1

Running head: VALUE OF BLOGGING IN SOCIAL SUPPORT

A Case Study Approach to Understanding the Value of Blogging for Social Support in Parents of Children Who Have Completed Cancer-Directed Treatment

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#### Abstract

**Background**: Completion of cancer-directed treatment contains a stressful transition for children with cancer and their families. Amplification of stress occurs when the social supports that are associated with regular hospitalizations and outpatient visits are less frequent and thus a gap in the social network of families is created. The use of social media presents a possible source of support to fill this gap. **Objective**: This exploratory study aims to qualify the types of support evident in one family's publicly available online blog detailing their experiences upon completion of cancer-directed treatment. Methods: By implementing Schaefer's theory of social support, which differentiates among emotional support, information support, and tangible support (1981), this paper used directed content analysis to scrutinize blog posts written in the six-month period following cancer-directed treatment completion and to sort the content by social support domain. Results: The most common form of social support observed was information support in two categories: information about medical procedures and information about family life. The second most common form of social support was emotional support, namely expression of fear and stress associated with both disease recurrence and the quest to achieve a new normal. Lastly, the third form of social support, tangible support, was the least common and expressed in terms of gratitude for such support. **Conclusions**: This paper serves to provide information necessary for future studies in developing a nursing intervention to distribute blogging as a means of improving social support among parents and caregivers of children who have completed cancer-directed treatment.

KEYWORDS: social support, pediatric oncology, social media, blogging

A Case Study Approach to Understanding the Value of Blogging for Social Support Among

Parents of Children Who Have Completed Cancer-Directed Treatment

The diagnosis and treatment of cancer in their child is a major stressor for parents. This experience can interfere with exchanges of social support between parents and their social network during notably stressful times in the illness trajectory when social support is needed most. Sources of stress during the transition from cancer-directed treatment include less access to support from parent-peers and clinicians in the hospital or outpatient setting, the change from focusing on medical appointments and other care requirements to usual life activities like school and work and learning how to recognize and address treatment-related complications that may arise or worsen as the child develops and, most importantly, threat of disease recurrence (Norberg, 2008; Williams, Williams & Williams, 2013),)

Schaefer, Coyne, & Lazarus (1981) describe three forms of social support: information support (i.e., "giving information and advice which could help a person solve a problem and providing feedback about how a person is doing"), emotional support (i.e., "intimacy and attachment, reassurance and being able to confide in and rely on another"), and tangible support (i.e., "direct aid or services and can include loans, gifts of money or goods, and provision of services"). The advent of the internet, the blogosphere and social media platforms such as Facebook and Instagram has empowered parents with communication tools to reach out for social support as needed and to share their struggles with cancer, as well as their victories (Gage-Bouchard, LaValley, Mollica & Beaupin, 2016). The use of illness blogs has been studied by Keim-Malpass, Albrecht, Steeves & Danhauer (2013) who found that these blogs were a source of connection and communication among young women (aged 20-39 years) diagnosed with cancer. Thus, the internet has created the potential for young adults who are parents of a child

with cancer to create or extend their social support network, and receive encouragement and empowerment from those who follow their blog, including other parents of children diagnosed with cancer. The internet connects parents to a larger and more diverse network than they had previously and allows for the provision of social support independent of physical context, as well as a continuation of the support they received from parent peers in the clinical setting.

The purpose of this study is to describe how one particular family has utilized social media to obtain social support in three domains (i.e., emotional support, tangible support and information support) (Schaefer et al., 1981) during the transition from cancer-directed treatment to monitoring for recurrence and treatment complications. The project was guided by Schaefer's social support model (1981), specifically in directing the content analysis of how this blog incorporates exchanges of the emotional, tangible and information support that comprise social support. The project was also guided by Keim-Malpass's (Keim-Malpass, Steeves & Kennedy, 2014) methods for using social media data to understand the cancer experience. By describing how this family used social media during the transition from cancer-directed therapy to extended survivorship as a means to exchange social support and the relevance of social support as a mediator of stress (McCain, Gray, Walter & Robins, 2005), the results will inform the development of a future nursing intervention for families in need of social support in the context of childhood cancer-related stressors.

