

NINR and Nursing Research: Yesterday, Today, and Tomorrow

HUP 4th Annual Nursing Research Conference September 29, 2015



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Director, National Institute of Nursing Research



Overview

Topics

- Nursing science and evidence-based practice
- NIH and NINR missions
- Dissemination and implementation of NINRsupported nursing science
- Looking to the future



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Nursing Science and Evidence-based Practice

The Role of Nursing Science in Health Research

- Leading change in healthcare environments through evidence-based practice
- Fostering cross-disciplinary teams
- Keeping pace with the latest techniques, initiatives, and innovations in science
- Building scientific foundation for clinical practice



Research Utilization in Nursing Protocols

Selected Survey Question: Elimination of lactose from tube- feeding diets	(n=216)
Aware of findings	47%
Persuaded that the finding was useful	46%
Sometimes used intervention	19%
Always used intervention	20%

Brett JL. 1987. Nurs Res.

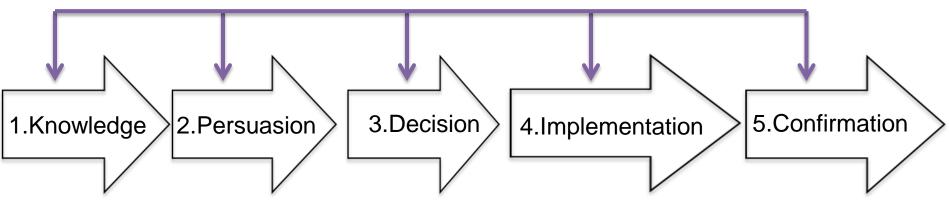


The Innovation-Decision Process

Prior conditions

Previous practice Needs or problems

Communication Channels



adapted from Rogers EM, 2003. Diffusion of Innovations



One Definition of Translational Research

"Translation is the process of turning observations in the laboratory and clinic into interventions that improve the health of individuals and the public — from diagnostics and therapeutics to medical procedures and behavioral changes."

National Center for Advancing Translational Science (NCATS)



Requirements for Successful Translation

- Formulation of research questions
- Large cohorts for generalizable populations
- Effectiveness evaluation
- Care delivery evaluation
- Sustainability planning











Accelerating Discoveries Toward Better Health

CTSA Clinical & Translational [⊗]
Science Awards



T1 T2 T3 T4

Potential Application

Potential Clinical Application

 \Leftrightarrow

Efficacy

Evidence Based Guidelines



Effectiveness

Clinical Care of Intervention



Population-Based

Health of Community or Population

Basic Knowledge

Basic

Scientific

Discovery

Theoretical Knowledge Efficacy Knowledge

Applied Knowledge Public Health Knowledge





Nurse Involvement in NIH's CTSA Program

Accelerating Discoveries Toward Better Health



Nurses have made contributions to CTSA efforts in:

- Community engagement
- Implementation science
- Training



Sampselle CM, et al. Clin Transl Sci 2013

http://www.ncats.nih.gov/research/cts/ctsa/ctsa.html



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NIH Mission

NIH: Steward of Medical and Behavioral Research for the Nation

"NIH's mission is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to extend healthy life, and reduce the burdens of illness and disability."



NINR Mission

- To promote and improve the health of individuals, families, and communities
- To understand and manage wellness and health across the lifespan
- To improve quality of life for individuals and their caregivers





NINR's Areas of Research

Scientific Focus Areas to Implement NINR's Strategic Plan

- Symptom Science
- Wellness
- Self-Management
- End-of-Life and Palliative Care
- Technology











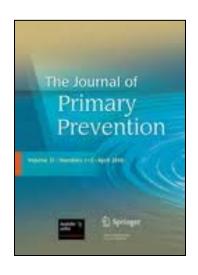
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Chicago Parent Program Makes a Difference in Primary and Secondary Prevention



Gross D, et al. J Prim Prev 2011



Deborah Gross, DNScJohns Hopkins University



Breitenstein SM, et al. Res Nurs Health 2012



NINR Pediatric Palliative Care Campaign



Goals:

