

Frontiers in Aging Research

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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 an 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.**

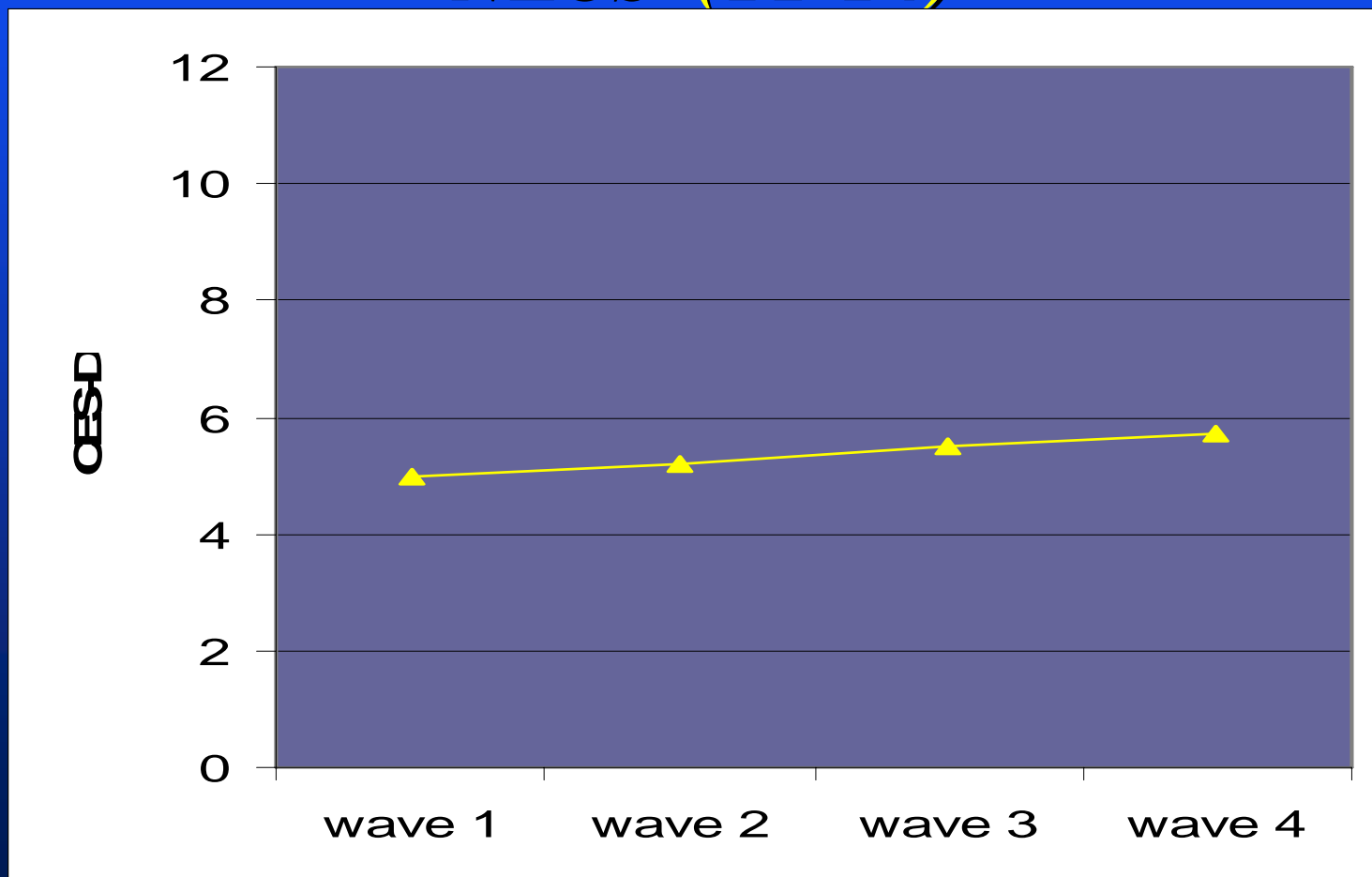