### **Literature Review**

Stress and available means for coping with stress are major factors affecting the need for social support by parents whose children are transitioning from cancer-directed treatment to monitoring for disease recurrence and treatment-related complications. With improvements in overall pediatric cancer survival rate to more than 80% (American Cancer Society, 2016) and therefore a growing number of survivors, distress surrounding the transition to extended survivorship has become highly relevant partly because childhood cancer remains the leading disease-related cause of death among children.

One study found that 60.5% of parents of children diagnosed with cancer reported clinically significant levels of psychological distress and difficulties coping after their child's treatment completion (Nam, Warner, Morreall, Kirchhoff, Kinney, & Fluchel, 2016). This psychological distress has the potential to have lasting, negative effects on the parent and the family unit. Moreover, upon completion of cancer-directed treatment, treatment center-based supports are less readily available. The major stressors that affect parents during their child's transition from cancer-directed therapy to extended survivorship include returning to "normal" family life, gaining some control in their life, confronting the financial aftermath of paying outof-pocket treatment related costs and parent work disruptions to care for the child (Williams et al., 2013). These particular factors have likely been a smoldering source of stress for caregivers since the diagnosis or even beforehand. However, previously their primary concern was that of securing their child's "cure" by completing cancer-directed treatment (Norberg, 2008). With treatment completion, these stressors emerge as priority areas. Additionally, during cancerdirected treatment, there was likely a wealth of readily available supportive resources in both health care professionals and the social network comprised of other parents experiencing

childhood cancer-related stressors. At treatment completion, parents lose ready access to this network and that loss in conjunction with the challenges of returning to normal family life introduces additional stressors.

Parents report that the threat of disease recurrence, the changing nature of their role as a parent, and the misunderstanding of the uncertain nature of their child's situation by family and friends creates stressors that affect them daily (Norberg, 2008). The continuing outpatient visits convey security but also a source of worry that the visit will reveal that the cancer has recurred or a further complication of treatment (Norberg, 2008). In regards to the parent role, some parents have difficulty balancing their reluctance to discipline their recovering child with their expectations for the healthy sibling's behavior (Norberg, 2008). Lastly, the misunderstanding of others in their social network that reaching the end of treatment means that cancer is in the past and now appreciating the ongoing risk for adverse treatment effects can be a significant stressor (Norberg, 2008). With the advent of blogging, this form of social media could be a promising outlet to express this stress, educate their social network, and elicit social support.

Prior research demonstrates that families with children with pediatric cancer tend to create ties with families whose children share this diagnosis to access information and emotional support. For example, as described by Gage-Bouchard, LaValley, Panagakis, & Shelton, while ongoing relationships with peers whose children have not been treated for cancer are important sources of tangible aid, the understanding of the illness process and the stress associated is better empathized with parents who share the experience (2015). One important factor influencing the availability of social support today is the popularity of social networking sites. Younger people have affinity for seeking information support online (Wakefield, Butow, Fleming, Daniel, & Cohn, 2012). Therefore, younger people who are parents to children transitioning from cancer-

directed treatment to extended survivorship may be inclined to use social media and online blogs as a means to access the social support they need to cope with the stressors particular to this and other phases in the cancer trajectory.

In summary, while the literature demonstrates that parents of children with cancer experience psychological distress from the time around diagnosis to treatment completion and into survivorship, knowledge is needed concerning how social media is used in the period following cancer-directed treatment completion. Additionally psychosocial responses to completing treatment- celebration, hope, uncertainty and fear (Haase & Rostad, 1994) - can be explored through social media platforms. The increasing popularity of blogging creates a new data source to observe the ways in which some parents access social support during the transition from cancer-directed treatment. Therefore, the purpose of this study is to explore how parents of children transitioning from cancer-directed treatment address stressors specific to this phase in the illness trajectory by using social media to obtain social support. This research aims to define how parents used an online blog as a conduit of social support and to lay a foundation for future research to determine how to broadly apply this coping strategy. Additionally, the results of this paper aim to contribute to a future study that will add to the growing body of literature that describe how social support can have long-term physiological and psychological benefits.

