LOOKING AT PROVIDERS’ PERCEPTIONS OF FAMILY FUNCTIONING AFTER A CHILD HAS EXPERIENCED A LIFE-ALTERING TRAUMA

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LOOKING AT PROVIDERS’ PERCEPTIONS OF FAMILY FUNCTIONING AFTER A CHILD HAS EXPERIENCED A LIFE-ALTERING TRAUMA

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Abstract

of

LOOKING AT PROVIDERS’ PERCEPTIONS OF FAMILY FUNCTIONING AFTER A-child Has Experienced A Life-Altering Trauma

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For families that have a child who has experienced a medical trauma, adjusting to the demands of the injury, both physically and emotionally, can be an arduous task. However, there is a limited amount of literature available to providers to assist families during this time. The purpose of the study is to assess family functioning after a child has endured a medical trauma, through the perceptions of medical providers. A qualitative design was chosen for this study. The researchers conducted face-to-face interviews with two doctors and eight social workers. After interviewing ten participants, the following four themes emerged: 1) families’ reaction patterns were distinctive to the family; 2) the most significant coping mechanisms included social supports, religion, and family expectations; 3) major stressors included financial, stress from the doctors, and conflict between the family members; and 4) there were differences in roles, responsibilities and perspectives between the doctors and the social workers. For effective collaboration, the researchers split the first three chapters of the project evenly. The 10 interviews were divided and each researcher transcribed their own interviews. The researchers constructed the last two chapters together. The researchers hope that the findings from
the study will increase awareness of the stress families endure and improve the quality of care medical providers offer to families that have a child who has experienced a medical trauma.

____________________________, Committee Chair
Maura O’Keefe, Ph.D., L.C.S.W.

____________________________
Date
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This project would not have been a success without the individuals who volunteered to participate in the study. From the interviews about their professional experience, I have learned a great deal about how families cope with life after a child has experienced life-altering medical trauma.

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Chapter 1

THE PROBLEM

Introduction

Many children experience a traumatic brain injury (TBI). The aftermath of such trauma does not only affect the person who endured the injury, but also changes the life of the victim’s family. After the person experiences TBI, the members of his or her family must learn how to adjust to the injured person’s needs (e.g., emotionally, physically, and financially). The activities of daily living often change after the traumatic event and the victim frequently requires more assistance with day-to-day tasks that he or she was once capable of doing independently.

When an individual experiences medical trauma, he or she is often hospitalized to receive medical care for varying amounts of time, depending on the severity of the injury. Doctors and nurses are generally some of the first professionals to tend to the urgent, life-sustaining needs of the victim. Once the individual’s medical condition is stabilized, social workers commonly meet with the patient, and even the patient’s family, to assess their coping skills with the altered life status. Once the patient’s medical condition improves enough to meets criteria to be discharged from the hospital, he or she begins a new journey in life that may be familiar, yet undoubtedly different than the one they had prior to the medical trauma. The injury sustained is likely accompanied by a list of the individual’s special needs to maintain a new level of normal everyday functioning:
possibly assistance with bathing, eating meals, transportation, walking, communicating with others, etc.

Medical trauma not only has the potential to impact the individual physically, but mentally as well. More specifically, posttraumatic stress disorder (PTSD) symptom levels tend to be more prevalent in children admitted in the hospital for trauma-related incidents than non-trauma-related reasons (Murray, Kenardy, & Spence, 2007). In addition, parents of the patients also experience posttraumatic distress, although rates of clinically elevated symptom levels did not differ much between parents of children who encountered trauma-related events versus non-trauma-related events (Murray et al., 2007). Medical trauma has physical consequences but has the capability of greatly impacting the mental status of the patients and their family members as well.

The authors became interested in the effects of medical trauma on its victims and their families simply due to the nature of social work; that is, such individuals could often benefit from some kind of support social workers can provide in adjusting to the physical and emotional needs resulting from the trauma. As there are many different areas of social work (e.g., school, hospice), the authors have always been particularly interested in the field of medical social work.

For Sarah Dunker, her friends that work in hospitals have only expanded her fascination with the social services that are provided in the medical setting; after hearing stories from her friends about the people that come into the hospital with medical trauma,
she has always wondered what happens to a child and the family after they are discharged from the hospital.

For the other author, Sarah Adeva, her interest in studying how the lives of children and their families are impacted after a medical trauma stems from her current internship in a hospital. The medical setting only allows for a limited amount of time for care providers to help patients adjust to their condition. She became curious, however, as to how well the injured children and their families dealt with the altered lifestyle upon discharge from the hospital.

**Statement of Collaboration**

Sarah Dunker and Sarah Adeva are working together on this project to establish additional literature on family functioning after a child has experienced a life-altering trauma. The authors have equally collaborated on efforts to conduct interviews with providers and analyze the data gathered to understand trends in families’ adjustment to a member’s traumatic event.

**Background of the Problem**

One of the more frequent types of traumatic physical injury is traumatic brain injury (TBI). Traumatic brain injury affects nearly half a million children each year (Langlois, Rutland-Brown, & Thomas, 2005) and is the leading cause of death disability among children and adolescents (Ornstein et al., 2009). The effects of experiencing a TBI can understandably influence a family’s functioning as the dependency of the injured individual becomes more demanding to compensate for his or her deficiency. In
addition, the impact of medical trauma on an individual is not limited to physical factors but can also affect the person’s mental status. Oftentimes, the people that suffer such traumatic medical injury require much assistance from others to satisfy everyday needs (e.g., personal hygiene). Little research has been conducted on how well families of children who have experienced the medical trauma cope with the higher level of need. Healthcare providers (e.g., doctors, nurses, social workers) can benefit from studying the common stressors families endure in order to provide effective support in treating the individual. Also, such providers can improve the impact of their practice by learning how to implement the successful coping strategies families in this situation have advocated for in dealing with adjusting to living life after the medical trauma.

The more providers understand the physical, emotional, and mental demands of the child and family dealing with life-altering trauma, the better the providers can utilize the appropriate tools to satisfy the presenting need. With that said, there is a limited amount of literature on how families cope when a child has experienced a medical trauma and what stressors they endure under such circumstances. Studying the effects of medical trauma on families is necessary in providing well-rounded, quality care to those in need of physical and emotional support. In providers setting a strong base of emotional and physical support in the hospital, the hope is that families may be more equipped to accommodate the new demands of the child who experienced the medical trauma.
Statement of the Research Problem

The research problem is that there are few studies about the physical and mental effects on families that have a child who experienced a life-altering medical trauma. There is a lack of knowledge of what type of stressors families experience and what coping strategies help them overcome the mental and physical challenges associated with the medical trauma. Because there is limited literature on how these families deal with life after the medical trauma, some providers may lack insight on these families’ needs and how best to help them.

Purpose of the Study

The purpose of the study is to better understand the service providers’ perspectives of how a family adjusts to the child’s needs accompanying the injuries sustained from the medical trauma. The research serves to help providers become more knowledgeable about what specific resources are helpful to the families in these circumstances. In addition, the study will provide information to service providers about appropriate interventions by focusing on the needs the families present.

Theoretical Frameworks

Elisabeth Kubler-Ross describes, in five discrete stages, a process by which people cope and deal with grief and tragedy, especially when diagnosed with a terminal illness or experience a catastrophic loss (Kubler-Ross & Kessler, 2011). It is now a widely accepted model of emotional and psychological responses that many people experience when faced with a life-threatening illness or a life-changing situation. These
stages do not only apply to loss as a result of death but may also occur in someone who experience a different life-changing event, such as a person’s significant loss in autonomy and ability to care for self in the most basic manner (e.g., personal hygiene). Kubler-Ross added that it is important to note that these stages are not meant to be complete or chronological. Not everyone who experiences a life-threatening or life-changing event feels all five of the responses nor will everyone who does experience them do so in the order that is written. According to Kubler-Ross, reactions to illness, death, and loss are as unique as the person experiencing them (Kubler-Ross & Kessler, 2011).

The five stages are as follows: 1) “Denial” is usually only a temporary defense for the individual. This feeling is generally replaced with heightened awareness of positions and individuals that will be left behind after death; 2) “Anger” usually involves the individual searching for someone to blame for the situation her or she is in; 3) “Bargaining” involves the hope that the individual can somehow postpone or delay death. Usually, the negotiation for an extended life is made with a higher power in exchange for a reformed lifestyle; 4) “Depression” involves the dying person (or the person dealing with some kind of loss) begins to understand the certainty of death (or the finality of the loss). Because of this, the individual may become silent, refuse visitors and spend much of the time crying and grieving; 5) “Acceptance” is when the individual begins to come to terms with his mortality or disability of his loved one (Kubler-Ross & Kessler, 2011).
Kubler-Ross’ theoretical framework helps explain the difficulty parents of children who experienced a medical trauma have in adjusting to life after the injury. Research shows that while many people with acquired brain injury lack insight regarding the impact of their brain injury, for their parents, there is often an acute awareness of the loss which has occurred: the loss of the expected, “normal” future, along with the hopes of success associated with such “normal” development. Parents tended to mourn the loss of the potential that existed for their before the medical trauma (Collings, 2008). In understanding the emotional reaction patterns the child and their family presents, the better providers can intervene and introduce possibly more productive strategies to cope with the situation.

Murray Bowen describes family dynamics with the Family Systems Theory. The theory allows one to understand the organizational complexity of families, as well as the interactive patterns that guide family interactions. The connectedness and reactivity make the functioning of family members interdependent. A change in one person's functioning is predictably followed by reciprocal changes in the functioning of others (Gilbert, 2006).

After a child has endure a significant medical trauma, the dynamics of the family unavoidably change—parental roles may require adjusting as caretaking demands of the child may increase; it may be required for the siblings of the child to become more involved in helping the child accomplish everyday tasks, etc. In addition, stress between members of the family that did not exist prior to the trauma may now exist, also altering
the family dynamics. Family Systems Theory illustrates how one member of the family’s condition effects the entire unit.

**Definition of Terms**

**Coping** is to face and deal with responsibilities, problems, or difficulties.

**Grief** is keen mental suffering or distress over affliction or loss; to suffer disappointment, misfortune, or other trouble (grief, 2011).