Trajectories of Caregiver Depression

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

Population Averaging Approach

Mean Level of Depressive Symptoms

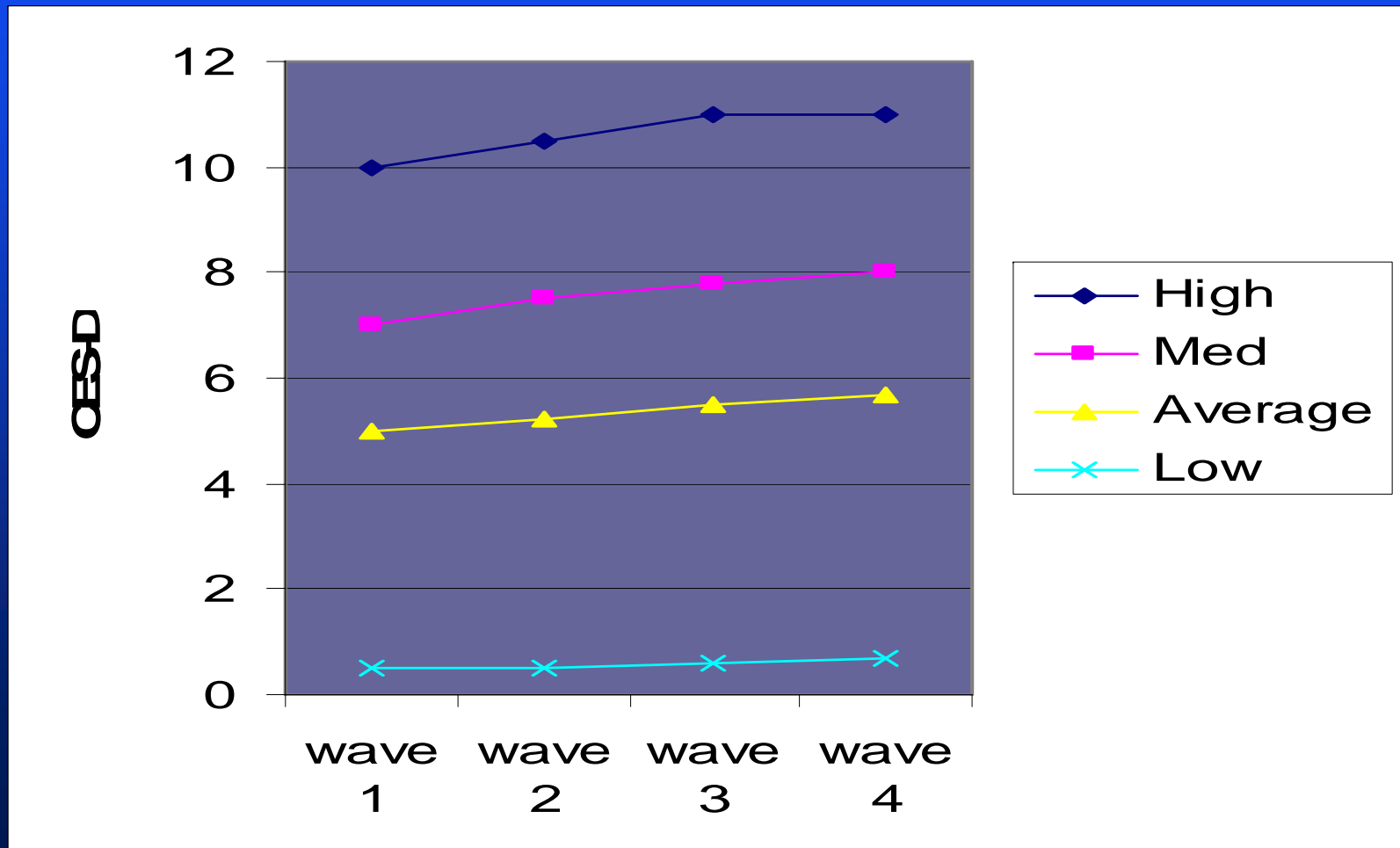
NLCS (T1-T4)



