

Patient-Reported Outcome Measures (PROMs) For Total Knee Arthroplasty. Preliminary Results Of A Prospective Study In 423 Patients

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Background

Total Knee Arthroplasty (TKA) is a well-established treatment for severe knee osteoarthritis. Although there has been a lot of improvement on technics, instrumentation, kinematic concepts, and biomechanical assets of the procedure and despite the excellent results of the same-concept hip arthroplasty, total knee arthroplasty has a low positive impact on patient's satisfaction, at the time when international literature confirming that 1 out of 5 patients are disappointed by this treatment. This disappointment is recorded by Patient-reported outcome measures (PROMs) which are increasingly used in clinical practice providing health care professionals with patients' perceptions and views of their health.

Objectives

The primary aim was to evaluate Patient-Reported Outcome Measures in patients undergoing primary total knee arthroplasty for patients with knee osteoarthritis.

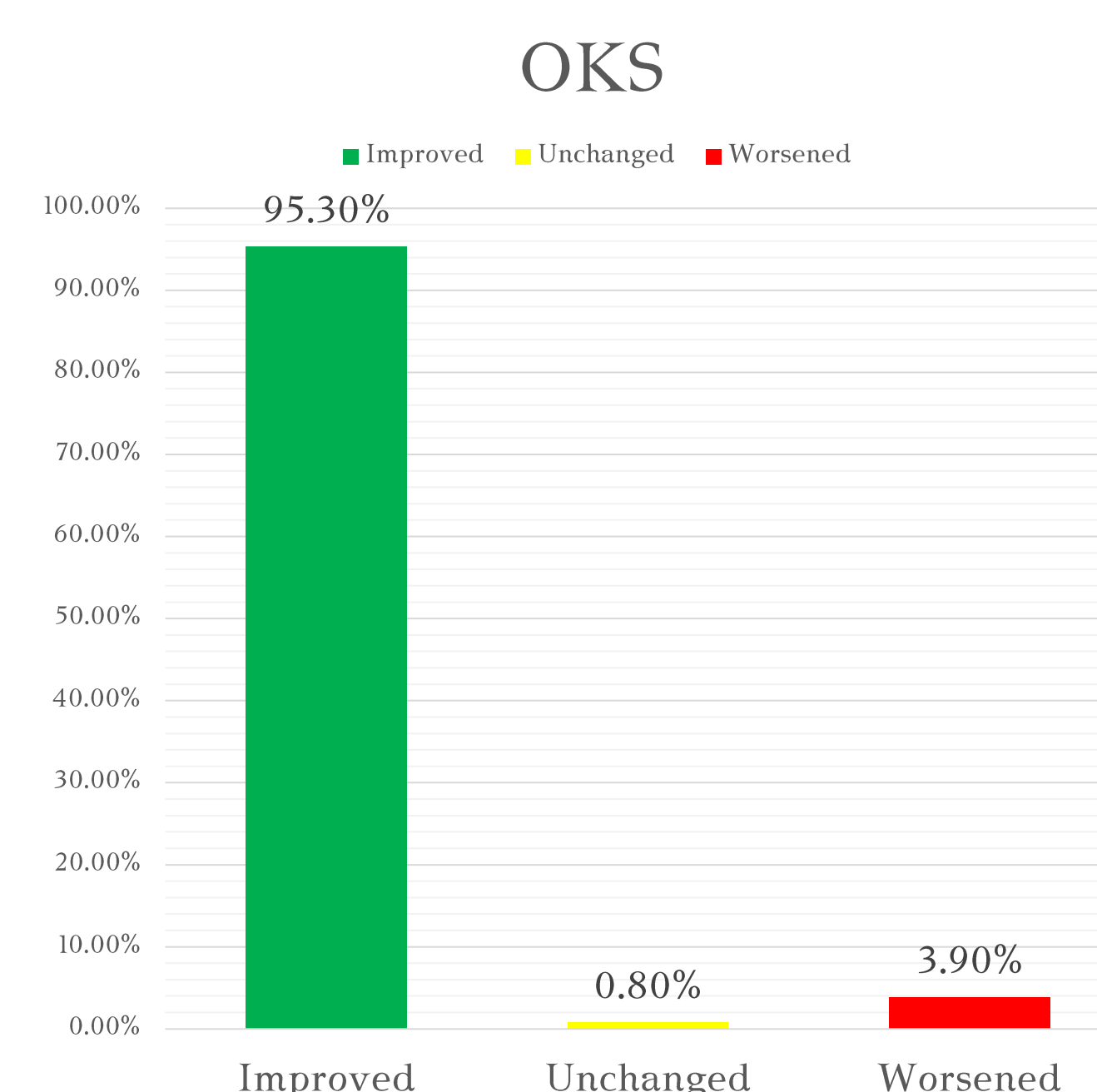
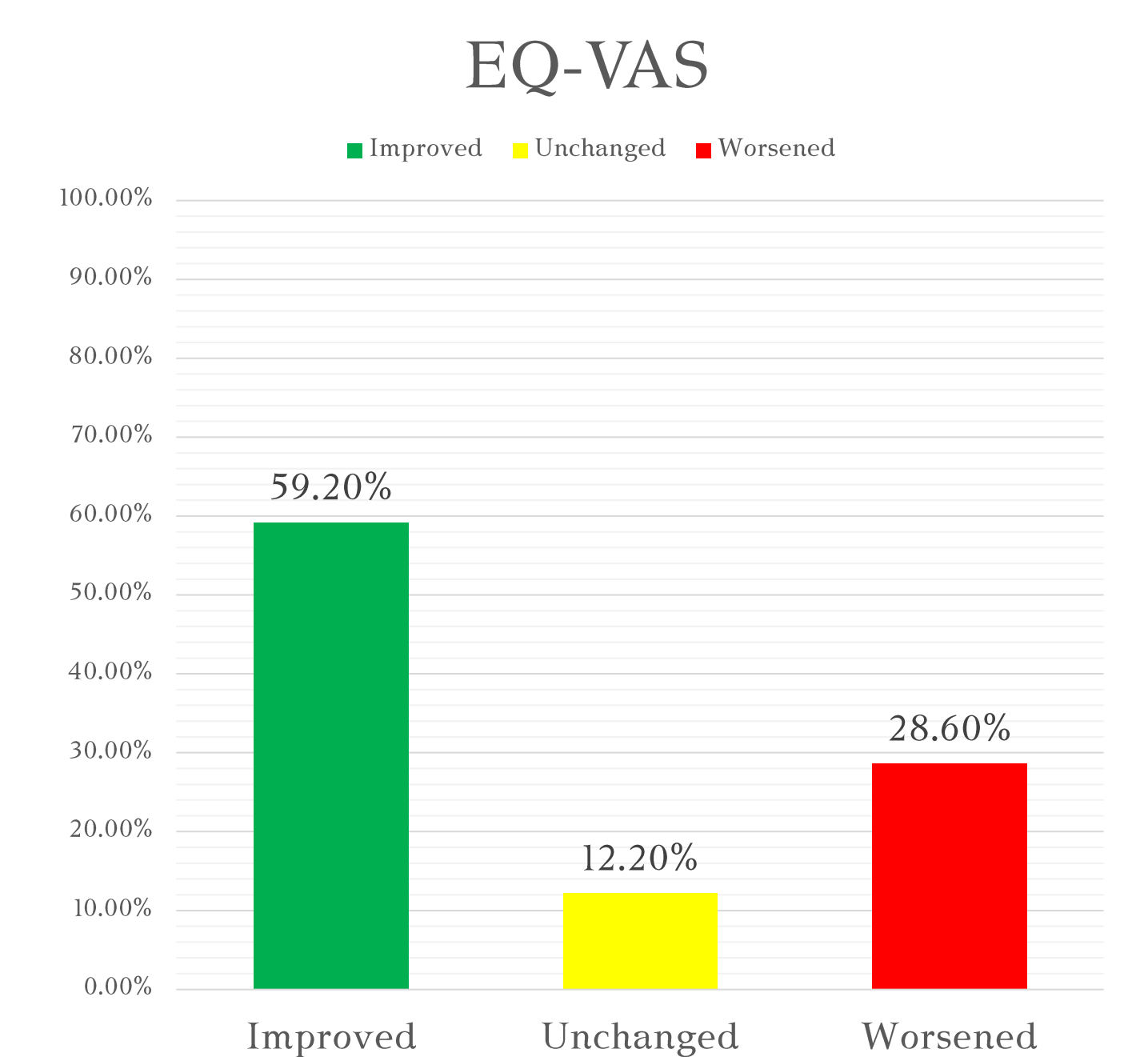
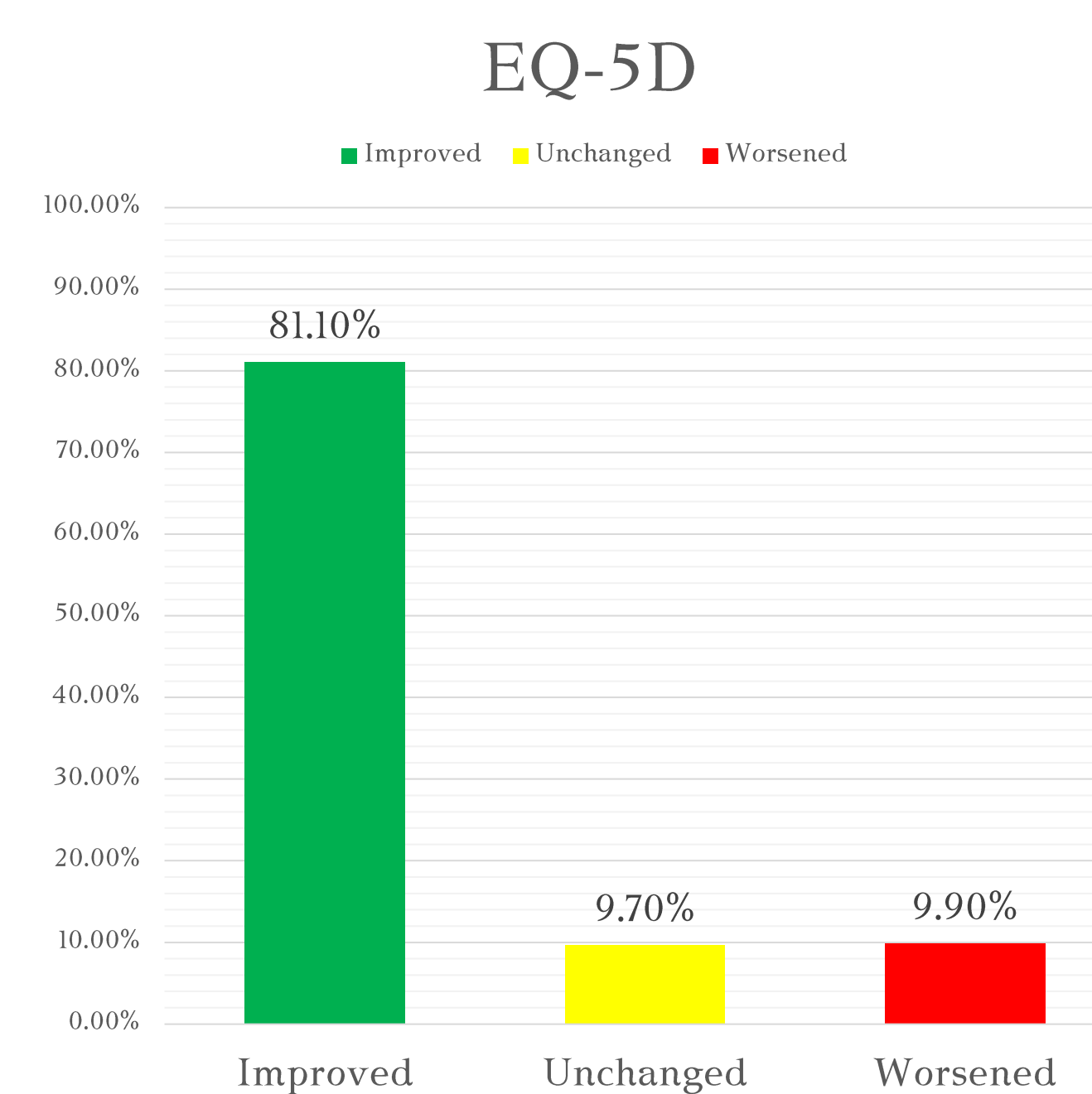
Study Design & Methods

