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## Support for Patients and Family Caregivers in Lung Cancer: Educational Components of an Interdisciplinary Palliative Care Intervention

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#### Abstract

Consistent with the recommendations of the Institute of Medicine Report on quality cancer care, attention to symptom management and quality of life concerns of patients with lung cancer should be addressed throughout the disease trajectory. As part of a NCI-funded Program Project grant, this paper reports on the patient and family caregiver education component of a nurse-lead, tailored palliative care intervention for patients with early (I-III, n=130) and late (IV, n=142) stage lung cancer. Patients and family caregivers received 4 separate educational sessions organized around the Quality of Life model domains (physical, psychological, social, and spiritual well-being). Each patient and caregiver was presented at a weekly interdisciplinary case conference which also informed the educational sessions. Based on needs and team suggestions, an individualized palliative care plan was created and a tailored educational intervention was designed based on topics chosen by each participant. The most common topics chosen by patients in each domain were fatigue, worry and fear, social support/isolation, and hope. Family caregivers most commonly chose fatigue, worry and fear, communication, and purpose and meaning in life. The mean time spent in each teaching session ranged from 31 to 44 minutes for patients and 25 to 35 minutes for family caregivers. There is a vital need for interdisciplinary palliative care interventions for patients across all stages and across the disease trajectory. Nurses are vital to integrating palliative care into routine care. Providing a tailored educational intervention is an important aspect of palliative care for patients and family caregivers. This paper focuses on the process of the tailored educational intervention.

#### Keywords

oncology; palliative care; lung cancer; educational intervention

#### Introduction

Lung cancer is the leading cause of cancer deaths in the United States, and the majority of patients will die from the disease.<sup>1</sup> The estimated 5-year survival for all stages is 16.8%.<sup>2</sup> Over the past decade, much progress has been made in the areas of screening, treatment, supportive care measures, and symptom management.<sup>3–5</sup> Unfortunately, patients with non-small cell lung cancer (NSCLC) still experience higher symptom burden than those with other solid tumors, as well as psychosocial and spiritual concerns.<sup>6–15</sup>

Results from two prominent, randomized controlled trials demonstrated that palliative care interventions provided in conjunction with standard oncology care early in the disease course improved quality of life (QOL), mood, and symptom burden.<sup>16,17</sup> Project ENABLE, conducted by Bakitas and colleagues,<sup>16</sup> tested the effects of a nurse-led psychoeducational intervention with 161 patients with advanced cancer. The nurse provided 4 weekly educational sessions by telephone and monthly follow-up sessions, until death or study completion. Compared with patients receiving usual oncology care (n=161), the nurse-led intervention had higher scores for QOL and mood. Temel and colleagues<sup>17</sup> tested the

efficacy of integrating palliative care with standard oncology care for ambulatory patients (n=151) newly diagnosed with metastatic NSCLC. Results indicated that early palliative care significantly improved the patient's QOL and mood compared to those receiving standard care.

Organizations such as the American Society of Clinical Oncologists have issued statements regarding the need to integrate palliative care into standard oncology care at the time of diagnosis,<sup>18</sup> and other investigators have also supported the integration of palliative care into routine oncologic care of the lung cancer patient across all stages.<sup>2,19–23</sup>

The authors of this paper conducted a NCI-funded Program Project Grant to test the efficacy of an interdisciplinary palliative care intervention, including patient assessment and teaching by nurses. The nurses directly involved in this study are advanced practice nurses in oncology with extensive experience in providing patient and caregiver education. Additionally, 8 weeks of practice teachings were conducted so that all nurses were adequately familiar with the flow and content of the materials. This paper reports on the process of a tailored patient and family caregiver (FCG) educational intervention component of the study. Quantitative outcomes will be forthcoming as data is published.

## Methods

#### Sample

Study participants with primary lung cancer were recruited from a NCI-designated comprehensive cancer center medical oncology outpatient clinic. The participants met the following criteria: 1) primary non-small cell lung cancer; 2) receiving treatment with chemotherapy, radiation, or combined modalities; 3) 18 years of age; 4) live within a 50 mile radius of the hospital; and 5) no previous cancer within the past five years. Family caregivers were identified by asking the patient to designate the one person most involved in his or her care.

#### **Educational Intervention**

Patients meeting study criteria were approached during a regularly scheduled clinic visit. Written informed consent was obtained prior to study participation. Upon consent, patients were provided an educational notebook.

