

# PATIENTS' EXPERIENCES WITH SHARED DECISION MAKING ABOUT IMPLANTABLE MEDICAL DEVICE SURGERY: RESULTS OF A CROSS-SECTIONAL SURVEY IN HUNGARY

Márta Péntek<sup>1</sup>, Miklós Kozlovszky<sup>2</sup>, Miklós Weszl<sup>3</sup>, József Kuti<sup>4</sup>, Áron Hölgyesi<sup>5,6</sup>, Barbara Tóth<sup>7</sup>, János Czere<sup>7,8</sup>, Petra Baji<sup>9,10</sup>, Levente Kovács<sup>11</sup>, László Gulácsi<sup>1,12</sup>, Zsombor Zrubka<sup>1,12</sup>

<sup>1</sup> Health Economics Research Center, University Research and Innovation Center, Óbuda University, Budapest, Hungary; <sup>2</sup> Department of BioTech Research Center, Óbuda University, Budapest, Hungary; <sup>3</sup> Department of Translational Medicine, Semmelweis University, Budapest, Hungary; <sup>4</sup> Antal Bejczy Center for Intelligent Robotics, Óbuda University, Budapest, Hungary; <sup>5</sup> Doctoral School of Molecular Medicine, Semmelweis University, Budapest, Hungary; <sup>6</sup> National Institute of Pharmacy and Nutrition, Department of Health Technology Assessment, Budapest, Hungary; <sup>7</sup> Doctoral School of Applied Informatics and Applied Mathematics, Óbuda University, Budapest, Hungary; <sup>8</sup> PSI CRO AG Hungary, Budapest, Hungary; <sup>9</sup> Department of Health Economics, Corvinus University of Budapest, Budapest, Hungary; <sup>10</sup> Musculoskeletal Research Unit, University of Bristol, Bristol, United Kingdom; <sup>11</sup> Physiological Controls Research Center, University Research and Innovation Center, Óbuda University, Budapest, Hungary; <sup>12</sup> Corvinus Institute of Advanced Studies, Corvinus University of Budapest, Budapest, Hungary

## Objectives

We aimed to assess patients' involvement in and experiences with decision making regarding implantable medical device (IMD) surgery.

## Methods

A cross-sectional survey was performed in August 2021 involving 1400 persons aged 40+ representative for the Hungarian general population. Health-related quality of life and digital health literacy were measured by the EQ-5D-5L and eHEALS questionnaires, respectively. Respondents who have had hip, knee, spine, tooth, breast implant, intraocular lens, dental bone graft, pacemaker, artificial cardiac valve, stent, abdominal mesh or continuous glucose monitor implantation in 2020/2021 were selected and surveyed retrospectively for their experiences with decision making regarding their IMD surgery. Respondents completed the 9-item Shared Decision Making Questionnaire (SDM-Q-9) and four questions of the patient reported experience measure (PREM) endorsed by the OECD. Descriptive statistics were performed, Spearman's rho correlations were analysed between SDM-Q-9 and EQ-5D-5L, eHEALS scores.

## Results

Altogether 70 patients (female 60%) were involved with mean (SD) age of 60.1 (12.4) years, 47.1% had tertiary educational level; EQ-5D-5L index score was 0.80 (0.25), eHEALS was 27.9 (5.5). The average SDM-Q-9 score was 34.7 (SD 8.7; minimum: 16, maximum: 45); the lowest score was obtained on item 7 ('My doctor and I thoroughly weighed the different treatment options'). The share of patients indicating 'Yes, definitely' on the PREM questions were as follows: the doctor spent enough time with the consultation 60.3%; the doctor provided easy-to-understand explanations 58.8%; the patient had opportunity to raise questions 64.7%; the patient was involved in the decision 57.4%. Only 33.8% indicated that the quality of the consultation was excellent. No significant correlations were found between SDM-Q-9, and EQ-5D-5L, eHEALS scores.

