Health Promotion in Family Caregivers

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Who are caregivers?

- A vast majority of caregivers are women.
- On average, caregivers are in their mid-fifties, and have an income of \$35,000.
- Seven in ten caregivers do not have a college degree.
- 96% receive no payment for caregiving.

 Caregiving is a full-time job even for those who are employed outside of the home.

 In addition to the time spent at their job, caregivers spend an average of 40 hours a week caring for their loved one.

 Caregivers who do not work outside of the home spend twice as much time, 80 hours a week, caring for their loved one.

Employment Status

 About 35% of caregivers currently work outside of the home.

One in five caregivers stopped working primarily to care for their loved one.

Effect of Caregiving on Career

60% of caregivers have missed days at work due to their caregiving responsibilities.

 Caregivers have missed an average of 17 work days per year due to caregiving.

 More than one-third report that they have reduced their work hours, lost income, or have become less effective at work.

Financial Aspects of Caregiving

- Caregivers report that caregiving has affected their personal finances.
- Nearly a quarter report that caregiving has affected their finances greatly.
- The financial impact on the caregiver increases as the disease progresses.

Financial Aspects (contd.)

 64% are concerned about having enough money to care for their own needs as they grow older.

Quality of Life

- Caregivers report that caregiving has caused stress within the family
- Many caregivers feel they do not have enough time for themselves
- About 1/3 become depressed and say they don't know if they can continue caregiving
- Caregiving stress can worsen as patient condition worsens

Sleep

 Almost half of all caregivers feel that they are not getting enough sleep.

 Caregivers whose patients have moderate or severe conditions are more likely to report a lack of sleep than those caring for patients with a mild condition.

Caregiver Health

Research findings

Caregiver Health

Collectively, research shows caregivers:

- Have more sleep problems
- Lowered cellular immunity
- Elevated blood pressure responses
- Higher levels of depression
- Poorer physical health
- More illness-related symptoms

Caregiver Mortality

 Caregivers who report increased strain due to caregiving duties, have mortality risks 63% higher than noncaregivers

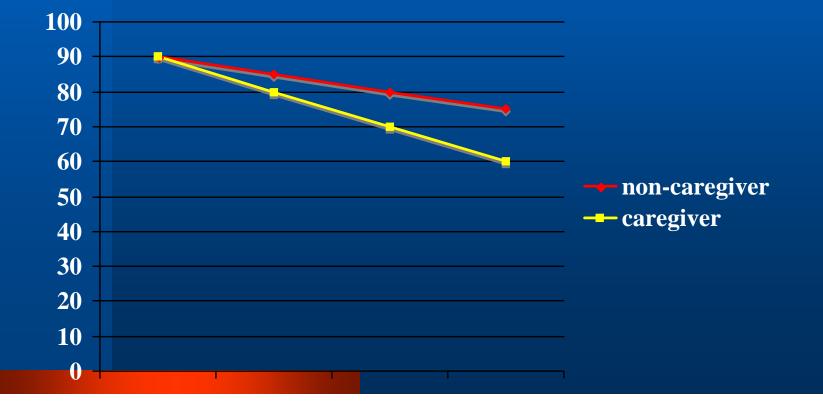
Schulz & Beach (1999). JAMA

Acton Meta-Analysis

 Reviewed 73 studies from 1979-2000 testing interventions to reduce the burden of caregiving

 Only 2 of the studies reported physical health outcomes
 -sleep quality
 -number of doctor visits

Immune Function of Caregivers



Empiric Evidence of Immune Function Changes

Chronic Stress in Caregivers of Dementia Patients is Associated with Reduced Lymphocyte Sensitivity to Glucocorticoids

Bauer, Vedhara, Perks, Wilcock, Lightman, & Shanks. (2000) Journal of Neuroimmunology 103(1), 84-92

Study

Compared demographically matched caregivers and non-caregivers on multiple immune function indicators

Findings

Caregivers reported greater distress and a decreased immune function response as compared to noncaregivers. The authors also tested whether or not chronic stress leads to an overall down-regulation of the immune system and they concluded that, consistent with prior research, chronic stress is associated with global, and perhaps permanent changes in immune function.