The nurse created an interdisciplinary palliative care plan (IPC) summarizing demographics, patient- and family caregiver-identified key problem areas, and supportive care needs. Using the IPC, the nurse presented a comprehensive assessment of both the patient and family caregiver at the weekly Interdisciplinary Team (IDT) meetings. Members of the team included the treating oncologist or surgeon, geriatrician, nurse, and key supportive experts in social work, nutrition, pulmonary and physical rehabilitation, pain and palliative medicine, psychology and chaplaincy. The focus of the IDT meeting was on interdisciplinary support for both the patient's and the family caregiver's physical, psychological, social, and spiritual well-being. Team members made palliative care recommendations for both the patient and the family caregiver which were then incorporated into the plan of care. Following the IDT

meeting, the nurse contacted the patient and family caregiver to set up the first of four educational sessions.

**Patient Education**—The patient education notebook was divided into four sections based on the QOL model<sup>24</sup>: physical, psychological, social, and spiritual well-being domains. Within each section, a list of symptoms or topics was provided from which the patient chose three. The lists were based on the authors' prior research<sup>21,25–28</sup> and the National Comprehensive Cancer Network (NCCN) guidelines for non-small cell lung cancer.<sup>29</sup> At the desired date, time, and location, the nurse either called or saw the patient in the clinic for the educational session. Based on the symptoms or topics chosen, the nurse then tailored the education to the patient's needs. During each session, patients were encouraged to ask questions or make comments. Patients then set goals for each symptom or topic discussed and with help from the nurse, decided on actions to accomplish those goals. At the end of the session, the patient was asked 2–3 review questions to assess learning. Depending on whether the teaching took place in-person or over the phone, the Action Plan was given to the patient, mailed, or scanned and emailed for placement in his or her education notebook. A date and time was then set for the next education session.

At the beginning of the next session, the nurse reviewed with the patient the prior session's goals to assess progress and/or problems before starting the current education session. A debriefing form was used to log the date, patient distress level, those present in addition to the patient, overall impression of the session, location, and total time. This same format was used for all four education sessions. Follow-up phone calls were conducted between questionnaire time points to check on patient concerns, answer questions, and coordinate needed resources.

**Family Caregiver Education**—The FCG educational process mirrored the patient process. The care plan, however, focused on the FCG's supportive care needs and included QOL needs, caregiver burden, and preparation for caregiving. The four teaching sessions were also based on the four QOL domains and focused on common symptoms faced by families and patients dealing with lung cancer. During each session, the FCG picked three symptoms in the QOL domain, the choices guiding the content of the teaching session. Second, in each session the nurse assisted the FCG in developing a Self-Care Plan, with the caregiver identifying a self-care goal and determining activities to achieve that goal. Caregiver self-care included exercise, nutrition, managing one's own health, healthy living recommendations, and external support. Supportive care referrals were initiated based on recommendations from the interdisciplinary team and the family caregiver's expressed needs. Periodically, the nurse conducted follow-up evaluations, reassessed caregiver needs, and revised the care plan.

## Results

#### Demographics

Table 2 summarizes the intervention group patient demographics. Early stage (Stage I-III) comprised 47.8% of the patients and late stage (Stage IV) 52.2%. The majority of patients were non Hispanic (93%) and female (63.6%). Sixty-percent of the patients were age 65,

Caucasian (79.8%), with most having completed college (65%). Most patients were married (62%), did not live alone (79.4%), and worked at least 32 hours a week (86%). Protestant was the predominant religion (40%), over half had an annual income greater than \$50K (49.8%), and the majority were former smokers (68.4%). Seventy-three percent received chemotherapy. Table 3 summarizes the FCG demographics. Fifty-seven percent of the FCG participants were late stage, and 43% were early stage. Mean age was 57.4 and predominantly female (60.6%). Most FCGs were non-Hispanic (87.7%), completed college (72.4%), and were married/partnered (76.7%). Seventy-six percent worked less than 32 hours a week, with the majority (60.6%) having an income over fifty-thousand dollars per year. Most FCGs were Protestant (40.1%) or Catholic (27.7%) and most were non-smokers (55.7%).

