One of the main determinants of treatment satisfaction after orthopaedic surgery, Rotterdam, Netherlands. Data was extracted from the LROI on TKA patients who had osteoarthritis. The aim of the present study was to create and validate prediction models for residual complaints regarding kneeling, squatting, pain in rest and during activity, sit-to-stand movement, stair negotiation, walking, activities of daily living, and treatment success showed acceptable discriminative values (AUC 0.68 – 0.74). The prediction models that have been developed can be useful for individual expectation management in patients planned for TKA for knee osteoarthritis. Our review shows that definitions for poor response to TKR are ambiguous. Our findings stress the need for an unambiguous definition of poor response to TKA. The present study showed that demographic and PROMs data collected for the LROI registry, can be used to predict the chance for residual symptoms after TKA. The predictive models that have been developed can be useful for individual expectation management in patients planned for TKA for knee osteoarthritis.

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### THU0463

**EXPECTATIONS OF TREATMENT RESULT OF KNEE OSTEOARTHRITIS PATIENTS TREATED WITH A TOTAL KNEE ARTHROPLASTY. THE INFLUENCE OF DEMOGRAPHIC FACTORS, PAIN, PERSONALITY TRAITS, PHYSICAL AND PSYCHOLOGICAL STATUS**


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**Background:** Unrealistic preoperative expectations have a strong influence on the outcome after total knee arthroplasty (TKA). More insight into determinants of the level of expectations is useful in identifying patients at risk for unrealistic expectations. This information can be used in optimizing pre-operative expectation management.

**Objectives:** The aim of the current study was to analyze to what extent pre-operative outcome expectations of TKA patients are determined by psychological factors, demographic factors, pain, physical function and general health status.

**Methods:** A cross-sectional analysis of 204 patients with symptomatic and radiographic knee OA, scheduled for primary TKA was conducted. Outcome expectations were measured using the Hospital for Special Surgery knee replacement expectations survey. Independent variables included were age, sex, body mass index and patient reported outcome measures for pain, physical function, quality of life, anxiety, depression, catastrophizing, optimism and pessimism. Multiple linear regression analyses were used to evaluate associations between these variables and pre-operative outcome expectations.

**Results:** Data of 7071 patients could be included for data analysis. Residual complaints on kneeling (972%/ 59%), and squatting (971% /56%) were reported most frequently, and least residual complaints were scored for walking (14%/ 1%2%) and pain in rest (18% /1%). The predictive algorithms for residual symptoms concerning sit-to-stand movement, stair negotiation, walking, activities of daily living and treatment success showed acceptable discriminative values (AUC 0.58 – 0.74). The calibration curves showed adequate calibration for most of the models.

**Conclusion:** A considerable proportion of patients has residual complaints after TKA. The present study showed that demographic and PROMs data collected for the LROI registry, can be used to predict the chance for residual symptoms after TKA. The predictive models that have been developed can be useful for individual expectation management in patients planned for TKA for knee osteoarthritis.