HEALTH LITERACY, COMMUNICATION, AND COST-CUTTING STRATEGIES IN MEDICARE PART D: THE TRANSLATING RESEARCH INTO ACTION FOR DIABETES (TRIAD) STUDY

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HEALTH INFORMATION SOURCES AND RISK REDUCTION BEHAVIORS: A PERSPECTIVE FROM THE 2005 HEALTH INFORMATION NATIONAL TRENDS SURVEY (HINTS 2005)

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BACKGROUND: Differences in health communication may influence racial/ethnic disparities in health status. It is unclear whether sources of health information are associated with behaviors such as diet, exercise, and cancer screening and if such associations vary by race/ethnicity.

METHODS: We utilized the 2005 Health Information National Trends Survey (HINTS), a cross-sectional, nationally representative survey of non-institutionalized U.S. adults, to assess the relationship of general health information sources (e.g., print media/newspaper/magazine), television (TV), and internet and social networks (e.g., friends/family; community organizations) to cancer screening and other health behaviors (five daily fruit/vegetable servings, exercise 30 min/day five days weekly, and non-smoking). We then assessed whether these associations varied by participant race/ethnicity. We utilized nationally published recommendations to classify respondents as meeting/not meeting guidelines for each health behavior and as users/non-users for each information source. Multivariable logistic regression models for each behavior were adjusted for other information sources as well as age, race/ethnicity, gender, education, income, cancer history, and general health status, using weights to account for the complex sampling design. Interaction terms were used to evaluate racial/ethnic variation in the observed associations.

RESULTS: The 2005 HINTS had 5586 respondents (representing approximately 357 million adults) who were 66% Non-Hispanic White, 12% Hispanic, and 10% Non-Hispanic Black. Friends and family were the most frequent sources of health information (76%) compared to TV (70%), print media (60%), internet (39%), and community organizations (23%). Only 6% met recommendations for diet, 24% for exercise, and 78% were non-smokers. The majority of eligible respondents received age-appropriate mammography (84%) and pap tests (93%); however, only 49% of eligible respondents received age-appropriate colonoscopy. Participants who used the internet for health information were less likely to meet recommendations for exercise (OR 0.71, [0.57–0.90]). The odds of being a non-smoker was increased if health information was obtained from print media (OR 1.22, [1.02–1.45]), community organizations (OR 1.92, [1.41–2.63]), or friends and family (OR 1.39, [1.04–1.84]). TV for health information was associated with increased odds of receiving mammography (OR 1.63, [1.11–2.39]). Increased odds of colonoscopy occurred among users of print media (OR 1.41, [1.20–1.67]), TV (OR 1.52, [1.22–1.90]), community organizations (OR 1.49, [1.20–1.85]), or friends/family (OR 1.57, [1.15–2.14]. There were no significant interaction terms.

CONCLUSION: Print media and social networks are most consistently associated with adoption of healthy behaviors nationally. Most of the observed associations between health information sources and behavioral outcomes did not vary by race/ethnicity. Additional research in clinical settings should explore the relations of health information sources with clinical outcomes and should develop social network interventions to promote adoption of healthy behaviors. Policy makers should focus efforts on better utilizing social networks to disseminate health recommendations.

HEALTH MODIFIERS OF HIV HIGH RISK BEHAVIOR IN A COHORT OF HOMELESS WOMEN

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BACKGROUND: The burden of HIV falls disproportionately on minority women who are homeless or in unstable housing. Homeless women face numerous challenges and often engage in high risk behaviors to sustain competing needs of finding food, shelter and caring for their children. There are no studies to date exploring the association between health modifiers and their impact on high risk behaviors. We sought to determine if homeless women with frequent health care utilization had decreased HIV risk behavior profiles in comparison to those who infrequently accessed medical care.

METHODS: We conducted bivariate and multivariate logistic regression analyses on data from a cohort of 329, randomly selected, shelter-dwelling women to determine the association between health care utilization and HIV high risk behaviors. The independent variable was health care utilization defined as a primary care physician (PCP), obstetrician/gynecologist (Ob/Gyn) or emergency department (ED) encounter within one year. The dependent variable was any high risk behavior over the last 3 months, subdivided into three categories: sexual risk, partner risk, and drug risk behaviors. High sexual risk behavior was defined as unprotected sex, high partner risk behavior as sexual activity with a partner who was high risk, and high drug risk behavior as sexual activity under the influence of alcohol or drugs.