#### Intervention Results

Table 4 provides the mean length of time spent teaching the educational topics offered to the patient and FCG within each QOL domain. The most frequently chosen topics by patients within each QOL domain are provided in Table 5. Fatigue (69%) and pain (36%) were the two most selected topics regardless of disease stage in the Physical Well-Being (PWB) domain, followed by breathing and sleep problems (32% each), constipation (29%), appetite problems/weight loss (25%), and cough (22%). Worry and fear (81%) was the predominant topic chosen within the Psychological Well-Being (PsWB) domain. Within the Social Well-Being (SWB) domain, social support/isolation (65%), and communication (50%) were the most common topics chosen, followed by changes in relationships (44%), advance directive planning (39%). Hope (72%), inner strength (64%), and uncertainty (55%) were chosen most frequently in the Spiritual Well-Being (SpWB) domain.

Table 6 provides the FCG' most frequently chosen topics within each QOL domain. Even more so for the FCG, fatigue (74%) was the most predominant physical domain topic. Worry and fear (88%) and depression (58%) were the most requested topics for psychological domain, followed by anger (42%) and cognitive changes (41%). For Social Well-Being, communication (78%) and advance directive planning (61%) were the most common topics. Roughly half of the FCGs chose purpose and meaning (54%), hope (49%), and inner strength (49%) as the main topics for Spiritual Well-Being.

## Discussion

#### Lessons Learned

**Patients**—When the intervention was initiated, patients received four educational sessions as detailed in the patient education notebook. Over time, many patients requested to either reduce the four sessions to two by combining them, or combine all four sessions into one. This was more conducive if they were not feeling well, as well as to their schedule. Additionally, most patients with late stage (stage IV) lung cancer wanted their teaching conducted via phone. This provided privacy and the opportunity to be comfortable at home, avoiding an extra trip to the hospital, an interruption during a busy clinic visit while getting chemotherapy, or having to stay beyond their clinic appointment. Early stage lung cancer patients (stages I–III) preferred to receive their education sessions while they were inpatient,

recovering from surgery, or during their chemo infusion. Most late stage patient caregivers were not present during the education session, since most all sessions took place over the phone. The opposite was true for early stage patient caregivers. Having brought the patient to the appointment, they listened in on the session. Being flexible to meet the patients and FCG needs was key to continued study participation.<sup>30,31</sup>

Another lesson learned was that although patients desired supportive services recommended during the teaching such as PT/OT or pulmonary rehab, some were physically unable to make extra trips to the hospital if the appointment was not on their scheduled clinic day. According to prior research, this is not uncommon, as patients struggle with logistical issues such as taking time off work, child care, transportation, and costs.<sup>32,33</sup> Additionally, patients who did not feel well, and those who felt better, also tend to cancel or fail to attend their appointments.<sup>33</sup> Patient symptoms made it very difficult, if not impossible, for patients to follow through on required exercises. This was mainly the case for late stage lung cancer patients. Most early stage lung cancer patients refused supportive care services. The two most common reasons were feeling that they did not need it and associating palliative care with end of life.

Patients appreciated the Action Plan, because it put their goals in writing and served to remind them of what was discussed during the education session. It also provided a means for patients to self-manage aspects of their illness and life; this is supported by prior research as well as the Institute of Medicine's 2003 report, Priority Areas for National Action: Transforming Health Care Quality.<sup>34,35</sup> Patients did not always have three applicable topics. In that case, they chose a topic they wanted to learn more about. For example, if a patient stated he or she had constipation but it was well controlled, the nurse asked the patient to share how he or she was controlling the symptom. As the patient shared, the nurse was provided an opportunity to affirm the patient's actions. From there, the patient focused on those actions to remain constipation-free. Many patients appreciated the affirmation and were relieved to hear they were doing the right thing. Some patients found that creating goals gave them something to look forward to. For example, one patient was too fatigued to meet friends for lunch and never knew how she would feel on any given day, so she invited a friend to her home who offered to bring lunch. This provided a way for her to socialize, yet balance rest and activity. Other patients who set goals were unable to accomplish them due to physical symptoms. One example was a gentleman who was feeling well and asymptomatic and had planned a weekend getaway from 'all things hospital' to have time alone with his wife. Several days before leaving for the trip, he experienced side effects from targeted therapy, preventing him from taking the trip.

**Family Caregivers**—Many lessons learned in providing educational sessions to the FCGs were similar to those learned in providing patient education. Sessions were often combined in the interest of caregiver time and schedule. The session length and topic depended on the caregiver's needs and priorities. While some caregivers preferred the sessions at the time the patient was receiving treatment, the majority preferred telephone sessions, when they were free of work and caregiving responsibilities. Privacy and time to focus on one's own needs were highly valued. The number of sessions done at one time and the amount of time per session varied according to caregiver needs.

