

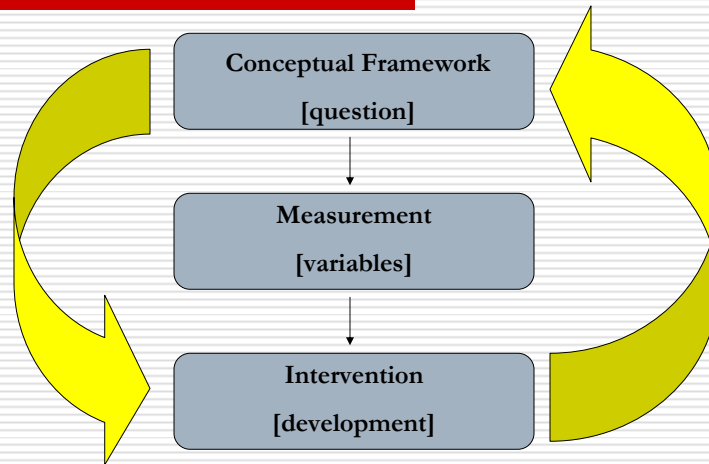
Health Services Research: Conceptual Framework Issues

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Presentation Overview

- Key components
 - Examples
 - Conceptual Frameworks
 - Anderson's Health Services & Access to Care Model
 - Transtheoretical Model
 - Theory of Planned Behavior
 - Network Episode Model
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Conceptual Development Model



Developing a Conceptual Framework Overview

- (1) The framework establishes the interrelationships among the variables in the model being developed
 - (2) The framework informs the:
 - (a) study design
 - (b) sample selection
 - (c) data collection plans
 - (3) The framework determines the final interpretation of results
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Example of Geriatric Mental Health Services Research

- How do we assist older adults with comorbid health and mental health problems?

- Theory: pathways to distress & well-being, problem coping

- Measurement: screening, assessment, outcomes

- Intervention: development and adaptation
 - Gellis et al, 2007 Amer J of Ger Psych

A Conceptual Model

- Chronic medical illness conceptualized as a major life stress and cause of series of stressful daily problems and hassles.

- Individual's problem-solving ability moderates the relationship between stress and the likelihood that the older person will experience significant symptoms of depression

Study Problem

- Problem under scrutiny
 - For example, older adults have the highest rate of suicide
 - Older adults with depression use mental health care less than any other age group
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Problem Specificity

- Why do some older adults obtain inadequate mental health care for depression?
 - What system, environmental, personal, factors prevent older adults from obtaining mental health care for depression?
 - Does a system of psychiatric care improve the rate of treatment?
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How to Develop a Conceptual Framework for the Problem?

Fundamental Components & Definitions

- Concepts
 - Theoretical Framework
 - Theory/Hypothesis
 - Model
 - Variables
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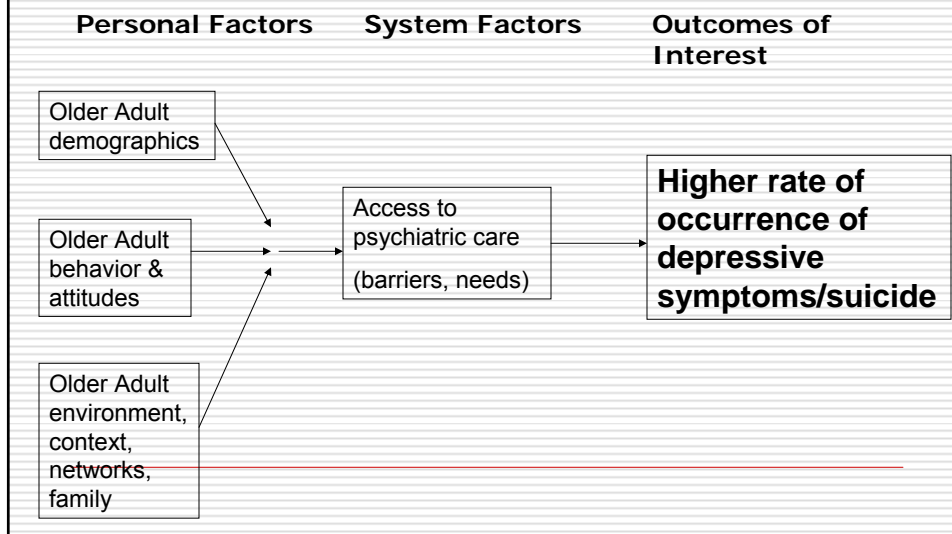
Concepts

- Theoretical building Blocks
- A notion about the problem under inquiry

(E.g.)

