Endometrial cancer risk and trends among distinct African-descent populations

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Current evidence indicates Black women in the U.S. are at greater risk of developing advanced uterine cancer, also known as endometrial cancer, and of developing its more aggressive form—non-endometroid cancer—than white women.

But research to date has mostly studied Black women as a homogenous group, and there is limited data about specific African-descent subpopulations worldwide. That is until now.

A new study by researchers with Sylvester Comprehensive Cancer Center and the University of Miami Miller School of Medicine compared both the overall incidence and trends for endometrial cancer between African-descent women in the U.S. (Florida) and the French Caribbean, specifically the islands of Martinique and Guadeloupe, where most residents are Black or mixed-Black and quality health data is available.

Their study, which appears in Cancer, found that endometrial cancer rates are related to factors beyond ancestry, including social determinants of health such as diet, psychosocial and physiological chronic stress and neighborhood/built environmental factors, among others.
"We need to disentangle the endometrial cancer disparities among Black women by focusing more on subpopulations, specifically on differences between countries and their associated socioeconomic factors while concentrating on patterns for the deadlier non-endometrioid subtype," said Heidy N. Medina, Ph.D., MPH, researcher with UM's Miller School of Medicine and the study's corresponding author.

As of 2022, endometrial cancer was the fourth most common cancer for U.S. Black women with one of every 10 newly diagnosed cases being a woman of African descent, the authors noted. Black women experience a higher incidence than white women in the U.S. and their rates are rising more rapidly.

Medina and collaborators, including Frank Penedo, Ph.D., Sylvester's associate director for Cancer Survivorship and Translational Behavioral Sciences, Tulay Koru-Sengul, Ph.D., Matthew P. Schlumbrecht, MD, MPH, and senior author Paulo S. Pinheiro, MD, Ph.D., analyzed data on almost 35,000 endometrial cancer cases from Florida and the French Caribbean from 2005 to 2018 for this study. Key findings included:

- Black women in the U.S. had a higher incidence of endometrial cancer and its more aggressive non-endometrioid subtype than did U.S. white women, consistent with current evidence.
- Surprisingly, French Caribbean women had the lowest incidence for both endometrioid and non-endometrioid subtypes.
- Endometrioid uterine cancer increased 1.8% yearly for U.S. Black women and 1.2% for U.S. white women during the timeframe, with no change observed for French Caribbean women.
- Rates of the more lethal non-endometrioid cancer subtype increased among all groups, with the greatest increase occurring among U.S. Black women.
"Our study supports current evidence that Black women in the U.S. are disproportionately affected by endometrial cancer, but also highlights key differences among African-descent subpopulations that should not be overlooked," Penedo explained. "These differences among Black women in different regions of the world are partly due to social factors and not solely related to genetic factors."

Dr. Pinheiro, a Sylvester cancer epidemiologist, agreed. "This research shows cancer trends for U.S. Black women cannot be generalized to other African-descent populations worldwide where limited data exists," he said. "The study underscores the importance of improving data collection in specific regions to better assess cancer risks for different population groups."

Next steps, the researchers noted, are to examine differences between the majority African-descent populations of the French Caribbean to that of the predominantly white French mainland in collaboration with our colleagues in the Université des Antilles, Clarisse Joachim, MD, Ph.D. and Jacqueline Deloumeaux, MD, Ph.D., to better pinpoint existing disparities.

"Additionally, we must pay particular attention to investigate risk factors for the more aggressive non-endometrioid subtype that is rising among all three groups in our current research," Medina concluded.