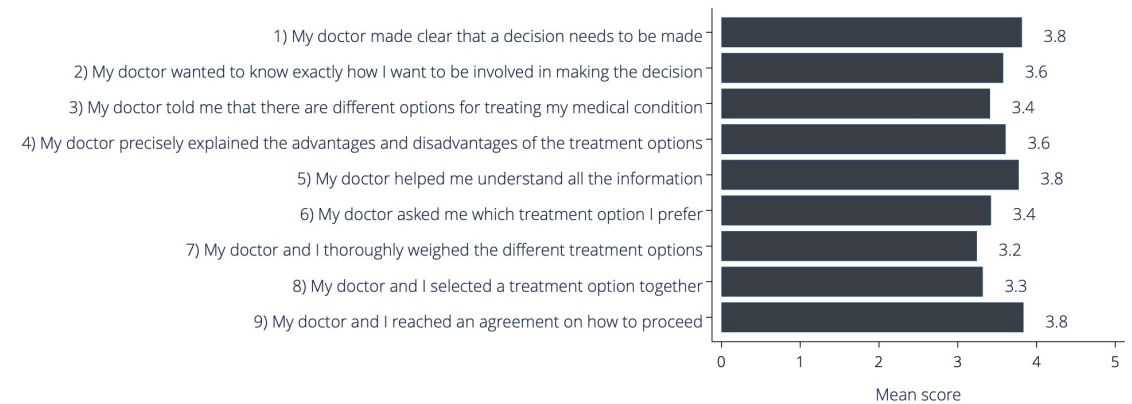
## Conclusions

This small retrospective empirical study suggests that patients undergoing IMD surgery may have substantial unmet needs regarding the decision process. Further prospective studies are encouraged to confirm our results and analyse the explanatory factors in depth.

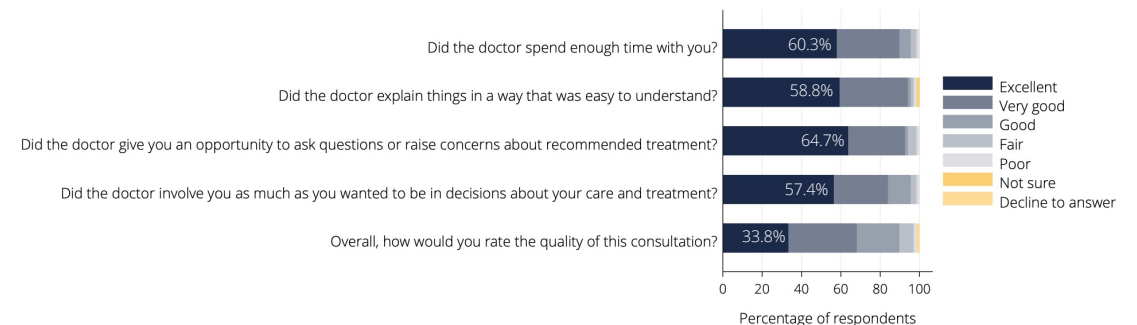
## References

Rencz, F., Tamási, B., Brodszky, V. et al. Validity and reliability of the 9-item Shared Decision Making Questionnaire (SDM-Q-9) in a national survey in Hungary. *Eur J Health Econ* 20, 43–55 (2019).  
 Scholl, I., Kriston, L., Dirmaier, J., Buchholz, A., Harter, M.: Development and psychometric properties of the Shared Decision Making Questionnaire-physician version (SDM-Q-Doc). *Patient Educ. Couns.* 88(2), 284–290 (2012).  
 Brito Fernandes, Ó., Baji, P., Kringos, D. et al. Patient experiences with outpatient care in Hungary: results of an online population survey. *Eur J Health Econ* 20, 79–90 (2019).  
 Fujisawa, R., Klazinga, N.: *Measuring Patient Experiences (PREMS): Progress Made by the OECD and Its Member Countries Between 2006 and 2016.* OECD Health Working Papers, vol. 102. OECD Publishing, Paris (2017)

## Mean SDM-Q-9 Score per item (N=70)



## Patient reported experiences (N=70)



**Funding:** The questionnaire survey was supported by the Higher Education Institutional Excellence Program of the Ministry of Innovation and Technology in the framework of the 'Financial and Public Services' research project (TKP2020-NKA-02) at Corvinus University of Budapest. In connection with writing this publication, MP, AH, BT, LG and ZZ received grant support from the National Research, Development, and Innovation Fund of Hungary, financed under the TKP2021-NKTA-36 funding scheme ('Development and evaluation of innovative and digital health technologies'; 'Evaluation of digital medical devices: efficacy, safety, and social utility (subproject) at Óbuda University.