Poster 31: Severe maternal morbidity is increased among pregnant persons with gynecological malignancies

Katherine C. Fitch, MD – Oregon Health & Sciences University

Topic: Other (Epidemiology and outcomes)

Objectives

In this study, we sought to examine whether pregnant individuals diagnosed with a gynecologic malignancy experienced higher rates of severe maternal morbidity (SMM).

Methods

This was a retrospective cohort study of deliveries at 23 to 42 weeks of gestation in California between the years of 2007 and 2011. Gynecologic malignances included uterine, ovarian, cervix, and vulvar cancer. SMM was defined using an already published algorithm. Potential confounders included race/ethnicity, maternal age, body mass index, education level, insurance status, parity, smoking history and number of prenatal visits. Chi-square and multivariable logistic regression analyses were performed for statistical comparisons.

Results

In the cohort of 3,153,851 a total of 981 (0.03%) deliveries impacted by a gynecologic cancer diagnosis were identified. SMM was approximately 3 times more common in pregnancies impacted by a gynecologic malignancy (4.33%) compared to those that were not (1.12%), with an odds ratio of 3.86 (95% CI: 2.74-5.45). The odds of SMM was highest among Black individuals with gynecologic malignancy compared to all other racial/ethnic groups (aOR 2.03, 95% CI: 1.94-2.13). When examining the conditions driving the increase in SMM, we found that hysterectomy (aOR 27.04, 95% CI: 17.60-41.52) and blood transfusion (aOR 2.3, 95% CI: 1.44-3.67) were occurring more frequently.

Conclusions

The risk of SMM is significantly higher among pregnant individuals with gynecologic malignancies. Within this population, Black pregnant people experienced the highest risk of SMM relative to all other racial/ethnic groups. More work is required to address on-going racial disparities and to optimize outcomes for all pregnant individuals with gynecologic cancer diagnoses.