Four Steps to Better Posters... and Better Communications

Penn State University College of Nursing

April 2015
What Kind of a Poster Person Are You?
Posters!
Leadership!
Poster Session!
Overview

• 4 Steps to Effective Poster Sessions
  ○ Poster exercise

• Poster Review and Discussion
Four Steps
(from Prepared to Perfect)
Steps to Effective Poster Sessions

1. Think strategy
2. Get on message
3. Hone your design
4. Practice your “pitch”
• Set a clear objective
• Make sense of the environment
• Know your audience
“I want the whole package—the little bowl, the colored pebbles, the plastic castle.”
Get SMART*

- Specific
- Measurable
- Attainable
- Realistic
- Time-bounded

From Fuzzy to SMART

• Fuzzy Objective
  – Make a successful presentation about my research at the ENRS meeting next week in DC.

• SMART Objective
  – In preparation for, participation in and follow up to the 2015 ENRS meeting, connect with five key academic leaders who provide constructive feedback and/or support to my research agenda.
Understand the Environment
General Poster Strategy

- Engagement as objective
- Poorly lit, competitive environment
- Scientific audience, on the move
- You are in control
  - Large visual format
  - Conversation starter, not a mini-paper
• Message = distillation
• Adapting messages
• Message challenges
“If you were to boil your book down to a few words, what would be its message?”
“One Thing” Message

A good message* completes the following four statements:

• The **one** thing your audience needs to know is...
• The reason this is **important** to this audience is...
• What this audience should **do** is...
• It is **urgent** for this audience to act now because...

*Courtesy of Valerie Denney, Denney Communications
Adapting Messages

- Audience values
- Audience expectations
- Multiple audiences
Message Challenges

- Complexity
- Jargon
- Opacity/abstraction
- Lack of emotion
- “Off key”

“You’re right. It does send a powerful message.”
Take a breath

- Looking to your next poster session:
  - Explain your objective
  - Identify your target audience
  - Describe your main message
Thinking Inside the Box: Four Simple Steps to More Effective Posters

Poster Development Worksheet

1. What is the OBJECTIVE of your poster? (For example: To find two potential collaborators? To meet and engage one potential funder? To get five people’s feedback on what your next piece of research should focus on?)


2. Who is your TARGET AUDIENCE? (Be as specific as possible (e.g. “People in other disciplines who are doing related research and who are looking to partner in an interdisciplinary project.” “Participants at GSA” is too broad.)


3. What is your MAIN MESSAGE? The ONE THING you want your target audience to know.


© SCP 2012
Know the basics
Message drives design
Get help
Building Blocks

• Less (text) is more
• Think big (fonts)
• Contrast is key
• When in doubt... handout
End-of-Life Care in Nursing Homes is Improving
Suzanne S. Prevost, RN, PhD and J. Brandon Wallace, PhD
School of Nursing and Department of Sociology & Anthropology

INTRODUCTION
Background
- 25% of Americans die in nursing homes
- Projected to increase to 40% by 2020

End-of-Life Care Problems in Nursing Homes
- High prevalence of pain
- Excessive use of life-sustaining therapies
- Poor communication with families
- Lack of advance care planning

METHODS
Secondary analysis of Minimum Data Set (MDS) assessment data for 103 for-profit nursing homes located primarily in the Southeast, ranging in size from 20 - 474 beds. Trends were examined in 6 month intervals from January, 2004 > December, 2006.

Sample Demographics
- 69% Female
- 91% Caucasian
- 73% Widowed, single, or divorced
- 78% Above the age of 75

Samples per Six Month Interval

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Residents</th>
<th>Number of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. - July 2004</td>
<td>22,111</td>
<td>2,939</td>
</tr>
<tr>
<td>July - December 2004</td>
<td>20,219</td>
<td>2,270</td>
</tr>
<tr>
<td>Jan. - July 2005</td>
<td>23,331</td>
<td>3,064</td>
</tr>
<tr>
<td>July - December 2005</td>
<td>22,743</td>
<td>2,630</td>
</tr>
<tr>
<td>Jan. - July 2006</td>
<td>22,849</td>
<td>2,730</td>
</tr>
<tr>
<td>July - December 2006</td>
<td>22,675</td>
<td>2,574</td>
</tr>
</tbody>
</table>

CONCLUSIONS
Our findings suggest that:
- More residents are being identified as terminal
- More are receiving hospice care
- Fewer are receiving tube feedings
- More have DNR orders

While these findings demonstrate improvements in EOL care, they also support the belief that the dying trajectory is frequently undocumented and many residents who could benefit from hospice care do not receive it.

The investigators would like to thank the John A. Hartford Foundation and the National HealthCare Corporation for their support of this project.
We demonstrated three key learnings

1. The characteristics of cancer survivors
2. The kinds of medical problems cancer survivors have
3. The implications of comorbid illness in cancer survivors for patients and for doctors

(i.e., table, graph, photo, colored text box, etc.)
Get Design Support!

- Templates/models
- Mentor and peer review
- Graphics departments and other pros
Welcome to PosterBuzz

Scientific posters are an increasingly popular form of professional communications. Poster sessions provide a unique, face-to-face opportunity for researchers to engage their peers, get needed feedback, prompt new ideas, and meet potential collaborators.

Posters are everywhere at professional association and society meetings across the country, and yet most scientists and academics struggle to put something useful up on the wall. Then they spend poster sessions standing around hoping somebody, anybody, will come by and talk with them about their work.

