## Patient Perspectives on the Cancellation of Elective Primary Hip and Knee Replacement During the COVID-19 Pandemic

## Abstract:

**Introduction:** The COVID-19 pandemic resulted in the unprecedented widespread cancellation of scheduled elective primary total joint replacement (TJA) in the United States. The impact of postponing scheduled total hip arthroplasty and total knee arthroplasty procedures on patients has not been well studied and may have physical, emotional, and financial consequences.

**Methods:** All patients whose elective primary TJA procedures at a tertiary academic medical center were postponed due to COVID-19 were surveyed. Seventy-four patients agreed to answer thirteen independent questions concerning the impact of surgery cancellation on their quality of life, mood, financial situation, and overall perspective on elective surgery during the pandemic. Statistical analysis, including Pearson correlation coefficients, cross-tabulation analysis, and chi-squares, was performed.

Results: 13.5% of patients strongly disagreed with the use of the term "elective" to describe their cancelled TJA surgery and 25.7% of patients reported substantial physical and/or mental deterioration due to the postponement. Younger individuals experienced greater change in their symptoms (p = 0.034), anxiety about their pain (p = 0.010), and frustration and anger (p = 0.043). Poor quality of life, mood, and lower HOOS/KOOS Jr interval scores were correlated with greater financial strain, disagreement with the postponement of surgery, and disagreement with the use of the term "elective" to describe surgery. Disagreement with the use of the term "elective" to describe surgery was associated with greater financial strain (p = 0.013) and disagreement with the decision to postpone surgery (p = 0.008). Additionally, greater financial strain was associated with disagreement with postponement (p = 0.014).

Conclusion: The cancellation of elective TJA during the COVID-19 pandemic had a variety of consequences for patients. One in four patients reported experiencing substantial physical and/or emotional deterioration as a result. Associations of poor quality of life and mood with greater financial strain and disagreement with the term "elective" were seen. These results signify the deleterious effects of cancelling elective surgery and suggest heightened surveillance of select patients should another postponement of surgery occur.

**Keywords:** TJA; joint arthroplasty; postponement; elective surgery; COVID-19; psychosocial impact