

COMPARISON OF QUALITY OF LIFE BASED ON SOCIODEMOGRAPHIC AND SURGICAL DATA AMONG TOTAL HIP ARTHROPLASTY PATIENTS IN HUNGARY

Kajos L<sup>1,2,3</sup>, Molics B<sup>4</sup>, Elmer D<sup>1,3</sup>, Kovács B<sup>1,2</sup>, Csákvári T<sup>1,3</sup>, Pónusz-Kovács D<sup>1,2,3</sup>, Bódis J<sup>2,3</sup>, Boncz I<sup>1,3</sup>

1. Institute for Health Insurance, Faculty of Health Sciences, University of Pécs, Pécs, Hungary
2. Doctoral School of Health Sciences, Faculty of Health Sciences, University of Pécs, Pécs, Hungary
3. National Laboratory on Human Reproduction, University of Pécs, Pécs, Hungary
4. Institute of Physiotherapy and Sports Science, Faculty of Health Sciences, University of Pécs, Pécs, Hungary

OBJECTIVES

Hip replacement surgery is one of the most common orthopaedic interventions performed in both public and private healthcare. The study aimed to investigate the impact of hip replacement surgery on the quality of life and to compare the quality-of-life outcomes by sociodemographic and surgical data in the Hungarian public and private hospitals.

METHODS

Patients were selected at the Department of Orthopaedics, Clinical Centre of the University of Pécs and at the Da Vinci Private Clinic in Pécs, Hungary. Patients completed the Oxford Hip Score questionnaire before the surgery and 3 months later. We also evaluated socio-demographic data, disease and surgical conditions.

RESULTS

128 people were included in our research, 60 patients from the public hospital, 68 patients from private hospital. We performed a comparison of the sociodemographic and surgical data, as well as the Oxford Hip Score preoperative and postoperative 3-month quality of life scores. Despite the different sociodemographic and surgical characteristics, all patients achieved a significant improvement based on quality-of-life scores by the end of the follow-up period (p<0.001) (*Table 1*). In the case of private patients, we observed a difference in the improvement of the quality of life between sexes (p=0.001) and according to educational level (p=0.021). Between the two healthcare areas, the change in the quality of life of those with different educational qualifications was not the same either (p=0.010). From the side of the public hospital, we found that patients with different occupations (p=0.049) and operated with different surgical indications (p=0.024) did not achieve the same level of improvement in quality-of-life results (*Table 2*).

CONCLUSIONS

Based on sociodemographic and surgical characteristics, quality of life improved differently in some cases, but always significantly by 3 months after hip replacement surgery in public and private patients.



		PUBLIC HOSPITAL	PRIVATE HOSPITAL	P VALUE
		Score (n=60)	Score (n=68)	
Oxford Hip Score	Before surgery (SD)	16.60 (8.47)	22.78 (10.37)	<0.001*
	3rd month (SD)	34.68 (8.89)	40.85 (7.22)	<0.001*
	Improvement within the group	<0.001*	<0.001*	<0.001*
	Improvement between groups	p=0.985		

Table 1. Changes in the Oxford Hip Score (OHS) in public and private hospitals

		PUBLIC HOSPITAL			PRIVATE HOSPITAL			p value between groups
		OHS score (before surgery)	OHS score (3 months)	p value within group	OHS score (before surgery)	OHS score (3 months)	p value within group	
Sex	Male (SD)	19.55 (9.81)	36.41 (7.59)	<0.001*	28.6 (9.48)	41.93 (7.53)	<0.001*	0.234
	Female (SD)	14.89 (7.19)	33.68 (9.52)	<0.001*	18.18 (8.66)	40 (6.95)	<0.001*	0.234
	p value	0.039*	0.256	0.548	<0.001*	0.276	0.001*	0.096
Education	Primary (SD)	16.23 (6.23)	29.85 (11.48)	<0.001*	8.5 (6.36)	46 (2.83)	0.042*	0.004*
	Secondary (SD)	16.56 (9.98)	35.06 (8.18)	<0.001*	22.21 (11.68)	38.61 (8.62)	<0.001*	0.499
	Higher (SD)	17.08 (6.30)	38.54 (5.58)	<0.001*	23.95 (9.02)	42.24 (5.72)	<0.001*	0.309
	p value	0.968	0.039*	0.231	0.112	0.075	0.021*	0.010*
Occupation	Intellectual (SD)	21.2 (8.82)	35.2 (7.82)	0.071	24.78 (9.31)	41.63 (6.32)	<0.001*	0.593
	Light physical (SD)	10.25 (7.68)	42.75 (3.86)	0.009*	24.33 (4.93)	41.33 (7.50)	0.002*	0.026*
	Hard physical (SD)	13 (5.57)	34 (8.0)	0.098	28.33 (11.93)	45 (3.0)	0.097	0.657
	Pensioner (SD)	16.38 (8.40)	34.16 (9.31)	<0.001*	20.28 (11.53)	39.72 (8.12)	<0.001*	0.528
	Other (unemployed, disabled) (SD)	24.33 (6.81)	31.67 (8.08)	0.069	-	-	-	-
	p value	0.144	0.440	0.049*	0.281	0.558	0.804	0.130
Indication for surgery	Primary coxarthrosis (SD)	16.39 (7.18)	34.12 (9.13)	<0.001*	22.17 (10.32)	40.83 (7.29)	<0.001*	0.661
	Avascular necrosis of the femoral head (SD)	11.4 (7.02)	34.6 (9.99)	0.012*	23.5 (10.50)	39 (8.98)	0.099	0.384
	Dysplastic hip (secondary coxarthrosis) (SD)	11.33 (6.81)	41.67 (4.16)	0.021*	28.17 (10.91)	42.33 (6.19)	0.002*	0.010*
	Revision (SD)	34 (13.12)	37 (5.0)	0.801	-	-	-	-
	p value	0.001	0.533	0.024*	0.405	0.778	0.544	0.066

Table 2. Comparison of sociodemographic and surgical characteristics and the Oxford Hip Score

ISPOR 2024  
May 5-8 | Atlanta, GA, USA

PÉCSI TUDOMÁNYEGYETEM  
UNIVERSITY OF PÉCS

**Financial support:** This research was financed by the Thematic Excellence Program 2021 Health Sub-Programme of the Ministry for Innovation and Technology in Hungary within the framework of the EGA-10 project of the University of Pécs. Supported by the ÚNKP-23-3-II-PTE-2011 New National Excellence Program of the Ministry for Culture and Innovation from the source of the National Research, Development and Innovation Fund. The research was also supported by the University of Pécs Doctoral Student Association Outstanding Scientific and Art Scholarship.

**Corresponding author:**  
Luca Fanni KAJOS, MSc, PhD student  
Doctoral School of Health Sciences, Faculty of Health Sciences,  
University of Pécs, Pécs, Hungary  
E-mail: kajos.luca@pte.hu

PCR  
32

European Union  
European Social  
Fund  
INVESTING IN YOUR FUTURE