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Did You Get What You Wanted? Patient Satisfaction and Congruence Between Preferred and Perceived Roles in Medical Decision Making in a **Hungarian National Survey**



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ABSTRACT

Objectives: In a growing number of countries, patient involvement in medical decisions is considered a cornerstone of broader health policy agendas. This study seeks to explore public preferences for and experiences with participation in treatment decisions in Hungary.

Methods: A nationally representative online panel survey was conducted in 2019. Outcome measures included the Control Preferences Scale for the preferred and actual role in the decision, the 9-item Shared Decision Making Questionnaire, and a Satisfaction With Decision numeric rating scale.

Results: A total of 1000 respondents participated in the study, 424 of whom reported having had a treatment decision in the preceding 6 months. Overall, 8%, 18%, 51%, 19%, and 4% of the population preferred an active, semiactive, shared, semipassive, and passive role in decision making, respectively. Corresponding rates for perceived role were as follows: 9%, 15%, 35%, 26%, and 15%. Preferred and perceived roles matched for 52% of the population, whereas 32% preferred more and 16% less participation. Better health status, attaining role congruence, and higher 9-item Shared Decision Making Questionnaire scores were positively associated with satisfaction, accounting for 32% of the variation in Satisfaction With Decision scores (P < .05).

Conclusions: This study represents the first national survey on decisional roles in healthcare in Hungary and, more broadly, in Central and Eastern Europe. Shared decision making is the most preferred decisional role in Hungary; nevertheless, there is still room to improve patient involvement in decision making. It seems that patient satisfaction may be improved through tailoring the decisional role to reflect patients' preferences and through practices that encourage shared decision making.

Keywords: Control Preferences Scale, EQ-5D-5L, Hungary, patient involvement, patient satisfaction, SDM-Q-9, shared decision making.

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Introduction

In a growing number of European countries, patient involvement in medical decisions is considered to be a cornerstone of broader health policy agendas.¹⁻³ At an individual level, patient involvement is defined as the extent to which patients and their families or caregivers participate in health-related decisions and contribute to organizational learning through their specific experience as patients.⁴ Shared decision making (SDM) is an approach recognized to empower patients to be actively involved in decisions related to their own health. Shared decision making involves providing high-quality health information to the patient in the context of the choice, describing options, and helping patients explore their preferences and make decisions.⁵ This process may be supported by patient decision aids.⁶ Shared decision making represents a shift in the physician-patient relationship from the paternalistic model to mutual participation, whereby power and responsibility are shared between the 2 parties.⁷ Over the past 2 decades, much effort has been invested in conducting research about SDM, developing decision aids for patients, training programs for healthcare professionals, and initiatives to integrate SDM in clinical practice guidelines.^{1,8,9}

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Patient involvement may lead to a better knowledge about treatment options, more realistic patient expectations, improved adherence, and better health outcomes.¹⁰ Research among patient groups in various conditions, such as asthma, cancer, human immunodeficiency virus, mental illness, and multiple sclerosis, showed that many patients felt their level of participation in medical decisions was insufficient; typically they preferred more participation than perceived.¹¹ On the other hand, being involved in a medical decision and sharing responsibility may impose a substantial burden on patients. A mismatch between people's desired and actual level of involvement in decision making possibly results in lower levels of adherence and satisfaction with the decision and the overall healthcare system.

An impressive amount of literature studied patients' involvement in medical decision making; however, almost all studies focused on specific clinical populations, and little attention has been placed on preferences and experiences of the general public.¹²⁻²¹ Most of these population-based national surveys have been carried out in the United States.¹²⁻¹⁷ Preferences and involvement in decision making may vary according to type of disease, level of care, and type of decision. Also, variations in preferences may be attributed to nonclinical factors, such as individuals' sociodemographic background and other countryspecific effects.¹¹ Evidence from population-based surveys on people's preferences about medical decision making and the extent to which they perceived being involved in the decisionmaking process may be useful for designing national health strategies and health system planning.²²⁻²⁴

In Hungary, no data exist on the preferences for and observations of actual decision-making practices at a national level. The number of studies dealing with different aspects of patient involvement in healthcare is small.²⁵⁻²⁷ This study hence aims to assess the preferences for and experiences with treatment decision making in a large sample representative of the general population in Hungary. Additional analyses will be conducted to (1) explore the congruence between perceived and preferred involvement, (2) identify factors influencing respondents' preferences and experiences, and (3) examine the relationship between decisional role and satisfaction with decision.