So who to call? Backed by a team of communications experts who have worked with academic leaders during the last two decades, PosterBuzz is here to help. It is a unique service that goes beyond the traditional communications and marketing.
Among community living older persons, the inability to perform essential activities of daily living (ADL) without the assistance of another person is common, highly morbid, and costly. An important impediment to the development of interventions to prevent disability is an incomplete understanding of the mechanisms underlying the disabling process. Previous epidemiologic studies have focused almost exclusively on identifying vulnerable older persons at risk for disability. Relatively little is known, in contrast, about the role of intervening events that precipitate disability. While recent evidence suggests that disability may occur insidiously, particularly among older persons who are physically frail, most episodes of disability appear to be preceded by a discernable intervening event.

**BACKGROUND**

Among community living older persons, the inability to perform essential activities of daily living (ADL) without the assistance of another person is common, highly morbid, and costly. An important impediment to the development of interventions to prevent disability is an incomplete understanding of the mechanisms underlying the disabling process. Previous epidemiologic studies have focused almost exclusively on identifying vulnerable older persons at risk for disability. Relatively little is known, in contrast, about the role of intervening events that precipitate disability. While recent evidence suggests that disability may occur insidiously, particularly among older persons who are physically frail, most episodes of disability appear to be preceded by a discernable intervening event.

**OBJECTIVES**

To evaluate the relationship between intervening events and the development of disability and to determine whether this relationship is modified by the presence of physical frailty.

**STUDY POPULATION**

Members of the Precipitating Events Project (PEP Study): 754 community-living persons, aged 70+ years, who required no personal assistance in bathing, dressing, walking, or transferring. Persons who were physically frail, as denoted by a timed score > 10 sec on the rapid gait test (i.e., walking back and forth over a 10-foot course as quickly as possible), were oversampled to ensure a sufficient number of participants at increased risk for ADL disability. Participation rate was high: 75.2%.

**DATA COLLECTION**

**ASSESSMENTS**

Comprehensive home-based assessments were completed at baseline, 18, and 36 months by trained research nurse using standard instruments. Telephone assessments of intervening events and ADL function were completed monthly for up to 5 years with a 99.2% completion rate.

**INTERVENING EVENTS**

Acute hospital admissions, Kappa = 0.94 for accuracy. Other illnesses or injuries leading to restricted activity: "Since we last talked on (date of last interview), have you stayed in bed at least half the day due to an illness, injury or other problem?" "Since we last talked on (date of last interview), have you cut down on your usual activities due to an illness, injury or other problem?" Test-retest reliability: Kappa = 0.90 for the presence or absence of restricted activity.

**DISABILITY OUTCOMES**

**PRIMARY**

Time to first occurrence of any disability over 5-year follow-up period.

**SECONDARY**

Persistent: new disability present for at least 2 consecutive months.

Severe: new disability in three or more ADLs.

**EXPOSURE PERIOD FOR INTERVENING EVENTS**

**PROXIMATE**

Month prior to assessment of disability.

**DISTANT**

Time from baseline assessment to two months prior to onset of disability or to a censoring event for participants who did not develop the relevant disability outcome.

**STATISTICAL ANALYSIS**

Evaluated time to first occurrence of any disability, persistent disability, and severe disability, respectively, according to physical frailty at baseline using Kaplan-Meier method. Used time-dependent Cox proportional hazards method to evaluate multivariate relationship between the independent variables, including the proximate and distant intervening events, and the development of each of the three disability outcomes; and subsequently stratified results by physical frailty at baseline.

Calculated population attributable fractions of the three disability outcomes for each of the two proximate intervening events.

**SUMMARY**

Intervening events, including illnesses and injuries leading to either hospitalization or restricted activity, were strongly associated with the development of disability in essential activities of daily living. These associations were limited to events occurring within a month of disability onset, were observed for three distinct disability outcomes, persisted despite adjustment for several potential confounders, and were present among persons who were physically frail and those who were not physically frail.

**IMPLICATIONS**

Our results highlight the importance of intervening events as a potential target for the prevention of disability, regardless of the presence of physical frailty.
WHEN BAD THINGS HAPPEN TO OLDER PEOPLE: THE ROLE OF INTERVENING EVENTS ON THE DEVELOPMENT OF DISABILITY
Thomas M Gill MD, Heather Allore PhD, Theodore R Holford PhD, Zhenchao Guo PhD Yale University School of Medicine

WHAT WE LEARNED
Illnesses and injuries leading to either hospitalization or restricted activity represent important sources of disability for community-living older persons, regardless of the presence of physical frailty.

These intervening events may be suitable targets for the prevention of disability.

BACKGROUND
A more complete understanding of the disabling process would likely facilitate the development of interventions aimed at preventing disability among community-living older persons.

OBJECTIVES
To evaluate the relationship between intervening events and the development of disability
To determine whether this relationship is modified by the presence of physical frailty

METHODS
Prospective study of 754 nondisabled, community-living persons, aged 70+ years
Categorized participants into two groups according to the presence or absence of physical frailty, which was defined on the basis of slow gait speed
Followed participants with monthly telephone interviews for up to 5 years
> to determine the occurrence of disability
> to ascertain exposure to intervening events, which included illnesses and injuries leading to either hospitalization or restricted activity

RESULTS

Table 3. Association Between Proximate Intervening Events and Disability Outcomes according to Physical Frailty at Baseline

<table>
<thead>
<tr>
<th>Proximate Intervening Event</th>
<th>Not frail at Baseline (% total)</th>
<th>Frail at Baseline (% total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalization</td>
<td>60</td>
<td>44</td>
</tr>
<tr>
<td>Physically frail</td>
<td>34</td>
<td>32</td>
</tr>
<tr>
<td>Not physically frail</td>
<td>117</td>
<td>73</td>
</tr>
<tr>
<td>Restricted activity only</td>
<td>5.1</td>
<td>3.3</td>
</tr>
<tr>
<td>Physically frail</td>
<td>4.1</td>
<td>3.3</td>
</tr>
<tr>
<td>Not physically frail</td>
<td>6.6</td>
<td>2.9</td>
</tr>
</tbody>
</table>

*All values are statistically significant at P < .001
Bring the Heat!

