13 April 2021

Authors' reply:

Sir,

We thank Mishra and Roy for their interest in, and comments about, our study.[1]

We agree that the EuroQol (EQ) may not be the ideal measure of quality of life, but it does remain the "preferred measure of quality of life in adults" recommended by the National Institute for Health and Care Excellence (NICE).[2] Furthermore, the early criticism that the authors highlight of Carr-Hill were in regard to the six-dimension (6D) score, which has subsequently undergone modification and development into what is now recognized as the EQ-5D. There were three reasons for our choice of the EQ-5D-3L and, in retrospect, this may not have been made clear in the original paper.[1] First, as Mishra and Roy highlight, the 5L version is currently not recommended for use by NICE,[2] although we note that there is a research team reviewing and validating the 5L for use in the UK population.[3] Second, the EQ-5D-3L version was used to assess outcome of our comparative control cohort before the COVID-19 pandemic (2014 to 2017) and was therefore also used for those patients waiting for surgery during the pandemic.[1,4] Finally, the version of the EQ-5D-3L used was validated for interviewer administration in a UK population.[5]

We did consider collecting joint-specific Oxford scores, which are validated for verbal use,[6] in addition to the EQ-5D index. However, with no comparative score with which to compare, we felt that this might not be helpful and would only add to the complexity of data collection. The EQ-5D-3L has been shown to correlate with, and be predictive of, the Oxford Knee Score preoperatively and therefore may be representative of joint-specific dysfunction.[7] The ideal assessment may have been to assess deterioration in function, for both joint-specific and general quality of life, over a defined time period while waiting for surgery. This would, as Mishra and Roy suggest, enable identification of patients on the waiting list who had endured a clinically significant worsening in their joint-specific function as well as their quality of life. However, at the individual patient level there would need to be an 8- or 9-point change in the Oxford Knee or Hip Score,[8] respectively, which might not be recognized by a patient who already had significant dysfunction, due to the floor effect of the score.[9] Furthermore, just because one patient has a clinically significant deterioration in their Oxford score from 35 to 28 points while waiting for a knee replacement, should they be prioritized over a patient with a clinically significantly worse score of 20?

We do agree with Mishra and Roy that this is complex and essential work that needs to be addressed in future studies to allow us to assess and understand what is happening to patients on our ever-increasing waiting lists for arthroplasty.

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