Methods

Study Design and Participants

The study was approved by the Scientific and Ethical Committee of the Medical Research Council (reference no. 47654-2/ 2018/EKU). In early 2019, an internet-based questionnaire was administered to a national sample of adults in Hungary. Stratified random sampling was applied to recruit 1000 respondents stratified on age, sex, education level, place of residence, and geographic region, reflecting the composition of the Hungarian general population as reported by the Hungarian Central Statistical Office.²⁸ Given the relatively low internet penetration rate among individuals aged $\geq 65^{29}$ the sampling procedure aimed for representativeness between ages 18 and 65, but not in the over-65 age groups. Recruitment for the study was conducted through a specialized survey company (Big Data Scientist Ltd). Volunteers aged \geq 18 years of an online panel were invited to complete the questionnaire. Participation was anonymous, and no remuneration was provided to the respondents. All respondents signed an informed consent form.

The Questionnaire

Respondents' preferences for control over medical decision making was measured by the Control Preferences Scale (CPS_{pre}) (see Appendix 1 in Supplemental Materials found at https://doi. org/10.1016/j.vhri.2020.07.573). Those respondents who reported having had a treatment decision in consultation with a physician within the preceding 6 months also completed a Control Preferences Scale-post (CPSpost), 9-item Shared Decision Making questionnaire (SDM-Q-9), along with a Satisfaction With Decision (SWD) numeric rating scale. Additionally, participants provided background information, including their age, level of education, marital status, self-perceived general health status, history of chronic illnesses, and self-reported lifestyle compared with others. Health-related quality of life was assessed by the EQ-5D-5L and EQ VAS.³⁰⁻³² The 5 dimensions of the EQ-5D-5L ask about mobility, self-care, usual activities, pain or discomfort, and anxiety or depression. We applied the value set for England to estimate EQ-5D-5L index scores.³³ All questions of the survey were set at mandatory, so respondents could not proceed to the next question without answering the previous one.

Measures

Control Preferences Scale (CPS_{pre})

For all respondents, preferred role in medical decision making was measured using the CPS_{pre}.³⁴ The CPS_{pre} is the most frequently used questionnaire to ask about different roles individuals can assume in making treatment-related decisions with their physician.^{35,36} It has been found to be a valid and reliable tool in various patient populations.³⁵⁻³⁷ Traditionally, the CPS_{pre} was administered in a form of a card-sorting task. Over time, this has been superseded by a pick-one-option method, in which respondents are presented with 5 statements and asked to select the one that best represents their preferred role in decision making.

The 5 statements are as follows: (1) "I prefer to make the decision about which treatment I will receive" (active role); (2) "I prefer to make the final decision about my treatment after seriously considering my doctor's opinion" (semiactive role); (3) "I prefer that my doctor and I share responsibility for deciding which treatment is best for me" (shared decision); (4) "I prefer that my doctor makes the final decision about which treatment will be used, but seriously considers my opinion" (semipassive role); (5) "I prefer to leave all decisions regarding my treatment to my doctor" (passive role).

Control Preferences Scale-Post (CPS_{post})

The CPS_{post} is a modified version of the CPS_{pre} to evaluate patients' actual control over medical decisions.^{11,38,39} Good validity and reliability evidence has been reported for the CPS_{post}.^{38,39} It provides 5 statements describing the *perceived role* of the patient in the physician–patient encounter: "I made my decision alone" (active), "I made my decision alone considering what my doctor said" (semiactive), "I shared the decision with my doctor" (shared decision), "My doctor decided considering my preferences" (semipassive), and "My doctor made the decision" (passive).

