LEVELS OF STRESS, HOPE AND OVERALL QUALITY OF LIFE OF CAREGIVERS OF CANCER PATIENTS

Thesis for PSY. 589
Presented to Professor Dr. Gayle Morse
Department of Psychology
Sage Graduate School

In Partial Fulfillment
of the Requirements for the Degree of
Master of Arts in Psychology
Cathy Hoehn
May, 2009
LEVELS OF STRESS, HOPE AND OVERALL QUALITY OF LIFE OF CAREGIVERS OF CANCER PATIENTS

I represent to Sage Graduate School that this thesis and abstract are the original work of the author and do not infringe on the copyright or other rights of others.

_____________________________________________  ________________
Cathy A. Hoehn       Date of Signature

Witnessed by:
Thesis Advisor

_____________________________________________  ________________
Dr. Gayle Morse       Date of Signature
Asst. Professor of Psychology

Thesis Reader

_____________________________________________  ________________
Dr. Bronna Romanoff       Date of Signature
Professor of Psychology
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>4</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. Review of the Literature</td>
<td>5</td>
</tr>
<tr>
<td>2. Research Design and Methodology</td>
<td>11</td>
</tr>
<tr>
<td>2.1 Table One</td>
<td>11</td>
</tr>
<tr>
<td>3. Results</td>
<td>14</td>
</tr>
<tr>
<td>3.1 Table Two</td>
<td>14</td>
</tr>
<tr>
<td>3.2 Table Three</td>
<td>15</td>
</tr>
<tr>
<td>3.3 Table Four</td>
<td>15</td>
</tr>
<tr>
<td>3.4 Table Five</td>
<td>16</td>
</tr>
<tr>
<td>3.5 Table Six</td>
<td>16</td>
</tr>
<tr>
<td>3.6 Table Seven</td>
<td>17</td>
</tr>
<tr>
<td>3.7 Table Eight</td>
<td>17</td>
</tr>
<tr>
<td>3.8 Table Nine</td>
<td>17</td>
</tr>
<tr>
<td>4. Discussion</td>
<td>18</td>
</tr>
<tr>
<td>4.1 Limitations</td>
<td>19</td>
</tr>
<tr>
<td>4.2 Future Research</td>
<td>20</td>
</tr>
<tr>
<td>References</td>
<td>21</td>
</tr>
<tr>
<td>Appendix A: Caregiver Questionnaire</td>
<td>23</td>
</tr>
</tbody>
</table>
ABSTRACT

Twenty-one current caregivers (18 female, 3 male) of cancer patients were recruited and completed a survey that examined their current levels of hope, stress and quality of life. It was predicted that caregivers would have high levels of stress and hope that would result in a high level of quality of life. The data collected showed that as a full model the combination of both stress and hope did not affect a person’s quality of life. Hope, when examined by itself was found to impact a person’s quality of life, in a positive direction (r = .613, p < .01). Age and marital status were also found to play a role where, younger people (r = .391, p < .05) reported higher levels of hope and people who are married reported higher levels of stress (r = .501, p < .05).

Suggested Keywords: Hope, Stress, Quality of Life, Cancer, Caregivers
Levels of Stress, Hope and Overall Quality of Life of Caregivers of Cancer Patients

Today there are roughly 10.7 million American cancer survivors (Halldorsdottir & Hamrin, 1996). While cancer certainly has a huge impact on the life of the person diagnosed with cancer, the lives of the family and friends of the cancer patient are also deeply affected. Some family members or close friends are put in the position of becoming the caregiver for the cancer patient. While there is a lot of research examining how cancer affects the patient there is limited research on how the caregiver is affected by the situation. With taking on this new role, there are many positive and negative “burdens” that a family member may experience while being a caregiver. Some of these negative burdens may include: having to quit their jobs, feeling that they have no support, and experiencing mental and physical vulnerability. The increase in these negative burdens may cause the caregiver to experience heightened stress. While there are negative burdens, there may also be positive aspects of being a caregiver, including improving their relationships with the cancer patient.

