

increasing awareness and knowledge among people with disabilities and their health care providers to support the need for testing and diagnosis of diabetes.

Urinary phthalates and metabolic syndrome in U.S adults (NHANES 2005–2014): examining potential differences by sex and race



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Purpose: Phthalates, plasticizers ubiquitous in household and personal care products, are associated with metabolic disturbances including diabetes and obesity. This study assessed whether the association between urinary phthalate concentrations and metabolic syndrome (MetS) varies by race and sex.

Methods: Using 2005–2014 National Health and Nutritional Examination Survey (NHANES) data, a cross-sectional analysis of eleven urinary phthalates in relation to MetS was conducted among 10,924 adults ages ≥ 18 years. Phthalates were analyzed in quartiles (individually and DEHP metabolites). MetS (dichotomous) was defined as having at least three of five criteria. Race was analyzed as White (W), African American (AA), and Mexican American/Hispanics (MA). Prevalence odds ratios (POR) and 95% Confidence Intervals (CI) were estimated using weighted sex and race stratified multivariable logistic regression.

Results: Overall, the prevalence of MetS was 25%. Higher MCOP levels were significantly associated with increased odds of MetS among women (POR_{Q4vsQ1}=1.45, 95%CI: 1.12,1.87; p-trend=0.01) but not men. In race-stratified analyses, this association was observed only among W females (POR_{Q4vsQ1}=1.73, 95%CI:1.24,2.41; p-trend=0.001). Significant associations were observed between MiBP levels and MetS among AA males (POR_{Q4vsQ1}:1.93, 95% CI:1.04, 3.58; p-trend=0.01) and MA females (POR_{Q4vsQ1}= 1.95, 95% CI: 1.04, 3.65; p-trend=0.12). DEHP metabolites were associated with increased odds of MetS among men only (POR_{Q4vsQ1}= 1.46, 95% CI:1.07, 1.98; p-trend=0.04) with no differences by race.

Conclusions: Select urinary phthalate metabolites may be differentially associated with MetS when sex and race are considered. Assessing such associations provides insight into racial disparities, such that more targeted interventions can be developed.

Oral health service use among U.S. adults aged 18 to 64 years by disability status and state Medicaid expansion status



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Purpose: Given operation of Health Insurance Marketplaces and Medicaid expansion following enactment of the Patient Protection and Affordable Care Act, adults may have increased access to dental benefits through health insurance plans that include dental benefits or stand-alone dental plans. We estimated the prevalence of oral health service use among adults by disability status and state Medicaid expansion status.

Methods: We used the 2016 Behavioral Risk Factor Surveillance System to assess prevalence of oral health service use by disability status (hearing, vision, cognition, mobility, self-care, or independent living) and state Medicaid expansion status (n = 271,256). We used weighted, log-binomial regression to estimate prevalence ratios (PR) and 95% confidence intervals (CI) while adjusting for socioeconomic and health-related characteristics.

Results: The age-adjusted prevalence of a dental visit was lowest among adults with disabilities residing in nonexpansion states (49.3%) and highest among adults without disabilities residing in Medicaid expansion states (70.7%). After full adjustment, compared to adults without disabilities in nonexpansion states, oral health service use was more prevalent among adults without disabilities in expansion states (PR 1.04, 95% CI: 1.03–1.05) and less prevalent among adults with disabilities in nonexpansion states (PR 0.87, 95% CI: 0.85–0.90). Moreover, adults with disabilities residing in Medicaid expansion states were more likely to report a dental visit compared to adults with disabilities residing in nonexpansion states (PR 1.13, 95% CI: 1.10–1.16).

Conclusion: Disparities in oral health service use exist for adults with disabilities compared to those without disabilities, and are larger for adults in non-expansion states.

Trends in utilization of metabolic and bariatric surgery procedures by race-ethnicity: A state-wide analysis



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Purpose: Trends in metabolic and bariatric surgery (MBS) procedure utilization have changed over the last two decades in the United States. This analysis examined patterns of MBS utilization by procedure type and race-ethnicity in Florida.

Methods: Secondary analysis of 2006 - 2017 Florida hospital inpatient records collected via the Agency for Health Care Administration (AHCA) data was performed. Using the International Classification of Diseases 9th or 10th edition codes, MBS recipients ≥ 16 years old of 4 groups (non-Hispanic White [NHW], non-Hispanic Black [NHB], Hispanic, and Other) who had (1) Sleeve Gastrectomy (SG), (2) Laparoscopic Roux-en-Y Gastric Bypass (RYGB), or (3) Laparoscopic Adjustable Gastric Banding (LAGB) were included.

Results: A total of 87,193 records were included in the analytical sample. In 2006 (n=4,220), 66.4%, 24.8%, and 8.8% were RYGB, LAGB, and SG recipients, respectively. In 2017 (n=11,340), 78.5%, 21.1%, and 0.3% were SG, RYGB, and LAGB recipients, respectively. RYGB was the most common procedure (range: 48.4–66.4%) from 2006 to 2012 (n=5,941). Since 2013 (n=6,597), the most common procedure was SG (range: 59.0–78.5%). While 24.8% received LAGB in 2006, they only represented 0.3% of procedures in 2017. Regardless of the procedure type, NHWs received the highest proportion of MBS in all years. In general, more NHBs received LAGB compared to Hispanics. Conversely, more Hispanics received RYGB than NHBs.

Conclusions: Etiological investigation of the secular trend in MBS procedure by race-ethnic groups warrants further analysis, particularly given that ethnic minority groups are disproportionately affected by severe obesity-related comorbidities versus NHWs.

Conflict of Interest: None.

Cardiovascular disease, risk factor profile and self-reported health in Arizona



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Purpose: Despite decline in cardiovascular mortality trend in the United States, cardiovascular disease still accounts for nearly 40 percent of the leading causes of death in Arizona. This study aimed to determine the cardiovascular profile and self-reported health status of adults aged 18 years and older in Arizona.

Methods: A cross-sectional secondary data analysis of 5665 study participants from the Arizona Behavioral Risk Factors Surveillance System was done. This was a state-wide telephone survey of randomly selected adults sorted based on area codes. Input variables was cardiovascular profile and sociodemographic characteristics, and the outcome variable was self-reported health. The χ^2 test was used to find an association between the cardiovascular profile and self-reported health. A binary logistic regression model was used to explain the relationship between population characteristics and self-reported cardiovascular events.

Results: Prevalence of cardiovascular disease was 53.3%: hypertension (38.8%), myocardial infarction (9.7%), and stroke (4.8%). Male and female prevalence of diabetes, tobacco use was (16.0%, 14.5%) and (2.2%, 1.4%), respectively. Overall poor self-reported health was 49.0%. Hypertension was significantly associated with poor self-reported health [1.67 (1.5, 1.8)]. Education [0.7 (0.49; 0.99)]; never married [1.25 (1.03; 1.26)]; diabetes [0.85 (0.72; 0.98)]; male sex [1.13 (1.01; 1.26)] were significant predictors of cardiovascular health.

Conclusion: Hypertension is a major contributor to cardiovascular disease burden in Arizona. There is a slight gender disparity in the prevalence of cardiovascular disease/risk factors. The relationship between cardiovascular disease and self-reported health should be further explored in measuring cardiovascular disease related morbidity and quality of life.