

# Research Critique Worksheet:

Title of Article: Does Hospice Improve Quality of Care for Persons Dying from Dementia?

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Reviewer: Mark A. Newbrough, MD

Mentor:

Date: 10-19-2011

Level I Research Design	Level II Research Design	Level III Research Design	MAJOR FINDINGS/STRENGTHS/LIMITATIONS
<p><u>Purpose of study:</u></p> <p><u>Research Questions:</u></p> <p><u>Research Variable:</u></p> <p><u>Research Design (Qualitative Non-experimental):</u></p> <p>Ethnography</p> <p>Phenomenology</p> <p>Grounded Theory</p>	<p><u>Purpose of study:</u> Examine the effectiveness of hospice services for persons dying from dementia from the perspective of bereaved family members.</p> <p><u>Research Questions/Associative Hypothesis:</u> Does Hospice improve patient centered outcomes for people who die from dementia?</p> <p><u>Independent Variable:</u> People who died with death certificate diagnosis of dementia between 2007-2009.</p> <p><u>Dependent Variable(s):</u> Whether or not Hospice involved in the care of the patient at time of death.</p> <p><u>Research Design (Quantitative Non-experimental):</u></p> <p>Correlational (ex post facto)</p> <p>Comparative</p> <p>Case-control</p> <p>Cohort: <b><u>Mortality follow-back survey, a secondary analysis of a sample originally selected for a study about feeding tubes and Hospice care.</u></b></p>	<p><u>Purpose of study:</u></p> <p><u>Research Questions/Causal Hypothesis:</u></p> <p><u>Independent Variable(s):</u></p> <p><u>Dependent Variable(s):</u></p> <p><u>Research Design (Quantitative Experimental):</u></p> <p>True Experimental (Random Controlled Trial)</p> <p>Quasi-Experimental</p>	<p><u>Findings:</u> Of 538 respondents, 260 (48.3%) received Hospice care. Family members of decedents who received hospice services reported fewer unmet needs and concerns with quality of care (adjusted odds ratio (AOR) = 0.49, 95% confidence interval (CI) = 0.33-0.74 and a higher rating of the quality of care (AOR = 2.0, 95% CI = 1.53-2.72). They also noted better quality of dying than those without hospice services with better peacefulness as well. Hospice patients had better perceived pain and dyspnea management, and families reported they were more likely to have received important information during the care of their loved one.</p> <p><u>Strengths:</u> Apparent sophisticated development and analysis of survey instrument and data analysis, with a sample that was larger than previous studies designed to look at benefits of Hospice care for people with dementia.</p> <p>The question re: timeliness of Hospice referral allowed the authors to tease out some data that if lumped in to all hospice referrals would tend to lessen the overall effect. The reader is able to consider the effect of timeliness on overall outcomes.</p> <p><u>Limitations:</u></p> <ol style="list-style-type: none"> <li>1. Relied on family members and their perceptions.</li> <li>2. The survey sample was only drawn from 5 states; MN, MA, AL, TX, FL</li> <li>3. Only 70% of located family members agreed to participate in the survey.</li> <li>4. Sample based on death certificates listing cause of death as dementia.</li> </ol>

SAMPLE	MAJOR TOOLS (Quantitative) Level II-III Research Design	Systematic Reviews/Meta-analysis/Guidelines	QUALITY OF EVIDENCE
<p><u>Number (N):</u> 1,111 death certificates from 5 states identified in an early study based on patterns of feeding tube utilization.</p> <p><u>Type of sampling plan:</u> 64 excluded because they did not need feeding assistance, or because there wasn't a knowledgeable family member available who spoke English or Spanish.</p> <p><u>Age:</u> N/A</p> <p><u>Gender:</u> 33% male</p> <p><u>Health status:</u> N/A</p> <p><u>Diagnosis:</u> Dementia listed as cause of death for patients who received Hospice. 278 without Hospice, 208 with Hospice at "right time", and 33 with Hospice "too late"</p> <p><u>Other:</u></p> <p><b>SETTING</b></p> <p><u>Type:</u> Acute care hospital 67/26/3</p> <p>Community</p> <p>Nursing Home 208/146/26</p> <p>Other Assisted living: 3/23/2</p> <p>Inpatient Hospice Facility 0/13/2</p> <p><u>Location:</u> Urban Rural</p>	<p><u>Name(s):</u> #1 Family Evaluation of Hospice Care (FEHC) survey, modified to examine family member perceptions of the quality of care in the last week of life. FEHC is a postdeath survey that examines the quality of hospice care from family's perspective and that National Hospice and Palliative Care Organization (NHPCO) has adopted as benchmarking tool.</p> <p>#2 Measure of four aspects of family members rating of quality of care: respecting that person's wishes, communication about the outcomes of care, desired level of symptom control, and provision of emotional support</p> <p>#3 Two questions re: quality of dying.</p> <p><u>Reliability:</u> #1 _____ #2 _____ #3 _____</p> <p><u>Validity:</u> #1 _____ #2 _____ #3 _____</p> <p>Responses were stratified according to family member perception of the timing of hospice referral, since late referral has been associated with poor outcomes in earlier studies.</p> <p>Reliability and validity measures were not reported for the primary survey instrument or for the added questions. However, strategies used to ensure that the questions asked measured the intended thoughts and beliefs, and the strategies for combining the scores into a composite score seemed reasonable. It is likely that the survey results accurately reflect the intended thoughts and feelings of respondents about the care their loved ones received.</p>	<p><b>Systematic Review:</b> <u>Research Question:</u></p> <p><u>Independent Variable(s):</u></p> <p><u>Dependent Variable(s):</u></p> <p><b>Meta-Analysis:</b> <u>Research Question:</u></p> <p><u>Independent Variable(s):</u></p> <p><u>Dependent Variable(s):</u></p> <p><b>Guidelines:</b> <u>Purpose:</u></p> <p><u>Clinical Question:</u></p>	<p><u>Evidence Rating:</u> Level I: Evidence from a systematic review or meta-analysis of mostly randomized controlled trials (RCT, experimental studies) or evidence-based clinical practice guidelines based on systematic reviews of experimental studies that are RCTs Level II: One well-designed RCT (true experimental study) Level III: Well-designed controlled trial without random assignment to group (quasi-experimental study) Level IV: Well-designed case-control or cohort study Level V: A systematic review of descriptive and qualitative studies (nonh-experimental quantitative or qualitative studies) Level VI: One descriptive or qualitative study (non-experimental quantitative or qualitative)</p> <p><b>Level VI</b></p> <p><u>Feasibility:</u> Could this practice change be implemented easily in your organization and with minimal resources? _____ Yes _____ No <b>Yes, it appears that Hospice referral beneficial, but this study does not address important, potential barriers.</b></p> <p><u>Benefit/Risk:</u> Would the benefits of this practice change outweigh the risks to patients? _____ Yes _____ No <b>Yes, it appears beneficial, and no risks are identified in this study.</b></p> <p><u>Comments:</u> <b>Given that is impossible to question patients with end stage dementia directly, this study does a good job of gathering data from bereaved family members.</b></p>