**Intervention** is to involve oneself in a situation so as to alter or hinder an action, behavior, or development.

**Medical Trauma**, for the purpose of this study, is any physical injury; refers to a serious or critical bodily injury, wound, or shock. This definition is often associated with trauma medicine practiced in emergency rooms (trauma, 2005).

**Posttraumatic Stress Disorder** is the development of characteristic symptoms following exposure to an extreme traumatic sensor involving direct personal experience of an event that involves actual or threatened death or serious injury, or learning about unexpected or serious harm experienced by a family member or close associate (American Psychiatric Association [APA], 2000, p. 263).

**Stress** is related to both external and internal factors. External factors include the physical environment, including one’s job, relationships with others, and all the situations, challenges, difficulties, and expectations you're confronted with on a daily basis. Internal factors determine a body's ability to respond to, and deal with, the external stress-inducing factors. Internal factors which influence your ability to handle stress
include one’s nutritional status, overall health and fitness levels, and emotional well-being (trauma, 2005).

Traumatic Brain Injury is the result of a severe or moderate force to the head, where physical portions of the brain are damaged and functioning is impaired (VA Polytrauma System of Care, 2009).

**Assumptions**

The assumptions that need to be considered for this study include: 1) The interviewers are knowledgeable about the processes a family encounters after a child experiences a medical trauma (i.e., from hospital admission to discharge, to life after discharge); 2) The interviewers can provide accurate information about what providers’ perspectives are on family functioning after the child had experienced the trauma. The participants have been employed in the hospital setting for several years and have encountered multiple families under the mentioned circumstances.

**Justifications**

There is a literature that notes the impact physical trauma has on the patient and the family but there is a lack of research on how family functioning specifically changes after a child (ages 0-18) experiences medical trauma. As service providers, it is imperative that knowledge about the type of assistance people need, whether medically or emotionally, be accessible. With the lack of information available to guide service providers’ interventions, the quality care suffers.
As social workers and others in the helping professions develop a more sophisticated understanding of the nature and impact of medical trauma on a child and his or her family, it will lead to greater integration of this concept into practice. Considering the prevalence of children encountering severe injuries needing medical attention, the authors suggest that more studies are needed to assist social workers and other professionals in providing life tools to help ease the adjustment to the new daily living, with its demands after traumatic injury.

**Delimitations**

This study is strictly exploratory and qualitative in nature and does not provide any statistical information. A fairly small sample of participants was gathered; the authors assembled a convenience sample, interviewing providers (i.e., doctors, nurses, social workers) only in California. The authors did not interview the families who have been exposed to medical trauma, but just the providers that worked with them. The providers’ contact with the patients and their families is often limited, and eventual discontinues upon discharge from the hospital, thus, the findings are not longitudinal and only provide a restricted assessment of family processes.

**Summary**

Chapter 1 included an introduction and background of the problem. In addition, Chapter 1 included a statement of the research problem, the purpose of the study as well as the research questions. Chapter 1 concluded with sections on a relevant theoretical framework, the definition of terms, and finally the assumptions, justification and
limitations of the research. Chapter 2 is a review of the relevant literature that examines the impact physical injury has on children and caregivers (i.e., parents), including the mental distress families experience as a result of the trauma.
Chapter 2

LITERATURE REVIEW

Many studies have been conducted to examine the effects of traumatic physical injury on children, including aspects such as posttraumatic stress, maladaptive behaviors, and complete rehabilitation factors. One of the more frequent types of traumatic physical injury is traumatic brain injury (TBI). Traumatic brain injury affects nearly half a million children each year (Langlois et al., 2005) and is the leading cause of death disability among children and adolescents (Ornstein et al., 2009). Traumatic brain injury in children and adolescents is a major public health problem with its lasting effects resting on the shoulders of the family to remedy. It is commonly caused by pedestrian or bicycle-associated collisions, or motor vehicle accidents (Middleton, 2001) and in children, frequently results in the impairment of “executive control processes” (Dennis, Guger, Roncadin, Barnes, & Schachar, 2001) that are “mediated by frontal-subcortical pathways” (Alexander, Delong, & Strick, 1986, p. 358).

The impact on executive control processes has been attributed to the relatively late maturation of this region. Appropriate executive control performance relies on the portion of the brain (frontal lobes) impacted by such injury, that serves to regulate, monitor, and organize behavior through processes that enable an individual to engage in independent, purposive activities (Lezak, 1995). Such injury to the portion of the brain involved in executive control processes inhibits the identification of and adjustment to errors in one’s performance. Several studies have shown that adults with frontal lobe
lesions (a consequence of TBI) demonstrate a pattern deficient in performance monitoring; these individuals tend to make errors and are undaunted by the consequences of their behaviors, including the lack of goal attainment (Eslinger & Damasio, 1985). The discussed impairment in performance monitoring, as a result of a TBI, can understandably influence family functioning as the dependency of the injured becomes more demanding to compensate for his or her deficiency.

A family’s response or ability to cope with the effects of the traumatic physical injury may often be influenced by the child’s own response to his or her trauma-related hospital admission. Hospitalization has been associated with a variety of adverse psychological responses in pediatric patients and their parents, including posttraumatic stress (Kassam-Adams & Winston, 2004). Factors related to treating the injury during hospitalization, such as invasive medical procedures, lack of sleep, sedation, and separation from family during hospital stay, often create distress for the parents and/or the child (Murray et al., 2007).

The hospital admission somewhat provides the family and the child with a preview of the kind of change required in everyday care as a result of the traumatic injury; the overview of the altered way of life the family and the injured must adopt can be overwhelming and the adjustment to meet the needs of the injured person can be difficult for all involved. With that said, it is unclear whether such posttraumatic stress reflects the experience of hospitalization itself, or the effects of injury, pain, and other events particular to trauma-related admissions (Murray et al., 2007).
Interestingly, a study was conducted that compared psychological responses in children and parents one month after trauma- and non-trauma-related hospital admission. The sample included 205 children aged 7-16 years and their parents. All were assessed for posttraumatic stress disorder (PTSD) and distress one month after trauma-related (Trauma Group: n=101) and non-trauma-related hospital admission (Non-Trauma Group: n=104). The results of the study indicated that clinically elevated PTSD symptom levels were more prevalent in children admitted for trauma-related (18%) than non-trauma-related reasons (4%). Parents also experience posttraumatic distress, although rates of clinically elevated symptom levels did not differ much between the Trauma (11%) and Non-Trauma (8%) groups. The study concluded that children experienced greater posttraumatic distress following trauma-related hospital admission, while parents’ experience of their child’s hospitalization is equally distressing regardless of the reason for admission (Murray et al., 2007).

Another notable trend of a child experiencing a traumatic physical injury, specifically TBI, is the diagnosis of attention-deficit/hyperactive disorder (ADHD), also called secondary ADHD (SADHD). SADHD is a relatively common and significant adverse side effect of TBI in youths during the first six months after injury (Max et al., 2005).

Secondary ADHD refers to the development of ADHD after brain injury. Studies have described this disorder as a complication of TBI (Gerring et al., 1998, 2000). The relationship of injury severity to the development of SADHD is still uncertain. A study
that included participants with a limited range of severity of injury (mostly severe TBI but also a small sample of children with moderate TBI) found no correlation of SADHD to injury severity (Max et al., 2005).

There are a number of models proffered in the literature that help explain the impact of trauma on children and their families. For example, cognitive models of trauma in children and adults propose that an individual’s appraisal of a traumatic event and of one’s capacity to cope with the experience play crucial roles in how well one adjusts to life after the trauma (Salmon, Sinclair, & Bryant, 2007). This concept claims that excessively negative perceptions about oneself and others will result in inflated estimates of likely harm and negative outcomes in the future, as well as maladaptive coping strategies. According to this perspective, negative appraisals will contribute to PTSD because these thoughts will hinder the ability of the individual to use corrective information to recognize that the threat of trauma has passed (Salmon et al., 2007). Despite increasing evidence of the role of appraisals of future events in posttraumatic adjustment in adults, there has been much less study of their role in children following trauma; less analyses of families’ ability to cope with the changes that accompany traumatic physical injury has been done. The focus of much acquired brain injury (ABI) research is on caregiver burden and stress rather than parental/familial grief (Collings, 2008).

Caregivers concerns are generally centered on the children’s physical and psychological well-being, the reorganization of family life, and the disruption of
community ties. Cultural values of pride, heroism, courage, and revenge emerged as relevant aspects shaping caregivers’ reactions to the traumatic event (Moscardino, Axia, Scrimin, & Capello, 2007). Research shows that possible sources of resilience include the willingness to return to normality and social support (Moscardino et al., 2007).

In this chapter, we will review literature that has discussed various types of traumatic medical injury and the effects of the experience on the individual and the family. Some coping strategies of the injured individual as well as the family will also be included. The stress and challenges of adjusting to a new life with different needs as a result of the trauma will be also be discussed in this chapter. The stated topics will be organized as the following: parental grief and loss following a medical trauma, parental stress and caregiver burden after children have received a medical trauma, predicting posttraumatic stress disorder in children following medical trauma, and the interventions for pediatric brain injury.

**Parental Grief and Loss Following a Medical Trauma**

It is estimated that 12,900 of 39,000 Australians who sustain an ABI each year live on with severe or significant permanent disability (Collings, 2008). A comparable study has yet to be conducted in the United States, but is determined that 1.7 million people sustain a traumatic brain injury (TBI) each year in the U.S (Brain Injury Association, 2005). A small exploratory study explored parental grief in response to the loss of normative lifespan development associated with ABI sustained in late adolescence or adulthood. In this study, the age range at which ABIs were sustained was 19-20 years
old, and the amount of time passed after the injury at the time of interview ranged from 2.5-26 years. In-depth interviews were conducted with a small purposive sample of affected parents (n=5) to address what their experience with grief is like (e.g., how long grief lasts) and the impact of losing the normal lifespan development, which occurs with ABI. Research shows that while many people with ABI lack insight regarding the impact of their brain injury, for their parents, there is often an acute awareness of the loss which has occurred: the loss of the expected, “normal” future, along with the hopes of success associated with such “normal” development (Collings, 2008). Furthermore, the study suggests that this perceived loss is ongoing; parents are obligated to make adjustments as the full impact of their child’s injury is realized across the lifespan (Collings, 2008).

