

Pain Severity and Quality of Life in Older Adults Receiving Hospice Care

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Background: Cancer Pain

- 500,000 people die each year from cancer, ~1/2 of whom receive some hospice care
- 75% of cancer patients have pain at diagnosis
 - 100% in advanced and terminal stages of disease
 - Up to 90% experience breakthrough pain
- More than 1/2 with cancer > 65 years

(Oliver et al, 2008; Minkowski et al, 2005; Gordon et al, 2003)

Background: Cancer Pain and Hospice Care

- Descriptive study by Strassels et al, 2006
 - N=347,555; 86% home-based; Cancer 55%
 - At least one pain intensity score available for 45% of patients
 - **55% had NO assessment of pain intensity documented**
- Results (All patients)**
 - Moderate to severe pain 24.8% 1st and 25.9% last reported
 - Last pain intensity score reported in persons with two or more pain scores— 27.5% moderate or severe

Background: Quality of Life

- Hospice care
 - promotes quality of life
 - decreases distress from pain related symptoms (McMillan, 2002).
- Cancer pain has been found to impact QOL for both patients and caregivers (Tang, 2009; Grov et al, 2005; Gill et al, 2003)
- Primary Complaints of Cancer
 - Lack of energy (89%)
 - Pain (83%)
 - Dry mouth(78%)
 - Shortness of breath (70%) (McMillan, 2002)

Purpose

- Examine the experience of pain in older adults with cancer receiving hospice care and its impact on QOL
- Examine the effect of hospice care on pain and QOL in older adults with cancer.



Research Questions

- 1) What is the experience of pain for older adults with cancer in hospice when reported by the patient OR by the caregiver at end of life?
- 2) What is the average, least and worst pain experienced by patients in hospice at the end of life?
- 3) What is the overall QOL for older patients with cancer pain reported by the patients OR caregivers at the end of life?
- 4) Does admission to hospice result in a change in pain and QOL as reported by the patient at admission and two weeks after?

Inclusion Criteria

- Inclusion Criteria:
 - 55 years of age or older
 - diagnosis of cancer
 - newly admitted to a participating hospice
 - receiving community-based hospices services

Background: Caregivers' Report

- Caregivers are often used as proxy reporters of patient symptoms (Vallerand, Collins-Bohler, Templin, Hasenau, 2007).
- Studies show that caregivers tend to over report pain related symptoms (Allen, Haley, Small, McMillan, 2002; Redinbaugh, Baum, DeMoss, Fello, Arnold, 2002).
- For this study, caregiver reports were obtained when patients were unable to self-report.

Sample

- 94 patients or their proxy reporters
 - 40 patients completed independently
 - 49 primary caregivers
 - 5 combination of patient and caregiver.
 - 345 baseline pt referrals, 27% response rate

Methods

- Telephone interviews
 - patient or caregiver
 - Baseline: within 72 hours of hospice admission
 - 2nd Interview: 7-10 days after baseline.
- Instruments: Brief Hospice Inventory (BHI) and Brief Pain Inventory (BPI)
 - BPI has strong reliability and validity testing (Cleeland & Ryan, 1994)
 - BHI preliminary studies only (Gao et al, 2001)

Statistical Methods

- One-sample paired T-test to evaluate changes between interviews.
- Student t-test were applied to check the difference between patient and caregiver groups.
 - No statistically significant difference between the two groups on the BPI, but significant differences noted on the BHI
 - BHI data was analyzed separately for interview 1 and 2.

Patient Demographics

	Patients Interview 1 (n=38)	Patients Interview2 (n=33)	Caregiver Interview 1 (n=34)	Caregivers Interview2 (n=37)
Gender				
•Male	52.6%	54.5%	54.5%	52.8%
•Female	47.4%	45.7%	45.5%	47.2%
Age				
•<65	18.4%	17.1%	9.1%	11.1%
•65-74	26.3%	28.6%	30.3%	27.8%
•75-84	34.2%	34.3%	36.4%	36.1%
•>85	21.1%	20.0%	24.2%	25.0%
Race				
•Black	8.2%	5.7%	6.1%	5.5%
•White	77.5%	85.7%	93.9%	91.7%
•Other	14.3%	8.6%	0	2.8%

Results: BPI Pain Severity

0-10 scale	Interview 1	Interview 2
	Mean (SD)	Mean (SD)
Worst Pain	4.55 (3.29)	3.76 (3.17)*
Average Pain	2.64 (2.16)	2.51 (2.37)
Least Pain	1.07 (1.6)	1.03 (1.72)
Pain Right Now	1.59 (2.29)	1.62 (2.24)

*p ≤ .05

Results: BPI Quality of Life

	Interview 1	Interview 2
	Hours in pain, Mean (SD)	Hours in Pain, Mean (SD)
Mild Pain	4.82 (6.06)	5.21 (7.1)
Moderate Pain	2.98 (5.00)	2.53 (4.92)
Severe Pain	1.71 (3.99)	0.99 (3.29)

*p ≤ 0.05, no statistically significant differences between interview 1 & 2

Results: BHI Pain Severity and QOL

	Interview 1	Interview 2
Mean Average Pain	Patient: 2.32 (2.56)	Patient: 2.45 (2.34)
	Caregiver: 3.20 (2.64)	Caregiver: 2.43 (2.74)
Overall Quality of Life	Patient: 4.02 (3.14)	Patient: 4.26 (2.84)
	Caregiver: 6.44 (2.53)	Caregiver: 6.44 (2.93)

Statistical Analysis showed that there was no difference between average pain measured by BPI and BHI.

*p ≤ 0.05, no statistically significant differences between interview 1 & 2

Discussion





- Worst pain ratings decreased significantly in the two weeks following admission.
- Hours spent in moderate and severe pain decreased following admission to a hospice facility, though not significant.
- Overall quality of life did not improve, which may be expected in this patient population.

Application

- Pain control in hospice continues to warrant further attention to improve patient outcomes.
- Prioritizing pain as a quality improvement focus
- Facilitate use of EBP recommendations for pain management

Future Research

- Further Analysis:
 - Exploration of pain severity impact on specific QOL indicators
- Exploration of the effects of hospice care in other painful diagnoses and in more diverse samples.
- Addressing the challenges of recruitment of frail elders at the EOL

	<h2>References</h2>	 
		
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