Modified from Rosswurm 11/98; Revised Nunley 6/2008

## RESEARCH DESIGNS

Research Level and Design	Conceptual Base	Purpose	Research Question	Research Strategies	Sample	Data Analysis
Level 1 – Qualitative, non-experimental	Little or no knowledge about the topic.	Describe the dimensions of the one	What are the lived experiences of those	Observations	Non-probability – no random	Content analysis of words

<p>Ethnography – investigation of cultures</p> <p>Phenomenology – describe experiences as the experiences are lived</p> <p>Grounded Theory – discovering what problems exist in a social scene</p>	<p>Some knowledge of the variable, but variable has not been studied in a particular population.</p>	<p>variable.</p> <p>Generate new theory.</p>	<p>who have survived a man-made disaster?</p>	<p>Participant observation</p> <p>Open-ended interviews</p>	<p>selection of the sample.</p> <p>Small size.</p> <p>Subjects have experience with the topic.</p>	<p>Descriptive analysis of the sample (frequency, percentage, mean, median, mode, standard deviation,, and other data analysis of the sample)</p>
<p>Level II – Quantitative, non-experimental</p> <p>Correlational (ex post facto) – investigation of relationships between two or more variables</p> <p>Comparative – describe differences in variables in two or more groups in a natural setting</p> <p>Case Control – comparison of a “case” such as persons with lung cancer with matched controls (similar but no lung cancer)</p> <p>Cohort – defined groups of people (cohorts) followed over time to study outcomes</p>	<p>Literature on variables but action of the variables cannot be predicted.</p>	<p>Test the relationship (differences, correlation, associations) between two or more variables.</p> <p>Test theory</p> <p>Test associative hypothesis(es)</p>	<p>What is the relationship between social support and dying patients’ degree of hopelessness?</p> <p>What is the difference between men and women’s feelings of hopelessness?</p>	<p>Multiple measurements with reliable and valid instruments.</p> <p>Self-report questionnaires</p> <p>Observation data collection</p> <p>Biophysiological data collection</p>	<p>Non-probability – no random selection of the sample.</p> <p>Probability – random selection of the sample</p> <p>As large as possible</p>	<p>Univariate descriptive statistics (frequency distributions, histograms, central tendency)</p> <p>Bivariate descriptive statistics (contingency table, Pearson’s <i>r</i>)</p> <p>Multivariate statistics to analyze the relationships among three or more variables (multiple regression, ANCOVA)</p> <p><i>t</i>-test – two groups</p> <p>ANOVA – three or more groups</p> <p>Chi square - proportions</p>
<p>Level III – Quantitative, experimental</p> <p>True experimental – There is manipulation of the independent variable (treatment; intervention), a control group, and random assignment to group.</p> <p>Quasi-experimental – There is manipulation of the independent variable (treatment; intervention) and either a control group or random assignment to group.</p>	<p>Previous research on relationships of variables.</p> <p>Action of variables can be predicted from the theoretical framework.</p>	<p>Explain and predict cause and effect relationships between the variables.</p> <p>Test theory</p> <p>Test causal hypothesis(es)</p>	<p>What is the effect of palliative care program on hopelessness in a dying patient?</p>	<p>Same as above.</p>	<p>Non-probability – no random selection of the sample.</p> <p>Probability – random selection of the sample</p> <p>As large as possible</p> <p>Statistical calculation of size (power analysis)</p>	<p>Same as above.</p>

**Opinion of Authorities and/or Expert Committee Articles  
(Level VII: Hierarchy of Evidence)**

Title of Article: \_\_\_\_\_

Author(s): \_\_\_\_\_ Journal: \_\_\_\_\_ Mo/Yr: \_\_\_\_\_ Pages: \_\_\_\_\_

Reviewer: \_\_\_\_\_ Mentor: \_\_\_\_\_

\_\_\_\_\_ Date: \_\_\_\_\_