The parental grief described is a common reaction to loss which may be expressed physically, affectively, cognitively, behaviorally, or spiritually (Martin & Doka, 2000). The “loss” that parents of children with a brain injury suffer is in reference to is the demise of their children as they knew them in the past or imagined them in the future. Research shows that some parents with the type of loss previously mentioned often experience some of the stages of grief, which has been traditionally associated with the finite loss of bereavement, such as denial, disbelief, isolation, bargaining, sadness, and anger (Collings, 2008). However, such grief over who or what the child could have become before the injury cannot be resolved in the same way death can be resolved because the child still does exist. It has also been concluded that a lack of validation for the type of loss parents experience for their children with ABI complicates progress.
toward closure (Collings, 2008); a new reality must be created with the spontaneous release of the previous one. Research suggests that in therapy, parents are often encouraged to mourn the initial diagnosis, their grief is expected to subside, and they are expected to look at the positives (Collings, 2008). As for looking at the positives in the situation, fathers, more often than mothers, endorse the notion that injuries benefit children by toughening them up or teaching them to avoid future injury risk situations (Lewis, DiLillo, & Peterson, 2004).

In the study of whether “parents experience grief with the cessation of normative lifespan development in their adolescent/adult children who sustain a severe ABI,” 80% of participants reported that the grief abated into a less severe, but recurrent, form of grief (Murray, 2001, p. 225). The same majority reported that the initial acute phase of grief lasted on average from 12 to 18 months. After this, they noted a general adjustment to their changed circumstances but with ongoing recurring/re-emerging periods of grief (Collings, 2008).

The re-emerging grief was described by participants as being related to: loss of their child as they knew them; child’s inability to do “normal” everyday things; concern about their child’s future well-being, especially in relation to appropriate accommodation; anger about the pointlessness of the situation; lack of closure relating to the fact that the object of their grief is still alive; lack of confidence in, as well as lack of hope/encouragement from, medical and/or allied health staff; witnessing other people of a comparable age doing “normal” things (e.g. getting married, working); impact on
siblings; and amount of time taken up by caring for their injured child and consequent restriction of social interaction/activity (Collings, 2008).

Research acknowledges that the grieving process for parents is not time-limited, noting that the final stages involve the adjustment of existing schemas, attaching a meaningful framework to one’s loss and learning to function with that loss (Collings, 2008). It is reported that one’s reaction to loss improves over time, but that “successful” grieving does not require the grief to end; elapsed time from the traumatic event makes a difference in the parents’ level of acceptance about the reality of their situation, but it has no apparent impact on the persistence of their grief experience (Collings, 2008). The grief being discussed is viewed as a dual process, with the griever moving back and forth between grief-oriented activities and restoration or adjustment-oriented activities.

Research shows that the majority of parents reported that their experience, even as tragic and mostly negative, also yielded positive elements, such as opportunity for personal growth and increased family cohesiveness (Collings, 2008). Coping strategies included: making conscious efforts to not think about their loss; creative activities; sharing their experiences with others; and focusing on other aspects of their life, such as work and social activities (Martin & Doka, 2000).

**Parental Stress and Caregiver Burden After Children Have Received a Medical Trauma**

More than 14 million children are injured every year, making injuries the leading cause of death and disability for those between the ages of 1 and 21 in the United States (Lewis et al., 2004). A study on caregivers’ concerns about their child’s physical health
after experiencing a medical trauma showed that such concerns were stressed by 41% of caregivers (7 of 17) (Moscardino et al., 2007). Furthermore, the caregivers’ stress was reportedly manifested by physical ailments; headaches, stomachache and ear pain were the most frequent physical symptoms described by caregivers (Moscardino et al., 2007).

The study included a convenience sample of 19 families from Beslan during their 40-day stay in northern Italy, three months after the terrorist attack. Seventeen primary caregivers were asked to participate in semi-structured interviews as part of a study on posttraumatic stress. Of these caregivers, 12 were mothers, two were fathers, and three were other relatives (e.g., aunt, grandmother). Children’s age ranged from 6-14 years. All children (13 boys, 9 girls) were held as hostages during the terrorist attack and had undergone repeated surgeries for their physical injuries. Caregivers’ mean age was 41.29 years; 10 caregivers were married, four divorced or separated, and three widowed. Part of the caregivers’ stress was induced by the child’s reaction to the trauma. In caregivers’ conversations with the affected children after the traumatic event, common issues for 88% of the children involved in this study were behavioral, aggression, sleep disorders, lack of appetite, separation anxiety, and regressive behaviors (Moscardino et al., 2007).

Many caregivers expressed concerns, doubts, and difficulties with regard to their role as parents. Approximately one-third of the caregiver participants reported a sense of guilt and failure in protecting their children from the trauma they had experienced. Nearly two-thirds of caregivers expressed their difficulties in imposing “normal” rules and a discipline due to the child’s “increased, psychological vulnerability” (Moscardino
et al., 2007, p. 1781). Although the caregivers recognized the necessity to behave with their children “normally”, many were uncertain about the effects of their discipline strategies in light of their child’s new psychological conditions and often reported giving in to their request (Moscardino et al., 2007). Caregivers commonly feel burdened by the pressure to find the correct balance between living life as “normal” as possible, prior to the event, and making the necessary accommodations to everyday activities due to the trauma sustained.

Some caregivers who were present for the traumatic event expressed a sense of gratitude for surviving, they also have a feeling of guilt or compassion for those who suffered greater injuries than their own family member or themselves. Most caregivers reacted to the death of friends and/or relatives with depression, grief, mourning, and a sense of loneliness (Moscardino et al., 2007). Half of the caregivers mentioned behavioral strategies to find relief, such as crying, listening to music, use of relaxation techniques, cigarette smoking, and drinking alcohol (Moscardino et al., 2007). A common theme in caregivers’ narratives was their perception of insecurity in everyday life, along with the sense of uncertainty about the future and a feeling of vulnerability expressed as the fear of another traumatic event (Moscardino et al., 2007).

Another study focused on the frustration experienced by caregivers when adjusting to the needs of a child whose executive functions have been hindered because of traumatic, medical event. The sample for this study included 110 children with an average age of 10.39 years old, from an ethnically diverse community. The sample was
compared across three trauma-exposed groups: familial trauma, non-familial trauma, and no trauma. Children completed a battery of tests to assess working memory, behavioral inhibition, processing speed, auditory intention, and interference control (DePrince, Weinzierl, & Combs, 2009).

Executive functions (EF) are comprised of such diverse abilities as directing attention (including shifting, inhibiting, and focusing attention), manipulating information in working memory, and self-monitoring (DePrince et al., 2009). The study concluded that children exposed to non-familial traumas (e.g., motor vehicle accident) will demonstrate slightly better EF performance relative to children exposed to familial trauma (including physical abuse, sexual abuse, and/or witnessing domestic violence) (DePrince et al., 2009). With that said, families still note significant deterioration in a child’s ability to achieve in school, maintain, update and integrate information, when he or she has experienced a traumatic medical injury.

Another study was conducted to examine the posttraumatic stress levels in children and parents following traumatic medical injury. The sample included 51 young, traffic injury victims aged 8-15 years. The assessments were conducted shortly after the injury, three months and six months post injury. The study found that during three months to six months following the incident, 12% of the children indicated the period of time with highest posttraumatic stress levels (Sturms et al., 2005). With three months and six months after their child’s involvement in a traffic incident, more than half of the parents reported one or more posttraumatic stress symptoms (Sturms et al., 2005). Put
differently, the posttraumatic stress symptoms experienced by children following the traffic injury were also experienced by their parents; results for the study show that it is likely that a substantial number of parents will suffer significant distress following their child’s traffic injury (Sturms et al., 2005). The children’s traumatic injury generally requires those they are dependent on (i.e., parents) to make life adjustments in order to provide proper care. As a result, caregivers/parents report feeling stressed with the new challenges (i.e., special needs) that accompany a severely injured child.

**Predicting Posttraumatic Stress in Children Following a Medical Trauma**

Road traffic accidents are one of the most common traumatic events that children can be exposed to; children under the age of 21 can be injured as vehicle occupants, pedestrians, or bicyclists (Landolt, Vollrath, Timm, Gnehm, & Sennhauser, 2005; de Vries, Kassam-Adams, Cnaan, Sherman-Slate, Gallagher, & Winston, 1999). Traffic injuries involving children have been linked with severe and fatal injuries; postinjury disabilities; a range of functional limitations; and psychobehavioral and cognitive changes (Sturms et al., 2005). Reports from case studies as well as self-report questionnaires from children involved in road traffic accidents insinuate that children suffer from nightmares, separation anxiety, sleep disturbance, specific fears, depression, and travel and generalized anxiety (Stallard, Salter, & Velleman, 2004). Posttraumatic stress disorder is associated with significant social impairment, cognitive deficits, poor academic performance, and various behavioral and emotional disorders (Nugent, Ostrowski, Christopher, & Delahanty, 2007). In order to adequately address this
increasing number of children in traffic accidents, it is important for professionals in these settings to understand trauma and the progression of posttraumatic stress symptoms in children.

The *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* defines posttraumatic stress disorder as developing characteristic symptoms following exposure of a traumatic experience in which an actual threat or perceived threat of death or serious injury was endured. A diagnosis must be made one month from the traumatic event and must greatly interfere with social and occupational functioning (APA, 2000). Criterion symptoms resulting from the exposure includes persistent reexperiencing of the event; including nightmares, flashbacks, distress when reminded of the event, and/or a physical response (increased heart rate and/or sweating) to reminders of the event (APA, 2000). The individual must be experiencing dissociative symptoms such as avoiding thoughts, conversations, and places that are reminders of the traumatic event; feeling distant from others; and difficulty remembering the event (APA, 2000). In addition to these symptoms, an individual experiencing posttraumatic stress will have increased arousal such as difficulty falling and staying asleep, irritability, difficulty concentrating, and feeling on edge or jumpy (APA, 2000).