Pitch
Only connect!

- Pique interest (Did you know...?)
- Connect with your audience
- Make it personal
- Tell a (brief) story
- Practice!
Poster Review
What are the Best Screening Items for Delirium Detection at the Bedside?

DM Fick1; SK Inouye2; LH Ngo3; J Guess4; RN Jones5; ER Marcantonio6

INTRODUCTION

Delirium, an acute state of confusion with impaired attention, cognition, and consciousness, is common in older adults and leads to poor clinical outcomes.
- Delirium is extremely costly, with estimates ranging from $38 to $152 billion annually.
- Yet, delirium is often under-detected at the bedside.
- Delirium screening in clinical practice can be labor-intensive and challenging to apply at the bedside.
- Thus, our aim was to identify one or two simple bedside tests that could be used to quickly screen for delirium.

STUDY AIMS

To determine the best-performing single and two item pairs of cognitive screening items to identify delirium by a clinical reference (gold) standard.

METHODS

- We utilized the 3D-CAM study cohort of 201 patients. Participants were age 75 or older, admitted to the general medicine service of a large teaching hospital.
- Patients underwent cognitive screening (items, such as orientation, word recall, digits span, days of the week and months of the year backwards) by trained interviewers.

- Independently, patients underwent clinical assessment for delirium and dementia involving a patient interview, medical record review, and interviews with family members. The clinical reference standard based delirium and dementia diagnoses was determined by an expert panel.
- Individual items from the cognitive screening were compared to the clinical reference standard 'delirium diagnosis to determine their sensitivity (percent of reference standard positive cases identified) and specificity (percent of reference standard negative cases identified).
- Sensitivity and specificity were calculated, along with 95% exact confidence intervals for the items.

RESULTS

- Of the 201 participants (mean age 84, 27% with baseline dementia, 42% (21%) had delirium based on the clinical reference standard.
- The best single screening item with the highest sensitivity is ‘months of the year backwards’ with a sensitivity of 83% and specificity of 69%. The best two-item screen was the combination of ‘months of the year backwards’ and ‘What is the day of the week?’ with sensitivity of 93%.
- Delirium, an acute state of confusion with impaired attention, cognition, and consciousness, is common in older adults and leads to poor clinical outcomes.
- Delirium screening in clinical practice can be labor-intensive and challenging to apply at the bedside.
- Thus, our aim was to identify one or two simple bedside tests that could be used to quickly screen for delirium.

CONCLUSIONS

- We were able to identify single screening items with greater than 80% sensitivity and pairs of items with greater than 80% sensitivity relative to a clinical reference standard delirium.
- The best two-item screen was the combination of ‘months of the year backwards’ and ‘What is the day of the week?’ with a sensitivity of 93%.
- Future work should test the best screening items with greater than 80% sensitivity and pairs of items with greater than 80% sensitivity relative to a clinical reference standard delirium.

This work was supported by the National Institute of Aging grant number R01AG030618 and K24AG035075 to Dr. Marcantonio. Dr. Inouye’s time was supported in part by grants P01AG031720 and K07AG041835 from the National Institute on Aging. Dr. Inouye holds the Milton and Shirley F. Levy Family Chair (Harvard Medical School). Dr. Fick is partially supported from NINR grant number R01 NR011042. The funding agencies had no role in the preparation of this abstract and the authors retained full autonomy in the preparation of this poster.
Current Management Strategies of Pennsylvania Primary Care Nurse Practitioners for Persons with General Anxiety Disorder

Madeline F. Mattern, MS, FNP-C, CNE
College of Nursing, The Pennsylvania State University

Background

Anxiety prevalence - 40 million American adults age 18 years and older (about 18%)

- Stepped treatment guidelines AHRQ:
  - Interpersonal, Psychosocial Treatments
  - Antidepressants (SSRI or SNRI)

Professional Guidelines:
- Antidepressants (SSRI or SNRI)
- Interpersonal, Psychosocial Treatments

No Benzodiazepines (BZDs)

Physician management of anxiety:
- Benzodiazepine (BZD) use & abuse

Quantitative studies:
- Global prevalence rates up of BZD use up to 76%

NPs’ Practices in only 1 Study of secondary analysis of depression and anxiety management:
- Antidepressants for anxiety
- High percentage of BZDs prescribed by 40%
- More education needed

Research has shown Nonpharmacological Interpersonal, Psychosocial Treatments lessened anxiety:
- Cognitive Behavioral Therapy (CBT)
- Counseling
- Computerized Modalities
- Complementary and Alternative Medicine (CAM) Approaches:
  - Exercise
  - Kouk Sun Do
  - Yoga
  - Kava

Purpose & Questions

The purpose of this study was to examine the management practices used by Pennsylvania primary care NPs for patients with GAD

1. What level of knowledge do NPs currently have regarding GAD management techniques?
2. What are NPs’ current management practices, pharmacological and non-pharmacological, of patients diagnosed with GAD?

