

The Impact of COVID-19 on Quality of Life Whilst Awaiting Total Joint Arthroplasty



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Introduction

Primary hip and knee arthroplasty are two of the most successful operations in the history of modern surgery.¹ The substantial increase in patient quality of life (QoL) associated with these procedures has been well documented in the literature and has been attributed to the significant reduction to pain and improvement in mobility post-operatively leaving them as some of the most commonly done operations in Scotland.²

Operation	Number performed in Scotland
Primary THR	7929
Primary TKR	7720

Table 1. Total number of primary hip and knee replacements performed in Scotland in 2019.³

The COVID-19 pandemic has had dramatic effects on elective operating capacity, with most hospitals in the UK significantly reducing or even stopping planned theatre lists. The potential catastrophic effects this may have on patients awaiting total joint arthroplasty have yet to be described.

Aims

- To assess the impact of the COVID-19 pandemic on the quality of life whilst awaiting total joint arthroplasty.
- To ascertain whether patients would be willing to proceed with an elective operation in the current climate.

Methods

This cross-sectional analysis identified 142 willing patients who were due total joint arthroplasty imminently in the run up to the COVID-19 lockdown period. Demographic details were collated and telephone consultations utilising the EQ-5D and EQ-VAS performed to establish the current QoL. Additionally, patients were asked whether they would be willing to undergo their proposed procedure, be operated on in a different hospital.

	THR	TKR
Gender	M38:F52	M17:F38
Age	67 (+/-10)	69 (+/-10)

Table 1: Patient demographics

References
 1. Maradit Kremers H, Larson D, Crowson C, Kremers W, Washington R, Steiner C et al. Prevalence of Total Hip and Knee Replacement in the United States. *The Journal of Bone and Joint Surgery-American Volume*. 2015;97(17):1386-1397.
 2. Konopka J, Lee Y, Su E, McLawhorn A. Quality-Adjusted Life Years After Hip and Knee Arthroplasty. *JBJS Open Access*. 2018;3(3):e0007.
 3. Scottish Arthroplasty Project. Annual Report 2020. Available from: <https://readymag.com/PHIDigital/SAP-Annual-Report-2020/>. Accessed 12 March 2021

Results

Mean age was representative of those waiting for arthroplasty (67.3 years and 69.8 for THR and TKR respectively). Most patients felt that their health had deteriorated during their wait for surgery (89% in THR and 83% in TKR) and would still be willing to undergo their procedure (96% THR and 84% TKR). The majority would also be willing to undergo their operation in a different hospital (81% THR and 57% TKR). Most patients are living in severe pain as they wait (62% THR and 57% TKR), have decreased mobility (89% THR and 94% TKR), however EQ-5D-5L indexing indicated that no patients were presently at worse-than-death status.

	THR	TKR
Willingness to proceed with surgery	96%	84%
Willingness to attend other hospital	81%	57%
Life has deteriorated during wait	89%	76%
EQ-5D response of being in severe pain	62%	57%

Table 2: Patient perspective and willingness for operation

Conclusions

- 1) Patients awaiting a total joint arthroplasty have severely impeded QoL.
- 2) The majority of patients are willing to proceed with arthroplasty and can be flexible with regards to location of surgery.