Factors associated with unintended pregnancy in cancer survivors after cancer

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OBJECTIVES/SPECIFIC AIMS: In the United States, it is estimated that approximately half of all pregnancies are unintended. This study examines the prevalence of unintended pregnancy in a cohort of cancer survivors and identifies factors associated with unintended pregnancy after cancer. METHODS/STUDY POPULATION: The FUCHSIA Women’s Study is a population-based study of female cancer survivors at a reproductive age of 22–45 years. Cancer survivors diagnosed between the ages of 20 and 35 years and at least 2 years postdiagnosis were recruited in collaboration with the Georgia Cancer Registry. Participants were interviewed about their reproductive histories. The prediagnosis analysis included all women who completed the interview; the postdiagnosis analysis excluded those who had a hysterectomy, bilateral oophorectomy, or tubal ligation by cancer diagnosis. RESULTS/ANTICIPATED RESULTS: Of the 1282 survivors interviewed, 57.5% reported at least 1 pregnancy before cancer diagnosis; of which, 44.5% were unintended. Of the 1088 survivors included in the postdiagnosis analysis, 36.9% reported a post-cancer pregnancy. Among those who had a pregnancy after cancer diagnosis, 38.6% reported at least 1 pregnancy was unintended. Of the 80 breast cancer survivors who had a pregnancy after diagnosis, 52.5% of them were unintended. Predictors of unintended pregnancy in cancer survivors included being younger than 30 years at diagnosis (odds ratio [OR] 2.1; 95% confidence interval [CI] 1.4, 2.9), identifying as Black (OR 1.6, 95% CI 1.1, 2.3, comparison: White), and having resumption of menstrual activity after cancer treatment (OR 8.1, 95% CI 2.0, 33.0). Compared with being ≥4 years from cancer diagnosis, those who were farther from diagnosis at the time of the interview also had increased odds of unintended pregnancy (4–7 years: OR 1.5, 95% CI 0.9, 2.7; 8–10 years: OR 1.3, 95% CI 0.7, 2.4; >10 years: OR 2.7, 95% CI 1.6, 4.7). DISCUSSION/SIGNIFICANCE OF IMPACT: Despite being at higher risk of infertility, cancer survivors may still be at considerable risk of unintended pregnancy. Women with certain types of cancer that are more likely to be hormone responsive, such as some types of breast cancer, may be hesitant to use hormonal birth control and thus be at higher risk of unintended pregnancy. Counseling for cancer survivors should include a discussion of the risk of unintended pregnancy and contraceptive options.

A confounder assessment of patient frailty in the relationship between anti-diabetic medication and heart failure

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OBJECTIVES/SPECIFIC AIMS: This study is part of a parent grant evaluating antidiabetic medications and risk for heart failure in an observational cohort of Veterans with type 2 diabetes (T2DM). Confounding by indication remains a concern in many observational studies of medications because difficult to measure confounders such as frailty may influence prescribing of different medications based on patient characteristics. Frailty is a multidimensional syndrome of loss of reserves (energy, physical ability, cognition, health) that gives rise to vulnerability to adverse outcomes. The objective of this study is to determine if frailty is a potential confounder in Veterans with T2DM, that is, independently associated with exposure to a specific antidiabetic medications and adjustment for potential confounding from frailty. METHODS/STUDY POPULATION: We conducted a cross-sectional study of patients with diabetes who were hospitalized within the Veterans Health Administration (VHA) Tennessee Valley Healthcare System from 2002 to 2012. Inclusion criteria were: age 18 years or older, receive regular VHA care (prescription fill or visit at least once every 180 d), a diagnosis of T2DM. A probability sample of HF and non-HF hospitalizations was collected. HF hospitalizations were selected on the basis of meeting either a primary diagnosis code (ICD-9) and/or disease related group (DRG) code for HF. For each hospitalization using a standardized chart abstraction tool, data was abstracted on: antidiabetic medication(s), patient reduced confounding due to access to care and insurance status. Future research is needed to confirm this finding in other populations and to assess if efforts to minimize the impact of T2DM following disasters reduce CVD risk and premature CVD events among older adults.

Post-traumatic stress disorder associated with Hurricane Katrina predicts cardiovascular disease events among elderly adults

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OBJECTIVES/SPECIFIC AIMS: Cardiovascular disease (CVD) is the leading cause of death among US adults and its prevalence is increasing, despite efforts to identify, and address risk factors. Post-traumatic stress disorder (PTSD) has been identified as a potential risk factor for CVD, though the results to date have focused on male veterans with combat-related PTSD. To our knowledge, there are no prospective analyses/reports among older community-dwelling adults following Hurricane Katrina. The purpose of this study was to explore the link between PTSD associated with Hurricane Katrina and incident CHD among elderly adults using data from the Cohort Study of Medication Adherence among Older Adults (CoSMO). METHODS/STUDY POPULATION: PTSD was assessed among male and female survivors of Hurricane Katrina using the PTSD Checklist (PCL) between March 2007 and February 2008. PTSD diagnosis was confirmed by a structured interview using the PTSD Checklist (PCL-5). PTSD diagnosis among elderly adults was associated with increased risk of CHD and all-cause mortality through young adulthood was associated with high HOMA-IR (referent: low-stable). DISCUSSION/SIGNIFICANCE OF IMPACT: Knowledge of changes in IR throughout increasing HOMA-IR trajectory through young adulthood was associated with greater prevalent CVD events among older adults.