Traumatic Brain Injury in Adolescence and the Family Resilience Process: A Case Study

Jérôme Gauvin-Lepage, RN, PhD1,2

Abstract
Introduction: The aim of this study was to better understand the family resilience process following a severe traumatic brain injury during adolescence.

Case Presentation: Inspired by the humanistic model of nursing care as a disciplinary perspective, this study used a qualitative and inductive case study design.

Management and Outcome: The data analysis yielded six themes as well as four subthemes that illustrate this family's resilience process. The most important factors that emerged are (a) family characteristics (i.e., a fighter personality, cultural and spiritual beliefs, presence of hope, keeping a sense of humor), (b) support of family members, (c) support of friends, (d) practicing sports and leisure activities, (e) back-to-school support, and (f) feeling helpful to the adolescent.

Discussion: This study provides interesting avenues with regard to the implementation of strategies to foster the resilience process in families during particularly difficult situations in their lives, such as a traumatic brain injury during adolescence.

Keywords traumatic brain injury, adolescence, resilience, qualitative design, case study, humanistic perspective

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Introduction
It is generally acknowledged that when a family member experiences a health problem, there are multisystemic repercussions for the family (Wright & Leahey, 2013). This is especially true when we focus on the period of adolescence, which generally entails several disruptions or specific transitions that place additional stress on the family (Papalia & Martorell, 2015). The gradual appearance of disabilities and medical, social, and human problems in adolescents with a severe traumatic brain injury (TBI; Doser, Poulsen, Wuensch, & Norup, 2018) can upset the family dynamic for many years, and even for a lifetime (Gauvin-Lepage & Lefebvre, 2010; Gauvin-Lepage, Lefebvre, & Malo, 2015a).

Recent studies and clinical research conducted with families in which a member suffered a TBI have shown that some of them demonstrate the capacity to bounce back and to change positively despite unfortunate events (Gauvin-Lepage, Lefebvre, & Malo, 2015b). For several authors, this is defined as resilience (Anaut, 2015). It is from this perspective that some researchers try to understand, analyze, and explain the experience of individuals and families that, during their lifetime, will be confronted with a trauma. Some authors, particularly in human and social sciences, view resilience as more of an innate personality trait, whereas others conceptualize resilience as a process that may change throughout a lifetime, and others still see it as a measurable end result (Sadhbh et al., 2018).

To date, research has mostly focused on individual rather than family resilience. However, even if few authors have specifically focused on family resilience, some have addressed it in relation to (a) a family’s capacity to adapt to stressors and bounce back when a traumatic event occurs, (b) a family’s capacity to respond positively to a negative situation, or (c) a family’s ability...
to adjust their dynamic in order to resolve the problems encountered (Zolkoski & Bullock, 2012). More recently, Gauvin-Lepage et al. (2014) defined family resilience as a complex human process that is deployed when a family is confronted with a trauma. Consequently, the family will undertake a fluctuating process of transformation, according to the meaning it ascribes to the situation. The interrelation of elements inherent to the family and its environment will influence this process, positively or negatively, to achieve a positive reconstruction of the life project. (p. 29)

This study relies on the humanistic model of nursing care (Cara et al., 2016) as a disciplinary perspective. The model links the four generally recognized central concepts in nursing care, that is, person, environment, health, and care, as well as two key concepts, caring and competency (Cara et al., 2016). Specifically, it posits that the environment in which an individual and their family evolve influences their health experience; consequently, creating an environment conducive to health is an important objective. In this context, the experiences of the individual and their family, the meaning they ascribe to these experiences, the relationships they maintain, and the resulting life project all play a preponderant role from a humanistic perspective. The aim of this study is to better understand the family resilience process within the context of a severe TBI during adolescence.

Case Presentation

A qualitative and inductive research design with a case study approach (Yin, 2017) was used with an adolescent with a severe TBI and her family. Data collection was performed in two chronological stages. The first stage identified the factors that fostered resilience in this family with a teenager suffering from a severe TBI, while the second validated these factors with the family. After obtaining consent from the family (ethics approval #3438), two semistructured family interviews performed at the family’s home were recorded on audiocassette and transcribed verbatim. The first interview lasted 75 minutes while the second lasted 35 minutes. The semistructured interviews focused on the family’s resilience process and were conducted in a manner consistent with the two stages outlined earlier (Creswell & Poth, 2017). Interviews’ questions samples are as follows: what are the factors that facilitate/constrain your resilience process, what would be the best interventions that could support your resilience process, and what are the elements to remember in the construction of intervention to support your resilience process. Data analysis was performed concurrently with data collection. A thematic content analysis (Miles, Huberman, & Saldana, 2013) was conducted to identify major themes.