Holldorsdottir and Hamrin (1996) interviewed cancer survivors, specifically, about how their lives were changed by their illness. Being diagnosed with any type of cancer brings with it a lot of stress. Overall, these authors found that there were five major themes that cancer survivors said they experienced. The first major theme the authors found was uncertainty. Many of these survivors experienced uncertainty because they did not know how their illness would play out (Holldorsdottir & Hamrin, 1996). Other research has also found that uncertainty is one of the major factors a cancer patient will experience during their treatment. One article stated that “uncertainty in illness is one of the major experiences that survivors of breast cancer must face” (Wonghongkul, Moore, Musil, Schneider, & Deimling, 2000, p. 4). The second theme identified experienced by cancer patients was vulnerability, some survivors expressed that they felt they were being talked down to, and were sometimes scared to ask their doctors questions. Isolation was the third major theme that was felt. Cancer patients may shut themselves off from others they care about. One reason for this isolation may be that cancer patients feel that others do not understand what cancer really is like and they fear people may treat them differently. Overall discomfort was the fourth major theme found by these researchers. There are many extreme
physical symptoms that are a result of cancer, including nausea, appetite changes, diarrhea or fatigue. While the previous four themes are more negative, the fifth is more positive. The fifth and final theme that was found was redefinition. After going through an experience like cancer, a survivor may reorganize his goals, to find out what he really wants or what is the most important to him in his life (Halldorsdottir & Hamrin, 1996).

As listed above there are many negative experiences that are a result of living with cancer, but cancer patients have also expressed that there are positive aspects as well. Some patients expressed that they became closer with their family and hoped to make their other friendships more intimate. Throughout the interviews researchers found over and over that one major factor that helped the cancer patients to cope with the illness was the support of their family and friends. This support was important in helping the patients adjust to the cancer treatment and essentially to help them to survive (Halldorsdottir & Hamrin, 1996). This finding demonstrates the vital role of a caregiver for a cancer patient.

As stated earlier, cancer can affect the cancer patient in many dimensions of their life. However, cancer affects not only the patients but also the patient’s support system (Yun et al., 2005). These caregivers often will experience the same negative burdens that the cancer patient experiences. Family members of the cancer patients tend to be the primary support or caregiver for cancer patient (Northouse, et al., 2002). Family is a broad term which can mean the immediate family, or some sort of blended family that comes to the aid of the cancer patient (Lewis, 2006). Those who have a social support system outside the family also have been found to have a better chance of adjusting to their cancer diagnosis. While family members are there to support the member who has cancer, these family members often do not have support themselves (Northouse et al., 2002). The stress that comes along with being a caregiver is multidimensional, and includes both positive and negative aspects. Treating cancer is usually a lengthy and exhausting process so the caregiver is likely to be involved in taking care of the patients for a long period of time (Nijboer, Triemstra, Tempelaar, et al. 2000).

Providing care for family members during an illness can take a toll on the family members. This can lead to diminishing the caregiver’s own quality of life. The burden that can be placed on the family is
multidimensional. Some areas of their life that may be affected include “disruption of normal household routines and roles, financial concerns relating to medical costs and income loss, and emotional stresses triggered by the illness” (Sales, 2003, p. 34). Sales (2003) expressed that the burden that may be experienced by family members can be broken down into two types of burdens, objective and subjective burdens. Objective burdens include the things the caregiver has to do, or can’t do any more as a result of the illness. The caregiver may have to take over roles that the family member with the illness used to do. For example, a husband may have to take on more household chores, perhaps something he never did in the past, if his wife is diagnosed with cancer. Learning these new roles can be stressful. According to the American Cancer Society, roughly 35% of families who have a member experiencing an illness have noticed role changes in their family structure. Subjective burdens include more the emotional costs that come along with being a caregiver. This may include “feeling trapped, being confined to the house, becoming isolated from others, feeling responsible for others” (Sales, 2003, p. 36).

Research has found that there are other negative aspects that caregivers may experience during the course of the cancer treatment. The toll of having to take care of a family member may become very stressful. The caregiver may become very distressed, and this can lead to anxiety or depression. There are also economic burdens that the family caregiver may experience. Having to quit their job or using the family’s savings to help pay for the treatment are two of the major economic burdens experienced by the caregiver. Economic burdens can eventually decrease the caregiver’s quality of life. Some caregivers have even been found to have lower levels of physical and mental health when compared to a controlled group (Yun, et al., 2005).

The family members like the patient are affected by the diagnosis. Lewis (2006) found that there are four ways a caregiver may be affected by cancer. First, children, who have parents with cancer, fear that they may lose their parent. These children may also have lower esteem, and parent’s role as a parent is disrupted when the diagnosis is given. Second, family members may have a tough time expressing to other family members the strains they are experiencing. Family members have expressed in past studies that they are not always sure how to help their other family members get through the situation.
Relationships may become strained because of this. Third, the family may try to attempt to address the tension that arises during this time. However, there is little research in looking how family members cope with the tension that arises. Lastly, the family will try to maintain how they were before the cancer arrived. Family members may worry about expressing their thoughts because they do not want to burden the cancer patient (Lewis, 2006).