### **Methods**

This project used a longitudinal design, directed content analysis and data from a publicly available illness blog to begin to understand how one of the parents utilized blogging for social support exchanges during their child's transition from cancer-directed treatment to monitoring for cancer recurrence and treatment-related complications. Therefore, the population of interest is families with children who recently completed cancer therapy. Within this blog, posts written

during the six months after completing active treatment were analyzed. The time frame of six months was chosen in order to present a clear longitudinal picture of the changes associated in this period. In the period of six months there were likely to be situational crises- crises that overwhelm normal coping mechanisms (Macdonald, 2016) - that occurred because of the changes associated with this transition. However, the period of six months was chosen prior to analysis of the blog, and the actual blog postings only ranged from August to January, with no blog postings in February, thus creating a time span of five months. The researcher employed Keim-Malpass's approach of passive analysis (2014), meaning that the researcher read the information posted publicly by the bloggers and public comments on their posts but did not interact with them. This decision was made to control for a Hawthorne-like effect on information shared on the public blog and also to protect the family's privacy. The Hawthorne effect is described as a change in behavior among participants from their norm because of the knowledge that they are being studied which can lead to biased results (Parsons, 1974). The researcher observed what events initiate blog-postings and social support exchanges and how the content of the postings and nature of the social support exchanges change over time (Keim-Malpass et al., 2014).

Before data collection (i.e., extracting the publicly available blog-postings from the blog website), project exemption was received from the University's Institutional Review Board (IRB). Assurance was provided regarding the passive nature of the research to protect the family's privacy. Additionally, all names have been removed from quotes and the title of the blog has been excluded from this study in order to protect the family's privacy.

Next, the researcher read the blog in its entirety to familiarize herself with the family, their writing style and their concerns since the inception of the blog. While the researcher also

overviewed other social media platforms written by the author of the blog, the directed content analysis was limited to the blog postings. Next, public postings made between August 2015, which is the date of treatment completion, through January 2016 were subjected to directed content analysis. These dates were chosen because the content within this period reflects the transitional period for this family from cancer-directed treatment to monitoring for cancer recurrence.

The initial analysis explored individual posts and comments on those posts, and determined evidence of the three domains of social support among posts. In order to organize the text, all posts were downloaded into a Microsoft Word TM document, where the lines of the blog posts were numbered. Each posting was then read line by line and subjected to directed content analysis analyzed using the lens of Schaefer's Social Support Theory (1981). For each posting, a data extraction tool was created, with a table that contained the definitions put forth in Schaefer's Social Support Theory as column headings. Additionally, an "other" column heading was introduced to account for data that did not meet the criteria put forth in Schaefer's Social Support theory but nonetheless seemed relevant to the investigation. This data extraction tool was used consistently throughout analysis for each of the three blog entries. One researcher completed the initial extraction of coding the forms of social support, and subsequently a second researcher read the tool to determine whether or not she agreed with the initial researchers coding. Any difference in opinion was discussed between the two researchers and agreed upon before completing the extracting tool. Should content have been applicable in more than one category, the content was sorted into more than one column.

#### Results

This case involves analysis of one blog that follows a family whose child was diagnosed with mixed lineage leukemia (MLL) during the first year of life. The primary author of the blog is the father, though the father does include and narrate opinions and experiences of his wife and their other two children. The inception of the blog began as a means to inform friends and family of the blog authors about the child's progress. The focus of the analysis for this case study was limited to the period following cancer-directed active treatment. Three blog posts written between August 2015 and January 2016 were included in this analysis, thus describing approximately the first six months after cessation of cancer-directed treatment. The first posting was immediately after cessation of cancer directed treatment and discussed the events and stressors that occurred at that time. The second posting discussed the importance of a milestone in the post-treatment phase, specifically that of the child's port being removed. The third post discussed in detail the ongoing challenges facing the child and her family. Every quote presented in the results is numbered according to its line position in the blogpost. Additionally, all quotes were extracted from the blog of study but not listed in references in order to protect the family's privacy.