Management and Outcome

A brief description of the family in this case study is explained in the following section. To ensure confidentiality, all the names used are fictitious.

Case Study Presentation—The Mother, Diane, and Her Daughter Lydia (Time Since Lydia’s Trauma at the Time of Data Collection: 11 Months)

Upon returning from a weeklong vacation in New York with her family, 17-year-old Lydia wants to see her friends. “We decide to go to a bar. We drink, we dance, we mess around,” shares Lydia (L-14). The night comes to an end, and Lydia and two of her friends accept a ride from a young man they don’t know. “He decided to drive at 120 km an hour on a boulevard, after drinking several beers and taking drugs,” says Lydia (L-28). Then, while taking a turn, he ran into a tree. “I hit my head. And all the consequences of the traumatic brain injury were horrible,” she recalls (L-31). Lydia is brought to a pediatric care center specializing in traumatology, where she wakes up a month later with a diagnosis of severe TBI. “I didn’t understand what had happened,” states Lydia (L-35). After several months in acute care and intensive functional rehabilitation, Lydia confides: “I still think about it every day” (L-42).

Data collection and analysis yielded six themes and four subthemes, which were considered the most important factors illustrating this family’s resilience process: (a) family characteristics (i.e., fighter personality, cultural and spiritual beliefs, presence of hope, keeping a sense of humor), (b) support of family members, (c) support of friends, (d) practicing sports and leisure activities, (e) back-to-school support, and (f) feeling helpful to the adolescent.

Theme 1. Family Characteristics

Fighter personality. The combative personalities of the family members were one of the subthemes addressed within the family characteristics theme. The strength a family shows when faced with a difficult, or even critical, situation manifests in different ways. For example, Lydia’s mother shares:

I have a strong capacity for resilience (…). When I’m faced with something very difficult, I try to find the positive and adjust my thinking accordingly, then I tell myself: this is what is in front of us, we will try to find a solution with what we have. (D-205)
She expands on this capacity she has to not apprehend the future, which, according to her, is a facilitating factor:

We got to here, then tomorrow is another day. Then after that, next week, next month, it will be something else. You have to move forward, then you have to move on. Put it behind you, it’s over, let’s move forward. (D-738)

She adds:

What helped me, was seeing her [Lydia] every day. Something was always changing (...). I didn’t have any expectations, every day, I would see what happens. I lived only 24 hours at a time, I was living day to day and I would embrace every little success. It was a winning strategy. We were all happy. (D-215)

For her part, Lydia shared these thoughts, demonstrating her strength of character: “I’m going to finish it [rehabilitation] as quickly as possible (...). Right now I can’t walk, but tomorrow, I will!” (L-347). She confides: “I’m happy that my pride took over because that’s what helped me persevere” (L-501). “I’ve been given a second life. A second chance. It’s incredible,” she concludes (L-694).

Cultural and spiritual beliefs. Cultural and spiritual beliefs were mentioned. Some of these seemed to be facilitating factors, in the sense that they helped the family adapt to this new situation. Diane states: “I prayed, often, even very often” (D-912).

Presence of hope. This family shares, completely naturally and often, the important role that hope played in their resilience process. To wit, Diane states: “We always had hope” (D-630).

Keeping a sense of humor. A last subtheme identified was keeping a sense of humor despite the situation. Indeed, this seems to have positively impacted this family’s journey. On this subject, in reference to Lydia, Diane says: “(...) her sense of humor, she kept her sense of humor, she found humor” (D-593). For her part, Lydia shares: “I kept my sense of humor and this helped a lot, the fact that I always laughed” (L-602). “My accident, I laughed about it because it was easier. It was easier to get past it, and then to joke about it. Even if it made people very uncomfortable, I thought it was funny,” she adds (L-999). She also says: “I read somewhere once that “humor shows man’s superiority over what he is living...” (...) this helped me because people stopped treating me like a victim, stopped treating me like I was disabled and needed help” (L-1008).