These negative burdens can lead to a caregiver experiencing stress. Some caregivers handle the stress of being a caregiver better than others. Examining the factors that buffer the effects of stress are important. One study found that those who tend to have higher self-efficacy or believe they can handle the stress that comes tend to have a higher quality of life (Northouse, et al., 2002). Families may also be able to handle the stress by having hope. There has been a lot of research demonstrating how hope has had a positive effect in the lives of cancer patients. Hope has been found to be crucial in their recovery and overall quality of life of a cancer patient. Hope is a state that may change over the course of the illness. On the other hand, there have been other studies that have found that hope does not seem to be different among newly diagnosed patients compared to those with reoccurring cancer. Rustoen and Wiklund (2000) looked at recently diagnosed women, and asked them to complete a hope scale. Roughly 87 percent of the women felt they were hopeful. Surprisingly, no one reported feeing completely hopeless (Rustoen & Wiklund, 2000). Another study also found that breast cancer survivors had high levels of hope. Hope is one factor that has seemed to help increase a cancer patient’s quality of life. Having a higher level of hope also was found in women that had more effective coping strategies as well (Wonghongkul, et al., 2000). While there is quite a bit of research examining hope and cancer survivors, there is little research on how levels of hope affect the caregivers and their own quality of life.

With all these stressors, how does taking care of a family member affect the overall quality of life of the caregiver? One study by Northouse et al. (2002) found that family members have reported feeling like they have less support from others, and higher levels of uncertainty. Some family member’s mental health quality, was actually lower then the cancer patients themselves. These family members were found to have “less support, less satisfaction with health professionals, and more uncertainty about the illness.
than even the patients do” (Northouse, 2002, p. 4061). One study found that both “patients and family members with more self-efficacy reported less hopelessness, less negative appraisal of the illness or care giving, and better quality of life” (Northouse et al., 2002, p. 4061). Another study found that over the course of the illness what caregivers considered the most burdensome was the disrupted schedule and having a lower level of self esteem. Female caregivers felt that they had a “loss of physical strength” compared to their male counterparts. Younger caregivers reported that having a disrupted schedule was much more burdensome than older caregivers (Nijboer et al., 2000).

Studies have examined the psychological well being of caregivers. Some studies have found that many caregivers would meet the criteria for a mental illness (Vanderwerker, Laff, Kadan-Lottick, McColl & Prigerson, 2005) while others do not (Pitceathly & Maguire, 2003). Many caregivers have reported depressive symptoms, but do not meet the criteria for a full case of depression. Their physical health may also suffer while taking care of a family member (Kim, & Given, 2008). Researchers Awadalla, Ohaeri, Gholoum, Khalid, Hamad, & Jacob (2007) found that caregivers of patients who were “married, with higher education, better employment, and with longer duration of illness [have] higher quality of life” (p. 1). This study looked at the quality of life of family members and the cancer patients after the patient had recovered. The quality of life of both patients and caregivers appeared to be higher compared to a control group. There are some positives that can come out of taking care of a family member. Being diagnosed with cancer seemed to have created healthier relationships between the survivor and his family. Another interesting finding was that those who were being cared for by their spouses, compared to another family member (e.g. brother, cousin), seemed to have higher levels of quality of life (Awadalla et al., 2007). At different points of the illness, different measurements of quality of life are seen. There are definitely contradictory findings with the past research in examining how long the caregiver feels burdened throughout the illness. Some caregivers may feel burdened throughout the whole process, while for others it may decrease after the initial shock of having to take care of a family member (Nijboer, Triemstra & Tempelaar, et al. 2000). While there are many negative strains that the family experiences while having to
witness their loved one go through cancer, there are also some positives. Some caregivers may experience growth, and an increase in self satisfaction.

Much of the past research has focused on the stress a cancer patient experiences and how having hope may be a factor in determining their quality of life, but little research has focused on what the caregiver experiences during this traumatic time. Research has found that caregivers also experience different types of stress in different areas of their lives, but would having hope, help them to overcome this stress and result in a high quality of life even though they are experiencing a difficult time in their life?

The focus of this current study is caregivers of current cancer patients, since there was less research on the caregivers quality of life, during the time they are taking care of a close family member or friend with cancer. Caregivers of cancer patients were recruited to take an online survey that focused on their levels of stress, hope and quality of life. The focus of this research was to assess caregivers, whose family members or close friends have or recently been diagnosed and treated for (within in the last six months) cancer. This study examined the caregivers current levels of stress, hope and overall quality of life.

The Model:
Below are the three hypotheses that were tested:

\[ H_1: \] Caregivers of cancer patients will have stress.

\[ H_2: \] Caregivers will have high levels of hope.

\[ H_3: \] Caregivers who have increased stress and increased hope will still have a high quality of life.

The hypothesized outcomes are important for research because these data may show the caregivers of cancer patients who experience stress, and who also exhibit hope, will experience a higher level of quality of life. These possible findings may be helpful in developing more support programs for caregivers.