## Overall Purpose vs. Main Idea of Blog Posts

For each post, the stated purpose was compared to the main idea (see Table 1). For the August posting, the stated purpose was to explain events that occur once the child's leukemia treatment ended, whereas the main idea of the post appeared to express the notion that the end of treatment is not the end of stress associated with the childhood leukemia experience. For the November posting, the overall purpose of the post was to describe the major milestone of having a port removed and the emotions associated with this milestone. The main idea of this post built

upon the earlier topics and expressed that stress continues after cancer-directed treatment and how returning to the hospital triggered memories of difficult times and the stress associated with those times. In the final posting analyzed, the January posting, the stated overall purpose and main idea were consistent with the previous entry. In this posting, the father educated the readers about the daily life of caregivers, the progress of his child and the rationale behind decisions he and his wife have made regarding their child's continued journey through recovery.

Table 1. A comparison of the overall purpose of the blog post and the main idea discussed throughout the blog post

Posting	Overall purpose	Main idea
date		
August	To explain events that occur once the	To express the notion that the end of
2015	child's leukemia treatment ended	treatment is not the end of stress
		associated with the diagnosis and
		treatment of childhood leukemia.
November	To describe the major milestones of	To continue to express and explain the
2015	having a port removed and the	stress associated with this time period of
	emotions associated with this	transition as well as express how visit to
	milestone.	the hospital can trigger emotions felt in
		previous times of stress
January	To educate readers on the daily life	Similar to the overall purpose, to educate
2016	of caregivers and the challenges	the readers on the choices made by
	associated with the "post treatment"	caregivers concerning the course of
	period.	treatment for their child.

## **Information Support**

Throughout all three postings subjected to directed content analysis, information support was a prevalent feature in which the author provided information to blog readers regarding the process his child and the family were undergoing in moving from cancer-directed treatment to cancer maintenance therapy. The abundance of information support likely draws from the author's initial stated purpose for the blog to be used to update friends and family. Overall, the author discussed the purpose of his child's medical regimen and the family's daily schedule

during the transition from focusing primarily on cancer remission to focusing on rehabilitation from the intensive treatment. In general, information support appeared to be divided into two subcategories- namely, information about the medical treatment and supportive care and information about the day-to-day activities for the family. In the quotes included below, the line numbers in parentheses refer to the location of the quote in the blog post.

The first subcategory of information support explaining medical treatment and supportive care is present in examples such as "...[the] main focus of treatment now switches from killing cancer to healing her body from two years of intense chemo" (lines 29-30) or "... we had the port installed after the central line in her back kept getting infected. These devices are used both to deliver chemo/meds and draw blood" (lines 14-16)

### And

Some have suggested we should just remove her feeding tube and force her to eat.

There's a couple problems with that which include the fact that she still needs to understand that eating food will satiate her. Until she makes that connection, she's not going to eat enough to nourish herself. [The child] also needs to be able to chew efficiently and have the strength to do so for three meals a day. (lines 72-76).

The second subcategory of information support associated with explaining family life is exemplified in examples such as "A lot of [her] restrictions have been loosened, we can start slowly transitioning back to 'normal'" (lines 24-25) and "However, the team decided that since [she] has been doing so well that the risk of infection wasn't worth it and wanted [the port] out before we traveled to Florida this month for vacation" (lines 18-20). In addition, information support is explained in the following quote that describes an upcoming vacation:

We've been very busy during that stretch which included a trip..., capped off by a visit to Disney World. It was our first real family vacation, and a much needed break from our chaotic lives over the last two and a half years (lines 4-7).

