Older Black men are more likely to die after surgery than others, particularly following elective procedures

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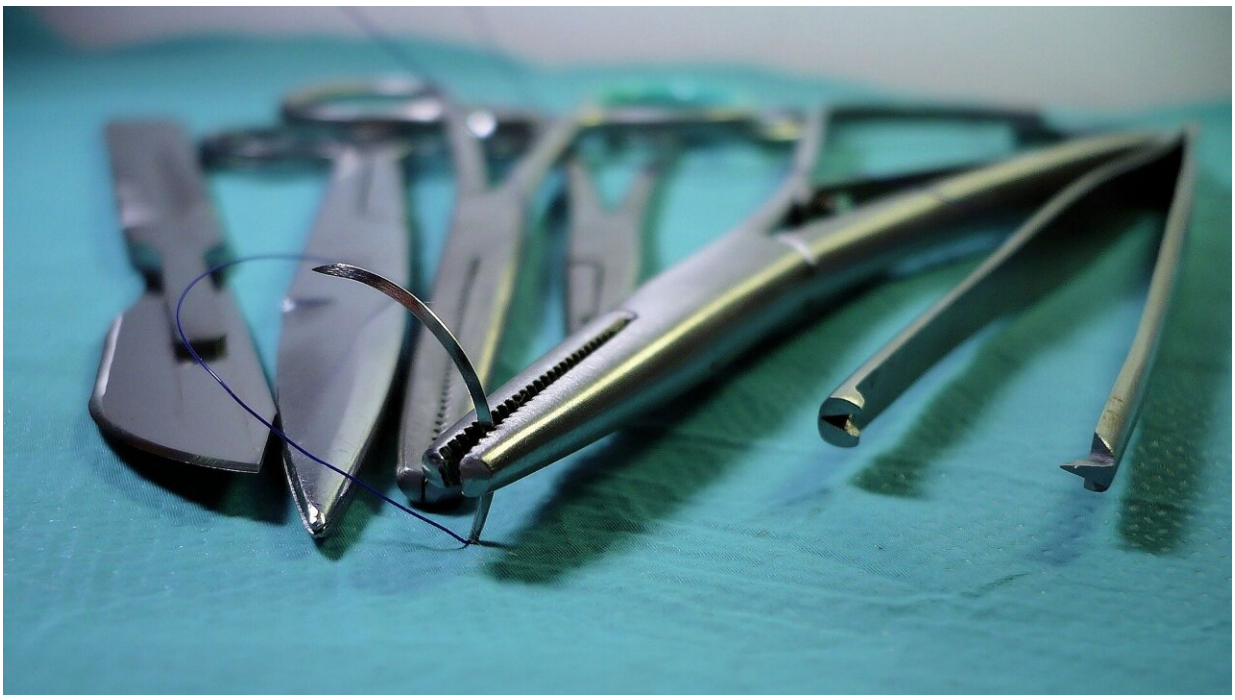

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Older Black men have a higher chance of dying within 30 days of surgery than do Black women and white men and women—with their odds of death 50% higher after elective surgery compared with white men.

The researchers suspect that the "especially high cumulative amounts of stress and allostatic load" that Black men face the U.S. may significantly contribute to declines in their physical health, they write.

"While a fair bit is known about such inequities, we find in our analyses that it's specifically Black men who are dying more, and they are dying more after elective surgeries, not urgent and emergent surgeries," said study lead Dr. Dan Ly, assistant professor of medicine in the division of general internal medicine and health services research at the David Geffen School of Medicine at UCLA. "Our findings point to possibilities such as poorer pre-optimization of co-morbidities prior to surgery, delays of care due to structural racism and physician bias, and worse stress and its associated physical burden on Black men in the United States."

The study was published March 1 in the peer-reviewed journal *The BMJ.*

The researchers examined Medicare data from 2016 through 2018, which were the most recent data available when they began the research, for about 1.87 million Black and white beneficiaries ages 65 to 99 years. These people had undergone one of eight common surgeries: abdominal aortic repair, appendectomy, cholecystectomy, colectomy, coronary artery bypass, hip replacement, knee replacement, and lung resection. These procedures were performed both planned (elective) and unplanned (urgent or emergent).

They found that overall, Black men had a higher adjusted mortality rate even after accounting for other differences between patients. For Black men, the mortality rate was about 3.05% compared with 2.69% among white men, 2.38% among white women, and 2.18% among Black women. This trend largely persisted with elective surgeries, with a death rate of 1.30% among Black men, compared with white men at 0.85%,

white women at 0.82%, and Black women at 0.79%. The disparity between Black and white men began as early as seven days after surgery and was still present 60 days after surgery.

Structural racism may partly explain the disparity, the researchers write. For instance, predominantly Black neighborhoods are often near hospitals lacking high-quality health care resources such as specialists, including surgeons with advanced training, as well as the latest diagnostic imaging studies and tests. This can lead to treatment delays resulting in more advanced disease or more difficult surgeries.

In addition, poorer pre-operative care for conditions such as diabetes and hypertension, and more exposure to toxic hazards that are frequently found near their neighborhoods that can increase disease severity, may also contribute to the disparity.

"These differences in neighborhood, home environment and community resources may make it more challenging for Black patients, on average, to recover at home and to make postoperative clinical visits," they note. "Our finding that Black men experience a higher surgical mortality compared with other subgroups of race and sex is troubling, and is also seen with shorter life expectancy among Black men more generally."

Study limitations include a focus on Black and white patients to the exclusion of other racial and ethnic groups; the observational nature of the study, which may have missed other contributory factors; and that the data are from the Medicare fee-for-service population, so the results may not apply to other populations.

More information: Inequities in surgical outcomes by race and sex in the United States: retrospective cohort study, *The BMJ* (2023). DOI: 10.1136/bmj-2022-073290