RESULTS: The health care utilization patterns over a period of one year demonstrated that 48.9% reported visiting a PCP, 51.1% visited an Ob/Gyn, and 55.4% had an ED encounter. HIV high risk behaviors were highly prevalent in this population with 66.1% of the respondents reporting engaging in unprotected sexual intercourse, 45.3% engaging in sexual intercourse with a partner who carried a high risk profile, and 35.7% having concurrent drug and/or alcohol use with sexual activity. Of those who visited their PCP, 64.5% reported high sexual risk costs. Patients were part of the Translating Research into Action for Diabetes (TRIAD) Study, a multicenter study of diabetes care in managed care. Low-income qualifiers, who did not have a coverage gap, were excluded. Patients who reported that they were somewhat, a little, or not at all confident filling out medical forms by themselves had to have low health literacy. This single-item question has been previously validated against the Rapid Estimate of Adult Literacy in Medicine (REALM) and Test of Functional Health Literacy in Adults (TOFHLA) measures. To examine the associations of health literacy with 1) patient-provider communication and 2) potentially harmful cost-cutting strategies, we constructed multivariate logistic regression models adjusting for age, gender, race/ethnicity, income, education, comorbidities, and number of medications. Results were expressed as predicted percentages.

RESULTS: Twenty-three percent of patients had low health literacy, and 70% had no drug coverage in the doughnut hole. Compared to patients with adequate health literacy, patients with low health literacy were more often Spanish-speaking (40% vs. 14%, p<0.001), more likely to report annual incomes <$25,000 (50% vs. 35%, p<0.001), less likely to have graduated high school (61% vs. 88%, p<0.001), and less aware of the coverage gap prior to 2006 (77% vs. 85%, p<0.001). Patients with low health literacy were also more likely to report that their provider switched medications to cheaper/less expensive options (55% vs. 46%, p<0.05). The percent reporting discussions about the amount paid for medications (44% vs. 43%, p=0.64), medications not to skip (51% vs. 52%, p=0.69), information on where to get less expensive medications (18% vs. 19%, p=0.66) or reducing the number of medications due to cost (8% vs. 8%, p=0.81) were the same. Nor were differences seen in cost-cutting strategies like using fewer medications due to cost (20% vs. 19%, p=0.74), going without necessities (12% vs. 12%, p=0.38). There were no significant differences in over-the-counter medications (9% vs. 8%, p=0.57).

CONCLUSION: Despite being less aware of the coverage gap at the start of 2006, Medicare Part D patients with low health literacy did not report either communicating less with their providers about the cost of medications or increased use of cost-cutting strategies during 2006. Factors other than health literacy that have been previously linked to patient cost-related behaviors, such as income, may be more important determinants of cost-containment discussions and the strategies used to reduce costs.

HEALTH LITERACY, COMMUNICATION, AND COST-CUTTING STRATEGIES IN MEDICARE PART D: THE TRANSLATING RESEARCH INTO ACTION FOR DIABETES (TRIAD) STUDY

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BACKGROUND: Under Part D, most Medicare patients lose some or all of their prescription drug benefits after exceeding a spending threshold (the “coverage gap” or “doughnut hole”). Patients with low health literacy may skip scheduled medications or engage in other potentially harmful cost-cutting strategies, particularly in the absence of provider communication about the coverage gap. We examined whether health literacy is associated with cost-cutting strategies or communication with providers, among Medicare Part D patients.

METHODS: We analyzed a 2007 computer-assisted telephone survey that asked 2011 diabetes patients about their experiences with Medicare Part D in 2006. All had exceeded their $2250 spending threshold for total drug costs. Patients were part of the Translating Research into Action for Diabetes (TRIAD) Study, a multicenter study of diabetes care in managed care. Low-income qualifiers, who did not have a coverage gap, were excluded. Patients who reported that they were somewhat, a little, or not at all confident filling out medical forms by themselves had to have low health literacy. This single-item question has been previously validated against the Rapid Estimate of Adult Literacy in Medicine (REALM) and Test of Functional Health Literacy in Adults (TOFHLA) measures. To examine the associations of health literacy with 1) patient-provider communication and 2) potentially harmful cost-cutting strategies, we constructed multivariate logistic regression models adjusting for age, gender, race/ethnicity, income, education, comorbidities, and number of medications. Results were expressed as predicted percentages.

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