Blood transfusion, once considered a low-risk procedure used to offset anemia, is itself associated with adverse outcomes in patients undergoing cardiac and noncardiac surgical procedures.
Black patients in the U.S. are more likely to receive perioperative red blood cell (RBC) transfusions for two of three frequently performed surgical procedures, posing a risk for favorable outcomes, a study by University at Albany School of Public Health researcher Feng Qian finds.

The report cites three common surgeries—coronary artery bypass surgery, total hip replacement, and colectomy. The findings indicate that black patients, most often younger and under-insured, had more comorbidities and were more likely to receive RBC transfusions for two of the three procedures examined.

The study found black patients undergoing coronary artery bypass surgery had a 41 percent higher incidence of receiving a perioperative RBC transfusion and blacks undergoing total hip replacement had 39 percent higher incidence of transfusion.

Blood transfusion is widely employed in contemporary surgical practices. The majority of the 15 million units of allogeneic RBCs transfused annually in the United States are administered to patients undergoing surgical procedures.

**Blood transfusions are common**

Yet blood transfusion, once considered a relatively low-risk procedure used to offset anemia, is itself associated with adverse outcomes in patients undergoing cardiac and noncardiac surgical procedures, including in-hospital mortality and postoperative complications.

The study, "Racial disparities in the use of blood transfusion in major surgery," published in the peer-reviewed journal *BMC Health Services Research*, examined the use of perioperative RBCs using patient data from the University HealthSystem Consortium, a network of academic
medical centers and affiliated hospitals. Data represented 90 percent of the contemporary hospitalizations at academic medical centers.

The data were fully encrypted so as not to identify specific patients, physicians, or hospitals. In addition to patient demographic characteristics, admission status, diagnoses, procedures, present-on-admission, severity of illness, and a comprehensive set of comorbidities, detailed information about inpatient blood transfusion was available.

**More information:** The complete study is available online:
[www.biomedcentral.com/content/… 1472-6963-14-121.pdf](www.biomedcentral.com/content/… 1472-6963-14-121.pdf)

Provided by University at Albany


This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.