

# 12<sup>th</sup> International Conference on ARTHROPLASTY

June 24-25, 2019 | Rome, Italy

## The role of patient education in total knee arthroplasty: Does it really matters? A Brazilian study

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**Statement of the Problem:** Osteoarthritis (OA) is a frequently chronic condition related to population aging, obesity and sports injuries. The knee is the second joint in occurrence of OA leading a functional impairment, pain and/or mechanical symptoms. Total knee arthroplasty (TKA) has been indicated when symptom's control has failed and proved to be a successful treatment. However, up to 20% of patients after knee arthroplasty complain of residual pain, functional impairment or subjective dissatisfaction. Written and illustrated materials in a preoperative education maximize knowledge and adhesion to treatment. However, in the third world, illiteracy index is high in the public hospitals. We describe an orientation method before TKA in which patients are instructed in a differentiated way without the necessity of reading.

**Methodology & Theoretical Orientation:** To improve patient education before TKA we developed a multidisciplinary method in which an orthopedic surgeon, a nurse and a physiotherapist give the patients a differentiated orientation regarding the pre, intra and postoperative issue in a prospective randomized trial of 79 consecutive patients undergoing primary TKA. Twenty-nine patients received the standard verbal (control group) education and 38 patients received the differentiated education (intervention group). The patients were evaluated during at least six-month

**Findings:** After a 6-month follow-up period, SF-36 and WOMAC forms, VAS and range of motion improved significantly in both groups. ROM was better in the intervention group. Moreover, walk ability (more than 400 meters) was improved more in the intervention group compared with control group. In the intervention and control groups, respectively, 10.5% and 31% of patients related the need to use some walking device ( $p = 0.03$ ).

**Conclusion & Significance:** A differentiated education with a multidisciplinary team had a positive impact in functional outcomes, improving ROM and walk ability of patients undergoing total knee arthroplasty in a short-term evaluation.

Table 1 - Functional evaluation after 6-month follow-up

	Control	Intervention	p-value
WOMAC	47.3 (10.4)	51.5 (8.4)	0.5
SF36	26.54 (8.2)	30.8 (6.2)	0.3
Analog Pain Scale	4.8 (1.4)	5.6 (1.1)	0.3
ROM	92.5 (12.1)	106.9 (5.7)	0.02
Walk ability > 400 meters	72.4%	97.4%	0.003
Stair with no impairment	51.7%	68.4%	0.16
Walker and cane use	31%	10.5%	0.03

## Biography

Rodrigo Santos is a scientific director at the Institute of Traumatology and Orthopedics of Barbacena, Brazil. He is also the head of the orthopedic department of Santa Casa de Barbacena Minas Gerais and an expert member of the Brazilian Society of Orthopedics and Traumatology. He obtained his bachelor's from the College of Medicine of Barbacena in 1996. He accomplished his master's degree in medicine by the Federal University of Minas Gerais, Brazil. Presently, he is a professor in the Department of Orthopedics and Traumatology at the Faculty of Medicine of Barbacena, Brazil.

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