METHOD

Participants

A total of 35 participants took the online questionnaire. Only 21 (3 males, 18 females) were fully completed, and only fully completed surveys were used. The ages of these participants ranged from 26-79 years old \((M=46.57, SD=15.70)\). Flyers were posted recruiting caregivers that directed them to the website where they could take the online survey. Caregiver participants were recruited through two organizations. One location was the oncology wing at a local hospital located in Upstate NY and a Community Caregiver building located in Upstate, NY. Multiple psychology Listservs were also used to recruit participants. Table One lists the descriptive statistics of the participants.

Table 1

<table>
<thead>
<tr>
<th>Demographics of Participants (N=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable Name</strong></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Ethnicity</td>
</tr>
<tr>
<td>Caucasian</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>
Marital Status
Not Married 11 52.4%
Married 10 47.6%

Education Level
Some College 2 9.5%
Bachelor’s Degree 2 9.5%
Some Grad. School 4 19.0%
Master’s Degree 5 23.8%
Pro. Degree 8 38.1%

Employment Status
Working
(full time/part time) 17 81.0%
Not Working 4 19.0%

Religion
Catholic 6 28.6%
Protestant 5 23.8%
No, religious or spiritual affiliation 6 28.6%
Other 4 19.0%

Relationship to the Cancer Patient
Spouse 7 33.3%
Child 10 47.6%
Other familial connection 1 4.8%
Other 3 14.3%

Type of Cancer
Breast 3 14.3%
Lung 3 14.3%
Colon-Rectum 3 14.3%
Stomach 1 4.8%
Prostate 1 4.8%
Bladder 1 4.8%
Other 9 42.9%

Materials

The online survey consisted of three scales that measured the three separate variables (stress, hope, and quality of life), along with a brief socio-demographic section created by the researcher. The three surveys used were the Ferran’s and Powers Quality of Life Index Generic Version-III, the Herth Hope Scale, and the Perceived Stress Scale (PSS). The PSS is not a diagnostic tool, but a self report
tool that measures an individual’s perception of their current level of stress (Cohen, S., Kamarck, T., & Mermelstein, R., 1983). It was designed for a community with at least a junior high education (Cohen, 2008). The Ferrans and Powers Quality of Life Index is a self report survey that measures an individual’s current perception of their level of quality of life. This scale was found to have an internal consistency reliability that ranged from .73 to .99. This survey also has a high construct and convergent validity (Ferrans & Powers, 2009). The Herth Hope Scale (1988) is a Likert type scale that was designed based on the work of Dufault and Martocchio’s model of hope. The alpha reliability of this scale ranges from .78-.97 and has demonstrated face, content, criterion-related and construct validity. It is a self report measures that measures the participants current level of hope, and has been used in approximately 100 other studies to measure hope. K.A Herth (personal communication, March 2009). Authors of each questionnaire gave permission to use their scales.

Procedure

The participants were directed to the psychdata.org website through the advertised flyers and were asked to complete the online questionnaire, which was an anonymous survey. SPSS was used to analyze the collected data.

RESULTS

First, the descriptive data were analyzed to ensure that the data met the basic assumptions of a normal distribution. The data were found to meet that criterion. Next a bivariate correlation matrix was completed of all relevant variables. See Table Two.
Table 2

Spearman Bivariate Correlation Matrix of Primary Variables

<table>
<thead>
<tr>
<th>Spearman</th>
<th>Gender</th>
<th>Age</th>
<th>Married</th>
<th>PSS Score</th>
<th>HH Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.079</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>.117</td>
<td>-.440*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS Score</td>
<td>.078</td>
<td>-.639**</td>
<td>.501*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH Score</td>
<td>.099</td>
<td>.351</td>
<td>-.085</td>
<td>-.642**</td>
<td></td>
</tr>
<tr>
<td>FP Score</td>
<td>.100</td>
<td>.296</td>
<td>-.147</td>
<td>-.501*</td>
<td>.613**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed)

NOTE:
PSS Score = Perceived Stress Score
HH Score = Herth Hope Score
FP Score = Ferrans and Powers Quality of Life Index Score

First, there was a negative correlation between stress and hope (r = -.642, p < .002). There was also a negative correlation between quality of life (QOL) and stress (r = -.501, p < .05). When looking at age, there was again a negative correlation between stress and age. There also was a correlation between stress and marriage (r = -.668, p < .001), those who were married reported higher levels of stress than those who are not. When looking at the findings concerning hope, there was a positive correlation between QOL and hope (r = .613, p < .003). There was also a positive correlation between age and quality of life. Age and marital status were the only two variables that showed some significance with stress, hope and quality of life.
Table 3

Regression Equation

\[ FP = a + b_1 \ast HHS + b_2 \ast PSS + b_3 \ast AGE + b_4 \ast MAR \]

Where:
- \( a \) is a constant
- \( FP \) represents Quality of Life
- \( HHS \) represents Hope
- \( PSS \) represents Stress
- \( AGE \) represents Age
- \( MAR \) represents Marital Status

Table Four demonstrates the tests and criteria that were used to evaluate the significance of the regression equation, as well the three hypotheses.

