Title

A randomized community-based intervention trial assessing the effect of church-based nurse referrals on systolic blood pressure

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weight loss experiences, and motivators and barriers to weight loss attempts. Each focus group lasted approximately 75 minutes. All groups were audio-taped and moderated by an African American female nurse practitioner with experience conducting focus groups. Tapes were transcribed and coded independently by the principal investigator and a co-investigator. No new codes emerged after the second group with either gender. Coding conferences were held until consensus was reached. A master code list was generated and the transcripts were then recoded and dominant themes identified.
RESULTS: Eight men and twelve women participated in focus groups. Female participants had a mean age of 48.7 years (range 34–59 years). Men had a mean age of 48 years (range 30–63 years). The mean BMI was 40.3 for women (range 31.7–53.7) and 41.3 for men (range 30.6–57.7). While men and women shared many barriers to weight loss, they also differed significantly in several important areas. Men were more likely to emphasize the role of exercise in decreasing weight and to identify unhealthy eating habits, reduced activity with retirement and anticipated discomfort with exercise as barriers to weight reduction. Women focused more on the role on dietary changes to achieve weight loss, and identified fear of appearing too thin, fatalistic attitudes such as "some of us were born to be thicker", previous failures with weight loss attempts, and a desire to be healthy without losing weight as significant barriers. Both genders perceived emotion driven eating, food cravings, busy lifestyle and access to healthy food and exercise facilities as barriers to weight loss. With respect to motivators, both men and women felt encouragement from a physician or family member, the desire to live longer and be healthier, experiencing less physical discomfort, and having increased physical endurance and ability were all important. While women also cited appearance as portrayed in the media, recognition of small losses by family and family support as additional significant motivators, these opinions were not voiced by the men.
CONCLUSIONS: While urban, obese African American men and women share some motivators and barriers to attempted weight reduction, significant differences are also present. In addition to shared systematic barriers such as the expense of healthier foods and access to exercise facilities, gender specific personal motivators and barriers also exist. Clinicians must be aware of these differences to better encourage and support weight loss efforts in these patients.

A RANDOMIZED COMMUNITY-BASED INTERVENTION TRIAL ASSESSING THE EFFECT OF CHURCH-BASED NURSE REFERRALS ON SYSTOLIC BLOOD PRESSURE A.A. Baig[1]; C.M. Mangione[1]; A. Sorrell[2]; J.M. Miranda[3]. [1]University of California, Los Angeles, Los Angeles, CA; [2]QueensCare, Los Angeles, CA; [3]UCLA Department of Psychiatry and Biobehavioral Sciences, Los Angeles, CA. *(Tracking ID # 189233)*

BACKGROUND: Community-based organizations have demonstrated success in providing care to individuals who are uninsured and underserved. Churches have emerged as a growing site for community health nursing. Unfortunately, there are been no controlled clinical trials of the effectiveness of these programs on the treatment of prevalent and morbid chronic medical conditions such as hypertension. Our goal was to measure the effect of church-based nurse referrals on blood pressure control, knowledge about hypertension, antihypertensive medication intensification, and participation in self-care among persons with hypertension.
METHODS: We recruited community-dwelling adults with hypertension who were 18 years-old and over, non-pregnant, and English or Spanish-speaking. All recruited patients had an average blood pressure reading equal to or above a systolic of 140 mm Hg or a diastolic of 90 mm Hg obtained at a parish nurse led health event in Los Angeles County from October 2006 to June 2007. Participants were interviewed, had blood pressure measured, and were randomized to either telephonic assistance with making primary care physician appointments or direct referral to parish nurse office hours. Patients were followed for 4 months and at that time had blood pressure measured again and completed a second survey. This study was powered to measure a change in systolic blood pressure between study arms of 12.5 mm Hg.
RESULTS: Eight hundred eighty six people were screened at the health events, 187 had elevated blood pressure, and 150 met eligibility criteria. Of these, 100 enrolled in the study: 50 in the nurse intervention arm and 50 in the assisted physician appointment arm. In the enrolled sample, 68% were female and had a mean age of 58±11 years. Ten-percent of the subjects were Caucasian, 20% Asian, 5% African-American, and 60% Hispanic. The average systolic blood pressure was 149±14 mm Hg and diastolic blood pressure was 87±11 mm Hg. Of the people enrolled, 57% were uninsured and 25% were undiagnosed at the time of enrollment. We had an 85% follow-up rate for the 4-month post-randomization measures, with 41 returning patients in the nurse arm and 44 in the physician arm. Patients in the nurse arm had a 7±15 mm Hg drop in systolic blood pressure versus a 14±15 mm Hg drop in the physician arm (p=0.04). Twenty-seven percent of the patients in the nurse arm had medication escalation compared to 32% in the physician arm (p=0.98). The two arms did not differ in increase in knowledge score or self-care score.
CONCLUSIONS: Church health fairs conducted in low-income, multiethnic communities have the capacity to identify many people with elevated blood pressure. Facilitating physician appointments for hypertensives identified at health fairs confers a greater decrease in systolic blood pressure than referral to a church-based nurse at four months. Further studies are needed to evaluate the long-term blood pressure outcomes in these populations and the impact of church-based care on chronic conditions.