Posttraumatic stress disorder in children may demonstrate disorganized or agitated behavior instead of a ‘normal’ response of intense fear after the traumatic event (APA, 2000). Children may exhibit frightening dreams without recognizable content or generalized into nightmares of monsters, rescuing others, or of threats to self and
others (APA, 2000). Children may often use repetitive play to express the trauma, such as repeatedly reenacting a car crash if he or she has recently been in an automobile accident (Russell, 2000). Most of these symptoms should be evaluated with help from the child’s parents, teachers, and others that may be observing the child (Russell, 2000).

Studies show prevalence of posttraumatic stress disorder in children after a road traffic accident was anywhere from 2.9% to 29% at six weeks after the traumatic event (Bryant, Salmon, Sinclair, & Davidson, 2007; de Vries et al., 1999; Kassam-Adams & Winston, 2004; Landolt et al., 2005; Murray et al., 2008; Nugent et al., 2007; Stallard et al., 2004). Out of these same studies, as many as 10.7% to 49% of children, at this same six-week juncture from the traumatic incident, were experiencing subsyndromal posttraumatic stress (Bryant et al., 2007; de Vries et al., 1999; Kassam-Adams & Winston, 2004; Murray et al., 2008; Nugent et al., 2007). Posttraumatic stress symptoms are used when the child or parent exhibits symptoms for posttraumatic stress disorder, but does not meet the full diagnostic criteria (Nugent et al., 2007).

Of the studies that were looking at posttraumatic stress symptoms in children, the parental response to trauma was examined as well. Many of the studies found that parental posttraumatic stress symptoms were uncorrelated to the initial posttraumatic stress symptoms in their children immediately after the incident (de Vries et al., 1999; Landolt et al., 2005; Nugent et al., 2007). What was found was a correlation between parental posttraumatic stress symptoms approximately four to six weeks after the incident and a later diagnosis of a child’s posttraumatic stress disorder (de Vries et al., 1999;
Landolt et al., 2005; Nugent et al., 2007). This may mean that a parent’s reaction to a child’s accident may greatly influence how the child views his or her adjustment after the trauma. High parental stress may sway the child into incorporating maladaptive ideologies about the traumatic event.

Landolt et al. (2005) found that a father’s diagnosis of posttraumatic stress disorder, four to six weeks after the child’s traumatic incident, was significantly associated with their child’s posttraumatic stress symptoms six months after the incident. Landolt et al. (2005) also found that the mother’s diagnosis of posttraumatic stress disorder was not associated with the child’s posttraumatic stress symptoms.

Although most of these studies looked at the correlation between parental posttraumatic stress disorder and children’s posttraumatic stress symptoms, other predictive factors came into light. Most studies noted injury severity was not correlated to child’s posttraumatic stress symptoms (de Vries et al., 1999; Landolt et al., 2005; Stallard et al., 2004). The type of the accident and the age of the child were also not found to be contributory towards children’s posttraumatic stress symptoms (Landolt et al., 2005; Stallard et al., 2004). However, there were some discrepancies between studies. One study found that age was a contributing factor in children’s development of posttraumatic stress symptoms (de Vries et al., 1999). The younger the child, the higher the correlation between parental posttraumatic stress disorder and the child’s posttraumatic stress symptoms (de Vries et al., 1999). Gender was also noted as having a
significant correlation of developing posttraumatic stress symptoms; girls were more likely than boys to develop posttraumatic stress symptoms (Stallard et al., 2004).

Another predictor of posttraumatic stress disorder in children was the tendency to engage in negative appraisals (Bryant et al., 2007). The child’s negative appraisals about the trauma influences stress reactions, which influences a child’s subsequent diagnosis of posttraumatic stress disorder (Bryant et al., 2007). This correlation may be due to children’s maladaptive view of the traumatic event, which in turn influences the child’s adjustment after the trauma. Also, children and adolescents are developing cognitive skills during this time frame; thus making him or her cognizant of adverse changes to their self-image (Bryant et al., 2007).

Child Traumatic Brain Injury

Children are at the highest risk for receiving a traumatic brain injury (TBI); children from birth to age four and 15 to 19 years of age are at the highest risk (Arroyos-Jurado & Savage, 2008; Brain Injury Association, 2005). Among these children, the majority is not admitted to the hospital and therefore receives a variety of treatment (Ponsford et al., 2001). These TBIs often result in headaches; and cognitive, behavioral, physical, emotional, social, functional, and academic difficulties in the child (Arroyos-Jurado & Savage, 2008; Cole, Paulos, Cole, & Tankard, 2009; Conoley & Sheridan, 1996; Ponsford et al., 2001).

These deficits are often demonstrated as impairments in attention, speed of information processing, memory, fatigue, and sensory motor functioning (Ponsford et al.,
There is a significant amount of demands set on children in school to pay attention and to learn; children that have sustained TBIs have no physical impairments but have behavioral difficulties are expected to behave and excel in school as everyone else (Ponsford et al., 2001). Many children that are demonstrating distractibility or inability to process information are quicker to get punished than treated for what may be the underlying cause.

The likelihood of developing posttraumatic stress disorder in children following a traumatic event is similar to that of an adult (Fletcher, 1996). However, the inclusion of traumatic brain injury introduces a perplexity in examining posttraumatic stress disorder after accidents due to the alterations of the conscious level that are subsequent to TBI; this interferes with the memorizing process and the capacity to re-experience the event (Mather, Tate, & Hannan, 2003). Several arguments have been made that posttraumatic stress disorder can follow traumatic brain injury (McMillan, 2001). Mather et al. (2003) found that seventy four percent of children in their study displayed posttraumatic stress disorder symptomatology. Children that had sustained a traumatic brain injury compared to children that had not sustained a traumatic brain injury had no difference in the posttraumatic stress disorder symptomatology (Mather et al., 2003).

**Interventions**

Interventions can be implemented by teachers, therapists, family members, or anyone in the child’s environment that may play an essential role in the structuring of the child’s environment (Slomine & Locascio, 2009). Different interventions provide
differently approaches for what the child may need. Conoley and Sheridan (1996) noted that education, family support and advocacy, behavioral therapy, and home-school consultation are often needed interventions.

More and more interventions are including the family system. TBI not only affects the survivor, but the parents, siblings, and extended family; families are reporting depression, emotional difficulties, burden, anxiety, social isolation, loss of income, difficulties adjusting to new roles, and difficulties expressing their needs (Cole et al., 2009; Conoley & Sheridan, 1996). These stressors may be mediated by social variables, the presence or absence of support networks and/or the change in the relationship between the child and the relative (Conoley & Sheridan, 1996). One study suggests that negative family functioning predicts new development of psychological disorders in children that have a brain injury; while a supportive environment following a brain injury can buffer the addition stress to the family as well as the child’s adaptation to the injury (Cole et al., 2009). Friends and family tend to be more helpful during the first few months following a trauma, but their attention and support drift as the recovery process continues (Conoley & Sheridan, 1996).

An intervention strategy for children with traumatic brain injuries is to match the intervention to the family. The two concepts seen to be most effective to interventions for TBI are variability and flexibility (Arroyos-Jurado & Savage, 2008). Interventions should begin early and be implemented across all the settings (home, school, etc.) to facilitate generalization of skills that may be difficult for children with TBI (Clark, 2002).
Various individual differences will affect the intervention needs, such as the developmental stage of the child, the injury, level of disability, and the difference in time for recovery (Cole et al., 2009). Since the effects of TBI are multifaceted, the treatment approaches and interventions should be as well (Arroyos-Jurado & Savage, 2008). Families are expected to react differently to their child’s injury; treatment that has a “one size fits all” approach should not be conceptualized as effective (Cole et al., 2009). Studies found the common interventions to be injury education, family realignment, adjusting the child’s environment, skills training, executive functioning, and educational based interventions.

**Injury Education**

After a child has sustained a head injury, families should be informed about the nature of the injury (Cole et al., 2009; Conoley & Sheridan, 1996). Information should be conveyed in a way that the family can understand, is sensitive to their vulnerability, is informative of the injuries likely time course, and the best way to cope with the injuries (Conoley & Sheridan, 1996; Ponsford et al., 2001). Clinical professionals should provide information to families that further their understanding of the child’s injury, how the injury might impact siblings, and help develop realistic goals for the child (Conoley & Sheridan, 1996; Cole et al., 2009). Prognostic indications should be kept at a minimum so families have a clearer and realistic expectation of their child’s injury (Conoley & Sheridan, 1996).
Injury education interventions are found to be associated with reductions in caregiver stress, burden, and fear for the future (Cole et al., 2009). Families of children who have sustained a TBI and were provided information in the emergency rooms had better outcomes three months after the injury, compared to children that received routine care (Slomine & Locascio, 2009). Children that were given an information booklet on coping skills post-TBI reduced parental anxiety, and lowered the incidence of ongoing problems in the child (Ponsford et al., 2001).

**Family Realignment**

Incorporating a positive realignment and reorganization of the family system is thought to be one of the most effective interventions for youth with TBI (Cole et al., 2009; Conoley & Sheridan, 1996). Family realignment interventions includes aiding parents in resolving their differences in the reactions to the child’s injury; parental empowerment to encourage realignment, including parents taking the leadership role to support a functional hierarchy; and incorporating positive behavioral supports into the family’s everyday routine (Cole et al., 2009; Conoley & Sheridan, 1996; Leith, Phillips, & Sample, 2004).

Another important component of family realignment is addressing the issue of sibling coping (Cole et al., 2009). Sibling’s whose brother’s or sister’s sustain a brain injury are more at risk for psychological distress and negative sibling relationships (Swift, Taylor, & Kaugars, 2003; Cole et al., 2009). In order to reduce the burden one
may experience regarding his or her sibling’s injury, adjustment and problem solving skills should be provided (Conoley & Sheridan, 1996).

