

Qualitative Analysis of Anterior Cruciate Ligament Reconstruction Surgery in the Hispanic Population

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ABSTRACT

Background: The anterior cruciate ligament (ACL) is a supportive structure in the knee that provides resistance to internal tibial rotation and anterior tibial translation.¹ ACL injuries are commonly seen in athletics and can lead to joint instability.^{1,2} The severity of injury determines the most suitable treatment option for patients. Sprains are typically healed through rest and rehabilitation, while tears may require surgical reconstruction to properly recover.² The purpose of our study is to evaluate the quality of current literature that investigates ACL reconstruction surgery outcomes in Hispanic patients.

Methods: We completed a review of literature that includes post-operative statistics on Hispanic patients who have undergone ACL reconstruction surgery through the PubMed database. Twenty-one of the studies found through PubMed fit the inclusion criteria and were included for review (10 systematic reviews, 7 cohorts, 2 narrative reviews, 1 cross-sectional, and 1 meta-analysis).³⁻²³ The data gathered focused on the incidence of multiple postoperative complications.

Results: Qualitative measures were used to provide a comparison between Hispanic patients and other ethnicities. The most common variables measured were concurrent meniscal injuries (5), revision procedures (5), physical therapy follow-up (4), delay to surgery (3), sports clearance (2), physical strength (2), and range of motion (1). Hispanic patients from all of the studies reporting saw an increased risk for concurrent meniscus injuries, experienced a greater delay to surgery, and attended fewer physical therapy sessions, which contributed to decreased strength during post-surgery recovery. The literature showed conflicting evidence about whether ethnic minorities are at an increased risk for revision surgery or failing sports clearance criteria. There was not a significant difference between ethnic groups for range of motion.

Conclusion: Hispanic patients are less likely to have a successful recovery after ACL reconstruction surgery compared to White patients. The social determinants of health that greatly influence positive outcomes following surgery include access to care, insurance status, language barriers, distrust of physicians, and workforce representation. Insurance disparity was the most studied parameter and had the highest correlation to postoperative complications. Language barriers and distrust of the medical field led to Hispanic patients having decreased attendance of follow-up appointments and physical therapy sessions. In order to cultivate a more inclusive healthcare environment for all, there must be a focus on increasing workforce representation, reducing barriers in access to care, and promoting cultural competence in practice.

Discussion: There are many studies that have been conducted on ethnic disparity in less emergent procedures, namely total knee and hip arthroplasty, but relatively few on ACL reconstruction surgery. It is important to note that of the 21 articles investigated through this research, only eight had a main focus on Hispanic outcomes. More data needs to be published on ACL reconstruction surgeries among all ethnicities. Recommendations for future research include longitudinal studies that survey long-term outcomes in Hispanic and other minority group patients such as subsequent injuries, revision procedures, continuation of pain, and joint stability.

Keywords: literature review, orthopedic, surgery, anterior cruciate ligament, latino, hispanic

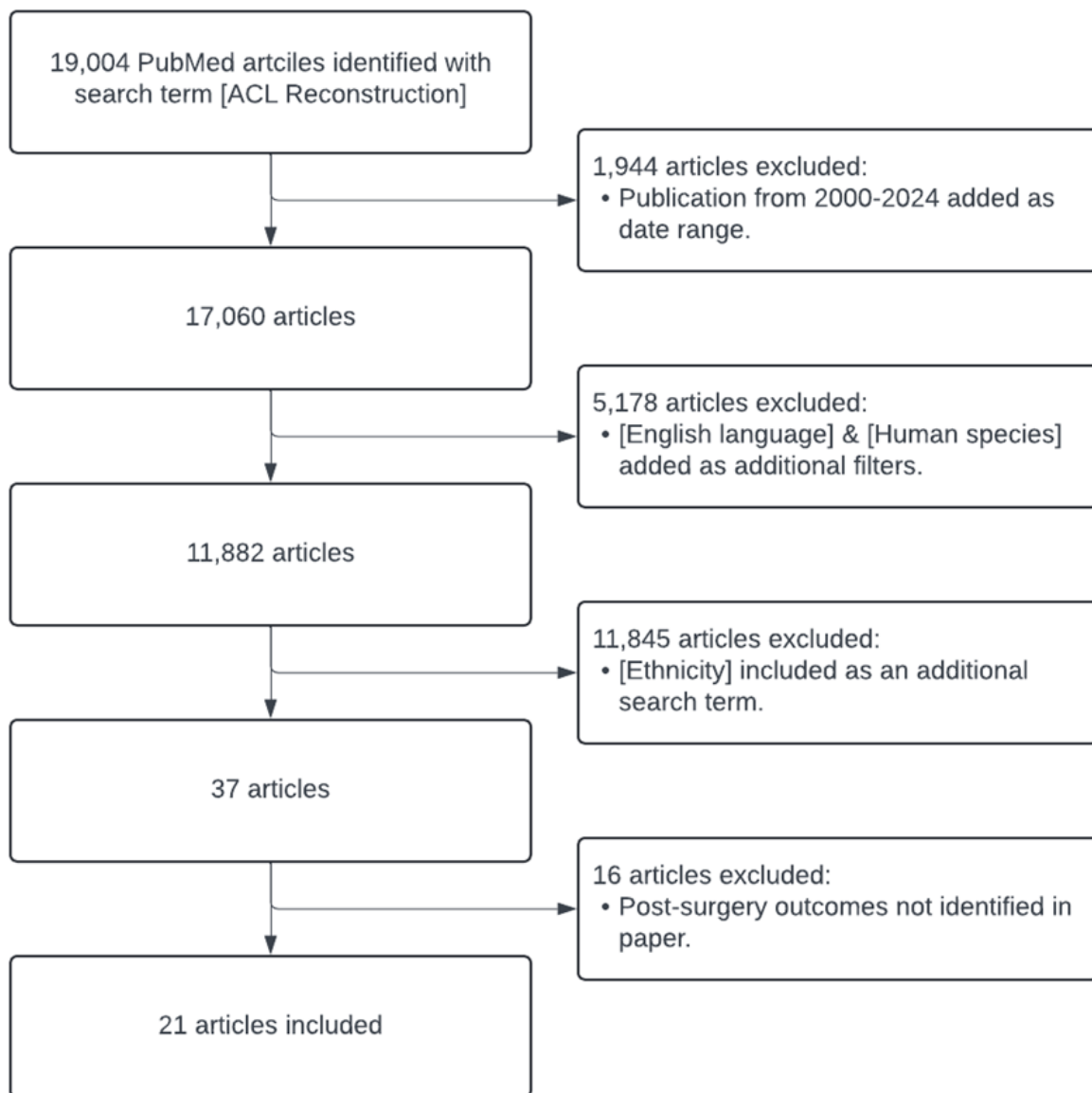


Figure 1. Flowchart for inclusion criteria.

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CONFLICTS OF INTEREST

All authors declare no conflicts of interest.

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