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Title

Randomized community-based intervention to improve self-management of diabetes among older African Americans and Latinos

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Among the 373 women in the older age group (>30 at the time of surgery), black women were significantly more likely to express desire for reversal compared to white women (aOR: 2.6; 95% CI: 1.2, 5.8). Among the 561 women in the younger age group (18–30 at the time of surgery), Hispanic and black women were equally likely to express desire for reversal as white women (aOR: 1.0, 95% CI: 0.6, 1.8; aOR: 1.1, 95% CI: 0.5, 2.2). Insurance status was not a significant predictor of regret in either of the age strata.

CONCLUSIONS: Among women over age 30 at the time of tubal sterilization, black women were much more likely to express desire for reversal than white women.

RACIAL AND GENDER DIFFERENCES IN REVASCULARIZATION FOR ACUTE CORONARY SYNDROMES. K.M. Freund¹; A.K. Jacobs¹; J.L. Speckman¹; A. Ash¹. ¹Boston University School of Medicine, Boston, MA. (Tracking ID # 173492)

BACKGROUND: Racial and ethnic minority men and women suffer higher mortality from coronary artery disease than white men. It is unknown if mortality differences reflect differences in disease or differences in treatment. Evaluation and revascularization is the standard of care when feasible in Acute Coronary Syndromes, especially for those at high risk. Our objective is to describe revascularization rates with either cardiac stent or coronary bypass grafting after Acute Coronary Syndromes by gender and race/ethnicity, adjusted for age, comorbidity, economic status and geographic variation.

METHODS: We conducted logistic regression analyses to assess stent use or coronary bypass grafting, compared with no cardiac intervention in subjects admitted with acute coronary syndrome. Models controlled for demographics, comorbidities (using claims data of inpatient and outpatient visits) and small area geographic variation. The study population was a random sample of 522,389 White, Black and Hispanic Medicare beneficiaries in 2001, aged 65+ with fee-for-service coverage, and without end stage renal disease. Blacks and Hispanics were oversampled to be able to study racial differences. Results are reported with reweighting to reflect the entire Medicare population.

RESULTS: Of the 22,903 admissions with acute coronary syndrome in the sample, 34% were black, 25% Hispanic, and 41% were white. In bivariate analyses, Black, Hispanic and White women were less likely to receive either stent or coronary bypass grafting than their male counterparts, and Whites had higher rates than Black or Hispanic subjects (all $p < 0.001$). In multivariate logistic regression adjusted for age, comorbidities, diabetes, prior MI or revascularization, CHF, peripheral arterial disease, renal insufficiency, CVD, HTN and economic status, Black and Hispanic men and all women had lower rates of revascularization, compared with their white counterparts (Hispanic men OR=0.56 (CI=0.53–0.56) and women 0.75 (0.71–0.80), black men 0.48 (0.47–0.50) and women 0.69 (0.67–0.71). White women (OR=0.67, CI=0.66–0.68), Hispanic women (OR=0.74, CI=0.68–0.80), and Black women (OR=.92, CI=0.88–0.97) had lower rates of revascularization than the corresponding men.

CONCLUSIONS: In the setting of Acute Coronary Syndromes, all women, Hispanics and Blacks are less likely to receive revascularization than white men. Differences in age, economic status and overall health only partially account for these differences.

RACIAL DIFFERENCES IN JOINT REPLACEMENT EXPECTATIONS AMONG VETERANS WITH OSTEOARTHRITIS. P.W. Groeneweld¹; C. Kwoh²; M.K. Mor³; M. Geng⁴; C.J. Appelt⁴; J.C. Gutierrez⁵; S.A. Ibrahim⁴. ¹Philadelphia VA Medical Center and the University of Pennsylvania, Philadelphia, PA; ²Pittsburgh VA Health Care System and University of Pittsburgh, Pittsburgh, PA; ³Pittsburgh VA Health Care System and The University of Pittsburgh School of Medicine, Pittsburgh, PA; ⁴Pittsburgh VA Health Care System, Pittsburgh, PA; ⁵Philadelphia VA Medical Center, Philadelphia, PA. (Tracking ID # 172508)

BACKGROUND: Joint replacement surgery can dramatically improve the symptoms and functionality associated with osteoarthritis (OA), yet black and white veterans with OA undergo joint replacement surgery at markedly different rates. Patients' expectations of the outcomes of joint replacement surgery are likely to influence their willingness to undergo these elective procedures. There are limited data, however, on whether blacks and whites differ in their expectations of joint replacement outcomes.

METHODS: We surveyed 939 veterans (459 blacks, 480 whites) ages 50–79 who were enrolled in primary care clinics in the VA Pittsburgh Health Care System or the Philadelphia VA Medical Center between 2004–2006. All enrollees were identified as potential candidates for joint replacement as indicated by their high scores on the Western Ontario and McMaster Universities OA Index. The previously validated Hospital for Special Surgery Joint Replacement Expectations Survey (JRES) was used to assess patients' expectations for pain relief, functional improvement, and psychological well-being after surgery. Data were collected in face-to-face interviews with the respondents. Multivariable linear regression models were fitted to the data to assess the relationship of the JRES score (the dependent variable) to age, race, sex, income, education, employment, marital status, symptoms, functional status, and clinical site.