Methods

- Nonexperimental design
- RR
- Convenience sample = 94
- Power analysis N=100
- Survey (Content Validity)
- Survey Monkey© x 3
- Descriptive analysis
- Reliability analysis
- Linear Regression

Table 1. Demographics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>93%</td>
</tr>
<tr>
<td>Male</td>
<td>7%</td>
</tr>
<tr>
<td>Age 30-39 yrs</td>
<td>8%</td>
</tr>
<tr>
<td>Age 40-49 yrs</td>
<td>15%</td>
</tr>
<tr>
<td>Age 50-59 yrs</td>
<td>28%</td>
</tr>
<tr>
<td>Age ≥60 yrs</td>
<td>16%</td>
</tr>
</tbody>
</table>

Results

Research Question #1: Education

Sample consistent with general population of NPs (see Table 1)

- ~50% indicated a need for more continuing education

Regression Analysis:
- NPs who had a mental health course in their basic NP education chose counseling/psychotherapy as the priority treatment (p = 0.001)

Research Question #2: Management Strategies

Top Five First Line Treatments for Patients with GAD

Barriers to Psychological/Counseling Strategies
- Lack of financial resources
- Lack of providers in the geographical area
- Lack of time to spend with patient
- Lack of preparation to deliver psychotherapeutic interventions

Overuse and Long-term use of BZDs
- BZDs 4th for first line treatment (7.95%)
- BZDs used before Internet-based modalities, buspirone, herbal
- 14.69% used BZDs for greater than 6 months
- Including 5.63% ongoing basis

Discussion

Education
- NPs continuing education
- NP student education: Mental health unit
- Increase Patient Education

Practice
- Reduce BZD use
- Reduce Barriers to Psychological/Counseling Treatment
- Increase use of nonpharmacological treatment
  - Psychosocial/CAM

Future Research
- Increase the sample size to include nationwide primary care NPs
- Obtain data from electronic health record
- Qualitative components
  - Use of CAM Barriers to Psychosocial modalities

Limitations
- Limited Generalizability
- Sample – Convenience, Small
- Survey tool developed for this project
- Comorbid with depression
- Possible collaboration with other providers for treatment plans

References

Handout
Expressions of Resilience by Informal Caregivers Providing End-of-Life Care

Janice Penrod, PhD, RN, FGSA, FAAN1; Kyungwha Angela Lee, RN, MS1; Xiaohua Zhao, MS2; Brenda L. Baney, MS1; Jane Schubart, PhD3

1College of Nursing; 2Visiting Scholar, Suzhou Health College; 3College of Medicine

BACKGROUND
Informal caregivers provide significant contributions to end-of-life care, from post-diagnosis treatment through the final hours of life. Caring for a person with a life-threatening illness is an extended commitment, spanning months or even years of declining health and function. Despite variations in trajectories of living with and dying from varied life-threatening illnesses, the caregiving experience is patterned and marked by a unifying theme of “seeking normal.” Observed variations in caregivers’ capacity to establish a sense of “normal” in the face of progressive decline and changing caregiving demands prompted an investigation of resilience as a conceptual marker of the potential to handle adversity with less distress.

PURPOSE
To identify expressions of resilience used by informal caregivers providing care through the end of life (EOL)

METHODS
Framework: Theoretical components of resilience were identified through an analysis of theoretical formulations used in multiple contexts.
Dataset: Longitudinal interviews with caregivers over 6-12 months in the later phases of EOL caregiving
EOL exemplars: Three distinct death trajectories: lung cancer; amyotrophic lateral sclerosis; advanced heart failure
Analytic technique: Thematic analysis of linguistic patterns of expressing conceptual features of resilience.

FINDINGS
Caregiving across trajectories of life-threatening illnesses is marked with dynamic changes in the care recipients’ condition and caregiving demands.
Variations in response to patterned adversity (i.e., anticipated decline due to illness trajectory) were apparent.
Caregivers manifesting resilience focused on the present/immediate future; made required decisions and regained stability (i.e. “normal”).
Other caregivers carried memories of past adversities into the present; expressed difficulty framing decisions, and reported unhealthy coping strategies (low resilience).

CONCLUSIONS
Recognizing linguistic patterns of resilience (or lack of resilience) may be a useful clinical marker for targeting interventions to support at-risk informal caregivers by building a stronger set of adaptive strategies.

Data used in this study were collected under NIH/NINR Grant # 1R01NR010127 Exploring the Formal/Informal Caregiver Interface across 3 Death Trajectories [Project Dates 2008-2012]. The content is solely the responsibility of the authors & does not necessarily represent the official views of the NIH/NINR.

RESILIENCE...

thrusting in the face of adversity

Linguistic cues may be useful clinical markers of resilience for targeting caregiver support
More Posters
End-of-Life Care in Nursing Homes is Improving
Suzanne S. Prevost, RN, PhD and J. Brandon Wallace, PhD
School of Nursing and Department of Sociology & Anthropology

INTRODUCTION

Background
• 25% of Americans die in nursing homes
• Projected to increase to 40% by 2020

End-of-Life Care Problems in Nursing Homes
• High prevalence of pain
• Excessive use of life-sustaining therapies
• Poor communication with families
• Lack of advance care planning

Hospice Care
• Nursing home residents are less likely to receive hospice care than people who die in other locations
• Residents who get hospice care have
  • More aggressive pain management
  • Less invasive procedures
  • Less hospitalization prior to death
  • Higher family satisfaction with care

PURPOSE

In light of recent local and national initiatives to enhance end-of-life care, we conducted an analysis of nursing home MDS assessment data to examine the changing patterns of end-of-life care in nursing homes from 2004-2006.

METHODS

Secondary analysis of Minimum Data Set (MDS) assessment data for 103 for-profit nursing homes located primarily in the Southeast, ranging in size from 20 – 474 beds. Trends were examined in 6 month intervals from January, 2004 > December, 2006.

