the trauma team would be appropriate. A workshop of this nature should focus on developing individualized plans for parental support and possible presence. Elements should include assessing a parent's wishes regarding presence, assessing a parent's ability to cope, preparing the parent for what he or she may see, hear or smell in the Resuscitation Room, helping the parent to meet their physical and emotional needs while in the Resuscitation Room and communicating limits to the parents. The strength of using multi-disciplines as designated support persons is that each different discipline brings a slightly different perspective. Workshops could be designed with a formal didactic session followed by a reflective discussion. Learning together and from each other, these multi-disciplines could also act as a support network for each other following difficult cases or in debriefing sessions.

A potential role of the APN in education around this issue relates to the study's finding that identified conditions where presence was more acceptable to health care professionals. In order to change practice, it will be key to overcome health care professionals' reservations about parental presence. A targeted educational program that demonstrates that presence fits with professionals' values in these specific cases may be one strategy that an APN could implement. Additionally, including this issue as part of discussions of family centred-care in undergraduate

education would assist in preparing paediatric nurses of the future to deal effectively with the issue of parental presence.

Conclusion

This qualitative research study offers insight into the varied attitudes and beliefs of health care professionals related to the presence of parents during trauma resuscitations in the Emergency Department. The nursing specific method, interpretive description, was used to ask ED registered nurses and TTL physicians about their attitudes and beliefs around the practice of parental presence. This study does tell us that there are definite benefits and problems that people believe exist. As well, when discussing problems related to parental presence, a number of myths surrounding the practice also came to light.

There is informal demand for practice changes, as evidenced in anecdotal experiences at CHEO and in the non-research literature. Findings from this study contribute to the growing body of evidence that suggests the need for well-supported, clinical practice changes. The findings from this study could help guide practice change with a focus on health care professionals, the gatekeepers, those who must accept and embrace a practice change of this nature for it to ever occur. Implications for practice, education and research have been discussed.

We know that parents want to be present or at least want to be given the option (Bauchner et al., 1989; Boie et al., 1999; Taylor et al., 1996). I acknowledge that there are practical tensions around this issue, in terms of competing needs, lack of resources, and the emotional burden on staff. However, with careful consideration of these tensions and using findings from this and other research, consistently offering the option for parental presence could become a reality in the ED.

Paediatrics is unique in that all health care professionals providing care to children are taught to value family-centredness to some degree. In the face of mounting evidence that fears of negatively impacting patient care are unsubstantiated, health care professionals need to evaluate their attitudes of ambivalence around this practice. It is time to stop hiding behind myths and tradition in this area and move towards an evidence-based approach to the practice parental presence.

The child trauma patient's parents have been there since the start of the child's life. It is time for those providing paediatric health care to re-examine what our attitudes and beliefs are around those same parents' presence at what may be the end of that child's life in our care. Family-centred care is about inclusiveness and if we are truly dedicated to it, attitudes and beliefs around parental presence must begin to change. Yet practice can only change once health care professionals examine the evolving evidence, overcome their fears, and truly embrace family-centred care.

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APPENDIX A: ENA POSITION STATEMENT

Emergency Nurses Association Resolution number 93-02

Resolution title: **Family presence at the bedside during invasive procedures and/or resuscitation**

RESOLUTION:

WHEREAS, Every ED patient is a member of a family system, with family being defined as a person(s) who has an established mutual relationship with the patient; and

WHEREAS, Historically many emergency departments have not consistently provided opportunities for families to be present for invasive procedures and/or resuscitation; and

WHEREAS, Emergency health care workers may be challenged by the presence of family members during invasive procedures and/or resuscitation; and

WHEREAS, Family presence during invasive procedures allows the patient and family to support each other; and

WHEREAS, Family presence during resuscitation facilitates grieving; and

WHEREAS, Families have a right to be together; therefore be it

RESOLVED, That ENA support the option of family presence during invasive procedures and/or resuscitation; and be it further

RESOLVED, The ENA promote research related to the impact of family presence during invasive procedures and/or resuscitation; and be it further

RESOLVED, That ENA support the development and dissemination of educational resources for Emergency health care workers identifying the issues related to family presence and including recommendations for integration into clinical practice; and be it further

RESOLVED, That ENA collaborate with other specialty organizations to develop multidisciplinary (including but not limited to nursing, social work, pastoral care, physicians, and other emergency health care workers) guidelines for family presence during invasive procedures and/or resuscitation.

