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Musculoskeletal Health Literacy Correlates with Outcome and Satisfaction of Total Knee Arthroplasty

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Introduction: The purpose of this study was to investigate if there is a correlation between musculoskeletal health literacy and outcome and satisfaction after total knee arthroplasty (TKA).

Methods: A cross-sectional study was performed at our tertiary center to include patients between 1- and 5-years postoperatively after primary TKA. Patients in this cohort were provided a survey including basic demographics, validated musculoskeletal health literacy scale (LiMP), Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC), and TKA satisfaction (whether they would choose to undergo the same operation again). Patients were categorized as either low or normal health literacy based on number of questions (cutoff six out of nine) answered correctly on the LiMP. Statistical analysis included unpaired student t-test with significance set at $p < 0.05$.

Results: 455 individuals fully completed the survey of eligible participants. 297 individuals (65.3%) had normal health literacy and 158 individuals (34.7%) had low health literacy. Average WOMAC (/96) was 17.9 ± 19.8 in the low and 12.1 ± 15.4 in the normal health literacy groups. Patients with low health literacy had significantly higher WOMAC (worse function) compared to those with normal health literacy ($p=0.012$). 27 out of 297 patients (9.1%) in the normal health literacy group and 29 out of 158 patients (18.4%) in the low health literacy group would not undergo the same operation again. Patients in the low musculoskeletal health literacy group were significantly less likely to undergo the same operation again ($p=0.007$, OR 2.248).

Conclusions: Health literacy has been determined to be an important predictor of health-related outcomes. This study shows that patients with a low musculoskeletal health literacy have worse outcome scores and are less likely to be satisfied with their TKA. By identifying these patients preoperatively, emphasis can be placed on enhancing procedure expectations and understanding to improve outcome measures and overall satisfaction.

Notes