**Adjusting the Child’s Environment**

Environmental modifications and making necessary accommodations to the injured child’s environment to support ongoing recovery are an important part of this type of intervention (Arroyos-Jurado & Savage, 2008; Cole et al., 2009). Leith et al. (2004) stated some of the adjustments should include increasing structure and predictability into the child’s routine; being proactive in behavioral approaches; involving people and activities that are meaningful to the child; and using positive behavioral supports and strategies (such as errorless learning). Studies show that adolescents with behavioral challenges following a brain injury who were introduced to positive behavioral supports, reduced targeted behaviors to near zero, increased the adolescent’s domain of activity, and improved the adolescent’s self-management abilities (Feeney & Ylvisaker, 2003; Gardner, Bird, & Maguire, 2003). These environmental adjustments promote the injured child’s feeling of social belongingness (Leith et al., 2004).

**Skills Training**

Skills training programs may include teaching coping skills to the parents, siblings, and to the child with the brain injury; helping the family build emotional support; or developing problem solving skills in both caregivers and the individual with the injury (Cole et al., 2009). Caregivers and other family members may be particularly overwhelmed immediately following a child’s TBI, especially when the child is returning
home (Cole et al., 2009). Fostering coping skills, problem solving skills, and positive communication is likely to reduce those stress levels in family member (Waaland, 1998). Skills’ training to family members has a benefit on the child with the TBI due to the direct effect family coping has on the child’s recovery (Cole et al., 2009).

**Executive Functioning**

Executive functioning includes aspects of goal directed behavior, including attention control, planning or goal setting, cognitive flexibility, and processing speed (Catroppa, Anderson, & Muscara, 2009; Slomine & Locascio, 2009). During childhood, due to their immaturity, these skills are particularly vulnerable (Catroppa et al., 2009). With TBI, it is often the executive control over other cognitive processes that is in need of rehabilitation (Slomine & Locascio, 2009).

One approach to rehabilitation is a comprehensive cognitive intervention. This intervention involves a systematic approach to teaching problem solving during everyday activities in the child’s life (Slomine & Locascio, 2009). Problem solving strategies can be useful in improving functioning skills in children with a brain injury (Slomine & Locascio, 2009). For example, a child may learn to complete a multistep task by following a set of sequenced steps; tasks become less novel and the child is able to improve functional activities (Slomine & Locascio, 2009). In time, these executive skills emerge into routines.

In addition to problem solving skills, the use of everyday people and routines in promoting organization may be helpful for children that have acquired a brain injury.
(Slomine & Locascio, 2009). An example would be to use graphic organizers and/or photographic cues (Slomine & Locascio, 2009). Utilizing these cues to improve self-monitoring procedures improved task behavior and productivity (Slomine & Locascio, 2009).

**Educational Based Interventions**

Educational based interventions are focused on the child’s reentry into the school. A successful school reentry includes an assessment that is tailored to the child’s needs, implementation of a multidisciplinary team approach, facilitation of peer interactions, and planning for provision and withdrawal of support (Diedrick & Farmer, 2005). Initially, students should be placed in settings with increased structure and support, including but not limited to, general education, part-time special education classes, residential placements, and homebound instruction (Arroyos-Jurado & Savage, 2008; Janus, 1994). Within these settings, it is recommended to use direct instruction as it increases reading and mathematics performance; the use of compensatory aids (tape recorder notes); modifications to students’ workloads; deadline extensions; and breaking down of tasks into smaller, more manageable assignments (Arroyos-Jurado & Savage, 2008; Clark, Russman, & Orme, 1999).

**Summary**

This chapter covered parental grief and loss following a child that has experienced a medical trauma; parental and caregiver stress after a child has received a medical
trauma; predictions of posttraumatic stress in children that have sustained a medical trauma; and interventions for child brain injury.

One of the most frequent types of traumatic injury is traumatic brain injury, affecting nearly half a million children each year. The coping patterns and response that the family has to the child’s injury can be influenced by the trauma-related hospital stay. Hospitalization has been linked to adverse psychological stress, including posttraumatic stress, due to invasive medical procedures, lack of sleep, sedation, and separation from family. However, hospitalization can provide the child and the family with a preview of the change that may be required for care of the child.

Research shows that the way the individual views the injury impacts the adjustment to life after the trauma. Negative perceptions about oneself and others will likely result in negative outcomes as well as maladaptive coping strategies. These negative appraisals may aid in a later diagnosis of posttraumatic stress disorder. Another trend that was noted with traumatic brain injury is the development of Attention Deficit/Hyperactivity Disorder (ADHD). This is known as secondary due to the development of this disorder after the child has sustained the traumatic brain injury.

Many adolescents or early adults that have acquired a brain injury lack the insight regarding the impact of his or her injury, while their parents are aware of the loss of the expected “normal” future. This loss is common, ongoing, and may be expressed physically, affectively, cognitively, behaviorally, and/or spiritually. This loss may mimic the stages of grief, such as denial, disbelief, isolation, bargaining, sadness, and anger.
Mothers are often encouraged to mourn the initial diagnosis and look at the positives; while the fathers tend to endorse the idea that injuries teach their children to avoid further injuries.

Many parents noted that on average, the acute grief phase from a child’s traumatic injury lasted from 12-18 months. After the initial grief period, there were re-emerging periods of grief that were related to loss of the child as they knew them; child’s inability to do “normal” everyday things; concern about the child’s future; anger about the situation; lack of closure relating to grief; lack of confidence from medical team; witnessing other individuals doing normal things; impact on siblings; and amount of time taken to care for child and consequently the restriction of social activity. Adjusting schemas and attaching a meaningful framework to the loss may help a parent to function with the loss. The parent’s reaction to the loss improves over time, but does not end. Despite parental grief, some parents report that positive coping strategies have come from a traumatic injury to their child.

Caregivers’ experience more stress after a child has sustained a traumatic brain injury and part of the stress is induced by the child’s reaction to the trauma. Approximately one-third of parents expressed guilt for failure to protect their child from the trauma he or she had experienced. Two-thirds expressed difficulty imposing normal disciplinary rules on the child. A commonality between caregivers with a child that has experienced a traumatic injury is that the caregiver often feels burdened by the pressure to make the child feel as normal as possible and accommodating for the child’s needs.
Caregivers’ express frustration with adjusting to the needs of a child whose executive functioning has been hindered due to a traumatic, medical event. One study found that posttraumatic stress levels were highest three to six months after the traumatic incident. Stress levels were higher in parents than they were in the children.

Road traffic accidents are one of the most common events that a child can be exposed to and can be linked to severe and fatal injuries; post injury disabilities; a range of functional limitations; and psychobehavioral and cognitive changes. Posttraumatic stress disorder or posttraumatic stress syndrome is common in children that have experienced these types of incidents. While many studies examined the relationship between child who sustained a traumatic, medical trauma and subsequently, posttraumatic stress disorder; studies examined posttraumatic stress on the parents. Many found that the parental reaction to the child’s traumatic event is correlated to the posttraumatic stress of the child.

Studies look at differing factors that may contribute to the child’s and/or parent’s posttraumatic stress. Many found that injury severity and type of accident did not affect the development of posttraumatic stress disorder, while child’s development and gender did. Among the list of injuries that comes from being in a traumatic, medical emergency, a traumatic brain injury is on that list. Children are the highest risk for sustaining a traumatic brain injury. With a traumatic brain injury, symptoms include headaches; cognitive, behavioral, physical, emotional, social, functional, and academic difficulties;
impairments in attention; speed of information processing; memory; fatigue; and sensory motor functioning.

In regards to traumatic brain injury, more interventions are looking at the family system and recognizing that this impairment affects not only the child, but the family as well. Negative family functioning predicts new development of psychological disorders in children that have a brain injury; while a supportive environment following a brain injury can buffer the addition stress to the family as well as the child’s adaptation to the injury. An effective strategy is matching the intervention to family. Interventions that tend to be most effective have two concepts; variability and flexibility. The interventions that were discussed in this chapter were injury education, family realignment, adjusting the child’s environment, skills training, executive functioning, and educational based interventions.

Injury education believes that families should be adequately informed about the nature of the child’s injuries. Information should be understood by the family and is sensitive to the needs of the family. This provides the family with a more realistic idea of the time course of the injury and how to adapt their lives to care for the injured child. This intervention is found to reduce caregiver stress, burden, and fear of the future.

Family realignment includes aiding parents in resolving their differences in the reactions to the child’s injury; parental empowerment to encourage realignment, including parents taking the leadership role to support a functional hierarchy; and
incorporating positive behavioral supports into the family’s everyday routine. Sibling coping is also looked at in this intervention.

Adjusting the child’s environment is an intervention that helps advocate for environmental modifications and accommodations to the child’s environment to support ongoing recovery. Environmental adjustments promote the child’s feelings of social belongingness. Skills training programs may include teaching coping skills to the parents, siblings, and to the child with the brain injury; helping the family build emotional support; or developing problem solving skills in both caregivers and the individual with the injury. This type of intervention is thought to decrease stress levels in a family member that directly affects the child’s recovery.

Since executive functioning is so complex, many interventions have been developed that look at this area. Comprehensive cognitive intervention involves a systematic approach to teaching problem solving during everyday activities in the child’s life. This intervention believes that children with traumatic brain injuries can learn a multistep task by following a set of sequenced steps. This way tasks become less novel and the child is able to improve functional activities and in time, these executive skills emerge into routines. Utilizing everyday people and routines in promoting organization may be helpful for children that have traumatic brain injury have been studied as well. Educational based interventions are focused on the child’s reentry into the school. School reentry should look at all aspects of the child’s injury and be placed in a setting
with intense structure and support. In these settings, direct instruction may increase reading and mathematics performance.
Chapter 3

METHODS

Introduction

This chapter discusses the methods of this study. Included in this section is the research question, a description of the design that was used for this study, and an explanation of the participants that were used in this study. Data gathering procedures and how the data was analyzed for this study is covered. Since the study includes human participants, protection of human subjects was also included.

Research Question

This study examines the following question: how do medical providers perceive family functioning after a child has experienced a medical trauma? In order to investigate this question as thoroughly as possible, an exploratory qualitative study was chosen.

Design

In order to investigate the question that was addressed, a qualitative design was chosen for this study. A qualitative study is a non-numerical examination and interpretation of observations for the purpose of discovering underlying meanings (Rubin & Babbie, 2008). Commonly used methods in collecting data for this design are face to face interactions, observations, and/or interviews. Qualitative research attempts to probe the deeper meanings of human experiences and is intended to generate richer observations that are not easily reduced to numbers (Rubin & Babbie, 2008). Qualitative
research may be more suitable in situations where flexibility is required and little information is known about the subject (Rubin & Babbie, 2008).