Developed: 1994

Approved by ENA Board of Directors: April 1994

Revised and approved by ENA Board of Directors: May 1996

Approved by ENA Board of Directors: September 1998

APPENDIX D: DEMOGRAPHIC DATA SHEET

Parental presence during pediatric trauma resuscitation:

Health care professionals' attitudes and beliefs

DEMOGRAPHIC DATA SHEET.....
Date and time of interview: _____

Location: _____

Date of trauma code: _____

Study Participant #: _____
.....

Professional Group: RN: _____ MD: _____ Speciality: _____

Years since graduation (RNs)/residency (MDs): _____

Years involved with resuscitative trauma care: _____

Gender: F: _____ M: _____

Age: < 25 _____ 26 - 35 _____ 36 - 45 _____ 46 - 55 _____ > 55 _____

Parental Status: Parent: _____ Non-parent: _____

Highest level of education completed: _____

Experience with parental presence during trauma resus: Yes: _____ No: _____
.....

APPENDIX E: SEMI-STRUCTURED INTERVIEW GUIDE

Tell me about the trauma code on (date) with respect to parental presence ...

(Probes: Was it discussed? Who decided? Would you say in this instance (having the parent present or not present) was a positive or negative experience for team? For the parent? For the child? Why?)

In general, drawing on your past experiences, how do you feel about parental presence during trauma codes ...

(Probes: Why do you think you feel this way? Have you always felt this way about parental presence? If not, then when and why did your feelings about parental presence change? Is this different than how you feel about parental presence during procedures or during a medical resuscitation? For participants who are parents: If your child was being resuscitated, would you want to be present?)

For the next part of our discussion, please focus only on the **trauma team's perspective...**

Tell me what some of the **benefits** to the trauma team in having a **parent present** could be...

(Probes: Can they help the team? In what way? In what positive way does their presence affect the trauma code?)

What do you think could be some of the **problems** for the trauma team associated with having a **parent present**...

(Probes: How does having a parent present affect the team dynamic? How does it affect the speed or efficiency of the code? How does it affect the team's stress level? How does it affect the communication between team members?)

What could be some of the **benefits** to the team in **not** having a parent **present**....

(Probes: Is it easier for the team to work on a child during a code without the parents present? Why do you think that is? Emotionally easier? Physically easier?)

Could you describe **problems** that could be associated with **not** having a parent **present**....

(Probes: Does it affect the team in any negative way when a parent is not present? Missed past medical history? Loss of individuality of patient? Loss of personhood of patient?)

Now, please think about what you think the benefits and problems are from the **parent's perspective...**

Possible **benefits** for the parent associated with being **present** during a trauma code...

(Probes: How does it make them feel to be present? Does it help them in any way? Short term? Long term? How?)

Possible **problems** for the parent associated with being **present** during a trauma code...

(Probes: Does it hurt or harm them in any way? Short term? Long term? How?)

Possible **benefits** for the parent in **not** being **present** during a trauma code....

(Probes: Does it protect them? From what? Do they cope better if they are not present?)

Possible **problems** for the parent in **not** being **present**....

(Probes: Does it cause problems for them? How does it make them feel emotionally? Guilty? Do they have difficulty coping? In what way?)

And finally, please tell me about what you think possible benefits and problems may be from the **child patient's perspective....**

Benefits to the child....parent **present**...

(Probes: Is the parent a comfort? Does their presence make it easier for the child?)

Problems for the child.....parent **present**...

(Probes: Can their presence make it more difficult for the child? In what way?)

Benefits to the child...parent **not present**...

(Probes: Can it be easier for the child if the parent is not there? How?)

Problems for the child.....parent **not present**...

(Probes: What is it like for the child to be alone, without their parent, during a code?)

Who do you think should decide whether parents are present or not during trauma codes?

(Probes: Is it a one person decision? Should the team decide together? Is this a reasonable possibility during a code? Who do you feel has the final say? Is this the way it should be decided?)

On what basis do you think this decision should be made?

(Probes: Contextual factors related to:

the child – age, previous experience, level of consciousness, sedation, analgesia...

the injury – severity of injury, injury appearance, amount of blood, intentional/inflicted...

the parent – expressed desire to be present, physical/emotional state, previous experience...

the resus – type of procedures, unstability of child's condition, time

the resus environment – space, large team, concurrent departmental activity...)

Finally, is there anything else you would like to add pertaining to the problems or benefits you think are associated with parental presence during trauma codes?