Table 4

Statistical Tests and Research Criteria

<table>
<thead>
<tr>
<th>Tests</th>
<th>Acceptance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>The F test was used to evaluate the overall goodness of fit of the Regression Model</td>
<td>( P(F) \leq 0.05 )</td>
</tr>
<tr>
<td>( H_1 ) was evaluated based on the significance of ( t ) for the coefficient of ( b_1 ).</td>
<td>( P(t_{b1}) &lt; 0.05 )</td>
</tr>
<tr>
<td>( H_2 ) was evaluated based on the significance of ( t ) for the coefficient of ( b_2 ).</td>
<td>( P(t_{b2}) &lt; 0.05 )</td>
</tr>
<tr>
<td>( H_3 ) was evaluated based on the significance of ( t ) for the coefficient of ( b_3 ).</td>
<td>( P(t_{b3}) &lt; 0.05 )</td>
</tr>
</tbody>
</table>

The hypotheses were examined using a full mode regression. A Linear Regression was done using the variables age, marital status, hope score, stress score and quality of life score. Table Five below shows that the combination of these variables showed to not be significant in proving the full model.
Table 5

Linear Regression of Variables Age, Marital Status, Stress, Hope on Quality of Life

\[ R^2 = .423, F(4, 16) = 2.935, p < .054 \]

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.240</td>
<td>13.933</td>
<td>0.233</td>
<td>0.819</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>5.084E-02</td>
<td>0.058</td>
<td>0.211</td>
<td>0.877</td>
<td>0.394</td>
</tr>
<tr>
<td>Married</td>
<td>0.122</td>
<td>1.767</td>
<td>0.016</td>
<td>0.069</td>
<td>0.946</td>
</tr>
<tr>
<td>PSS Score</td>
<td>-3.342E-02</td>
<td>0.151</td>
<td>-0.072</td>
<td>-0.221</td>
<td>0.828</td>
</tr>
<tr>
<td>HH Score</td>
<td>0.219</td>
<td>0.120</td>
<td>0.486</td>
<td>1.827</td>
<td>0.086</td>
</tr>
</tbody>
</table>

Next the variable age and marital status were removed because they were not statistically significant and only the hypothesized variable were examined in another linear regression was completed, as seen below in Table Six. This linear regression that shows the effect of stress and hope on quality of life showed that only hope played a role in determining caregiver’s quality of life. Although stress was approaching significance it was not statistically significant.

Table 6

Linear Regression of Variables Stress, Hope on Quality of Life

\[ R^2 = .395, F(2, 18) = 5.883, p < .011 \]

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>7.426</td>
<td>11.558</td>
<td>0.643</td>
<td>0.529</td>
<td></td>
</tr>
<tr>
<td>PSS Score</td>
<td>-8.506E-02</td>
<td>0.111</td>
<td>-0.183</td>
<td>-0.764</td>
<td>0.455</td>
</tr>
<tr>
<td>HH Score</td>
<td>0.223</td>
<td>0.108</td>
<td>0.496</td>
<td>2.1073</td>
<td>0.053</td>
</tr>
</tbody>
</table>

Finally a Linear Regression was conducted comparing hope and stress (see table 7). This indicated that as hope increases stress decreases (r = -.642, p = .002).

16
Table 7

Linear Regression of Variables Stress on Hope

\[ R^2 = .413, F(1,19) = 13.162, p < .002 \]

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>102.263</td>
<td>7.513</td>
<td></td>
<td>13.612</td>
<td>.000</td>
</tr>
<tr>
<td>PSS Score</td>
<td>-.665</td>
<td>.182</td>
<td>-.642</td>
<td>-3.653</td>
<td>.002</td>
</tr>
</tbody>
</table>

Lastly because there was a bimodal distribution of age, the category of age was split into two categories including 55 and younger and 56 and older. When examining how these two groups differed using a linear regression it was found that the younger age group has lower levels of hope than their older counterparts. See Table 8, 9 and Figure 1.

