ANALYSIS OF THE QUALITY OF LIFE OF PATIENTS UNDERGOING HIP REPLACEMENT SURGERY USING THE SF-36 QUESTIONNAIRE <u>Kajos LF¹, Molics B², Pónusz-Kovács D¹, Kovács B¹, Csákvári T³, Pónusz R¹, Bódis J⁴, Boncz I¹</u> 1. Institute for Health Insurance, Faculty of Health Sciences, University of Pécs, Pécs, Hungary 2. Institute of Physiotherapy and Sports Science, Faculty of Health Sciences, University of Pécs, Pécs, Hungary 3. Institute for Health Insurance, Faculty of Health Sciences, University of Pécs, Zalaegerszeg, Hungary 4. National Laboratory on Human Reproduction, University of Pécs, Pécs, Hungary

OBJECTIVES

Assessing the quality of life of patients undergoing hip replacement surgery is essential for evaluating the effectiveness of medical and rehabilitation care. The aim of our study was to examine the quality of life of patients undergoing hip replacement surgery using the SF-36 questionnaire. METHODS

Patients were selected through simple convenience sampling from patients treated at a public hospital and a private clinic in Pécs (Hungary), between 2019 and 2023. Patients completed the internationally validated SF-36 questionnaire, which evaluates general health status across eight dimensions, both preoperatively and three months postoperatively. Data were analyzed using SPSS statistical software, employing the Kolmogorov-**Smirnov test, paired t-test, and Wilcoxon test (p<0.05).**

RESULTS

A total of 318 participants (144 males and 174 females) with an average age of 66.19 years were included in the study. Significant improvements in quality of life were observed in the following dimensions by the third month after surgery: physical functioning improved from 26.33 to 66.75 points (Figure 1), role limitations due to physical health problems from 23.79 to 52.67 points (Figure 2), bodily pain from 23.31 to 80.0 points (Figure 3), general health perceptions from 48.85 to 62.82 points (Figure 4), energy/fatigue from 57.22 to 76.74 points (Figure 5), social functioning from 74.35 to 87.34 points (Figure 6), and emotional well-being from 71.27 to 84.18 points (p<0.001) (*Figure 7*). No significant improvement was observed in role limitations due to emotional problems, which increased only from 77.24 to 78.21 points (p=0.735) (*Figure 8*). Overall, patients' Physical Health improved from 31.31 to 65.47 points, and Mental Health improved from 68.47 to 80.82 points (p<0.001).

CONCLUSIONS

The quality of life of patients undergoing hip replacement surgery showed significant improvements in most dimensions by the third month postoperatively. The substantial enhancement in physical and mental health highlights the effectiveness of the surgery, although no measurable improvement was observed in role limitations caused by emotional problems.

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Change in SF-36 Physical Functioning Score during the follow-up period



Change in SF-36 General Health Perceptions Score during the follow-up period

	Emotional Wel
90 —	
80 —	71.27
70 —	
60 —	
eg 50	
$\overset{33}{33}40$ –	
30 —	
20 —	
10 —	
0 —	
p<0.001	Before surgery

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Role Limitations due to Physical Health Problems 52.67 34023.79 3rd month Before surgery p<0.001 **Figure 2**

Change in SF-36 Role Limitations due to Physical Health Problems Score during the follow-up period

Change in SF-36 Energy/ Fatique Score during the follow-up period





Change in SF-36 Social Functioning Score during the follow-up period