Sample Demographics
• 69% Female
• 91% Caucasian
• 73% Widowed, single, or divorced
• 78% Above the age of 75

Samples per Six Month Interval

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Number of Residents</th>
<th>Number of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. – July 2004</td>
<td>22,111</td>
<td>2,999</td>
</tr>
<tr>
<td>July – December 2004</td>
<td>20,219</td>
<td>2,270</td>
</tr>
<tr>
<td>July – December 2005:</td>
<td>22,743</td>
<td>2,630</td>
</tr>
<tr>
<td>Jan. – July 2006:</td>
<td>22,869</td>
<td>2,730</td>
</tr>
<tr>
<td>July – December 2006:</td>
<td>22,675</td>
<td>2,574</td>
</tr>
</tbody>
</table>

RESULTS

CONCLUSIONS

Our findings suggest that:
• More residents are being identified as terminal
• More are receiving hospice care
• Fewer are receiving tube feedings
• More have DNR orders

While these findings demonstrate improvements in EOL care, they also support the belief that the dying trajectory is frequently undocumented and many residents who could benefit from hospice care do not receive it.

The investigators would like to thank the John A. Hartford Foundation and the National HealthCare Corporation for their support of this project.
Persistent Pain in Assisted Living Facilities
C.A. Kemp, BSN, RN, BC; L.L. Miller, PhD, RN; H.M. Young, PhD, GNP, FAAN; S.K. Sikma, PhD, RN

What We Learned
Older adults with persistent pain living in assisted living facilities are more likely to have fallen in the previous year and require assistance with mobility.

Background
- Persistent pain is a common, debilitating condition among older adults regardless of residence.
- Assisted living facilities (ALFs) are the fastest growing segment of the senior housing market.

Purpose & Aims
This study describes the phenomenon of persistent pain in older adults residing in eight ALFs in Washington & Oregon.

Aims
- Compare demographic characteristics, cognitive status, ADL function, & number of falls in past year in the pain group & non-pain group.
- Describe analgesic orders of the pain group.

Sample
- 156 residents from the Medication Management in Assisted Living Facilities study (NINR R21 NR009102-01) participated in this study.
- Pain group (n=92, 59%) vs. non-pain group (n=64, 41%).
- Pain group inclusion criteria:
  - Routine or PRN opioid analgesic order OR
  - Routine (>once daily) non-opioid analgesic order OR
  - Pain-related diagnosis (e.g., arthritis, sciatica, "knee pain")

Methods
- Secondary data analysis.
- Cross-sectional, descriptive design.

Results
- Needs Help with ADL Function

<table>
<thead>
<tr>
<th>ADL Function</th>
<th>Bathing</th>
<th>Dressing</th>
<th>Feeding</th>
<th>Taking Medication</th>
<th>Taking ADL Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group (%)</td>
<td>56%</td>
<td>41%</td>
<td>20%</td>
<td>34%</td>
<td>24%</td>
</tr>
</tbody>
</table>

- Analgesic Orders

Discussion
- Prevalence of persistent pain in sample (59%) matches prevalence of persistent pain in other studies with older adults.
- All residents required assistance with 1 to 2 ADLs on average; however, residents in the pain group required significantly more assistance with mobility.
- 50% of residents in pain group fell in past year compared with 41% in non-pain group, although difference was not significant.

Next Steps
- Examine correlations among falls, mobility, and analgesic orders in assisted living residents.
- Describe changes in analgesic orders over 6-month period of parent study.
- Examine impact of analgesic order changes on number of falls and assistance with mobility.

Limitations
- Research questions formulated based on available data.
- Data collected by chart review with minimal data verification.
- Cross-sectional design prohibits analysis of changes over time or causal effect.

Acknowledgments
NINR R21 NR009102-01
John A. Hartford Building Academic Geriatric Nursing Capacity Pre-Doctoral Scholarship
Octogenarians in these focus groups identified **fear of loss of function**, and the need to keep mentally and physically active, but not beliefs about improved life expectancy, to be important determinants of physical activity.

**Implications/Next Steps:** Interventions aimed at increasing walking among octogenarians might increase their impact by shifting the incentive focus away from health improvement, and towards maintenance of physical and mental functioning.

---

**Background**
- Over 12 million Americans will be octogenarians by 2030; most will be ambulatory.
- The vast majority of ambulatory octogenarians do not participate in regular physical activity.

**Objective**
- To identify octogenarians’ beliefs and attitudes about physical activity

**Methods**
- Recruited English-speaking octogenarians at 8 low-income senior residential housing units
- Conducted 1-hour focus groups using standardized open-ended script
- Grounded theory approach
- Transcripts read independently by 3 investigators to identify themes and develop coding template
- 4th investigator coded each line
- Reliability of coding scheme assessed on 5% of lines by 2nd coder – 83% agreement

---

**WHAT WE LEARNED**

1. Physical activity is not regarded as an optional activity one might do in order to improve health outcomes, but rather as activities of daily living **necessary** to maintain mobility/independence/health/life.
   - Sample quotes:
     - “I still do my housework, we have to keep going.”
     - “If you don’t do anything you get brain dead.”

2. **Fear of loss** is a major source of motivation for participation in physical activity.
   - Sample quote:
     - “you stop doing things, and you’re not able to do them again.”

3. Physical and mental health are regarded as inseparable phenomena.
   - Sample quotes:
     - “if you just sit all day and don’t do anything you’re no longer thinking anymore so you get brain dead.”
     - “Once you get lazy at walking, you get lazy at thinking and you just sit and become like a vegetable.”

