This study aimed at examining racial disparities in TKA utilization.

Objective

- This study aimed at examining racial disparities in TKA utilization and perioperative health outcomes using nationally representative data.

Methods

- Administrative data were examined from State Inpatient Databases (SID)—a comprehensive inpatient database maintained by the Healthcare Cost and Utilization Project under AHRQ—from eight racially diverse states between 2001 and 2008.

- The main outcomes examined were the rate of TKA; utilization of hospitals with higher TKA volumes; in-hospital mortality (died vs alive); and in-hospital complications (any vs no complication).

- Patient race was examined as the primary independent variable of interest and was categorized according to the SID: whites, blacks, Hispanics, Asians, Native Americans and mixed-race.

- Unadjusted odds ratio (OR) and 95% confidence intervals were generated for the association between the primary outcomes and race.

- Patient characteristics and hospital-level information were controlled for in adjusted analyses using logistic regression models for in-hospital mortality, morbidity and rate of utilization, and multinominal logistic regression model for use of high TKA volume hospitals.

- The study also analyzed time trends in TKA utilization by race to assess whether access to TKA improved over time.

- The significance level was set at α=0.05.

Conclusion

- In this study of nationally administrative data collected for the SID from eight states between 2001 and 2008, we found that minorities had higher rates of adverse outcomes (mortality and complications) and lower rates of TKA utilization. Minorities were also less likely to undergo TKA in high-volume hospitals compared to whites.

- Most of the racial disparities found in unadjusted analyses remained significant in adjusted analyses, implying that differences in patient demographics, health conditions and socioeconomic status, and health care system characteristics explained only some racial disparities in utilization of and outcomes after TKA[3,4].

- Prior studies indicate that behavioral and culturally-based factors (such as patient preferences for other forms of complementary treatments or patient expectations for the procedure) could play a critical role towards influencing one’s decision to seek medical care and overall health outcomes[5,6].

- Patient and provider level factors (such as physician referral patterns, hospital distances, and patient willingness to travel) could also contribute toward the observed disparities in TKA use[7].

- Future studies that consider specific patient-level information with psychosocial and behavioral factors are needed.

References


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