- Older adults use less mental health care
 - This may contribute to their high rate of depressive symptomatology
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Developing an example of a Conceptual Framework



Types of variables

- Dependent (outcome)
 - Your major interest in the study-what happens?

 - Independent (causal)
 - The program, intervention, or factor that you believe leads to the outcome

 - Intervening (modifying)
 - May modify the outcome
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Drawing a Model to Explore Relationships

Three Major Components

Independent Intervening Dependent

Drawing a Model to Explore Relationships

Three Major Components

Independent	Intervening	Dependent
M.H. program	Age	Has illness
yes/no	Gender	yes/no
	Education	
	(other intervening factors)	

Other Intervening factors that may modify outcome

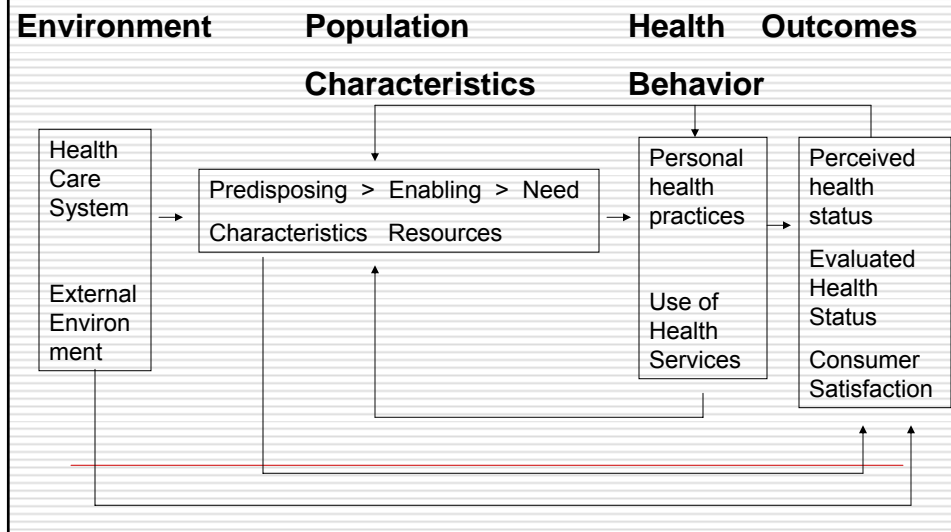
- Activity level
 - Spouse/significant other
 - Social network
 - Health literacy
 - Awareness/attitude to problems
 - Daily problem solving
 - Access/availability of m.h. service
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Mental Health Services

- Does the older adult have easy, comfortable access to the service?

 - Intervening variables
 - Privacy
 - Geographic
 - Relationship with provider(s)
 - Transportation
 - Hrs of operation
-

Anderson's Behavioral Model of Health Services & Access to Care (1995)



Using Anderson's Behavioral Model of Health Services Access

□ Predisposing

- Age/cognitive functioning
- Gender
- Past experience w/ illness
- Poor general health knowledge (risk factors, severity, treatments)
- Norms regarding m.h/medical help
- Stigma issues

