



Abstract

Grant Number: 5R01NR004914-02

PI Name: SEDLAK, CAROL A.

PI Email: csedlak@kent.edu

PI Title:

Project Title: DXA: HEALTH BELIEFS & OSTEOPOROSIS PREVENTION BEHAVIORS

Abstract: *Prevention of osteoporosis is an important nursing and health care concern. The purpose of this study is to evaluate the effect of DS (dual energy x-ray absorptiometry) screening on Osteoporosis Preventing Behaviors (OPB) of post-menopausal women between the ages of 50 to 65 at 6 and 12 months post DXA. The theory base is the Health Belief Model (HBM). It is believed that the DXA screening will increase knowledge and influence OPB through potentially mediating health beliefs (perceived susceptibility, seriousness, benefits, barriers, motivation, and self-efficacy). The independent variable is DXA (an objective measure of bone density) which is hypothesized to increase knowledge to increase knowledge of osteoporosis and to affect the dependent variables which are the OPBs (increased calcium intake, weight bearing exercise, smoking cessation, alcohol intake moderation, hormonal replacement therapy and non-hormonal drug therapy) through the mediating HBM variables. The HBM variables, in turn, will influence the OPB. Specific aims are to: 1) Compare HBM variables and Knowledge of Osteoporosis between postmenopausal women who have a first DXA screen and those who have not; 2) Compare performance of OPB health behaviors between postmenopausal women who have a first DXA screen and those who have not; 3) Determine which variables (DXA screen, HBM variables, Knowledge of Osteoporosis) are most predictive of the performance of OPB; 4) Determine if health beliefs are related to the performance of OPB; 5) Determine the mechanism through which DXA screen affects Osteoporosis Preventing Behaviors. The research questions are: 1) Does having a DXA screen cause an increase in Knowledge of Osteoporosis? 2) Does having a DXA screen cause a change in Health Belief scores? 3) Does having a DXA screen cause an increase in OPB? 4) Does an*

increase in Knowledge of Osteoporosis in OPB? 5) Are Health Belief variable scores related to OPB scores? 6) Does having a DXA screen cause an increase in OPB when controlling for Knowledge of Osteoporosis? 8) Does Knowledge of Osteoporosis of Health Beliefs have the stronger causal effect on OPB? 9) What are the effect parameters of the proposed model? Statistical analyses are tailored to the aims and derived hypotheses.

Thesaurus Terms:

diagnosis design /evaluation, disease /disorder prevention /control, health behavior, health care service evaluation, osteoporosis, photon absorptiometry, postmenopause, skeletal disorder diagnosis

belief, bone density

clinical research, female, health services research tag, human middle age (35-64), human subject

Institution: KENT STATE UNIVERSITY AT KENT
KENT, OH 44242

Fiscal Year: 2001

Department: NONE

Project Start: 01-JUN-2000

Project End: 31-MAY-2003

ICD: NATIONAL INSTITUTE OF NURSING RESEARCH

IRG: NURS