Theme 2. Support of Family Members

The family interviewed unanimously stated the importance of the support provided by family members during this difficult situation. Diane says: “I think the fact that family members were there for us, I think that is what made all the difference” (D-279). “My parents were there for me (...), I wouldn’t be how I am today without them, without their help, I think that’s what made the difference,” says Lydia (L-62).

Theme 3. Support of Friends

The family expressed the importance of immediate family during this period but also highlighted the positive impact of friends’ support. Diane shared her experience:

I have a very good friend who is a doctor, so we would talk every day (...). He helped calm me down. This was an incredible source of support because it gave us the energy to keep going. (D-237)

Lydia states that the difficulties would have been even more pronounced “(...) without, also, the help of my family and friends” (L-63).

Theme 4. Practicing Sports and Leisure Activities

Taking part in sports and leisure activities can be beneficial not only for the adolescent but also for the parent. In this regard, Diane states: “We have a cottage in the country, this was great therapy for us. It’s amazing how much it helped” (D-510). Lydia, when asked, mentioned the benefits of physical activity for her: “I started working out, which really helped me. I feel a lot better. It’s when I’m active that I really feel alive again” (L-123). The benefits of her workouts have an impact on her everyday life. In fact, she shares: “When I look at myself today (...), I am the happiest person on Earth. I am so happy” (L-856).

Theme 5. Back-to-School Support

For this family, back to school seems to be an important step because school is an integral part of Lydia’s life. Generally, the actions taken by school staff and administration and the support they provide are elements that can facilitate a family’s resilience process. In this specific case, Diane assures that the school’s support was essential when her teenage daughter went back. “She just wanted to go back to school (...). The school gave her a lighter, adapted course load when she returned” (D-532).
Theme 6. Feeling Helpful to the Adolescent

Finally, this family underlined the importance of feeling helpful to Lydia. In this regard, Diane shares: “I would tell the nurses: don’t do this, I’ll do it (…). My role is to provide support: physical and psychological support and understanding” (D-686).

Discussion

Six themes and four subthemes emerged from the comments made by this family with an adolescent suffering from a severe TBI, such as (a) family characteristics (i.e., a fighter personality, cultural and spiritual beliefs, presence of hope, keeping a sense of humor), (b) support of family members, (c) support of friends, (d) practicing sports and leisure activities, (e) back-to-school support, and (f) feeling helpful to the adolescent. This family shared, with profound conviction, the important role played by these themes and subthemes in their resilience process. In order words, they summarize the aspects of the resilience process and are considered essential to support it.

To sum up, the findings of this study confirm previous resilience research, whereas other results better define certain elements or make new contributions to the field. Like previous research, the study confirms that the presence of certain traits of a fighter personality in family members, such as determination and positivity (Simpson & Jones, 2013), as well as the support of friends and family members (Cohen, Ferguson, Harms, Pooley, & Tomlinson, 2011) have an impact on the family’s resilience process. Furthermore, this study pinpoints a few elements identified in the literature regarding the influence of cultural and spiritual beliefs (Wu, 2011), the feeling of being helpful to the adolescent, as well as the role of healthcare professionals in the resilience process (Klerk & Greeff, 2011). Finally, it sheds new light on the positive impact of the presence of hope (West, Buettner, Stewart, Foster, & Usher, 2012), keeping a sense of humor, practicing sports and leisure activities, and back-to-school support (Ahlert & Greeff, 2012) on the resilience process.

Based on a disciplinary perspective that emphasizes the humanistic view of the family’s experience, this case study permitted a better understanding of the resilience process of a family with an adolescent who suffered a severe TBI. The complexity of the method was mostly due to the use of the inductive design the study relied on, which aimed, through its process, to give an important role to the family’s perspective. Despite the study’s limitations related to the case study design, it has many strengths, which will have an impact on the development of future proven family intervention programs. Moreover, this study opens new clinical and scientific avenues for human and social sciences. It reaffirms the benefits of a humanistic care approach centered on the life project of the patients and their families. In that respect, it highlights the specific contributions of knowledge development through scientific research conducted in a human, interdisciplinary environment, which takes advantage of the perspective of the various actors concerned by the phenomena under study.

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ORCID iD

Jérôme Gauvin-Lepage  https://orcid.org/0000-0002-9852-2522

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