

# Race and Elective Joint Replacement: Where a Disparity Meets Patient Preference

The Institute of Medicine defines disparity as the difference in health care utilization or outcome not including patient preference.<sup>1</sup> This definition of health disparity holds true in most cases but not all. Total joint replacement (TJR) in the management of knee and hip osteoarthritis (OA) might represent an exception to the rule. TJR, and more specifically knee and hip elective TJR, is considered to be one of the most successful treatments in the history of surgery. Today more than 700 000 TJRs are performed each year in the United States. Utilization is projected to grow exponentially in the next decades. In some estimates, the demand for hip replacement will increase by 170% while that of knee replacement will increase by more than 600%.<sup>2</sup> TJR is an effective treatment option for end-stage OA—a condition that is incurable and rapidly increasing in prevalence. It is estimated that nearly 70 million Americans (about one in three) are impacted by arthritis or musculoskeletal disease. Joint disease from arthritis is a leading cause of disability among the elderly.

Although there are no randomized controlled trials that demonstrate survival benefit, the evidence base for TJR as a treatment option for end-stage OA is robust. TJR has been the subject of several consensus statements by the National Institutes of Health and systematic reviews by the Agency for Healthcare Research and Quality (AHRQ). For instance, the most recent AHRQ review of more than 129 studies found that evidence supports the effectiveness of TJR as the primary surgical option for

end-stage knee OA.<sup>3</sup> The body of evidence pointing to the effectiveness and safety of joint replacement contributes to making it one of the most commonly performed elective surgeries in people older than 65 years.

Yet there are marked variations in the utilization of this treatment, with race being a determining factor. While arthritis-related activity, work limitations, and severe pain disproportionately impact African American patients compared to White patients, numerous studies in the last 10 to 15 years have documented marked racial disparity in the utilization of TJR.<sup>4</sup> The reasons for this disparity are probably complex and might involve patient-, provider-, and system-level factors. However, patient preference is emerging as a strong potential explanation.<sup>5</sup> The reason why minority patients—most specifically African American patients—are less willing to consider joint replacement when clinically recommended is currently a subject of ongoing research. A patient must have a positive attitude (high preference) about TJR to choose it. That preference needs to be communicated to the surgeon to secure a recommendation for the treatment. Lower utilization rates in African American communities mean that fewer African American patients are exposed to friends and family members undergoing TJR with positive outcomes. There are also data to suggest that minority patients receive TJR at low-volume or at low-quality hospitals compared to nonminority patients. But it is not clear how or whether this differential access to

high-quality surgical care shapes patient preference.

## NO TO MAMMOGRAM BUT YES TO KNEE REPLACEMENT

TJR is considered a preference-sensitive treatment. Wennberg et al. define a preference-sensitive treatment as a treatment in which the benefits and the risks of the options are less than unequivocal.<sup>6</sup> But this evidence-based conceptualization of preference might not be what patients always exhibit. To illustrate the fickle nature of patient preference regarding TJR, take the example of a 68-year-old African American woman with end-stage knee OA. She expressed a desire to have knee replacement. When asked, “Why knee replacement?” and “Why now?,” her answer was short and to the point: “Because I can no longer walk.” Although this is the most explicit expression of preference, this particular patient has been adamantly opposed to all forms of evidence-based preventive care, including breast cancer screening. Furthermore, this patient did not bring her request to an orthopedic surgeon. Instead, she called a trusted relative to express her feelings about her choice. It is unclear if she would have expressed her preference for surgery clearly had she seen an orthopedic surgeon during the typical 5-to-10-minute visit.

## PREFERENCE-SENSITIVE VS ELECTIVE

The “elective” label for TJR may also be a barrier, particularly

for African American patients who may not start off with positive attitudes and preferences about the treatment. TJR is considered elective in part because it is rarely performed in urgent settings. However, we do not refer to all scheduled surgeries as elective procedures. We label TJR as elective in part because it is a preference-sensitive treatment. In other words, it is not sufficient that the patient meet the clinical indications for the treatment. The patient has to also want the surgery for it to be recommended. This thinking might be complicating the national effort to intervene on this disparity. Primary care providers often leave TJR decision-making to patients and their orthopedic surgeons. Most orthopedic surgeons hold the belief that the treatment is available for anyone who wants it (read “preference”) and is clinically in need of it. Framing TJR as a routine surgical treatment option, rather than as an elective treatment, will not necessarily deprive patients of choice. After all, a clinical recommendation for coronary artery bypass grafting (CABG) in a patient with significant coronary artery disease does not constitute the abdication of patient preference or choice. Patients who are recommended for CABG still hold the right to decline the treatment no matter how clear the indications and forceful the recommendation. Unlike in the management of coronary artery disease for which national guidelines exist on when to recommend surgery, a clear consensus on the right time for TJR in the management of end-stage OA will be needed to move away from “elective” terminology.

Now that President Obama’s Patient Protection and Affordable Care Act has survived the ruling

of the US Supreme Court, many more Americans are anticipated to gain greater access to health care and to effective treatments such as TJR. We must clarify what we mean by elective surgery when referring to treatment options. It is also critical that we find better ways to solicit informed preferences from patients who are considering preference-sensitive treatments such as TJR. This need applies to all patients, but most particularly to those from ethnic and racial minorities who have found the traditional doctor–patient communication a less-than-ideal venue for expressing their choices and beliefs. ■

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