---

**RESULTS**

- **Benefits of Physical Activity Identified by Octogenarians**
  - * Mobility
  - * Flexibility
  - * Fun
  - * Symptoms
  - * ADLs
  - * Circulation
  - * Social activity
  - * Active mind
  - * Mood
  - * Weight
  - * Medical conditions
  - * Getting out
  - * Living longer
  - * Feeling young

<table>
<thead>
<tr>
<th>Benefit</th>
<th># Coded Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>60</td>
</tr>
<tr>
<td>Flexibility</td>
<td>50</td>
</tr>
<tr>
<td>Fun</td>
<td>40</td>
</tr>
<tr>
<td>Symptoms</td>
<td>30</td>
</tr>
<tr>
<td>ADLs</td>
<td>20</td>
</tr>
<tr>
<td>Circulation</td>
<td>10</td>
</tr>
<tr>
<td>Social activity</td>
<td>10</td>
</tr>
<tr>
<td>Active mind</td>
<td>10</td>
</tr>
<tr>
<td>Mood</td>
<td>10</td>
</tr>
<tr>
<td>Weight</td>
<td>10</td>
</tr>
<tr>
<td>Medical conditions</td>
<td>10</td>
</tr>
<tr>
<td>Getting out</td>
<td>10</td>
</tr>
<tr>
<td>Living longer</td>
<td>10</td>
</tr>
<tr>
<td>Feeling young</td>
<td>10</td>
</tr>
</tbody>
</table>

* Benefit Identified in ≥ 7 of 8 focus groups
Please Don’t Measure My “Burden”
Duty and Satisfaction Are What Matter to Me
Lyda C. Arévalo-Flechas PhD, RN
The University of Texas Health Science Center at San Antonio

Background

- Burden is not the best way to describe the impact of caregiving on Latino/Hispanic caregivers of a relative with Alzheimer’s disease.
- Current models do not consider the role culture and language play in how caregiving is perceived.
- Spanish lacks a word that translates to the English “burden.” The Spanish word “carga” translates only to a physical load.
- Neither “burden” nor “carga” are culturally competent words to accurately describe Latino/Hispanic caregiving.

Assumptions

- Each culture gives people a way to see the world (Spradley, 1979). This worldview is passed from one generation to the next primarily through language.
- More than a way to communicate, language also creates and expresses cultural reality (Spradley, 1979). Ways of perceiving, categorizing, and thinking about one’s world result directly from one’s language.
- The linguistic (cognitive) categories that make up one’s reality and define actions are meanings (Krauss, 2005). Meaning is essential to human life (Frank, 1963). Meaning making allows us to make sense of our lives and experiences, as humans.

What We Learned & Where We Are Headed

Measures for burden in the majority population may not assess the same concept in Latinos/Hispanics and other populations. The best measures of the impact of caregiving duties and the interventions to minimize negative effects may lie in concepts that express the impact more positively.

Duty fulfillment and satisfaction are proposed as positive perceptions of what Latino/Hispanic Alzheimer’s caregivers experience. Further qualitative exploration of these concepts will provide the basis for instruments to measure these two types of caregiver perception not considered in current theoretical models.

CULTURALLY INFORMED CONCEPTUAL ORIENTATION OF CAREGIVING

ANTECEDENTS
Regardless of racial or ethnic background, caregivers face these day-to-day situations that are antecedents to coping and perception

Consequences
The resulting outcome is the perception that the caregiver has of the overall caregiving experience.

Cultures and Language

Caregiver Duty Fulfillment
Degree to which a person feels honored to be a dutiful caregiver and responsible for another.

Caregiver Coping Response
Degree to which caregiver mobilizes resources (personal, physical, financial, social, and emotional) to increase one’s ability to manage stressful events.

Caregiver Satisfaction
Degree to which caregiver perceives balance between the changes made to care for another and sense of duty or responsibility.

Caregiver Burden
Degree to which one perceives the inability to deal with the stress when responsibility for another is assumed.

Examples:
- Amount of money spent
- Amount of time spent
- Amount of travel time
- Amount of hours slept
- Amount of time to self

Caregiver Expenditure
Degree to which one offers time, as well as physical, financial, environmental, and personal resources on behalf of another.

Examples:
- Lazarus Coping Scale
- Geriatric Hopelessness Scale
- Perceived Social Support Scale
- Social Functioning Scale

Caregiver Coping Response
Degree to which caregiver mobilizes resources (personal, physical, financial, social, and emotional) to increase one’s ability to manage stressful events.

Examples:
- Caregiver’s Assessment of Satisfaction Index
- Positive Aspects of Caregiving
- Pending Cross-cultural validation

Caregiver Duty Fulfillment
Degree to which a person feels honored to be a dutiful caregiver and responsible for another.

Examples:
- Screen for Caregiver Burden
- Revised Memory and Behavior Problem Checklist
- Pending cross-cultural validation
Quality and Inequality in Home Care of Older Adults: How do cultural background and social policy influence publicly and privately funded home care practices? Elana Buch, University of Michigan

Background
- Home care is one of the fastest growing industries in the U.S.
- Home care workers and recipients often come from different class and ethnic backgrounds.
- Research suggests that home care participants’ backgrounds may affect their ideas about quality care.
- Current research primarily focuses on publicly funded care.

Research Questions
1. How is cultural background related to home care participants’ understandings of home care quality?
2. How does public vs. private funding influence participants’ ability to shape home care practices?
3. How do home care practices reproduce or transform pre-existing social relations and formal labor conditions?

Methods
- Research sites: One publicly and one privately funded home care agency in Chicago, IL.
- Sample: Nested sample includes 15 worker-recipient pairs (criteria = cognitively-able older adults receiving avg. of 8 hrs. care/week), available family members, agency supervisors and industry leaders.
- Data collection: Participant observation in homes and agency offices, life care history interviews, document and policy review.

Conceptual Map of Home Care

Preliminary Findings
1. Workers and recipients from diverse cultural backgrounds suggest that quality care helps the recipient maintain social personhood. However, meanings of personhood are culturally informed. Workers try to learn about recipients’ families, cultural backgrounds and personalities, adjusting care to reflect recipient’s understanding of personhood.
2. Private pay recipients act and are treated like consumers who have the right to control their care. Clients in publicly funded programs tend to frame the care offered to them as a gift, and thus to build relationships with workers based on norms of reciprocity rather than those of market exchange.
3. Lack of acknowledgement of workers’ role in maintaining recipients’ social personhood exacerbates pre-existing social inequalities (greater in privately than publicly funded care). Reciprocal relationships between publicly funded workers and recipients can lead to political action addressing common causes of inequality in their lives.

