Submission Id: 6077

Title

The Relationship Between Cardiovascular Risk, Gender Identity, Sex Assigned at Birth, and Depression Among Transgender People

Priority 1 (Research Category)

Big Data

Presenters

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Abstract

Context: Significant structural barriers exist concerning access to healthcare for transgender (TG) individuals. These barriers may prevent TG from receiving the necessary care to address chronic conditions, such as cardiovascular disease (CVD). It is important to understand how gender identity, sex assigned at birth, and other psychosocial factors influence CVD in this vulnerable population.

Objective: To investigate the connections between gender identity, sex assigned at birth, and depression in relation to CVD among TG.

Study Design and Analysis: A cross-sectional study was conducted to estimate the adjusted prevalence ratios (aPR) and 95% CI using survey weights with cox proportional hazard regression model.

Setting or Dataset: Secondary analysis of the CDC state-specific Behavioral Risk Factor Surveillance System (BFRSS) surveys conducted from 2019 to 2022.

Population Studied: Adult, community-dwelling, non-institutionalized TG (N=6,238).

Intervention/Instrument: From the BRFSS, we used Self-reported depressive disorder, which includes either depression, major depression, dysthymia, or minor depression.

Outcome Measures: CVD outcomes includes self-reported Heart Attack/Myocardial Infarction, Coronary Heart Disease/Angina, Stroke, or any CVD; cardiovascular risk includes Diabetes Mellitus.

Results: Transgender status (i.e., transgender male, transgender female) did not significantly predict any of the CVD outcomes. However, sex assigned at birth and depression significantly predicted all the CVD outcomes, with presence of depression leading to higher aPRs across all outcome measures. TG who had depression were approximately 4.4 times more likely to have coronary heart disease/angina (aPR = 4.40, p < .001) and were approximately 3.5 times more likely to have a stroke (aPR = 3.42, p < .001). Subgroup analyses revealed that individuals who were assigned male at birth and had depression were 4.75 times more likely to have coronary heart disease/angina (aPR = 4.75, p < .001), and 3.76 times more likely to have had a stroke (aPR = 3.76, p <.001).

Conclusions: Having depression significantly increased the risk of CVD in TG. TG who were assigned male at birth and had depression were more likely than those who were assigned female at birth to have one of the CVD outcomes. This study highlights how depression plays a crucial role in CVD among TG and more research is needed on potential mitigation strategies to reduce depression and CVD outcomes in this