The SDM-Q-9

We used the validated Hungarian version of the SDM-Q-9, which provided excellent validity and reliability (Cronbach's alpha 0.925).⁴⁰ The SDM-Q-9 is a self-reported questionnaire designed to assess patients' views on SDM during a consultation with a healthcare provider.⁴¹ It contains 9 statements rated on a 6-point scale from 0 (completely disagree) to 5 (completely agree). The total score, calculated by summing the score of the 9 items, is

expressed on a 0-45 scale, where a higher score indicates a greater level of perceived SDM. Consistently with prior studies, the raw total scores were rescaled to a 0 to 100 range.^{38,41,42}

SWD

To evaluate the results of the decision-making process, SWD was recorded on a numeric rating scale from 0 (fully unsatisfied) to 10 (fully satisfied).

Statistical Analyses

We defined 2 subsets of respondents for the data analysis: all respondents (hereafter subsample 1) and the group of respondents who had a treatment decision in the preceding 6 months (subsample 2). There were 4 outcome variables of interest: (1) preferred role (CPS_{pre}) in decision making (subsample 1), (2) actual role (CPS_{post}) in decision making (subsample 2), (3) congruence between the preferred (CPS_{pre}) and experienced roles (CPS_{post}) (subsample 2), and (4) satisfaction with the decision made (SWD) (subsample 2).

Bowker's test of symmetry was used to assess the congruence between preferred (CPS_{pre}) and perceived (CPS_{post}) roles. Relation between the preferred and perceived roles was categorized as follows: (1) preferred and perceived participation were equal (ie, role congruence), (2) preferred more participation than perceived, or (3) preferred less participation than perceived. Differences across the 3 groups in SWD total scores were tested by analysis of variance and the Games-Howell post hoc test. Pearson's correlation coefficient was computed to examine the relationship between SDM-Q-9 and SWD scores.

We conducted regression analyses to identify the variables associated with the 4 outcome measures. We used ordinal logistic regression models to investigate the impact of demographic and health status characteristics on CPSpre and CPSpost outcomes. We applied binary logistic regression analysis to examine the association of demographic and health status characteristics with achieving congruence. Results of all logistic regressions were reported in the form of odds ratios (ORs) along with 95% confidence intervals (CIs). Determinants of SWD were analyzed by multiple linear regressions (ordinary least squares) with robust standard errors adjusted for heteroscedasticity. The following variables were included in the initial model: congruence, SDM-Q-9 total score, and demographic and health status variables. We performed backward model selection using a significance level of α = 0.05. All statistical analyses were performed with Stata 14 (StataCorp LP, College Station, TX).

Results

Characteristics of the Study Population

A total of 1000 respondents filled in the questionnaire (completion rate 64.7%) (subsample 1). Of the study population, 424 respondents reported having had a treatment decision in the preceding 6 months (subsample 2). Table 1 presents the socioeconomic and health status characteristics of participants. The sample exhibited a good representativeness of the Hungarian general public in age, sex, level of education, marital status, employment status, place of residence, and geographical region. Regarding respondents' current health status, 50%, 34%, 34%, 25%, and 9% of the respondents reported having problems on the pain/discomfort, anxiety/depression, mobility, usual activities, and self-care dimensions of the EQ-5D-5L. Mean EQ-5D-5L index and EQ VAS scores were 0.87 \pm 0.16 and 75.6 \pm 15.8, respectively.

Preferred Role in Medical Decision Making

Overall, 8%, 18%, 51%, 19%, and 4% of the participants preferred an active, semiactive, shared, semipassive, and passive role, respectively. Respondents aged \geq 45 years (OR 0.522, 95% CI 0.408-0.668), those with secondary education (OR 0.709, 95% CI 0.533-0.945) or tertiary education (OR 0.650, 95% CI 0.479-0.882), and respondents who assessed their lifestyle "as healthy as others" (OR 0.639, 95% CI 0.475-0.858) compared with the "excellent" group were inclined to prefer a less active role in decision making (Table 2). Significantly more decisional control was preferred by respondents who were homemakers/housewives (OR 2.096, 95% CI 1.196-3.673) or unemployed (OR 1.689, 95% CI 1.075-2.642) at the time of the survey.