Table 8

Linear Regression of Variables Stress, Hope on Quality of Life for Participants 55 years old and younger

\[ R^2 = .383, F(2,9) = 2.795, p < .114 \]

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>7.412</td>
<td>19.061</td>
<td>.389</td>
<td>.706</td>
<td></td>
</tr>
<tr>
<td>HH Score</td>
<td>.241</td>
<td>.139</td>
<td>.536</td>
<td>1.734</td>
<td>.117</td>
</tr>
<tr>
<td>PSS Score</td>
<td>-.114</td>
<td>.259</td>
<td>-.136</td>
<td>-.441</td>
<td>.670</td>
</tr>
</tbody>
</table>

Table 9

Linear Regression of Variable Stress, Hope on Quality of Life for Participants 56 years old and Older

\[ R^2 = .268, F(2,6) = 1.097, p < .393 \]

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>17.359</td>
<td>25.823</td>
<td>.672</td>
<td>.526</td>
<td></td>
</tr>
<tr>
<td>HH Score</td>
<td>.114</td>
<td>.255</td>
<td>.235</td>
<td>.447</td>
<td>.671</td>
</tr>
<tr>
<td>PSS Score</td>
<td>-.123</td>
<td>.205</td>
<td>-.317</td>
<td>-.602</td>
<td>.569</td>
</tr>
</tbody>
</table>
Figure One: Mean scores of stress, hope and quality of life for participants ages 55 and younger, and 56 and older. As a person gets older their levels of stress decrease, while their levels of hope and quality of life increase.

Discussion

According to the bivariate correlation matrix many of the variables showed statistically significant negative or positive correlations. If a person is under stress, they will most likely also lose hope in their current situation. If a person is under stress, they will also report that their quality of life is not satisfactory. Age, had a bimodal distribution which was divided into two groups and examined separately, indicated that those who were older reported a lower level of stress ($r = -.596$, $p < .001$). This may be because an older person has learned how to handle stress more effectively or they may find situations not as stressful as their younger counterparts. Married people also reported higher levels of
stress this may be for various reasons (r =.501, p < .05). Perhaps the participants in this study are in marriages that are not healthy, or the stress of having to take care of their spouse is taking a toll on their relationship. Marriage in itself could also just be stressful, because of financial or other familial burdens.

Hope was found to play a part in determining a person’s overall quality of life. If a person reported having a high level of hope they also reported having a higher quality of life (r =.613, p<.001). This may be because having hope that their loved one will get better may make the caregiver look at his own life. While examining their life they may feel grateful for the life that they have. One interesting finding was that people under age 55 reported more hope than the older participants. This may because the patient they are taking care of is also younger and has a better chance of surviving cancer then an older person.

Overall looking at the full model it did not show that the combination of stress and hope affected the caregiver’s quality of life. The only individual variable that seemed to have an effect on a caregiver’s quality of life was hope. As hope increased, so did the caregiver’s quality of life (r=.613, p <.001). If a person has a higher level of hope in their life, then they perceived themselves having a higher quality of life. This also adds to the research on cancer patients that showed that patients with a high level of hope tended to have better outcomes.

Limitations

A major limitation of this study was that there were a small number of participants. With more participants there might have been better information regarding stress and its impact on quality of life. Perhaps those who are experiencing the most levels of stress did not have time to take a survey. Another limitation of this study was the length of the survey, which may have deterred caregivers, who are busy people, from taking the survey. More of the respondents were female, and the limited male input impacts our ability to generalize our information to a male population of caregivers. Also a vast majority of the participants were Caucasian which make it difficult to make inferences about other cultural groups with this data.
Future Research

Further research needs to be conducted on caregivers of cancer patients and how they are affected by the cancer experience. The research that is on caregivers seems to focus on caring for the elderly or people with Alzheimer’s disease. In the future other positive variables like faith or optimism may be researched to see what other factors a caregiver exhibits. Future research may also concentrate on comparing the different types of cancer, and if those types of cancer that are more fatal have an impact on a caregivers level of stress, hope or quality of life, compared to a less fatal type of cancer.
References


Appendix A

Caregiver Questionnaire

Thank you for participating in this survey. This is an anonymous survey. You will not be asked to list any identifying information, including your email address, while completing this survey. If, while completing this survey you experience any discomfort kindly discontinue and speak with someone about your feelings. If you have any further questions please feel free to contact me at hoehc@sage.edu. This research has received approval of The Sage College Institutional Review Board, which functions to insure the protection of the rights of human subjects.

1. Gender
   o Male
   o Female

2. What is your ethnicity?
   o African American
   o Asian American
   o Caucasian
   o Hispanic/Latino
   o American Indian/Alaskan Native
   o Other (please specify?)