There are several advantages and disadvantages to using a qualitative design. An advantage is that when using qualitative designs, the researcher can use any pertinent information related to the topic to be considered data (Morse, 2010). This design allows for more descriptive and unexpected results. In some instances, qualitative research can build theory and produce enough results so quantitative methods can be used (Rubin & Babbie, 2008). A disadvantage includes time; data collection and data analysis are time consuming. Using a qualitative design, the numbers of participants are smaller and therefore limiting the information that is collection and potentially can be biased (Creswell, 2003).

For the purpose of this study, the researchers conducted face-to-face interviews and interviews over the phone. Interviews conducted over the phone were mainly for convenience. The technique of interviewing allowed the researches to explore and understand the participants’ views of the research question. Allowing the researchers to better understand what happens to the family and the child after the child has sustained a traumatic medical accident. Due to the broad topic, qualitative design was imperative to gathering the depth and complexity of this subject.

**Participants**

The population of interest for this study was nine medical providers in a hospital setting. Participants are doctors, nurses, or social workers that have worked in a hospital
setting for at least one year, preferably two years. Nine individuals participated in the interview; one was a medical doctor, one registered nurse, four licensed clinical social workers, and three social workers. The individuals that participated in the study work with children that have sustained a medical trauma, as well as their families while their child(ren) was in the hospital. Participants were chosen based on availability and convenience.

The researchers identified a few subjects that were willing to participate in the interview and by using a snowball sampling procedure; more subjects were indentified through referral. Snowball sampling can be identified as a procedure a researcher uses to access informants through contact information that is provided by other informants (Noy, 2008). Fellow colleagues in the researchers’ masters level social work courses were approached and asked for referrals. One of the researcher’s internship is in a hospital setting; therefore she was able to recruit a few individuals to participate in the study. Other participants were recruited by individuals that the researchers knew working in a hospital setting; these individuals were approached and asked if they knew of anyone that would be willing to participate. No incentives were provided for participating in the study.

The difficulty that the researchers encountered while gathering the data for this study was finding time to meet with the participants. Since the focus of the study was medical providers in a hospital setting the participants that were needed to participate were social workers, nurses, or doctors. These individuals work schedules are hectic and
often do not know what their daily work schedule looks like until that day. Setting up an appointment was a challenge.

Data Gathering Procedures

Since the researchers’ did not go through an agency to recruit subjects to participate in this project, the process of obtaining cooperation for each subject varied. Those known to the researchers and who met the criteria were approached and asked if they would be willing to participate in an interview. The subjects that were interviewed were asked if they knew of other individuals that meet the criteria that may be interested in participating in the study. With the individuals that were recruited through colleagues of the researchers, they were first approached by the individuals that knew them. The potential subjects were asked if they would be willing to participate in a study and those that were willing gave contact information to pass along to the researchers. Those individuals were then contacted to set up an interview time.

Participants were informed that the interview would take approximately 45 minutes and that it would be recorded. Three of the nine participants preferred to conduct the interview over the phone. The informed consent (see Appendix A) was read out loud to the participant. Individuals that were still willing to participate in the study were faxed or emailed the consent form and asked to sign and return the signed copy. For the interviews that were conducted in person, the participants were given the consent forms to read and sign; the participants were given a copy.
After informed consent was reviewed, the tape recorder was started. The demographics of the participant were reviewed. The interview questions (see Appendix B) were asked by the researcher and responded to by the participant. In some cases, the participant asked for clarification on the question. In addition, the researcher asked follow up questions to the participants’ responses.

**Data Analysis**

Following the interviews, all of the audiotapes were transcribed by the researchers. Half of the interviews were transcribed by one researcher and the other half was done by the other researcher. A content analysis was conducted on the written version of the responses and examined for common themes by both researchers. Further discourse about themes that emerged in the interviews will be discussed in Chapter 4.

**Protection of Human Subjects**

As required prior to data collection, a human subjects application was submitted to California State University, Sacramento; Committee for the Protection of Human Subjects from the Division of Social Work. The application was approved with “no risk” and an approval number of 10-11-055. The application that was submitted through California State University, Sacramento included the informed consent that was used with the participants in the study. The interview questions that were addressed in the interviews were also included in this application.

The individuals that participated in this study were voluntary and had the right to stop the interview at any time. The participant’s also had the right to refuse to answer
questions. All information that was obtained during the interviews remained confidential. The audiotapes, transcribed materials, and all other confidential information were kept in a locked cabinet in the researchers’ home. Upon completion of this study, all materials will be destroyed.

Summary

This chapter provided a description of the methodology of the study. An explanation of qualitative design was given as well as why the researchers chose that design. In addition, sections on participants, data gathering procedures, data analysis, and protection of human subjects were included.
Chapter 4
DATA ANALYSIS

Interviews were conducted with ten medical providers that work in a hospital in California. To protect the identity of the participants, fictitious names were given. The sample of participants included eight social workers: Kim, Laura, Danielle, Glenda, Maria, Jessica, Katie, and Susan. The other two participants were doctors: Bob and Richard.

Kim is a 45-year-old Licensed Clinical Social Worker that is currently working in the maternal unit at a hospital in Fairfield, California. Kim has been in medical social work since 1991.

Laura is a 28-year-old social worker with her Masters in Social Work that is currently working in the emergency room at a hospital in Walnut Creek, California. She has been in medical social work for a year and a half.

Danielle is a 35-year-old social worker at a hospital in Fairfield, California. Her degree is a Masters in Social Work and she is currently working with individuals with substance abuse.

Glenda is a Licensed Clinical Social Worker that works in the emergency room and the neonatal intensive care unit at a hospital in Sacramento, California. She has been in medical social work for over 10 years.
Maria is a social worker at a hospital in Fairfield, California. Her degree is Masters in Social Work and she works in hospice and with children. Maria is 49 years old and has been in the medical field for over 10 years.

Jessica is a social worker that works in the emergency room a hospital in Fairfield, California. She has been in the medical social work field for over 10 years and has her Masters in Social Work.

Katie is a Licensed Clinical Social Worker that works in the emergency room at a hospital in Walnut Creek, California. She is also a supervisor so she spends half of her week outside of the hospital. Katie has been in the medical social work field for over 10 years.

The two doctors that were interviewed both worked at a hospital in Walnut Creek, California. They are both registered M.D.s and work in the emergency room. Richard is a 47-year-old and has been working in the emergency room for over 10 years. Bob is 50 years old and has been working in emergency rooms for over 10 years as well; he has only worked at that hospital for five years.

The main purpose of this study was to investigate the following research question: how do medical providers perceive family functioning after a child has experienced a medical trauma? The participants were asked a series of questions regarding families and their reactions to the medical trauma as well as coping patterns. As noted in Chapter 3, the interviews were taped, transcribed and analyzed for emerging themes. The following themes emerged: 1) families’ reaction patterns were distinctive to the family; 2) the most
significant coping mechanisms included social supports, religion, and family expectations; 3) major stressors included financial, stress from the doctors, and conflict between the family members; and 4) there were differences in roles, responsibilities and perspectives between the doctors and the social workers.

**Reaction Patterns among Families**

Every participant stated that there was no single “common reaction” that family members had. Richard stated that reactions are based on cultural norms and past experiences with the medical community. Richard stated,

There is no way to tell how someone is going to react; the mother can often be the type to plan ahead, ask the right questions, and seem to handle things well, while the father is the one to come unglued. And then there are families where the mother is the one to come unglued, while the father is the one to plan and ask the questions.

However, there were reactions within families that are significant enough to be noted. It was observed by the social workers that families often described their reaction to the situation as having “fear and anxiety.” Laura, one of the social workers, states that “many parents become ‘anxious’ with the thought of ‘losing’ the medical staff’s support and expertise upon discharge from the hospital.” Susan, another social worker elaborates on the concept,

Anxiety sets in regarding special equipment the child may require, like a sleep apnea monitor, oxygen, or special care instructions. Adjusting to the “fear” of
being responsible for a dependent child (in some capacity) is commonly expressed by families.

Other families react to the child’s condition with “denial.” For many parents, the altered quality of life that has resulted from the medical trauma is difficult to accept. The social workers also explained that the when discharge from the hospital is nearing, the families frequently begin to realize the full responsibility they have acquired of the child with special needs. It is reported that families express feelings of “discomfort” with the idea of having to live differently to accommodate the often demanding needs of the child. Some families exhibit “shock” which gradually transforms into “acceptance” of the condition over time.

Several social workers noted the importance of allowing the family members to convey their feelings. A participant, Katie, expressed this,

I think a big part of our job as a social worker is to carve out a space for parents or relatives to be able to react in the way that they need to act. People are often told that they need to contain their emotions, and others often feel as though they need to protect others from their emotions. Social workers should give people a space so if they want to wail, pound a wall, scream, it’s ok. We shouldn’t try to contain that.

**Coping Mechanisms**

Every participant stated that the coping pattern depended upon a number of factors, including- the family member, the type of medical trauma that brought the child
and the family to the hospital, the religious background of the person, or even the culture. Most of the social workers stated that coping was a process that the families have to go through until they reach acceptance. They reported that families start at different places; what the families utilize to help them reach acceptance, and when, is dependent upon the family and their resources. The following factors emerged as most important for families to utilize to help cope with their child(ren)’s medical trauma: 1) social support; 2) religion and culture; and 3) family expectations.