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Study Purpose

Compare the effect of relaxation therapy for male and female spousal caregivers of Alzheimer's patients

Variables

Quality of life
Emotional distress
Bioinstrumentation monitoring
Natural killer cell number & function

Spouse Caregivers

16 males45 females

Average age = 70

Relaxation Therapy

 Professionally made 30-minute relaxation therapy tape used for eight weeks

Biofeedback training

Results

 Men had significantly lower levels of depression, stress, anxiety, and anger-hostility, and subjective burden than women.

Results

 Men had a significantly higher percentage of natural killer cells (NK) than women.

 Women also had significantly lower NK cells that non-caregivers

Conclusions

 Study results suggest that there may be gender differences in the effect of chronic stress on the immune system.

Health Practices of Caregivers

 Research shows that health promotion practices differ between caregivers and non-caregivers

Acton Study

Study purpose:

 To compare health practices of family caregivers with demographically-matched noncaregivers

Acton (2002). Western Journal of Nursing Research

Sample

46 family caregivers
50 non-caregivers

 Matched on: age, gender, ethnicity, education, and income

Variables

- Importance of health promotion
- Barriers to health promotion
- Self-efficacy for health promotion
- Physical activity
- Nutrition
- Stress management
- Interpersonal relationships
- Spirituality

Findings

Family caregivers scored significantly lower on:

- Importance of health promotion
- Self-efficacy for health promotion
- Physical activity
- Quality of interpersonal relationships
- Stress management
- Sleep quality and numbers of hours
- Spiritual growth

Caregivers scored significantly higher on:

- Barriers to health promotion

• There were no differences in:

- Nutrition

- Numbers of medications

Stress Mediation

 Does practicing health promoting behaviors, help mediate (lessen) the negative effect of stress on wellbeing

Test of Stress Mediation

Variable	r	R	F	р	FChg	р
Equation 1 ^a						
Stress	.51	.26	15.04	.000	15.04	.000
HPSCB	.80	.64	36.47	.000	43.16	.000
Equation 2 ^b						
HPSCB	.79	.63	72.97	.000	72.97	.000
Stress	.80	.64	36.47	.000	.62	.436

Findings

 The negative effect of stress on wellbeing was reduced to non-significant levels

 Thus, those caregivers who engaged in more health promoting behaviors experienced less negative effect of stress on well-being

Divergent Findings

 A study of preventive health practices by Matthews and colleagues showed (n = 319) that caregivers do engage in similar health promoting activities as noncaregivers.

Matthews, Dunbar-Jacob, Sereika, Schulz, & McDowell (2004). Journal of Gerontological Nursing However, both past and current health promotion practices were measured and the sample scored lower on current than past health promotion activities

 This indicates that engagement in health promotion had decreased

Health Promotion Interventions for Family Caregivers

Acton Focus Group Study

 Needed to learn caregivers' perceptions of health promotion needs

Purpose

 The purpose of the study was to use focus group research methods to gain insights into how family caregivers take care of their health and what they need to care for themselves

Focus Group Questions

- How do you take care of your health?
 What keeps you from taking care of your health?
- What helps you take care of your health?
- What do you need to help you take care of your health?

Sample

N = 10 (7 females, 3 males) Mean age = 60

Themes

Things other people tell me
I come second
Not enough time
Support and resources

Things Other People Tell Me

 Group reported that they were repeatedly told to take care of themselves

"My sister always tells me to take care of myself, but she just doesn't understand"

I Come Second

 Group reported that they were too busy to take care of themselves

"I just can't think of myself right now, I have to think of my husband first"

Not Enough Time

 Group said that they knew they should take better care of themselves, but they did not have enough time

"I'd like to exercise and lose weight, but there is no time"

Support and Resources

 Group reported that they would like to take better care of themselves, but they needed respite, support from other family members, information and ideas

"I just don't have enough money to go to the doctor, his care is so expensive" The group also said that they would love to have a mentor to guide them through the tough times

Self-Care Interventions

 Teel and Leenerts piloted a series of telephone-based sessions (healthy habits, self-esteem, focus on positive, role overload, communication, and meaning) between APNs and caregivers (n = 6)