Therefore, the author used the blog as a platform to educate their social network about both the clinical and personal aspects of this transitional period.

Table 2. Data extracted from blog posts of information support

Posting	Information about medical treatment	Information about how medical
date	and supportive care	treatment and supportive care affect
		family life
August	"[the] main focus of treatment now	"A lot of [her] restrictions have been
2015	switches form killing cancer to healing	loosened, we can start slowly
	her body from two years of intense	transitioning back to 'normal'(lines 24-
	chemo"(lines 29-30)	25)
November	" we had the port installed after the	"However, the team decided that since
2015	central line in her back kept getting	[she] has been doing so well that the
	infected. These devices are used both	risk of infection wasn't worth it and
	to deliver chemo/meds and draw	wanted [the port] out before we
	blood"(lines 14-16)	traveled to Florida this month for
		vacation"(lines 18-20)
January	"Some have suggested we should just	"We've been very busy during that
2016	remove her feeding tube and force her	stretch which included a trip, capped
	to eat. There's a couple problems with	off by a visit to Disney World. It was
	that which include the fact that she still	our first real family vacation, and a
	needs to understand that eating food	much needed break from our chaotic
	will satiate her. Until she makes that	lives over the last two and a half years
	connection, she's not going to eat	"(lines 4-7)
	enough to nourish herself. [The child]	
	also needs to be able to chew	
	efficiently and have the strength to do	
	so for three meals a day"(lines 72-76)	

# **Emotional Support**

Additionally, emotional support was a common feature throughout the three postings.

Similar to information support, there were two focuses of emotional support emotional support relating to expressing emotions regarding finding a "new normal" and emotional support relating

to the stress and fear associated with this phase in the illness trajectory. Examples in which the author addresses the family's "new normal" are quotes such as "Many have asked if we're back to normal as a family. The brief answer to that is no." (line 20).

Additionally, the author expresses this new normal by addressing the emotions of continuing on with their life, however changed it may be through examples such as "We're also looking forward to some much needed down time as a family" (lines 47-48) and "Mommy/Daddy are crashing a bit after living through two years of an intense, ultra stressful and unpredictable lifestyle" (lines 10-12). The author expresses information support by expressing these emotions and explaining that family life has not returned to "normal" through quotes such as

Even though [she] has been off treatment, we are still working to get back to some semblance of 'normalcy'. [The child's mother] often gets asked if she's back to working full time since she doesn't have to bring [their child] to [her appointments] anymore other than her monthly appointments. In reality [she] is just as busy post-treatment... (lines 20-24).

The emotions, namely fear, associated with this period in the illness trajectory is another common theme throughout the three postings. These emotions are demonstrated through quotes such as "Being back... was strange for me personally, my first time in the clinic since [her] treatment ended....Being up there today, I was overanxious and uncomfortable" (lines 25-28).

The author not only writes to express the fear that they as caregivers have experienced but also the fear their child has developed throughout the arduous treatment process. For example when discussing a trip to the dentist office the author writes

A few weeks ago she was terrified to be in the dentist office while the rest of us were getting our teeth cleaned, our little girl is simply scared of any hint of a medical atmosphere after everything she's endured. We can't blame her. (lines 39-41)

Additionally, the author expressed the family's thanks for emotional support that was extended to them outside the sphere of the blog (as well as within the blog in the comments section). Quotes such as the following demonstrate how the author offers their gratitude to their social network that has provided them with kind thoughts and words.

We are so thankful for the continued support- our doctors, our nurses, all the staff at [the medical center where they received treatment], our therapists, fellow cancer families, the organizations that supported us, our employers, our neighborhood..., family, friends... (lines 73-75)

Emotional support demonstrated throughout these posts is expressed through the emotions that the author put forth. By informing the family's social network of their emotions and changes associated with the transitional period of the three posts analyzed, the family is able to reach out for ongoing emotional support.

