# IS AGE A PREDICTOR FOR PRESENTATION OF PAIN, FUNCTIONS AND QUALITY OF LIFE AMONG OA PATIENT?

# A STUDY IN 348 PATIENTS UNDERGOING TOTAL KNEE REPLACEMENT SURGERY

Vijaya Kumar LS<sup>1</sup>, Wong BC<sup>1</sup>, Tew MM<sup>2</sup>, Vijay Kumar NK<sup>1</sup>, Ashutosh S Rao<sup>3</sup>

<sup>1</sup>Department of Orthopaedic, Hospital Sultan Abdul Halim

<sup>2</sup>Clinical Research Centre, Hospital Sultan Abdul Halim

<sup>3</sup>Department of Orthopaedic, Melaka-Manipal Medical College

## INTRODUCTION:

Total knee replacement (TKR) is highly successful and cost-effective procedures for end-stage knee disease. Most study compared the improvement in patient reported outcome measurements post surgery<sup>1</sup>, lack of focus has been placed on the presentation of pain and function and quality of life in osteoarthritis (OA) patients preoperatively with age as the predictor. The objective of this study was to explore the relationship between age and baseline characteristics pain, functions, and quality-of-life in OA patients who planned for TKR surgery.

# **METHODS:**

A single-center, prospective study. Patients who planned for TKR surgery were consented and recruited for the study. Data collection was performed from January 2013 until December 2018. Baseline data was obtained using Knee injury and Osteoarthritis Outcome Score (KOOS) questionnaire. The relationship between age and preoperative KOOS scores were analyzed and compared.

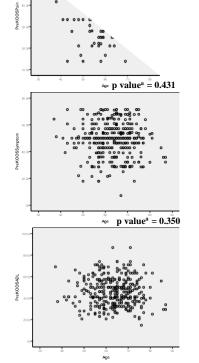
## **RESULTS:**

Data from 348 patients were included in the study. Patient demographic characteristics were shown in Table 1. The relationship between age and pre-operative KOOS Pain, Symptoms, Function in daily living, Function in sport and recreation and knee related Quality of life scores were compared using pearson correlation test (Figure 1).

Table 1: Demographic data

	<u>n</u>	(%)	Mean	<u>SD</u>
Gender				
Male	74	(21.20)		
Female	274	(78.80)		
Age (Years)	_		63.5	(8.59)
SD = Standard 1	Deviation			

 $p value^a = 0.935 p value^a = 0.593$ 



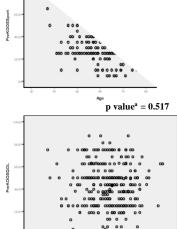


Figure 1: The correlation between age and pre-operative KOOS Pain, Symptoms, Function in daily living, Function in sport and recreation and knee related Quality of life (QoL) Scores

Note: aPearson Correlation Test

#### **DISCUSSIONS:**

There were no age-related differences in joint pain, function, or quality-of-life measures among OA patients planned for TKR surgery preoperatively reported in this study. These results appeared to be similar to several studies which indicated that age was not a significant determinant of pain or functions in patients with knee OA who planned for surgery <sup>2,3</sup>.

#### **CONCLUSION:**

Age is not a predictor for presentation of pain, functions and quality of life among patients who planned for TKR surgery.

#### REFERENCES:

- Kane RL, Saleh KJ, Wilt TJ, Bershadsky B. The functional outcomes of total knee arthroplasty. JBJS. 2005 Aug 1;87(8):1719-24.
- Jones CA, Voaklander DC, Johnston DW, Suarez-Almazor ME. The effect of age on pain, function, and quality of life after total hip and knee arthroplasty. Archives of internal medicine. 2001 Feb 12;161(3):454-60.
- March LM, Cross MJ, Lapsley H, Tribe KL, Courtenay BG, Brooks PM. Outcomes after hip or knee replacement surgery for osteoarthritis. The Medical Journal of Australia. 1999 Sep 6;171(5):235-8.