Time to Appendectomy: A Review of Disparities in Time to Appendectomy at a Midwest Hospital System

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Introduction. Previous studies have indicated that Black patients wait longer for appendectomies after arrival to the hospital for appendicitis. Our study investigated whether race and ethnicity-related discrepancies in time to appendectomy exist at a Midwest institution.

Methods. All appendectomies from July 2022 to September 2023 at The University of Kansas Health System were analyzed. Using chart review, patient records were organized by self-reported race and ethnicity. Time from emergency department arrival to surgery start was determined for each patient, and the average elapsed time was calculated in minutes for each category.

Results. Our study included 119 patients who presented to this institution's emergency department and subsequently underwent appendectomy. Of these, 64 identified as White and 55 identified as non-White or Multiracial. Additionally, 77 identified as non-Hispanic and 40 identified as Hispanic. On average, appendectomies occurred after 832.5 minutes and 875.1 minutes, respectively, for White patients and Multiracial patients. For Hispanic versus non-Hispanic patients, average time to appendectomy was 841.9 minutes and 861.2 minutes respectively. Results showed no significant difference between White and non-White groups ($p = 0.2769$) or Hispanic and non-Hispanic groups ($p = 0.3119$).

Conclusions. Results showed no indication of disparity in time to appendectomy between patients who identified as White and patients of other races, as well as between patients identifying as Hispanic and non-Hispanic, as the time differences between groups was neither clinically significant nor statistically significant. We hope this study will serve as a reminder of the importance of providing equitable care for all patients.