Enabling Variables

- Income, health insurance, caregiver

 - Access to services
 - Geographic, availability
 - Cost
 - Knowledge of services
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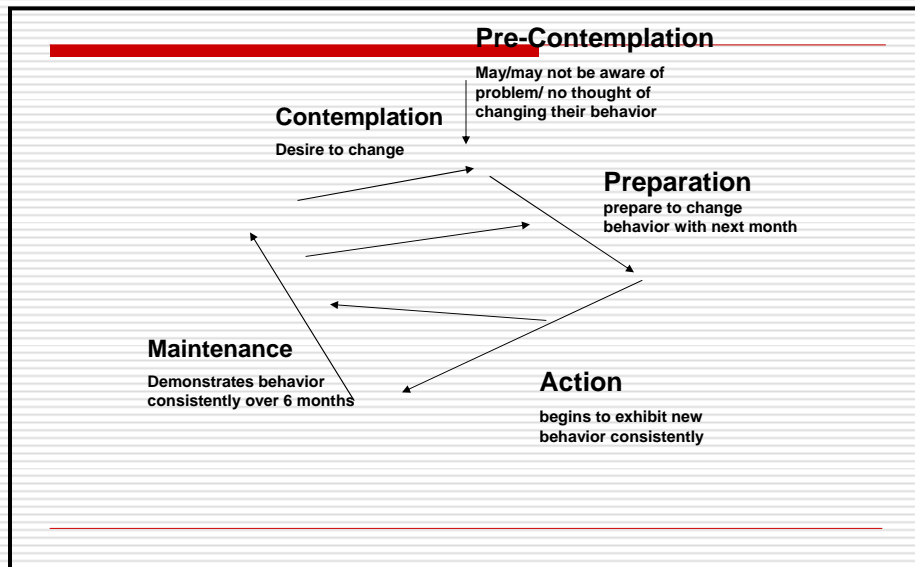
Need for Services

- Level of need (high, low)
 - Presence of disease
 - Severity
 - Discomfort
 - Awareness of disease
 - Complications of disease
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Other Conceptual Models

- ❑ **Transtheoretical (TTM) / Stages of Readiness to Change Model** (Prochaska & DiClemente, 1983)
 - The model allows a systematic assessment and enhancement of the changes that individuals are willing to make in problem behaviors
- ❑ Behavioral change is a 5-step process
- ❑ Model used in substance abuse, high-risk sexual behaviors, domestic violence, smoking behavior research

Stages of Change Framework



Tobacco Dependence among Depressed Smokers

(Study Exemplar) (Prochaska et al., 2004)

- Funded by NIDA
 - Study investigated tobacco dependence among smokers with psychiatric disorders (unipolar depression) readiness to quit & identify strategies for supporting psych pts.
 - High risk for smoking-related deaths
 - Mental health & addictions services undertreat problem
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Tobacco Dependence among Depressed Smokers

(Study Exemplar) (Prochaska et al., 2004)

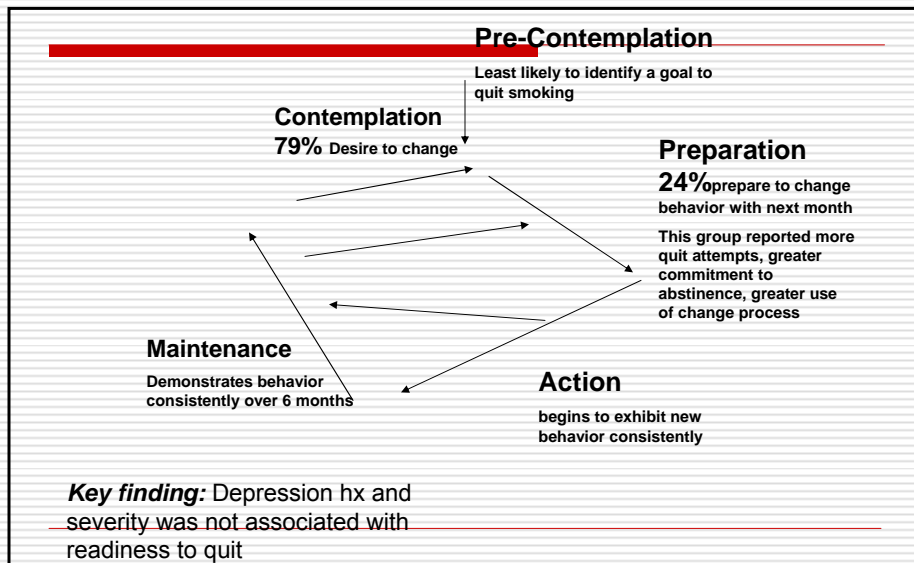
- RCT design
 - Intervention->stage-based expert system
 - >behavioral counseling->
 - nicotine replacement therapy (NRT)->
 - bupropion
 - Study objectives:
 - Examine smoking traits of depressed smokers
 - Evaluate the generalizability of TTM to this psychiatric population
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Tobacco Dependence among Depressed Smokers