3. How old are you?

4. What is your current Marital Status?
   o Never Married
   o Married
   o Widowed
   o Divorced
   o Separated
   o Live In Partner
   o Other (Please Specify)

5. What is your highest level of education completed?
   o No school
   o Grade School
   o Some High School
   o High School Diploma/GED certificate
   o Some college
   o Bachelor’s Degree
   o Some Graduate School
   o Master’s Degree
   o Professional Degree (i.e. PhD, RN, MD)
   o Other (please specify)

6. Are you currently employed?
   o Yes, full time
   o Yes, part time
   o Seasonally
   o No, I choose not to work at this time
7. What is your religious or spiritual affiliation?
   - Catholic
   - Protestant (Methodist, Baptist, etc.)
   - Mormon (Church of Latter Day Saints)
   - Jehovah’s Witness
   - Traditional Longhouse
   - No, religious or spiritual affiliation
   - Other (please specify)

8. What is your relationship to the cancer patient?
   - Spouse
   - Sibling
   - Child
   - Close Friend
   - Other familial Connection
   - Other (Please specify)

9. What type of Cancer does the patient have?
   - Breast
   - Lung
   - Colon-Rectum
   - Stomach
   - Prostate
   - Bladder
   - Oral
   - Skin
   - Cancer of the uterus
   - Ovarian
   - Other (please specify)

INSTRUCTIONS:
The questions in this scale ask you about your feelings and thoughts during THE LAST MONTH. In each case, you will be asked to indicate your response by placing an “X” over the circle representing HOW OFTEN you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don’t try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.
1. In the last month, how often have you been upset because of something that happened unexpectedly?

2. In the last month, how often have you felt that you were unable to control the important things in your life?

3. In the last month, how often have you felt nervous and “stressed”?

4. In the last month, how often have you dealt successfully with day to day problems and annoyances?

5. In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?

6. In the last month, how often have you felt confident about your ability to handle your personal problems?

7. In the last month, how often have you felt that things were going your way?

8. In the last month, how often have you found that you could not cope with all the things that you had to do?

9. In the last month, how often have you been able to control irritations in your life?

10. In the last month, how often have you felt that you were on top of things?

11. In the last month, how often have you been angered because of things that happened that were outside of your control?

<table>
<thead>
<tr>
<th>Never</th>
<th>Almost</th>
<th>Fairly</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

12. In the last month, how often have you found yourself thinking about things that you have to accomplish?

13. In the last month, how often have you been able to control the way you spend your time?
14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them.
HERTH HOPE SCALE

Listed below are a number of statements regarding hope. Read each statement and decide whether it applies to you personally. There are no right or wrong answers. Place a check [X] in the appropriate box indicating how often the statement has applied to you in the past week or two.

<table>
<thead>
<tr>
<th></th>
<th>Never applies to me</th>
<th>Seldom applies to me</th>
<th>Sometimes applies to me</th>
<th>Often applies to me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am looking forward to the future.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I sense the presence of loved ones.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I have deep inner strength.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I have plans for the future.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I have inner positive energy.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I feel scared about my future.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I keep going even when I hurt.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I have a faith that gives me comfort.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I believe that good is always possible.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I feel at a loss, no where to turn.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I feel time heals.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I have support from those close to me.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I feel overwhelmed and trapped.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I can recall happy times.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>I just know there is hope.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I can seek and receive help.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>applies to me</td>
<td>applies to me</td>
<td>applies to me</td>
<td>applies to me</td>
</tr>
<tr>
<td>---</td>
<td>--------------</td>
<td>---------------</td>
<td>---------------</td>
<td>---------------</td>
</tr>
<tr>
<td>17.</td>
<td>I am immobilized by fears and doubts.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I know my life has meaning and purpose.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I see the positive in most situations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I have goals for the next 3-6 months.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I am committed to finding my way.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>I feel all alone.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>I have coped well in the past.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>I feel loved and needed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>I believe that each day has potential.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>I can’t bring about positive change.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>I can see a light even in a tunnel.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>I have hope even when plans go astray.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>I believe my outlook affects my life.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>I have plans for today and next week.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ferrans and Powers  
QUALITY OF LIFE INDEX®  
GENERIC VERSION - III  

PART 1. For each of the following, please choose the answer that best describes how *satisfied* you are with that area of your life. Please mark your answer by circling the number. There are no right or wrong answers.