 Findings were geared toward delivery and receipt, rather than outcomes

Lewis R01

 Relaxation therapy intervention has been expanded in a competing continuation R01, to include 2 classes on health promotion

Intervention Content Expanded

Stress and relaxation Grief, loss and depression Coping Challenging behaviors Positive thinking Healthy living Becoming a healthy caregiver

Outcomes for Health Behaviors

Health Promoting Lifestyle Profile II

Walker, Secrist, & Pender

Physical activity Nutrition Stress Health responsibility Spiritual growth Interpersonal relationships

N=27 (pre and post tests)

Data Analysis

Simple paired t-tests

Findings

 Means on the posttests were significantly higher than pretests on physical activity and nutrition

 Means on the posttests were significantly lower than the pretests on stress

Exercise Programs

 In 1997, King and Brassington demonstrated that family caregivers would participate in a home-based, 4-month, moderate-intensity physical activity program

 Findings showed a decrease in ambulatory blood pressure and anger expression

King & Brassington (1997). Annals of Behavioral Medicine

Exercise Program

 In 2002, Castro and colleagues assigned 100 female caregivers to either a 12month, home-based, exercise program or attention control condition (telephonebased nutrition education program).

Castro, Wilcox, O'Sullivan, Baumann, & King (2002). Psychosomatic Medicine

Findings

Exercise participation rate was 74% (3 exercise sessions per week)

 Exercise participants showed increased knowledge of the benefits of exercise

 Exercise participants showed increased motivational readiness for exercise Both groups improved significantly in perceived stress, burden, and depression

 Lower baseline depression scores were associated with better exercise adherence

Health Promotion Intervention Development

 There are few, if any, comprehensive health promotion interventions for family caregviers

 Interventions for family caregivers must be individualized, to some degree

 Interventions must meet the caregivers' needs

 Intervention programs must address issues related to caregiving duties -PRIOR to interventions aimed at health promotion

 Multicomponent intervention programs have been shown by multiple meta-analytic studies to be most effective in reducing stress and burden and increasing caregiving skills

 Thus, interventions aimed at health promotion must also be multicomponent in nature

For example,

Intervention programs should first assess care receiver problematic behavior and address any behavior problems prior to instituting a health promotion intervention Such an intervention strategy must be individualized because each caregiving situation is different Caregivers are usually very reluctant to think about themselves when they are struggling with caregiver duties But, if you can show caregivers that you are interested in helping them, willing and able to help them with their caregiving duties, then they may be able to engage in a program to learn to better care for themselves

My Research in Health Promotion

- With funding from two NIH-funded centers of excellence at the University of Texas at Austin School of Nursing,
- The Center for Health Promotion
- Southwest Partnership Center
- We are developing a comprehensive, multicomponent health promotion intervention program for caregivers

Program Components

 Pre-intervention assessment of care receiver problematic behaviors and caregiver coping skills

 Individualized intervention to address behavior problems and coping

Program Components

Stress management
Nutrition
Physical activity
Sleep
Healthy living

Strategies

Didactic presentations Role-playing Demonstrations Discussions Tailoring Goal attainment Sharing experiences

Progress

- We are currently testing the format, delivery, timing, and structure of the program
- Preliminary results show that caregivers are very interested in the program, they come to the sessions, they engage and participate and express appreciation for the information

Outcomes Testing

 Presently, we do not have enough subjects to test the outcomes (sleep, stress, nutrition, physical activity) for significance, but the numbers are trending in the right direction

Hispanic Family Caregivers

 Funding from the Southwest Partnership Center has allowed us to work with a consultant to adapt the intervention for Hispanic Family caregivers Currently we are preparing to test the intervention with English-speaking Hispanic samples

Spanish Translation

 We have also translated the intervention to Spanish and with funding from the Center for Health Promotion Research, will begin back translation, validation, and evaluation of the intervention in Spanish-speaking Hispanic samples this fall Ultimately, we plan to conduct a randomized clinical trial in a multiethnic sample of family caregivers

Thank you very much for your time and attention!