A RANDOMIZED CONTROLLED TRIAL OF STRATEGIES FOR WEIGHT LOSS K.G. Volpp[1]; L. John[2]; L. Norton[3]; J. Fassbender[4]; A. Troxel[4]; G.F. Loewenstein[2]. [1]CHERP, Philadelphia VAMC; University of Pennsylvania School of Medicine and the Wharton School, Philadelphia, PA; [2]Carnegie Mellon University, Pittsburgh, PA; [3]CHERP, Philadelphia VA, Philadelphia, PA; [4]University of Pennsylvania, Philadelphia, PA. *(Tracking ID # 190386)*

BACKGROUND: Identifying effective strategies for treating obesity is both a clinical challenge and a public health priority due to the health consequences of obesity and its contribution to health disparities. This study tests the effectiveness of financial incentives in achieving clinically significant weight loss.
METHODS: 57 subjects at Philadelphia VA Medical Center (mean BMI 34.9, 42% African American) enrolled in a 3-arm randomized controlled trial (RCT) in which all subjects were given weight loss targets of 16 pounds in 16 weeks and a counseling session with a nutritionist. Subjects were randomized to receive either: 1) monthly weigh ins; 2) entry into a daily lottery with a 1 in 5 chance of winning $10 and a 1 in 100 chance of winning $100, with earnings paid only if subjects were below target weights at the end of each month; 3) an option to deposit $.01-$3.00 per day of their own money, matched 1:1 by the investigators, in which subjects received the sum of both amounts plus a fixed payment of $3.00 each day if below their target weight, but were paid nothing (and lost their deposit) if not. All incentives were disbursed monthly once weights were confirmed in clinic. Amount of weight loss in each intervention group was compared to the control group using a two-sided t-test. Analyses of weight loss were done using intention-to-treat, with any subjects lost to follow-up assumed to have their weight return to baseline. The incentive programs were designed to take advantage of behavioral economic concepts of prospect theory, loss aversion, and regret.
RESULTS: The study was fully enrolled with 57 subjects. 17/19 (89.4%) of subjects deposited money in their deposit contracts and 14/17 participants who made initial deposits either held constant or increased their contributions each month. All subjects have completed the four months of trial participation, with low lost to follow-up rates (10.5%). Subjects in both incentive groups lost significantly more weight on average than subjects in the control group (4.0 lbs) (lottery 13.1 lbs, p=0.0151; deposit contract 14.0 lbs, p=0.003). Of the subjects not lost to follow-up in the two incentive arms (32 out of 38), all of them lost weight. The low lost to follow-up rates suggest that this approach to providing daily feedback to keep weight loss salient among participants is feasible.
CONCLUSIONS: Results from a randomized controlled trial of financial incentives for weight loss indicate significantly higher weight loss in the incentive arms of the trial than in the control group. This approach could have a major impact in reducing the incidence of obesity-related illnesses and disparities in the US population.

A RANDOMIZED TRIAL OF AN INFORMATICS-BASED INTERVENTION TO INCREASE BREAST CANCER SCREENING IN A PRIMARY CARE NETWORK S.J. Atlas[1]; W.T. Lester[1]; R.W. Grant[1]; J.M. Ashburner[1]; Y. Chang[1]; M.J. Barry[1]. [1]Massachusetts General Hospital, Boston, MA. *(Tracking ID # 189510)*

BACKGROUND: Among women, breast cancer is the most common cancer worldwide and the second leading cause of cancer deaths. Despite recommendations for mammography testing, screening rates