Policy Context

This research is generously funded by: NIA Grant T32-A0000117 and the Hartford Doctoral Fellowship Program
A Life of Quality?

Systematic review and meta-analysis of interventions relevant to quality of life for persons with intellectual disabilities and dementia

**Background**
Shifts in population, life expectancy, and associated prevalence rates have brought attention to services for persons with intellectual disabilities (ID) and dementia, which are ill-prepared to meet growing needs.

**Aim**
Synthesis of ID literature in order to assess: 1) the effectiveness of psychosocial interventions with QOL-related outcomes, and 2) their relevance for persons who are aging with dementia.

**Methods**
Use of a QOL conceptual framework with targeted domains/indicators (Schalock & Verdugo, 2002).
Electronic and hand searches to uncover published studies spanning 25 years from databases, journals, conference proceedings, reference lists, etc.
Study selection, quality assessment, and data abstraction undertaken by two independent reviewers.
Narrative synthesis of studies and fixed/random effects meta-analyses by classified QOL domain.

Key QOL Domains

A dissertation funded by the John A. Hartford Doctoral Fellows Program in Geriatric Social Work, Administered by the Gerontological Society of America
# Geriatric Neutrophils

The implications of immunosenescent neutrophils in neutropenic older adults with cancer

## Background
- Immunosenescence
  - Refers to age-related changes in structure and function within the immune system
  - Renders older adults more vulnerable to infection than younger adults
  - Vulnerability magnified by disease and treatment affecting immune function
  - Has critical implications for older adults immunocompromised because of neutropenia

## Purpose
To review the intersection of immunosenescence and neutropenia, focusing on innate immunity and implications for neutropenic older adults with cancer, and to examine current management of neutropenia in light of immunosenescence.

## Methods
- Literature culled from searches in MEDLINE using keywords neutropenia, immunosenescence and related terms was reviewed and critiqued to achieve the stated purpose.

## Findings
- Geriatric neutrophils form a weaker line of defense against infection
  - Blunted mobilization response when the hematopoietic system under stress
  - Decreased phagocytic ability
  - Premature apoptosis
  - Decreased intracellular killing ability

- Geriatric neutrophils may partly account for neutropenia’s devastating impact on older adults
  - Neutropenia related infection occurs in up to 49% of older adults
  - Neutropenia related hospital stays are 13.5 days vs. 7 days for younger adults
  - Neutropenia related mortality is reportedly 5-30% for those over 79 years old

## Elements of Current Practice:
- Fever indicates infection
- Administer growth factors to increase production of neutrophils
- Neutropenic diet includes restricting vitamin rich foods
- Neutropenia is associated with considerable physical and psychological stress

## Critique:
- 20-30% of older adults with an infection never develop a fever
- Growth factors stimulate production of geriatric neutrophils
- Malnutrition has a negative effect on immune function
- Physical and psychological stress has a negative impact on immune function

## Implications for Research and Practice:
- Broaden assessment to include emphasis on atypical presentation of infection in older adults
- Give growth factors according to guidelines and expand interventions to include nonpharmacologic supportive care
- Reconsider neutropenic diet and consider supplementation with immune boosting elements
- Research to explore the physical and psychosocial impact of neutropenia from the older adult’s perspective

---

**Margaret H. Crighton, MSN, RN**
John A. Hartford Foundation Building Academic Geriatric Nursing Capacity Scholar
WHEN BAD THINGS HAPPEN TO OLDER PERSONS
the role of intervening events on the development of disability

Thomas M. Gill, MD, Heather Allore, PhD, Theodore R. Holford, PhD, Zhenzhu Guo, PhD. Yale University School of Medicine

Illnesses and injuries leading to either hospitalization or restricted activity represent important sources of disability for community-living older persons, regardless of the presence of physical frailty. These intervening events may be suitable targets for the prevention of disability.

<table>
<thead>
<tr>
<th>Proximate Intervening Event</th>
<th>Level of Baseline Physical Frailty</th>
<th>Any Disability</th>
<th>Persistent Disability</th>
<th>Severe Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All participants</td>
<td>50</td>
<td>64</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>Physically frail</td>
<td>117</td>
<td>94</td>
<td>93.2</td>
</tr>
<tr>
<td></td>
<td>Not physically frail</td>
<td>117</td>
<td>94</td>
<td>93.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Background</th>
<th>Multivariable Hazard Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalization</td>
<td>1.03</td>
</tr>
<tr>
<td>Restricted Activity Only</td>
<td>1.03</td>
</tr>
</tbody>
</table>

**Background**
A more complete understanding of the disabling process would likely facilitate the development of interventions aimed at preventing disability among community-living older persons.

**Objectives**
1. To evaluate the relationship between intervening events and the development of disability
2. To determine whether this relationship is modified by the presence of physical frailty.

**Methods**
Prospective study of 754 nondisabled community-living persons, aged 70+ years.

Categorized participants into two groups according to the presence or absence of physical frailty, which was defined on the basis of slow gait speed.

Followed participants with monthly telephone interviews for up to 5 years to determine the occurrence of disability and to ascertain exposure to intervening events, which included illnesses and injuries leading to either hospitalization or restricted activity.

