Frontiers in Aging Research

Elizabeth C. Clipp, RN, PhD
Professor and Associate Dean for Research
Duke University School of Nursing
Overview

• Health Trajectories in Nursing Science
  – *In concept and empirical pattern*

• Aging Research: 3 Calls for Nurse Scientists
  – *test nursing theories related to end of life*
  – *shift the dominant paradigm of “successful aging”*
  – *Expand conceptually from “gerontology” to “life course”*
Health Trajectories

In Concept
Trajectory

- **Dictionary:**
  - Curve that a body describes in space; the path, progression, or line of development

- **Scientific Literature:**
  - Long-term pattern of experience in a defined life domain
  - Sequence of transitions

- **Analytically:**
  - Longitudinal data incorporating at least 3 time points
Health Trajectories

- Not a statistical approach
- Rather -- a way of thinking about
  - Clinical phenomena of interest to nurses
  - Individual differences in health dynamics
  - How to exploit longitudinal data in clinically relevant ways.
Why should nurse scientists take a trajectory approach?

- Nurses focus on health, which is fundamentally dynamic.
- Nurses care about the nature of health transitions (periods marked by stability, instability, decline, recovery).
- Nurses seek to identify factors that anticipate decline or enhance recovery.
- Nursing interventions are most effective when targeted to those most in need and carefully timed along the illness course.
- For these reasons, nurses are ideally suited to thinking in terms of health trajectories and taking a health trajectory approach in their research.
Health Trajectories

In Empirical Pattern
National Longitudinal Caregiver Study

- 4-year longitudinal study of 2,278 informal primary caregivers of elderly individuals with clinical diagnoses of Alzheimer’s disease (AD) or vascular dementia (VAD).
- Care recipients are veterans followed in the VA system nationwide (all contiguous US states).
- Caregivers were surveyed by mail in 1998 (baseline), and in 1999, 2000; the final surveys were mailed in 2001.
- Data captured on multiple aspects of informal care costs, caregiver & care recipient functioning, & caregiver QOL.
Trajectories of Caregiver Depression

- Research, clinical, anecdotal evidence implicate depression is a major problem
- >4 million caregivers
- Who most needs intervention?
- When should we intervene?
Population Averaging Approach

Mean Level of Depressive Symptoms

NLCS (T1-T4)
Trajectories of Depression

Latent Class Analysis using “Latent Gold”

NLCS (T1-T4)
A Health Trajectory Approach

- moves away from measures of central tendency to an intermediate level of complexity by taking into account within-individual variation in health dynamics.

- blends together the efficiency of sample statistics and the richness & diversity of clinical patterns.
Aging Research
Three Calls for Nurse Scientists
Call 1

*For nurse scientists to test nursing theories of end of life*

- Nursing has led the way — clinically and conceptually — at end of life
- Currently interventions are not theory based (2004 NIH State-of-the-Science Statement on Improving End-of-Life Care)
Nursing offers multiple theories regarding the final phase of life

Stage
Process
Task
• Nursing conceptualizations share several common features
  – dying is multi-dimensional
  – its dimensions are interdependent
  – change occurs over time

• Across disciplines -- Nursing is in the best position to move the EOL field forward
Call 2

For nurse scientists to shift the dominant paradigm of “successful aging”

- Over the last decade, the term “successful aging” has appeared with high frequency in the literature.
- In most aging research, definitions of “successful aging” rely on multiple indicators of life conditions (e.g., diseases, physical/cognitive/social function).
- This normative approach assumes that investigators can develop universally applicable standards.
• From a normative perspective, Rowe & Kahn (1998) posit that “successful aging” occurs with
  – Low levels of disease and disability
  – High levels of physical and cognitive functioning
  – Active engagement in life

• From a non-normative view, nurse scientists likely would posit that the concept of “successful aging” means different things to different people and should include self evaluation – of life quality.
Dominant view of successful aging

- Leaves out older individuals’ QOL perceptions
- Suggests that disability, functional or cognitive declines, or low levels of social engagement imply unsuccessful aging
- At odds with what nurses often see in practice
  - presents a stigmatizing view of successful aging for many older adults who lack a requisite element of the dominant model.
• **Underlying issue:** Nurses understand the complex relationships between older adults’ objective health conditions (physical impairment, disability) and their perceptions of life quality.

• **Nurse scientists hold key positions to re-conceptualize the dominant view “successful aging”**
  - by bringing QOL to the definition of “successful aging”
  - by providing evidence of “successful agers” with limitation by normative standards.
Call 3: For nurse scientists to shift conceptually from “gerontology” to “life course”

• Multiple literatures are converging to suggest the importance of a broader, more temporal perspective on health of older adults
Life course propositions that could guide gerontological nursing research

1. Aging is a lifelong process
2. Health in later life is conditioned by cohort and key demographic factors
3. Health in later life is tied to those of significant others & shaped by context
4. Within older individuals, health trajectories are multiple and interdependent
Considerations: Time & Place

• **Time** -- Older individuals have long histories and pasts that largely determine how health is experienced

• **Place** -- Care contexts can enhance health or adversely affect health

How might these considerations change or even revolutionize nursing scholarship?
Final thoughts