Perceived Role in Medical Decision Making

According to the SDM-Q-9, the most frequent reasons for consultation were musculoskeletal problems (18%), cardiovascular problems (16%), and infection (14%). Most of the decisions were made in specialized care settings (primary 39% vs specialized 61%) and in the public healthcare sector (public 87% vs private 13%). On a 0-100 scale (100 corresponding to a fully shared decision), the mean SDM-Q-9 total score was 66.5 ± 26.7 .

A total of 9%, 15%, 35%, 26%, and 11% stated that they had played an active, semiactive, shared, semipassive, and passive role in the decision-making process, respectively. There was no difference in the prevalence of SDM between primary and secondary care (34% vs 36%, P = .6315), while slightly more respondents experienced SDM at private healthcare providers (42% vs 34%, P = .2822). Respondents aged \geq 45 (OR 0.647, 95% CI 0.437-0.957), students (0.290, 95% CI 0.118-0.712), and those who were married (OR 0.600, 95% 0.413-0.869) were less likely to experience an active role in decision making (Table 2). Respondents who perceived their health as "very good/good" (OR 0.306, 95% CI 0.127-0.738) or "fair/bad" (OR 0.228, 95% CI 0.090-0.576) tended to experience less involvement in the decision making.

Congruence Between Preferred and Perceived Roles

Table 3 compares respondents' preferred and perceived decisional roles. In general, respondents' perceived decisional role was less active than they preferred (Bowker's test for symmetry P < .0001). Overall, 52% reported a match between their preferred and perceived roles, 32% preferred more participation, and 16% preferred less participation. Nevertheless, 80% of all participants attained a role within plus or minus 1 category of that preferred. Respondents whose preferred role was either active or semipassive were more likely to achieve a match between their perceived and preferred roles, compared with those preferring a passive role. The strongest determinant of achieving a match between preferred and perceived role was having a chronic illness (OR 1.712, 95% CI 1.150-2.548) (Table 2).

Satisfaction With Decisions

Respondents were predominantly satisfied with the treatment decision made (mean SWD score on a 0-10 scale 8.29 \pm 2.23). A positive correlation was found between the SDM-Q-9 score and SWD (r = 0.55, *P* < .0001). Mean SWD scores of respondents whose preferred and perceived scores matched were 8.68 \pm 1.95. Respondents who experienced either more or less involvement than preferred were less satisfied with the decision (7.91 \pm 2.40, *P* = .0056 and 7.75 \pm 2.49, *P* = .0153).

In a multivariate regression analysis, a 1-point increase in SDM-Q-9 score (0-100 scale) resulted in a 0.046-point increase in SWD score (P < .0001) (Table 4). Participants who experienced a

Table 1. Representativeness of the study population.