**Social Support**

A coping strategy that was mentioned in nearly all the interviews is support. This included support groups as well as family support. Families that utilize support groups are able to reach the acceptance of their child(ren)’s injury. Katie, Glenda, Danielle, and Laura all reported that families that attend support groups are able to get support from other parents that are going through (or have been through) the same thing. Through support groups, they feel that they are not alone, they trade stories, trade child care, and help each other out. These parents are usually the ones that do the best. Families that have emotional support and a strong support system were also seen as more able to cope with medical traumas. Families that have a better social network are able to advocate and be proactive in their child’s recovery. Glenda stated that parents who know how to get services in place for their child(ren) do better because they are getting the services the child(ren) need.
Mostly all participants expressed that families’ ability to cope with, adjust to, and accept the child’s condition, was being dependent on the support and amount of help provided by medical staff, family, and friends. Several social workers stated that a strong support system provides an outlet for families to vent their frustrations and feelings of helplessness to, so that the caregivers may become emotionally revived and then refocus on giving quality care to the child in need. Kim demonstrated this when she stated, 

Families that have multiple caregivers, or parents that are supporting each other through their child’s recovery always do the best. These people are the ones that can talk to each other about what is going on, what is bugging them, and how they feel; and just by talking to people that are going through the same things with the same child, they feel validated. They feel strong enough to continue taking care of the child. That is until they need to talk to that person again. The thing about having a person they can talk to is, the parents’ are getting to vent but the child is the quality of care they deserve too. Parents burn out less easily than they would if they didn’t have anyone to talk too.

**Religion and Culture**

Richard stated that culture and religion played a significant role in how the family copes. Some cultures and religions are very emotional and screaming, yelling, falling on the ground and crying are typical while other cultures and religions promote stoicism. Some cultures are respectful of medical care, while others are questioning. Families that believe in reincarnation were reported to have a better acceptance of death, although the
loss of a child was traumatizing. The idea that their loved one is moving onto another world is helpful in how the family views the tragedy. Maria and Jessica also stated that religion played a part in how the family accepted the news of their child(ren)’s trauma. Both Richard and Bob stated that familial reactions are based on cultural norms and past experiences with the medical community.

**Family Expectations**

Katie, Laura, Susan, and Glenda noted the individual’s past coping patterns affected their current coping patterns while their child(ren) were in the hospital. Katie stated “every situation is different; as social workers, we have to assess previous coping skills they’ve had and if they’ve had a traumatic event in the past”. Those that have had previous trauma’s in their past, tend to cope with the current situation better than those that are experiencing their first trauma. These families know what to expect and how to be more “hands on” with their children.

Susan mentioned that families that appear dysfunctional, for example they cannot work and do not work, often do the best. These families come to the acceptance of their child(ren)’s injury the fastest because the family often has had terrible things happen to them. Families that seem ‘dysfunctional’ have no preconceived notion of how their life is going to turn out, and the child’s trauma doesn’t “challenge their system.” This in contrast to families that do have high expectations for their children and plan ahead; these families have a harder time reaching acceptance. Families that do not live day to day are crushed by the loss of everything that they had hoped for, for their child. Susan noted,
Parents that plan their day-to-day lives for themselves, have a career and have things that they, as a parent and for their child, want to accomplish. These parents are hit harder by the trauma because they are having to leave the jobs that they love. Plus the parents’ hopes and dreams for the child are crushed.

**Stressors**

Participants noted that families experienced significant stress subsequent to their child(ren)’s hospitalization unrelated to the child’s specific trauma. Three stressors that emerged from the interviews were: 1) financial; 2) stress from interactions with the doctor’s; and 3) familial stress.

**Financial**

A major theme or stressor noted by every participant was that families generally experience stress about finances as a result of the child’s medical trauma. It was noted that families report feeling overwhelmed with the expenses that accompany a traumatic medical injury related to the length of hospitalization, the extensive surgical procedures, special post-hospitalization services (e.g., physical therapy, home health aides), the physical therapy, and the medical equipment (e.g., oxygen tanks, wheelchair) all of which can be costly for any family.

The participants noted that family members often take time off work to stay at the hospital with the child(ren). Bob stated this causes financial distress to increase, as a stay in the Intensive Care Unit (ICU) is $100,000. Katie also mentioned that sometimes families travel long distances without clothes and food. Not having the money to buy
food, clothes, and even a place to stay while their child is in the hospital is enormously distressing. These families are not able to provide themselves with basic needs. Families’ financial situation was often further complicated by the loss of housing and/or employment. The parents’ focus is on fulfilling the child’s needs during and after hospitalization such that other aspects of their lives like one’s job or paying mortgage on time, seem to become less of a priority.

For families that do not have insurance, a child in the hospital is even more of a stressful event. Two social workers, Kim and Laura, both report that that families experience stress in particular about their limited, or lack of medical insurance coverage. Kim stated, “many of these families who have medical insurance have the type of coverage that does not account for the costly requirements to treat medical emergencies.” More common examples of medical insurance items that are poorly covered for the families are extended hospital stays and adequate amounts of physical therapy. Glenda mentioned that providing special equipment and therapy for the child are additional expenses to the costly hospital stay, which families do not have the money for. In addition, the process of applying for insurance can be stressful. Several of the social workers mentioned that although the hospital has a department to help the families apply for insurance programs this is still a stressful process. Bob also mentioned the legal implications behind financial stressors. For children/adolescents that come in with injuries due to drunk driving, caregivers/parents often have to worry about the other family suing them or having to get a lawyer, both of which are additional costs.
Stress Due to Interactions with the Doctors

Another important observation that was noticed was that families are often stressed due to interactions with the doctor. Glenda, Kim, Danielle, and Laura, all social workers, had mentioned this in their interview; however, none of the doctors mentioned it. Families found the doctors and the medical system stressful. If the child had a complicated accident where there were many systems involved, this brought additional stress to the family. Danielle stated that often when many specialists get involved there are many different opinions and the family does not get clear information on what the next step should be. Interactions with the doctors sometimes leave the family feeling scared; doctors provide minimal information. The more the family knows about the situation, the easier it is for them to cope. Not having a diagnosis is a stressor. Kim stated that this causes the families uncertainty and they often do not know what to expect and where to turn.

Familial Stress

The stress of a child in the hospital seems to place a burden on the personal relationships between parents. The social workers, Glenda, Maria, Jessica, and Katie, all noted that many parents in this situation experience marital problems, sometimes ending in divorce. Jessica noticed a connection between financial stress and marital stress. She states,
The stress of the child’s condition, in combination with the expenses that result from the traumatic event, commonly strain parental relationships as parents struggle to keep up with amount of money required to satisfy the child’s needs.

Other stress on marriages can be from parents being at different levels of acceptance/grief of their child(ren)’s trauma. Maria and Danielle stated that parents can often begin to resent the other for one progressing in the stages of grief faster. Maria states,

A parent will see the other parent happy and accepting of the child; meanwhile that parent is still hurting and angry. This causes the parent to question whether they loved the child as much, if the other parent is doing as much as they should, and so on. This can ignite so much frustration and anger in the relationship.

Another common stress in relationships, not just between the caregivers/parents, is blame. Laura, Jessica, Kim, and Glenda all mention families that had experienced one family member blaming another. Jessica explained cases when families become inundated with blame,

Family members begin to blame other family members. They believe the accident wouldn’t have happened if so-and-so did this or wouldn’t have done that. Then the family doesn’t want that particular member to see the child or they don’t want them at the hospital. It can get pretty messy.

Differences in Roles, Responsibilities, and Perspectives between Doctors and Social Workers

A theme that was noticed in the interviews with the doctors and the social workers was the different perspectives that each professional had. The participants that were
doctors’ had a medical model view of the situation. The medical model focuses on the physical and biological aspects of disease and/or injury. When comparing doctors and the social workers perspectives, the social workers focused on environmental factors included in the child and families recovery process while the doctors believed that statistics told the best story about the injury.

Bob, who is a doctor, explained the reaction patterns of family members. He stated that family members often want to know if their child will ever be normal again. Bob stated that all doctors can do is tell the family what they know about the injury, and what the statistics say about that injury. Richard, the other doctor, stated that all the children that he has worked with are different and that “children are pretty tolerant of trauma, but things can change very quickly and the child can die.” Children generally are able to recuperate from traumatic injuries fairly easily. Their bodies seem to handle the trauma better than adults do. Both Richard and Bob expressed that reporting the statistics of past similar injuries of what the child has sustained is the best way to give the family as much information as they can. The doctors are not able to tell the prognosis of the injury with children so reporting statistics is the only choice. The difficulty in this is that this does not leave any room for environmental influences. For example, the statistics can show that an accident involving head trauma allows a certain percentage of children to live and to have normal functioning. However, this does not take into consideration any prior head injuries that the child may have sustained that could potential cause more brain injury. This does not consider the home life that child may go into; the family
could be nurturing and be able to afford the best equipment and therapy to rehabilitate the child.

However, the doctors that participated in the interviews noted that this was difficult for families. A participant that is a social worker expressed difficulty between the two perspectives,

Doctor’s tend to provide a very minimal amount of comfort to the families dealing with a traumatic event. Their emotional support to the families is superficial as their time is limited and their service is focused on delivering the news of the medical condition to the family. Not necessarily to help them deal with the aftermath of knowing the information.

Both doctors expressed appreciated the role that social workers have in helping families cope with their child(ren)’s medical trauma. Bob noted, “social workers are vital in helping translate the medical world.”

Summary

This chapter discussed the findings from the study. A brief description of the participants was given, as well as the purpose of the study and what was conducted to determine the findings. The themes that were discussed were the families reaction patterns; significant coping mechanisms, including social supports, religion, and family expectations; stressors, including financial, stress from the doctors, and conflict between the family members; and the differences in roles, responsibilities and perspectives
between the doctors and the social workers. Chapter 5 is a description of the conclusions and recommendations.
Chapter 5

CONCLUSIONS AND IMPLICATIONS

Introduction

This chapter summarizes the conclusions of this study. It discusses the major themes identified in the interviews including the families’ reaction patterns, their coping mechanisms, major stressors, and the differences in roles, responsibilities and perspectives between the doctors and the social workers. In addition, this chapter will discuss future recommendations, the implications, and the limitations of the study.

Conclusions

This project was designed to determine how medical providers perceive family functioning after their child has experienced a life altering trauma. From the information gathered from the interviews, particular themes were discovered in providers’ perceptions of family functioning after a child has experienced some form of medical trauma. Medical providers observed the following in families whose child has encountered a life-altering medical trauma: there was no common reaction patterns to the situation among families; the most significant coping mechanisms of families medical providers noticed included social supports, religion, and family expectations; major stressors included financial, stress from the doctors, and familial stress; and there was a difference in roles, responsibilities and perspectives between the doctors and the social workers.