RESULTS: Among hip OA patients (n=296), unadjusted JRES scores among blacks (median=40, interquartile range [IQR]=30–50) were lower than whites' scores

(median=48, IQR=36–60, $p < 0.001$). The adjusted mean score for blacks was 1.3 points lower than for whites ($p=0.009$), and blacks with hip OA were more likely than whites (adjusted odds ratio [OR]=1.19, $p=0.03$) to be in the lowest expectations quartile. Among knee OA patients (n=643), blacks' unadjusted JRES scores (median=44, IQR=33–56) also were lower than scores for whites (median=49.5, IQR=37–63, $p=0.002$). The adjusted mean score for blacks was 0.8 points lower than for whites ($p=0.03$), but blacks with knee OA were not more likely to be in the lowest expectations quartile ($p=0.41$). Both hip JRES scores (OR for 1 point increase=1.06, $p < 0.001$) and knee JRES scores (OR for 1 point increase=1.04, $p < 0.001$) were strongly associated with patients' willingness to undergo surgery.

CONCLUSIONS: Among potential candidates for joint replacement, black veterans have significantly more pessimistic expectations for the outcomes of surgery than white veterans. Furthermore, favorable expectations of surgical outcomes were highly correlated with an increased willingness to consider joint replacement. Together, these findings suggest that interventions designed to enhance minority patients' understanding of the benefits of joint replacement surgery (e.g., testimonial videos, peer counseling, etc.) may be effective in reducing racial disparities in these procedure rates.

RANDOMIZED COMMUNITY-BASED INTERVENTION TO IMPROVE SELF-MANAGEMENT OF DIABETES AMONG OLDER AFRICAN AMERICANS AND LATINOS. C.M. Mangione¹; A. Brown²; C. Sarkisian¹; R.J. Brusuelas¹; K. Norris³; N. Steers¹; M. Davison³; S. Ettner¹; D. Ganz¹; M.M. Funnell⁴; R.M. Anderson⁴. ¹University of California, Los Angeles, Los Angeles, CA; ²University of California, Los Angeles, Los Angeles, AZ; ³Charles R. Drew University of Medicine and Science, Los Angeles, CA; ⁴University of Michigan, Ann Arbor, MI. (Tracking ID # 173704)

BACKGROUND: Although participation in self-care has been shown to improve glycemic control, many persons with diabetes report low levels of physical activity, self-monitoring of blood glucose (SMBG), or following a special diet. To address this problem, we conducted a community-based randomized trial of a behavioral intervention with older Latinos and African Americans designed to enhance participation in diabetes self-care. Our intervention was implemented in English and Spanish, grounded in empowerment theory, and used individualized goal-setting and problem-solving to effect behavior change.

METHODS: From 2004 to 2005, we recruited participants from senior centers, churches, and community clinics who were African American or Latino, English or Spanish speaking, ≥ 55 years and had hemoglobin A1c $\geq 8\%$. All Latino group sessions were conducted in Spanish. We gave each participant a glucose meter and strips and instruction on their use. Participants were then randomized to either 6 weekly diabetes intervention group meetings that were facilitated by a trained health educator or to a 6 weekly control group health lectures unrelated to diabetes. As dictated by empowerment theory, the content of each session was participant driven yet also included strategies for enhancing physical activity, eating a healthier diet, managing multiple medications, and control of risk factors such as blood pressure, cholesterol, and glycemia. Our primary endpoint was change from baseline to 6-month follow-up in hemoglobin A1c. We also measured change in a number of potential mediators such as diabetes knowledge, self-efficacy, and reported participation in self-care and other intermediate outcomes including systolic blood pressure (SBP), LDL cholesterol (LDL), and body mass index (BMI).

RESULTS: The 258 intervention and 258 control participants were 38% African-American and 62% Latino. Mean age was 63 years, 71% were female, 70% had an income less than \$15,000 per year, 43% were uninsured, and less than half had ever had diabetes education. Six-month follow-up data were available for 223 intervention and 217 control participants. At baseline, mean hemoglobin A1c was 9.6% (intervention) and 9.7% (control), mean (SD) SBP was 141 (20) (intervention) and 141 (19) (control), and mean (SD) LDL-cholesterol was 119 (35) (intervention) and 120 (37) (control). At follow-up, mean hemoglobin A1c improved by 1.0% for the intervention group and by 0.5% for the controls ($p=0.016$ between trial arms). None of the potential mediators tested improved at follow-up. Additionally, SBP, LDL-Cholesterol, and BMI did not improve in either group.

CONCLUSIONS: This simple, community-based, low-cost behavioral intervention designed to improve self-care of diabetes among poor, low literacy populations did significantly improve glycemic control but did not improve other important intermediate outcomes associated with risk for complications, such as blood pressure and cholesterol levels. The 0.5% decrease in A1c between trial arms, if sustained over time, potentially could confer a 15% reduction in end-stage renal disease or progression to blindness. Easy access to diabetes programs designed to support personal self-management could mitigate long-term complications among some of the highest risk populations for poor outcomes.

RECENT DRUG USE AND HOMELESSNESS ARE ASSOCIATED WITH INCREASED SHORT-TERM MORTALITY IN HIV-INFECTED PERSONS WITH ALCOHOL PROBLEMS. A.Y. Walley¹; D. Cheng¹; H. Libman²; D. Nunes¹; C.R. Horsburgh¹; R. Saitz¹; J. Samer¹. ¹Boston University, Boston, MA; ²Harvard University, Boston, MA. (Tracking ID # 172595)