Table 3. Data extracted from blog posts of need for and appreciation of emotional support

Posting	A "new normal"	Triggers of fear and stress
date		
August	"We're also looking forward to some much	"A few weeks ago she was
2015	needed down time as a family"(lines 47-48)	terrified to be in the dentist
		office while the rest of us
		were getting our teeth
		cleaned, our little girl is
		simply scared of any hint of a
		medical atmosphere after
		everything she's endured.
		We can't blame her"(lines
		39-41)

November	"Mommy/Daddy are crashing a bit after living	"Being back was strange
2015	through two years of an intense, ultra stressful	for me personally, my first
	and unpredictable lifestyle"(lines 10-12)	time in the clinic since [her]
		treatment endedBeing up
		there today, I was
		overanxious and
		uncomfortable"(lines 25-28)
January	"Many have asked if we're back to normal as a	"We are so thankful for the
2016	family. The brief answer to that is no"(line 20)	continued support- our
		doctors, our nurses, all the
	"Even though [she] has been off treatment, we are	staff at [the medical center
	still working to get back to some semblance of	where they received
	'normalcy'. [The child's mother] often gets asked	treatment], our therapists,
	if she's back to working full time since she	fellow cancer families and
	doesn't have to bring [their child] to [her	all of you reading this"(lines
	appointments] anymore other than her monthly	73-75)
	appointments. In reality [she] is just as busy post-	
	treatment"(lines 20-24)	

# **Tangible Support**

Lastly, the directed content analysis found evidence of tangible support. Of the three forms of support, this form was not as apparent as the two other forms. The one example that demonstrated this form of support more so implied that tangible support had been offered rather than explicitly stated as such. The quote that demonstrates this support is as follows:

"We are so thankful for the continued support- ... the organizations that supported us, our employers, our neighborhood..., family, friends, those who sent meals and donations...." (lines 73-76).

Therefore, though tangible support was not that common, it is important to note that the example of tangible support identified incorporates both the tangible component as well as the emotional.

Table 4. Data extracted from blog post of tangible support

Posting	Tangible Support
date	
August	"We are so thankful for the continued supportthe organizations that supported us, our employers, our neighborhood, family, friends, those who sent meals
2015	and donations"(lines 73-76)

## The effect of childhood cancer on the patient's siblings

Another common theme that emerged in this analysis that was not specific to any of the three types of social support was that of the effect of the intricate post-treatment treatment life had on the stress experienced by each member of the family. Stress in this case seems to arise from a variety of factors for a cumulative effect. Expanding upon that, stress can result from the misunderstanding of what post-treatment life entails, but also that this period necessitates juggling family demands on the parents' time. For example, the quote "It took a few weeks to find therapists and create a schedule that incorporated [their child] still getting a few naps a week and also worked with [her siblings'] activities" (lines 38-39) spans across multiple forms of social support in that it expresses that not only does this family have the stress of peers not understanding the complexity of the patient's post-treatment needs but that they must also meet the needs of the two school-age siblings to participate in activities that are less critical but nonetheless important to their development.

Therefore, stress is a component in each of the dimensions of social support and becomes increasingly complicated with the more activities that the family needs to accomplish in an effort to find their "new normal".

### **Discussion**

The factor that appears to relate all forms of social support is stress. Expressions of stress and psychological responses to stress were most associated with situations that triggered memories of what seemed to have been traumatic experiences. Examples such as returning to the hospital i.e. "Being back... was strange for me personally, my first time in the clinic since [her] treatment ended....Being up there today, I was overanxious and uncomfortable" demonstrate that this return to a physical location translates to a return to the emotions felt when the family had traumatic experiences. Additionally, a source of stress related to going through a trauma is explained when the author discusses the return to normalcy and the stress associated with peers asking if the mother had gone back to work yet. The return to normalcy is a common theme among families that have experienced a cancer diagnosis. In a study of 32 members of seven families who had recently experienced a childhood cancer diagnosis in the family, the author Laura Clarke-Steffen notes, "the common goal for families... was creating a new normal or normalizing their lives" (1997). This creation of a new normal, brings along an additional challenge, namely that those outside the nuclear family assume the traumatic experience is over with completion of cancer-directed treatment (Norberg, 2008).