According to the participants, there was no single “common reaction” that a family member had and that reactions to the situation were greatly influenced by the
family’s culture and past experiences. More generally, the social workers noted that families often described their reaction to the situation as having “fear and anxiety.” about providing the new level of care to the child after the injury. Caregivers became nervous when the child’s discharge from the hospital neared, as they felt that the support and expertise of the medical staff would disappear. With that said, anxiety and fear increased as the responsibility to satisfy the child’s needs would fall on the caregivers/parents. Other families react to the child’s condition with “denial.” For many parents, the altered quality of life that has resulted from the medical trauma is difficult to accept.

When considering factors that determine how families cope with the child’s medical trauma, the following appeared to be significantly influential: social support; religion and culture; and family expectations. Providers often expressed families’ ability to cope with, adjust to, and accept the child’s condition, was dependent on the support and amount of help provided by medical staff, family, and friends. According to the social workers, a strong support system also provides an outlet for families to vent their frustrations and feelings of helplessness too, so that the caregivers may become emotionally revived and then refocus on giving quality care to the child in need.

Culture and religion play a significant role in how the family copes. Some cultures and religions find appropriateness in expressing emotions in a physical and audible manner, while other cultures and religions are more reserved and refrain from displaying emotions. Families that believe in reincarnation had a better acceptance of
death, although the loss of a child was traumatizing. The idea that their loved one is moving onto another world is helpful in how the family views the tragedy.

Social workers noted that those that have been exposed to previous trauma’s in their past, tend to cope with the current situation better than those that are experiencing their first trauma. These families know what to expect and what initiatives to take with their children. Medical providers also observed that families that appear dysfunctional, often cope with the situation best. These families come to the acceptance of their child(ren)’s injury the fastest because the family frequently has had unfortunate things happen to them. Families that seem ‘dysfunctional’ have no preconceived notion of how their life is going to turn out, and the child’s trauma doesn’t “challenge their system”. This is different compared to families that have definitive or high expectations for their children and plan ahead; these families have a harder time reaching acceptance. Families with high expectations for the child are more disappointed by the loss of the child’s full potential and the plans they had for the child prior to the trauma.

Medical providers noticed the following were common stressors among families: financial stress, stress from interactions with the doctors and conflict between family. Families become overwhelmed with the expenses associated with the trauma (e.g., hospitalization costs, special therapy/equipment needs). The task to keep up with the medical costs is further complicated by the parents still needing to maintain housing/mortgage payments and employment responsibilities. Also, families reported that the doctors and the medical system themselves were often stressful. Differing
medical opinions and receiving an unclear prognosis of the child’s situation often left the family scared and confused about the next best step to take for their child’s recovery. In addition, medical providers noted that the stress of the situation often strain relationships within the family; many parents in this situation end up with marital problems, sometimes ending in divorce. Other stress on marriages can result from parents being at different stages of acceptance/grief of their child(ren)’s trauma.

Another theme that was noticed in the interviews involved the different perspectives doctors and social workers had. Doctors and medical staff seemed to interact with the families from a medical model (i.e., the focus was on the physical aspects of the trauma) while social workers approached the situation with more of a therapeutic perspective (i.e., the focus was on the emotional repercussions of the trauma). Doctors tended to focus simply on the diagnosis of the child while the social workers paid more attention to providing emotional support to the family. Families expressed feeling more stress from their interactions with the medical staff, while their contacts with social workers were described as more pleasant and emotionally comforting.

The finding that the researchers did not expect to gather was the clear difference in viewpoints between social workers and doctors. This was not surprising as doctors are taught to focus on diagnosis and treatment, while social workers are taught to evaluate many different aspects as well as providing emotional support.
**Recommendations**

Based on the findings of the study, recommendations can be made to practitioners and to future researchers. The researchers’ recommendations are described in the sections below.

**Practitioners**

The researchers recommend practitioners to not just utilize one approach when working with families. One approach will work for all families, as families are unique and the approach should match the family. A practitioner that understands multiple approaches can better address a family’s needs. Also, it is important to be cognizant that one approach may not be appropriate for the family throughout the time spent with the family. For example, an ecological-systems approach may be beneficial able to identify an individual’s support system, resources, and help the individuals identify how their environment can adapt to better fit themselves (Hong, Kim, Yoshihama, & Byoun, 2010). This may be constructive in helping a family when they are getting ready to discharge from the hospital. However, having an understanding of the five stages of grief may be practical when the family is coping with the traumatic incident.

**Future Researchers**

The researchers believe that more research should be done in regard to the effects of trauma on the family. Trauma not only affects the individual child, but those in the individual child's life. More research is needed not only on the different types of trauma and its effect on the individual but how different types of trauma affect each family
member. A recommendation would be to expand the sample size of the participants in order to establish greater generalizability of the findings. The researchers believe it would be useful to include an equal number of doctors, nurses and social workers in the study. This could provide a balanced perspective of the themes that emerge. Another recommendation would be to include a variety of hospitals, not limited to just northern California, that specialize in treating children. It would be beneficial to include family members in the study.

Limitations

Limitations of this study involved the small size of the sample, the participants, and the researchers. Due to the small number of participants, the study’s findings cannot fully capture the range of providers’ observations of family functioning after a child has experienced the medical trauma. In other words, data gathered from the small, convenience sample cannot be generalized to the larger population. The participants consisted of two doctors and eight social workers. The lack of balance of professions may have skewed the findings; social workers view the family functioning differently than the doctors. In regard to the limitations of the researchers, face-to-face collecting of data can elicit a biased response from the participants. In addition, biases of the researchers may affect the design of the study, data collection, and interpretation of the research.

Since the study is qualitative, the study is difficult to replicate. The researchers utilized a convenience sample by a snowball sampling procedure which resulted in many
limitations: the researchers had limited access to a variety of medical providers; the participants were gathered around the same geographical areas, limiting the diversity of the sample; and the researchers collected the data from a small number of medical facilities, restricting information from a range of medical providers and facilities.

**Implications**

Medical providers (e.g., doctors, nurses, social workers) can benefit from studying the common stressors families endure in order to provide effective support in treating the individual. Also, such providers can improve the impact of their practice by learning how to implement successful coping strategies. The more providers understand the physical, emotional, and mental demands of the child and family dealing with life-altering trauma, the better the providers can utilize the appropriate tools to satisfy the presenting need.

Studying the effects of medical trauma on families is necessary in providing well-rounded, quality care to those in need of physical and emotional support. In providers setting a strong base of emotional and physical support in the hospital, the hope is that families may be more equipped to accommodate the new demands of the child who experienced the medical trauma.

**Conclusion**

This study found that families ultimately did not exhibit common reaction patterns to the situation resulting from the trauma. With that said, social workers did note that some families mentioned being “fearful and anxious” when faced with the
responsibility of the child’s care. The data show that significant coping mechanisms for families include: support system; religion and culture; and family expectations. Families with a strong support system and those that are used to misfortune (i.e., low expectations) tend to cope better with the unfortunate situation that the trauma results in. The way in which families cope are also dependent on what is acceptable in their culture and religion; some families believe in reincarnation or an afterlife and are able to accept their child’s fate with the idea that their life will be better in the next life. The study also concluded that families experience stress about finances, the medical system, and the strain on relationships between family members as a result of the child’s medical trauma. The research also demonstrated a difference in roles, responsibilities and perspectives between the doctors and the social workers—doctors focus on the diagnosis of the child while social workers focus on providing the family with emotional support as they adjust to the child’s condition. The findings can offer medical providers more insight into how to work with families learning how to function after a child has sustained medical trauma.
Consent to Participate as a Research Subject

You are being asked to participate in a research study which will be conducted by Sarah Dunker and Sarah Adeva, who are both MSW graduate students at California State University, Sacramento. The purpose of this study is to better understand any patterns that families share in dealing children experiencing a life-altering medical trauma. You were selected as a possible participant since you are a professional who has knowledge of families whose child has experienced a life altering medical trauma.

Your participation is completely voluntary. Even if you agree to participate, you may withdraw at any time without risk. If you agree to participate, one of the researchers will interview you about your perceptions of how families cope when their child has endured a severe medical trauma.

The interview will take approximately 1 hour and will be tape recorded to assure that we capture the accuracy or your responses. Importantly, all your responses will be confidential. There will be no identifying information; your name will not be recorded during the interview. All information collected will be used to find general themes and patterns, not for presenting single case examples. The recordings of your responses will be destroyed as soon as the study is completed and until they are destroyed, the recordings will be stored securely.

If you have any questions about this research, you may contact either Sarah Dunker at dunkersarah@yahoo.com (925-348-3016) or Sarah Adeva, email sarahadeva@gmail.com (707-208-2655). Alternatively you may contact our thesis advisor, Dr. Maura O’Keefe, at 916- 278-7067 or email okeefem@csus.edu.

Unfortunately, you will not be compensated to your participation. However, it is hoped that the information you provide will provide insight and knowledge to help other professionals regarding working with families whose child has undergone a life altering medical trauma.
A copy of this consent form will be given to you for your records.

Signature: ___________________________________     Date: ________
APPENDIX B

Interview Questions

Type of Provider (e.g. social worker, nurse, medical doctor):

- Location/agency of practice:

- Area of professional concentration:

- Gender: __ male
  __ female

- Please explain a few cases in which you have worked with families for up to two years, whose family member (ages 0-18) has experienced some type of medical trauma.
  > Please highlight any reaction patterns of the family you noticed and coping skills you observed in working with families dealing with this issue.

- Can you describe the reactions caregivers/family members have had to the demand of caring for a dependent child, as a result of medical trauma?
  > What sort of adjustments are most concerning to such families?

- Please explain the various coping strategies that families have utilized in the process of changing their lives to accommodate a dependent child’s needs?
  > E.g. Spirituality/religion, support systems/groups, etc.
- What stressors have families mentioned as a result of the child experiencing medical trauma?

  > What type of community resources/assistance have families inquired about/needed?

  (e.g., financial assistance, home healthcare, etc.)
REFERENCES


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