Trajectories of Depression

Latent Class Analysis using “Latent Gold”

NLCS (T1-T4)

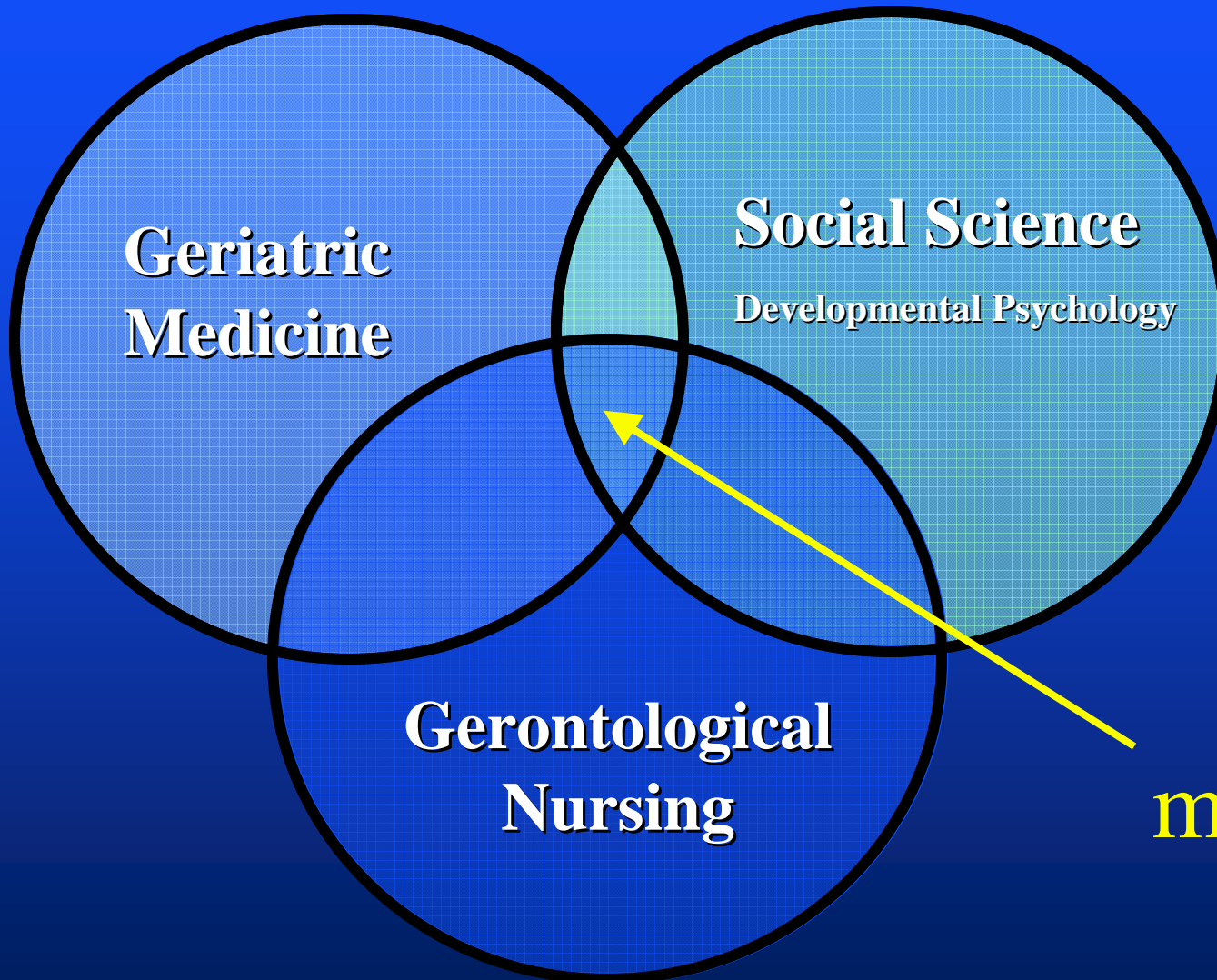


A Health Trajectory Approach

- **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



my lens

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