

Katelynn M. Donnelly

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LSU Health Sciences Center, New Orleans, LA

Andrew Chapple, PhD

LSUHSC, Biostats Program, School of Public Health

Peter C. Krause, MD

LSUHSC, Department of Orthopaedics

Vinod Dasa, MD

LSUHSC, Department of Orthopaedics

“Lack of Demographic Information in THA/TKA Randomized Controlled Trial Publications”

Introduction: The impact of social determinants of health (SDOH) has been documented in orthopedic literature. However, there is a lack of data on the inclusion of these variables in orthopedic studies. Our aim was to investigate how many THA and TKA randomized controlled trials (RCTs) report SDOH variables such as race, ethnicity, insurance, income, and education within the manuscript.

Methods: A literature review was conducted on a PubMed search for RCTs published from 2017-2019 in 4 major orthopedic journals which routinely publish on total joint arthroplasty: *JBJS*, *Journal of Arthroplasty*, *CORR*, and *Osteoarthritis and Cartilage*. The inclusion criteria, THA/TKA RCTs with a table 1 and patient demographics, resulted in 72 publications. Data collected included publication year, type of surgery, and the inclusion of race, ethnicity, insurance, income, and education in either the discussion, table 1, or multivariable regressions. Counts and percentages were used to summarize the variables. Additionally, Fisher's exact tests were used for comparisons on SDOH inclusion by journal name, publication year, and surgery type (THA vs TKA).

Results: 5.6% of the manuscripts mentioned race, 4.2% included race within table 1, and 1.4% included ethnicity in table 1. Insurance, income, and education were not included in any of the 72 publications. Overall, only 5 studies discussed any one of the variables studied, and none included any SDOH variables in their multivariable regressions. There were no statistically significant differences on inclusion across journal year (p-value = .78), journal name (p-value = 1.00), or surgery type (p-value = .555).

Conclusion: Our findings identify a significant shortcoming in the inclusion of SDOH variables in TKA/THA publications. Their exclusion may be indirectly perpetuating disparities if research that does not use representative patient samples is used in creating health policies and national standards.