FCGs spent time in each session discussing and learning symptom management strategies in each QOL domain, focusing on problems caregivers or their loved ones were experiencing while living with lung cancer. Often the symptom management discussion focused on effective strategies the caregiver was already employing, with additional symptom management techniques pointed out during the session and available in the written material. While patient and caregiver symptom management was included in each session, greater focus was placed on the patient's symptoms when discussing the QOL physical domain. Teaching and reinforcing techniques to manage the patient's physical symptoms helped the caregiver feel better prepared for caregiving, positively impacting the caregiver's QOL. FCGs spent a greater amount of time on self-care during the educational sessions in the psychological, social, and spiritual domains.

FCGs found creating a Self-Care plan that defined goals and actions to maintain or improve personal QOL, to be helpful. The importance of attending to one's own needs while caring for a loved one with a life threatening illness is often forgotten. When a caregiver identified actions in one QOL domain while creating a Self Care Plan, he/she often identified the same actions in other domains. For example, a FCG might identify taking a 30 minute walk twice a week with the next door neighbor as an action in the QOL physical, emotional, social, and spiritual domains. The overall effect of creating a Self Care Plan was to help the caregivers remember what they do to care for themselves, while they are busy caring for others. Keeping it simple while addressing individual styles and needs was paramount.

One of the most important lessons learned in teaching and intervening with FCGs of lung cancer patients was the value of attending to and providing resources to meet the caregiver's needs while providing an open line of communication with the nurse/healthcare provider. In a question asking caregivers if there is anything specific they would like to be better prepared for, many FCGs expressed a profound level of uncertainty because they did not know what would be required of them in their caregiving role. Some stated they didn't even know what questions to ask. They valued having a connection with the nurse providing the education sessions as they faced an uncertain future.

## Conclusions and Implications for Nursing

Interdisciplinary palliative care interventions are vital for patients with lung cancer across the disease trajectory. Given the high distress levels of both patients and caregivers living with lung cancer, it is important to provide an education tailored to individual needs by allowing them to set the priorities. The tailored education used in this study is generalizable for other clinical nurses with oncology and palliative care experience. Nurses are in a unique role to help integrate palliative care into routine care.

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Table 1

Palliative Care Intervention Teaching Content

Dationt T		L'anita	austina Teochine
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		PHYSICA.	, WELL BEING
•	Breathing problems	•	General information on caregiving for the patient's physical symptoms
•	Cough	•	Breathing problems and cough
•	Pain	•	Pain
•	Constipation	•	Constipation
•	Fatigue	•	Fatigue
•	Sleep problems	•	Sleep problems
•	Nausea/Vomiting	•	Nausea and vomiting
•	Appetite problems	•	Appetite problems/weight loss
•	Skin, nail, hair changes	•	Skin, nail, hair changes
•	Smoking cessation	•	Smoking cessation
		•	Caring for your own health needs
•	Action Plan	•	Self-Care Plan
	PSY	CHOLOG	CAL WELL BEING
•	Worry and fear	•	General information on caring for the patient's emotional needs
•	Depression	•	Worry and fear
•	Anger	•	Depression
•	Cognitive changes	•	Anger
		•	Cognitive changes
		•	Caring for your own emotional needs
•	Action Plan	.	Self-Care Plan
		SOCIAL	WELL BEING
•	Changes in relationships	•	General information on caring for the patient's social concerns
•	Communication	•	Changes with relationships
•	Sexual changes	•	Communication
•	Social support	•	Sexual changes

Patient <b>T</b>	<b>Feaching</b>	Family Caregiver Teaching
•	Financial burden	Social support
•	Healthcare planning (Advance Directive)	Financial burdens
		Healthcare planning (Advance Directive)
		Caring for your own social needs
	Action Plan	Self-Care Plan
		SPIRITUAL WELL BEING
•	Spiritual or religious	General information on caring for the patient's spiritual concerns
•	Purpose & meaning in life	Purpose and meaning in life
•	Hope	Hope
•	Redefining self & priorities in life	Redefining self and priorities in life
•	Inner strength	Inner strength
•	Uncertainty	Uncertainty
•	Positive changes	Positive changes
		Caring for your own spiritual needs
•	Action Plan	Self-Care Plan

