

Welcome

isakos.com/2023 • #ISAKOS2023





Quality of Life Following Primary Total Knee Arthroplasty: Factors Predicting Satisfaction in Low-Income Population

Mohamed Amine Gharbi, Houssem Eddine Chahed, Ahmed Zendeoui, Moatassem Belleh Jelassi, Anis Tebourbi, Ramzi Bouzidi, Khelil Ezzaouia, Mouadh Nefiss

Department of Orthopedic and Trauma Surgery, Mongi Slim Marsa University Hospital Center, Tunis, Tunisia





Disclosures:

- Authors (or a member of their immediate family) **DO NOT** have a financial interest or other relationship with a commercial company or institution.

- Authors declare that there is NO CONFLICT OF INTEREST.



BACKROUND:

- Total knee arthroplasty is one of the most common and rewarding procedures in orthopaedic surgery
- However, it remains for many people a costly procedure, and one in five patients remains dissatisfied with their prosthesis





OBJECTIVE:

 The aim of this work was to calculate the satisfaction rate after total knee arthroplasty and to establish predicting patient satisfaction factors in low-income population





METHODS:

- Our study included 279 primary total knee arthroplasties placed between 2015 and 2019 with a minimum follow-up of two years
- Our retrospective census took into account the various factors concerning the patient's background and monthly family income, the surgical procedure and the knee-related parameters before and after surgery



METHODS:

- Functional outcomes were assessed using the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) and the International Knee Documentation Committee (IKDC) subjective scores
- Satisfaction was estimated by a yes or no question



RESULTS:

- The mean age of patients was 68 years-old
- Over 95% declared < 1000 US\$ monthly family income. At the last follow-up, all our patients reported a functional improvement with better WOMAC and IKDC scores
- The overall dissatisfaction rate was 22.6%





RESULTS:

- Two parameters concerning the patient's background had a statistically significant link with dissatisfaction: the female sex and the history of diabetes
- Only one parameter related to the knee preoperatively had a direct, statistically significant influence on increasing dissatisfaction risk: limited range of motion with flexion <90°



RESULTS:

- No parameters related to surgery statistically significant link with satisfaction
 - Regarding parameters related to the knee after surgery, only moderate to severe residual pain (Visual Analog Scale: VAS>3) was associated with patient dissatisfaction after total knee replacement



had a

DISCUSSION:

- The overall patient dissatisfaction rate after TKA varies between 7 to 32% [1-3] with a mean rate of 20% [4]
- Factors predicting patients dissatisfaction in the literature are various: female gender, high BMI, low preoperative RAM, poor socioeconomic conditions,...[2,3]
- Low-income population patients should be well informed preoperatively of the different risk factors that may interfere with their satisfaction [1,6]



CONCLUSION:

Recognition of factors predicting patient satisfaction in low-income population after total knee arthroplasty should influence our behaviour so as to act on the modifiable factors, allowing to reduce the risk of dissatisfaction to minimum, or to have a more alert attitude towards non modifiable factors in order to adapt the therapeutic care and to better inform and educate patients.



REFERENCES:

- [1]: Bourne RB, Chesworth BM, Davis AM, Mahomed NN, Charron KD. Patient satisfaction after total knee arthroplasty: who is satisfied and who is not? Clin Orthop Relat Res. 2010 Jan;468(1):57-63. doi: 10.1007/s11999-009-1119-9. PMID: 19844772; PMCID: PMC2795819.
- [2]: Robertsson O, Dunbar M, Pehrsson T, Knutson K, Lidgren L. Patient satisfaction after knee arthroplasty: a report on 27,372 knees operated on between 1981 and 1995 in Sweden. Acta Orthop Scand. 2000 Jun;71(3):262-7. doi: 10.1080/000164700317411852. PMID: 10919297.
- [3]: Scott CE, Howie CR, MacDonald D, Biant LC. Predicting dissatisfaction following total knee replacement: a prospective study of 1217 patients. J Bone Joint Surg Br. 2010 Sep;92(9):1253-8. doi: 10.1302/0301-620X.92B9.24394. PMID: 20798443.
- [4]: Gunaratne R, Pratt DN, Banda J, Fick DP, Khan RJK, Robertson BW. Patient Dissatisfaction Following Total Knee Arthroplasty: A Systematic Review of the Literature. J Arthroplasty. 2017 Dec;32(12):3854-3860. doi: 10.1016/j.arth.2017.07.021. Epub 2017 Jul 21. PMID: 28844632.
- [5]: Noble PC, Conditt MA, Cook KF, Mathis KB. The John Insall Award: Patient expectations affect satisfaction with total knee arthroplasty. Clin Orthop Relat Res. 2006 Nov;452:35-43. doi: 10.1097/01.blo.0000238825.63648.1e. PMID: 16967035.
- [6]: Bullens PH, van Loon CJ, de Waal Malefijt MC, Laan RF, Veth RP. Patient satisfaction after total knee arthroplasty: a comparison between subjective and objective outcome assessments. J Arthroplasty. 2001 Sep;16(6):740-7. doi: 10.1054/arth.2001.23922. PMID: 11547372.