1. Very Dissatisfied  
2. Moderately Dissatisfied  
3. Slightly Dissatisfied  
4. Slightly Satisfied  
5. Moderately Satisfied  
6. Very Satisfied

**HOW SATISFIED ARE YOU WITH:**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Your health?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Your health care?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. The amount of pain that you have?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. The amount of energy you have for everyday activities?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Your ability to take care of yourself without help?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. The amount of control you have over your life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Your chances of living as long as you would like?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Your family’s health?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Your children?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Your family’s happiness?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Your sex life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Your spouse, lover, or partner?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Your friends?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. The emotional support you get from your family?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. The emotional support you get from people other than your family?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

© Copyright 1984 & 1998 Carol Estwing Ferrans and Marjorie J. Powers
**HOW SATISFIED ARE YOU WITH:**

1. Very Dissatisfied  
2. Moderately Dissatisfied  
3. Slightly Dissatisfied  
4. Slightly Satisfied  
5. Moderately Satisfied

---

16. Your ability to take care of family responsibilities? 1 2 3 4 5 6

17. How useful you are to others? 1 2 3 4 5 6

18. The amount of worries in your life? 1 2 3 4 5 6

19. Your neighborhood? 1 2 3 4 5 6

20. Your home, apartment, or place where you live? 1 2 3 4 5 6

21. Your job (if employed)? 1 2 3 4 5 6

22. Not having a job (if unemployed, retired, or disabled)? 1 2 3 4 5 6

23. Your education? 1 2 3 4 5 6

24. How well you can take care of your financial needs? 1 2 3 4 5 6

25. The things you do for fun? 1 2 3 4 5 6

26. Your chances for a happy future? 1 2 3 4 5 6

27. Your peace of mind? 1 2 3 4 5 6

28. Your faith in God? 1 2 3 4 5 6

29. Your achievement of personal goals? 1 2 3 4 5 6

30. Your happiness in general? 1 2 3 4 5 6

31. Your life in general? 1 2 3 4 5 6

32. Your personal appearance? 1 2 3 4 5 6

33. Yourself in general? 1 2 3 4 5 6

© Copyright 1984 & 1998 Carol Estwing Ferrans and Marjorie J. Powers
PART 2. For each of the following, please choose the answer that best describes how important that area of your life is to you. Please mark your answer by circling the number. There are no right or wrong answers.

HOW IMPORTANT TO YOU IS:

1. Your health? 1 2 3 4 5 6
2. Your health care? 1 2 3 4 5 6
3. Having no pain? 1 2 3 4 5 6
4. Having enough energy for everyday activities? 1 2 3 4 5 6
5. Taking care of yourself without help? 1 2 3 4 5 6
6. Having control over your life? 1 2 3 4 5 6
7. Living as long as you would like? 1 2 3 4 5 6
8. Your family’s health? 1 2 3 4 5 6
9. Your children? 1 2 3 4 5 6
10. Your family’s happiness? 1 2 3 4 5 6
11. Your sex life? 1 2 3 4 5 6
12. Your spouse, lover, or partner? 1 2 3 4 5 6
13. Your friends? 1 2 3 4 5 6
14. The emotional support you get from your family? 1 2 3 4 5 6
15. The emotional support you get from people other than your family? 1 2 3 4 5 6

© Copyright 1984 & 1998 Carol Estwing Ferrans and Marjorie J. Powers

16. Taking care of family responsibilities? 1 2 3 4 5 6
17. Being useful to others? 1 2 3 4 5 6
18. Having no worries? 1 2 3 4 5 6
19. Your neighborhood? 1 2 3 4 5 6
20. Your home, apartment, or place where you live? 1 2 3 4 5 6
21. Your job (if employed)? 1 2 3 4 5 6
22. Having a job (if unemployed, retired, or disabled)? 1 2 3 4 5 6
23. Your education? 1 2 3 4 5 6
24. Being able to take care of your financial needs? 1 2 3 4 5 6
25. Doing things for fun? 1 2 3 4 5 6
26. Having a happy future? 1 2 3 4 5 6
27. Peace of mind? 1 2 3 4 5 6
28. Your faith in God? 1 2 3 4 5 6
29. Achieving your personal goals? 1 2 3 4 5 6
30. Your happiness in general? 1 2 3 4 5 6
31. Being satisfied with life? 1 2 3 4 5 6
32. Your personal appearance? 1 2 3 4 5 6
33. Are you to yourself? 1 2 3 4 5 6

© Copyright 1984 & 1998 Carol Estwing Ferrans and Marjorie J. Powers
LEVELS OF STRESS, HOPE AND OVERALL QUALITY OF LIFE OF CAREGIVERS OF CANCER PATIENTS

I represent to Sage Graduate School that this thesis and abstract are the original work of the author and do not infringe on the copyright or other rights of others.

[Signature]
Cathy A. Fields

5/4/09
Date of Signature

Witnessed by:
Thesis Advisor

[Signature]
Dr. Gayle Morse
Asst. Professor of Psychology

5/4/09
Date of Signature

Thesis Reader

[Signature]
Dr. Brown Romanoff
Professor of Psychology

5/4/09
Date of Signature