## Table 2

## Patient Demographics

Stage Groupings	
Early Stage (Stage I–III)	130 (47.8%)
Late Stage (Stage IV)	142 (52.2%)
Age	
<65	109 (40.1%)
65–74	100 (36.8%)
>/= 75	63 (23.2%)
Gender	
Male	99 (36.4%)
Female	173 (63.6%)
Ethnicity	
Hispanic/Latino	19 (7.0%)
Non Hispanic/Latino	253 (93.0%)
Race	
American Indian/Alaska Native	0 (0%)
Asian	32 (11.8%)
Black or African American	14 (5.1%)
Native Hawaiian or Other Pacific Islander	7 (2.6%)
White (Includes Latino)	217 (79.8%)
More than one race	2 (0.7%)
Education Completed	
Elementary School	2 (0.7%)
Secondary/High School	93 (34.2%)
College	177 (65.1%)
Marital Status	
Other (Single, Separated, Widowed, Divorced)	101 (37.3%)
Married/Partnered	170 (62.7%)
Live Alone	
No	216 (79.4%)
Yes	56 (20.6%)
Employment	
32 hours per week	235 (86.4%)
< 32 hours per week	37 (13.6%)
Religion	
Protestant	109 (40.1%)
Catholic	76 (27.9%)
Jewish	14 (5.1%)
Muslim	1 (0.4%)

Buddhist	2 (0.7%)
None	47 (17.3%)
Other	23 (8.5%)
Income	ł
= \$50K</td <td>93 (34.3%)</td>	93 (34.3%)
>\$50K	135 (49.8%)
Prefer not to answer	43 (15.9%)
Smoking History	ł
Current Smoker	16 (5.9%)
Former Smoker	186 (68.4%)
Non-Smoker	70 (25.7%)
Treatments	
Chemotherapy	199 (73.2%)
Surgery	76 (27.9%)

## Table 3

## Family Caregiver Demographics

Stage Groupings	
Early Stage (Stage I-III)	157 (43%)
Late Stage (Stage IV)	209 (57%)
Age	
Range	18-88
Median	57.5
Mean	57.4
Gender	
Male	80 (39%)
Female	123 (60.6%)
Ethnicity	
Hispanic/Latino	24 (11.8%)
Non Hispanic/Latino	178 (87.7%)
Race	
American Indian/Alaska Native	0 (0%)
Asian	16 (7.9%)
Black or African American	5 (2.5%)
Native Hawaiian or Other Pacific Islander	10 (4.9%)
White (Includes Latino)	167 (82.3%)
Other	5 (2.5%)
Education Completed	
Elementary School	1 (0.5%)
Secondary/High School	55 (27.1%)
College	147 (72.4%)
Marital Status	
Other (Single, Separated, Widowed, Divorced)	47 (23.2%)
Married/Partnered	156 (76.7%)
Live Alone	
No	85 (92.6%)
Yes	15 (7.4%)
Employment	
32 hours per week	48 (23.6%)
< 32 hours per week	52 (76.4%)
Religion	
Protestant	81 (40.1%)
Catholic	56 (27.7%)
Jewish	16 (7.9%)
Muslim	0 (0%)

Buddhist	1 (0.5%)
Other/None	44 (21.8%)
Income	
= \$50K</td <td>39 (19.2%)</td>	39 (19.2%)
> \$50K	123 (60.6%)
Prefer not to answer	41 (20.2%)
Smoking History	
Current Smoker	15 (7.4%)
Former Smoker	75 (36.9%)
Non-Smoker	113 (55.7%)

#### Table 4

Time (in minutes) spent in Teaching Sessions

	Patient	Family Caregiver
Session Type	Mean	Mean
Physical	43.7	34.8
Psychological	36	27.8
Social	31.1	25.5
Spiritual	32.4	25

Table 5

Patient Intervention Education Topics Selected Physical, Psychological, Social and Spiritual Well-Being