This feeling of stress, particularly related to the challenges experienced upon cessation of cancer-directed treatment is supported by the literature. As Norberg addressed, with the cessation of cancer directed treatment, there is an emergence of a new set of stressors that previously were not identified (2008). In this case, the child's need for ongoing supportive care therapies to maximize her physical function and other aspects of health-related quality of life inhibited the family's "return to normal". In addition, this complicated schedule was something that the support network of the family did not understand, hence the repetition of the question as to whether the mother had returned to work.

Being asked this type of question repeatedly could help explain why the form of social support for which there was the most evidence in the blog was information support. In an effort to inform friends and family, whom are the intended audience of the blog, the author was continuously informing the family's support network about the realities of their life. By informing their social network about what they are going through in this "post treatment" (as defined by the author) transitional period, they are equipping their social network with the understanding necessary to further appreciate the stress that is associated with this time period and thus provide ongoing support. This action of informing one's social network of updates on the illness process updates and celebration of cancer milestones is also evidenced in Gage-Bouchard's study of communication among caregivers of children with cancer on Facebook (2016).

Furthermore, emotional support was evidenced throughout all three postings, though to a lesser extent than information support. Stress combined with realizing the "new normal" was not as ideal as anticipated were the two most common themes among the examples of emotional support. The emotional support was therefore heavily tied to the information support in that by informing the reader about the reality of their situation, the emotions and feelings that they express through the blog are more relatable and allows the reader to empathize. For example, in order for a member of the family's support system to truly appreciate the emotions expressed by the author in the post regarding having a port removed, the reader has to first understand what a port is, which is what the information support strives to do. Similar results were observed in Gage-Bouchard's study of parents on Facebook in which many parents shared frustrations and anxiety experienced throughout the cancer process as well as broadly, "sharing emotional strain associated with caregiving..." (2016).

Tangible support was the least referenced in the three posts. Perhaps this is related to the stated purpose by the author of the blog, namely that it was created in order to update friends and family members about their life. This purpose lends itself more toward examples of information support, while also addressing emotional support. Regardless, tangible support is an important feature in the triad of social support; however, it was not readily evidenced in the time period analyzed for this study.

For this case study, posts in a publically available illness blog presented insight into the stress and daily life of families affected by childhood cancer. To echo Keim-Malpass (2014), in her work with internet ethnographies, the blog as a data source supplies information that is untainted/uninfluenced by both the interview questions and the context in which they are being interviewed. Additionally, as explained by Keim-Malpass (2014) the blog creates a way for people affected by cancer to be "raw and honest" about their experiences, while at the same time informing their social support network about what is going on in their lives

## Limitations.

Limitations of this study include the inability to gather textual data regarding the nature of social support exchanges between the bloggers and their social network members when contact information is shared via the online blog and leads to further exchanges outside of the blog. According to Keim-Malpass, a benefit of internet ethnographies is that the information posted online is "raw and honest" and authors "connect and immerse in each other's cancer experience" therefore highlighting the importance of the researcher having no influence on the blog (2014). These types of accounts of the cancer experience can help nurse researchers understand how families experience and cope with illness transitions by using social media to exchange social support.

### **Conclusions and Future Directions**

Blogging as a means of social support was utilized in this particular case study and has potential for presenting as a means of social support for families that have experienced cancer treatment in children. The author used the blog to inform the family's social support network about their experiences throughout this stressful part of their lives, while also being able to express the emotions associated with intensive treatment of leukemia in a very young child. Nurses should be familiar with how families express and expand their social support network throughout the illness trajectory including in the period immediately following the completion of cancer therapy so that families can access the social support they need. Recommended future studies include expanding the sample size to look at blogs of multiple families affected by childhood cancer and using the various cases and comparison between them to develop a teaching tool for nurses to offer families as a means of coping with the stress of cancer treatment.

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