Patients with knee osteoarthritis operated with total knee arthroplasty by the same surgeon with the same technique between January 2015 to December 2019 that were eligible, included in the study. PROMs were measured one week before the surgery and 4 months after and compared. These were for general health EQ-5D Index and EQ-VAS Score and for knee joint Oxford Knee Score (OKS). Demographics, as well as operation parameters, were also recorded for each patient. The sending, collection, recording, and analysis of the questionnaires were made by an independent team which included a physiotherapist and a nurse.

Results

423 patients (252 women - 171 men) returned the questionnaires correctly both pre- and post-operatively. Mean age was 71.6 years (range 36-90 years), and mean BMI was 28.7. The mean duration of surgery was 57 minutes, and the mean duration of hospitalization was 3.8 days (range 3-11 days). Patients were followed up for an average of 22.3 months. General health measured by EQ-5D Index, and EQ-VAS Score was shown improved at 81.1% and 59.2%, same at 9.7% and 12.2% and worsened at 9.9% and 28.6% of the patients respectively. The average health gain on the EQ-5D Index was 0.334 and, on the EQ-VAS Score 7.600. Oxford Knee Score was improved at 95.3%, the same at 0.8%, and worsened at 3.9% of the patients with an average health gain of 17.078.

Demographics	
n	423
Gender	252♀/171♂
Mean age (years)	71.6 (36-90)
Mean BMI	28.7
TKA duration (min)	57
Mean DoH (days)	3.8 (3-11)
Mean Follow-up	22.3 months



Average health gain	
EQ-5D	0.334
EQ-VAS	7.600
OKS	17.078

Conclusions

Despite the fact that, total knee arthroplasty shares the same concept as of total hip arthroplasty, patients are more disappointed with this treatment of their knee osteoarthritis. Preliminary results of our study confirm that total knee arthroplasty even though has a positive impact on knee functions, health gains are poor for patients with knee osteoarthritis. Although our results compared to international literature showed the same or even better improvement rates, we have to wait until the finish of our study in order to extract a more valuable result for patient's satisfaction on total knee arthroplasty.