Quality of Life Domain	Early	Stage Patients N=123	Late	Stage Patients N=122		Total N=245
PHYSICAL WELL BEING	N	% of Cases	z	% of Cases	N	% of Cases
Fatigue	93	%9 <i>L</i>	75	63%	168	%69
Pain	60	%6†	29	24%	68	36%
Breathing Problems (dyspnea)	37	30%	42	35%	62	32%
Sleep Problems	45	37%	33	27%	78	32%
Constipation	38	31%	34	28%	72	%67
Appetite Problems/Weight Loss	34	%82	28	23%	62	25%
Cough	16	13%	37	30%	53	22%
Skin, Nail, Hair Changes	5	4%	39	32%	44	18%
Nausea and Vomiting	15	12%	18	15%	33	13%
Other	26	21%	I	I	26	11%
PSYCHOLOGICAL WELL BEING	N	% of Cases	z	% of Cases	N	% of Cases
Worry and Fear	105	%58	94	77%	199	81%
Depression	59	48%	72	59%	131	23%
Cognitive Changes	6	7%	72	59%	81	33%
Anger	18	15%	37	30%	55	22%
Other	12	1%	I	I	12	1%
SOCIAL WELL BEING	N	% of Cases	z	% of Cases	N	% of Cases
Social Support/Isolation	76	%6L	62	51%	159	65%
Communication	53	43%	69	57%	122	%05
Changes in Relationships	44	36%	64	52%	108	%77
Healthcare Planning (Advanced Directive)	14	11%	82	67%	96	%6£
Financial Burdens	26	21%	33	27%	59	24%
Sexual Changes	20	16%	15	12%	35	14%
Other	6	4%	Ι	I	6	0.2%
SPIRITUAL WELL BEING	N	% of Cases	z	% of Cases	Z	% of Cases

Quality of Life Domain	Early	Stage Patients N=123	Late	Stage Patients N=122		Total N=245
PHYSICAL WELL BEING	N	% of Cases	z	% of Cases	N	% of Cases
Hope	110	%68	67	%55	177	72%
Inner Strength	103	84%	55	45%	158	64%
Uncertainty	92	%SL	43	35%	135	55%
Purpose and Meaning in Life	28	33%	42	34%	70	29%
Positive Changes	4	%£.0	57	% <i>L</i> †	61	25%
Redefining Self and Priorities	10	%8	45	37%	55	22%
Spiritual or Religious	13	11%	6	%L	22	%6
Other	4	%£	I	—	4	0.1%

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Quality of Life Domain	Early S	tage Caregivers N=65	Late S	tage Caregivers N=72		1 0tal N=137
PHYSICAL WELL BEING	Ν	% of Cases	Ν	% of Cases	N	% of Cases
Fatigue	55	85%	46	64%	101	74%
Pain	31	48%	22	31%	53	39%
Appetite Problems/Weight Loss	28	43%	24	33%	52	38%
Breathing Problems/Cough	21	32%	29	40%	50	36%
Sleep Problems	23	35%	12	17%	35	26%
Nausea/Vomiting	18	28%	14	19%	32	23%
Constipation	12	18%	13	18%	25	18%
Skin, Nail, Hair Changes	I	I	14	19%	14	10%
Swelling	I	I	8	11%	8	6%
Diarrhea	ļ	I	7	10%	7	5%
Other	5	7%	I	I	5	4%
<b>PSYCHOLOGICAL WELL BEING</b>	N	% of Cases	N	% of Cases	z	% of Cases
Worry and Fear	59	91%	34	47%	121	88%
Depression	37	57%	42	%85	62	58%
Anger	34	52%	23	32%	57	42%
Cognitive Changes	28	43%	28	39%	56	41%
Other	5	1%	23	32%	28	20%
SOCIAL WELL BEING	N	% of Cases	N	% of Cases	z	% of Cases
Communication	60	92%	47	%29	107	78%
Health Care Planning	35	54%	49	%89	84	61%
Changes in Relationships	44	68%	32	44%	76	55%
Social Support	38	58%	30	42%	68	50%
Financial Burden	12	18%	6	12%	21	15%
Sexual Changes	6	14%	4	.05%	13	1%
Other						

Quality of Life Domain	Early S	tage Caregivers N=65	Late St	tage Caregivers N=72		Total N=137
PHYSICAL WELL BEING	N	% of Cases	z	% of Cases	N	% of Cases
SPIRITUAL WELL BEING	Ν	% of Cases	Z	% of Cases	N	% of Cases
Purpose and Meaning	35	54%	39	54%	74	54%
Hope	30	46%	37	51%	67	49%
Inner Strength	45	%69	22	31%	67	49%
Redefining Self & Priorities	38	58%	15	21%	53	39%
Positive Changes	32	49%	9	1%	38	28%
Uncertainty	11	17%	22	31%	33	24%
Other						