- To raise awareness of and improve communications about pediatric palliative care
- To increase the use of palliative care for children living with serious illnesses



www.ninr.nih.gov/conversationsmatter



Internet-based Psycho-educational Interventions for Teens with Type I Diabetes

Adolescents with type 1 diabetes who completed a coping skills education program AND a diabetes management education program had better glycemic control and quality of life outcomes



Grey M, et al. Diabetes Care 2013



Creating Opportunities for Personal Empowerment (COPE)

Intervention for adolescents targeting obesity, social skills, and mental health

- Builds cognitive behavioral skills
- Potential to prevent and treat overweight and obesity in teens
- Implemented by teachers rather than health professionals





Melnyk BM, et al. Am J Prev Med 2013



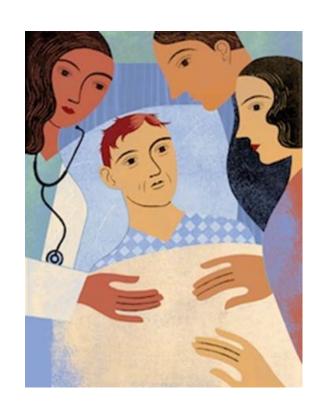


Loretta Sweet Jemmott, PhD, RN, FAAN University of Pennsylvania



Fostering Advance Directives Communication

- Communications strategies for advance directives
- Physician Orders for Life-Sustaining Treatment (POLST)
- Nursing home residents less likely to receive unwanted life sustaining treatment



Hickman SE, et al. J Palliat Med 2009



THE CARE SPAN



THE CARE SPAN

The Importance Of Transitional Care In Achieving Health Reform

Naylor, MD, et al. Health Aff. 2011



Transitional Care: Published Evidence*

- 21 clinical trials of diverse innovations focused on chronically ill older adults
- 9 of 21 studies reported positive impact on health outcomes and reductions in preventable hospitalizations
- Effective interventions:
 - Extended from hospital to home
 - Offered multiple solutions
 - Relied on teams (including patients) with nurses as "coordinators"

*Information courtesy of Dr. Mary Naylor (8/5/15)





Supported by the National Institute on Aging and the National Institute of Nursing Research

Adapted from slide by Dr. Richard Hodes, NIA



Discharge Decision Support System (D2S2)

- Embedded in electronic health records systems
- Identifies patients in need of follow-up after hospital discharge to:
 - improve health outcomes
 - reduce hospital readmission costs





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PRECISION MEDICINE INITIATIVE



- Public input on building the Initiative's national participant cohort
- Long-term goals aligned with nursing research
 - Identifying new targets for treatment, prevention, and healthy behaviors

www.nih.gov/precisionmedicine



Infrastructure for Large Scale Studies





Big Data Opportunities in Nursing

- Data visualization
- Profiling complex conditions to guide therapies
- Examining large amounts of data from successful treatments across populations to determine effectiveness in specific populations
- Mining social media to discern trends
- Developing learning systems to maximize use of longitudinal and interoperable datasets

http://www.ninr.nih.gov/training/trainingopportunitiesintramural/bootcamp



Innovative Questions

Pointing the Way Forward for Nursing Science

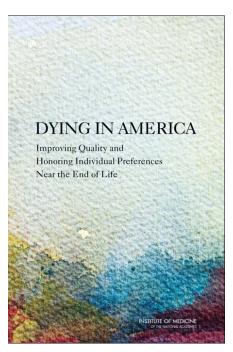
Shaping the Future of Nursing Science

- Designed to initiate a dialogue with NINR stakeholders to develop lists of creative, results-oriented questions to assist in guiding future research directions in nursing science
- Consisted of a series of workshops with leading experts in the field, and a public website
- All questions from the IQ Initiative are now posted on the NINR website as a resource for the scientific community

www.ninr.nih.gov/IQ



Video Available—NINR-hosted NIH Briefing on IOM Report – *Dying in America*



INSTITUTE OF MEDICINE

OF THE NATIONAL ACADEMIES



www/iom.edu/endoflife



NINR's 30th Anniversary Opening Symposium



October 13, 2015



NINR and Nursing Research