**Kaplan-Meier Curves for Development of Any Disability and Severe Disability According to the Presence of Physical Frailty at Baseline**

**Number at risk**

<table>
<thead>
<tr>
<th>Not physically frail</th>
<th>Physically frail</th>
</tr>
</thead>
<tbody>
<tr>
<td>432</td>
<td>322</td>
</tr>
<tr>
<td>350</td>
<td>151</td>
</tr>
<tr>
<td>273</td>
<td>103</td>
</tr>
<tr>
<td>97</td>
<td>5</td>
</tr>
<tr>
<td>432</td>
<td>322</td>
</tr>
<tr>
<td>351</td>
<td>201</td>
</tr>
<tr>
<td>333</td>
<td>146</td>
</tr>
<tr>
<td>117</td>
<td>9</td>
</tr>
<tr>
<td>432</td>
<td>322</td>
</tr>
<tr>
<td>388</td>
<td>243</td>
</tr>
<tr>
<td>344</td>
<td>183</td>
</tr>
<tr>
<td>125</td>
<td>19</td>
</tr>
</tbody>
</table>

**Characteristics**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Physically frail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age per each 5 years</td>
<td>1.3</td>
</tr>
<tr>
<td>Female sex</td>
<td>1.1</td>
</tr>
<tr>
<td>Non-Hispanic white, %</td>
<td>0.9</td>
</tr>
<tr>
<td>Lives alone</td>
<td>0.7</td>
</tr>
<tr>
<td>Years of education</td>
<td>1.0</td>
</tr>
<tr>
<td>No. of chronic conditions</td>
<td>1.1</td>
</tr>
<tr>
<td>Cognitive impairment</td>
<td>1.3</td>
</tr>
<tr>
<td>Depressive symptoms, %</td>
<td>1.3</td>
</tr>
<tr>
<td>Physical frailty</td>
<td>2.2</td>
</tr>
</tbody>
</table>

**Proximate Intervening Event**

| Hospitalization | 0.48 |
| Restricted Activity Only | 0.19 |

**P Value**

-.04
The Effect of a Music and Noise/Light Reduction Program on the Sleep and Agitation of Nursing Home Residents with Dementia

Purpose of the Study
The purpose of this study is to evaluate the effectiveness of a non-pharmacological sleep enhancing strategy consisting of a resident-centered protocol using calming music and an environmentally-centered protocol of noise and light abatement to improve the quality and quantity of sleep and daytime agitation in nursing home (NH) residents with Alzheimer’s Disease (AD). The specific objectives of this controlled clinical intervention were: 1) to evaluate the effectiveness of resident-centered strategy consisting of calming music to enhance the quality and quantity of sleep and to reduce levels of daytime agitation; 2) to develop and evaluate the effect of an environmental strategy to optimize noise and light in the nighttime nursing home environment on the quality and quantity of sleep and levels of daytime agitation; and 3) to evaluate the combined effect of a resident-centered sleep enhancing strategy and the environmental noise/light abatement strategy on these measures.

Statement of Methods
The design consisted of a two-phase controlled clinical intervention that was conducted in three skilled nursing facilities. The study utilized a within-subjects design with each of the 27 subjects acting as his/her own control. Subjects were monitored for 16 days (4 blocks) utilizing event Arouseltraps under four conditions: each consisting of 4 days. Condition 1: gathered baseline measures. Condition 2 consisted of 5 hours of Individualized calming music at bedtime. Condition 3 consisted of a noise/light reduction program. Where music was used, the noise-light abatement program. Outcome variables included total sleep time, time of sleep latency (time needed to fall asleep) and daytime agitation levels.

Results
Results indicate that both music and environmental interventions designed to enhance sleep may be effective non-pharmacologic approaches for improving total sleep time, reducing the period of sleep latency, and improving daytime agitation scores; however, only reduction of sleep latency under each condition proved to be significantly different from baseline at the p<.02 level using paired t-tests with a Bonferroni correction for avoiding Type I error.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Music</th>
<th>No Music</th>
<th>Music/no Light</th>
<th>No Music/no Light</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sleep</td>
<td>234 minutes</td>
<td>317.5 minutes</td>
<td>313.5 minutes</td>
<td>322.8 minutes</td>
</tr>
<tr>
<td>Sleep Latency</td>
<td>56.5 minutes</td>
<td>33.8 minutes</td>
<td>35.0 minutes</td>
<td>33.5 minutes</td>
</tr>
<tr>
<td>Agitation</td>
<td>60.6</td>
<td>60.9</td>
<td>60.6</td>
<td>60.9</td>
</tr>
</tbody>
</table>

p<.02

Conclusions
Both individualized music and a noise/light reduction program significantly reduced sleep latency in a pilot study of 27 elderly nursing home residents with dementia. Although positive effects on total sleep time and decreases in daytime agitation were noted, no statistically significant differences were discerned.

Key Words: Alzheimer’s Disease, Quality of Life, Clinical Trials.
Going Poster

Remember the Four Steps

1. Think strategy
2. Get on message

*Take a breath...then*

3. Hone your design
4. Practice your “pitch”
For More Help

• Call me/write SCP: jbeilenson@aboutscp.com

• See: Posterbuzz.com

• Engage graphic designers in your department/school/area for advice.

• Offer this to a graphic design class as a unique design project.

• Contact your university/school publications or graphic design office.
Welcome to PosterBuzz

Scientific posters are an increasingly popular form of professional communications. Poster sessions provide a unique, face-to-face opportunity for researchers to engage their peers, get needed feedback, prompt new ideas, and meet potential collaborators.

Posters are everywhere at professional association and society meetings across the country, and yet most scientists and academics struggle to put something useful up on the wall. Then they spend poster sessions standing around hoping somebody, anybody, will come by and talk with them about their work.

So who to call? Backed by a team of communications experts who have worked with academic leaders during the last two decades, PosterBuzz is here to help. It is a unique community where people can share ideas, organize events, and get feedback.