(Study Exemplar) (Prochaska et al., 2004)

- Use of Stages of Change Conceptual
- Model Assumption
 - Persons with psychological disorders may not always be ready to take advantage of tx interventions, even if they are in the tx system
 - Model identifies patient's stage of readiness
 - Model suggests interventions useful for moving them towards tailored interventions

Stages of Change Findings



Theory of Planned Behavior (Ajzen, 1985)

- Expansion of Theory of Reasoned Action that emphasizes the role of intention in behavioral activity

TBM Model states that the incidence of actual behavior performance is proportional to the amount of control a person has over the behavior and the strength of the individual's intention in performing the behavior

Self-efficacy is key in determining the strength of the individual's intention to perform a behavior

"Wheeling Walks" W. Virginia Study

Study Exemplar (Reger et al., 2002)

- Funded by Robert Wood Johnson
 - The program was a health services intervention to promote walking exercise in sedentary 50-65 yr old adults
 - Used TPB and Stages of Change Models to change physical activity behavior by promoting 30 min of daily walking through media, PR, public health activities at work sites, churches
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“Wheeling Walks” W. Virginia Study

- ❑ 8-week media-based community physical activity campaign to deliver a targeted public health physical activity message : 30 min/day each day
 - ❑ Aim 1: increase by 10% in the proportion that meet CDC standards for moderate-intensity walking
 - ❑ Aim 2: a 15% forward movement of one or more stages in the TTM model
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“Wheeling Walks” W. Virginia Study

- ❑ Quasi-exptl health services pilot intervention
 - ❑ Intervention community (n=719)
 - ❑ Comparison community (n=753) (Parkersburg)

 - ❑ Research observers for walking behavior at sites
 - ❑ Pre-post 8-week intervention telephone random sample survey in each community (attitudes, norms, perceived control, and readiness to change variables)
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“Wheeling Walks” W. Virginia Study Findings

- ↑23% in the number of walkers in the intervention community (IC) vs 0 in the comparison community (CC)
- 32% (IC) met CDC criteria for moderate-intensity physical activity by walking at least 5x /wk vs 18% in the CC
- IC reported an increase in positive stage change compared to CC

Network Episode Model (NEM)

(Pescosolido, 1991, 1998)

- Model specific to mental health services research, focus is on first contact and entry into formal psychiatric care
- Based on earlier research on “illness career” of individuals from community to tx system
- Model developed on how community networks influence the early illness careers of individuals with mental illness and their families

NEM Model

- concentrates on the significance of social influence through social networks on how, when, or if individuals obtain health care.
 - Suggests that the structure of networks (*e.g. size, density, proximity*) and their content (*e.g. affect, beliefs*) be considered simultaneously
 - Social influence can be in the form of:
 - Rational choice
 - Coercion
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Concepts

- Choice (rational decision-maker)
 - individual vs supported choice
 - social networks wield influence & initiate use of services
 - Coercion (forced into tx system)
 - Legal, active resistance to tx, social control, thrust into the system
 - Muddling through (bounce around and end up in the m.h. system, "bystander" role)
 - Lack of active resistance
 - Lack of active agreement for service
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Thank You

Questions???

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Contribution of Health Services Research to Productive Aging

HSR can:

- (a) provide evidence of effective strategies to manage chronic disease
- (b) Identify methods to maintain innovations

Issues in Aging are:

- (a) avoiding disease
 - (b) Active QoL
 - (c) Maintain physical & cognitive function
 - (d) Social support, m.h., life satisfaction
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