Variables	Subsam (n = 100	ple 1 0)	Subsample 2 (n = 424)		Hungarian general population	
	n	%	n	%	%	
Sex Female Male	550 450	55.0 45.0	229 195	54.0 46.0	53.1 46.9	
Age (years) 18-24 25-34 35-44 45-54 55-64 65+	118 198 191 125 147 221	11.8 19.8 19.1 12.5 14.7 22.1	40 72 73 50 68 121	9.4 17.0 17.2 11.8 16.0 28.5	10.0 15.2 19.5 16.0 16.8 22.5	
Highest level of education Primary Secondary Tertiary	341 363 296	34.1 36.3 29.6	139 145 140	32.8 34.2 33.0	23.8 55.0 21.2	
Employment status Employed full-time/self-employed Employed part-time Unemployed Retired Disability pensioner Student Homemaker/housewife Other	449 51 70 259 32 50 52 37	44.9 5.1 7.0 25.9 3.2 5.0 5.2 3.7	165 21 29 138 16 15 21 18	38.9 5.0 6.8 32.8 3.5 3.5 5.0 4.3	53.1 26.1 3.1 4.7 1.0 N/A	
Marital status Single Married Domestic partnership Divorced Widowed Other	220 397 221 62 64 36	22.0 39.7 22.1 6.2 6.4 3.6	74 170 111 29 27 13	17.5 40.1 26.2 6.8 6.4 3.1	18.5 45.6 13.4 11.1 11.4 N/A	
Place of residence Capital Other town Village	213 557 230	21.3 55.7 23.0	87 236 101	20.5 55.7 23.8	17.9 52.6 29.5	
Region Central Hungary Western Hungary (Transdanubia) Eastern Hungary (Great Plain and North)	348 299 353	34.8 29.9 35.3	142 152 130	33.5 35.9 30.7	30.4 30.2 39.5	
Household net monthly income (HUF) ^{*,†} < 100,000 100,001-200,000 200,001-300,000 300,001 to 400,000 > 400,000	84 228 229 156 148	8.4 22.8 22.9 15.6 14.8	36 98 84 70 65	10.2 27.8 23.8 19.8 18.4	N/A N/A N/A N/A	
Self-perceived health status Excellent Very good Good Fair Bad	81 283 400 205 31	8.1 28.3 40.0 20.5 3.1	16 91 179 120 18	3.8 21.5 42.2 28.3 4.3	N/A N/A N/A N/A	
History of chronic illness ^{‡,§} Yes No	489 390	48.9 39.0	267 111	63.0 26.2	45.0 55.0	
Self-reported lifestyle compared to others Healthier As healthy as others Less healthy	221 600 179	22.1 600 179	101 235 88	23.8 55.4 20.8	N/A N/A N/A	

N/A indicates not available. *n = 178 (17.8%) refused to answer or did not know in subsample 1 and 71 (16.7%) in subsample 2. [†]Hungarian forint (HUF) 320 = €1. [‡]n = 121 (12.1%) refused to answer or did not know in subsample 1 and 46 (10.8%) in subsample 2. [§]General population percentages are reported for the 15+ population.⁴³ ^IHungarian Central Statistical Office (Microcensus 2016).²⁸

Table 2. Logistic regression analysis of factors associated with respondents' preferred and perceived role in treatment decision making.

Variables	Odds ratio	95% CI		<i>P</i> value
Preferred role (n = 1000) *				
Age				
<45 years	Ref.			
≥45 years	0.522	0.408	0.668	<.0001
Education				
Primary	Ref.			
Secondary	0.709	0.533	0.945	.0189
Tertiary	0.650	0.479	0.882	.0057
Employment				
Homemaker/housewife	2.096	1.196	3.673	.0097
Unemployed	1.686	1.075	2.642	.0228
Self-reported lifestyle				
Healthier than others	Ref.			
As healthy as others	0.639	0.475	0.858	.0030
Less healthy	0.708	0.483	1.038	.0766
Perceived role $(n = 424)$ *				
Age	Def			
<45 years	Rei.	0 427	0.057	0204
≥45 years	0.047	0.437	0.957	.0294
Student	0.290	0.118	0.712	.0069
Married	0.600	0.413	0.869	.0070
Sell-perceived health status	Def			
Excellent Vonggood/good	Rel.	0 1 2 7	0 729	0094
Fair/bad	0.500	0.127	0.756	.0064
Fair/Dau	0.228	0.090	0.576	.0018
Congruent role (n = 424) [†]				
Intercept	0.784	0.057	1.075	.1304
History of chronic illness [‡]	1.712	1.150	2.548	.0081

CI indicates confidence interval.

*Ordinal logistic regression where odds ratios refer to preferring/perceiving a more active role.

[†]Binary logistic regression where odds ratios refer to experiencing a congruent role.

⁺Those who refused to answer or responded "do not know" to the question were considered to have no chronic illness.

congruence between their preferred and perceived roles were, on average, 0.114 and 0.575 points more satisfied compared with those who experienced either more or less participation than preferred, respectively. Respondents who rated their health as "fair/bad" tended to be less satisfied by 1.252 points (P = .0036). The R² value indicated that 32.2% of the variation in SWD score was explained by the model variables, foremost by the SDM-Q-9 score (29.8%).

Discussion

This study represents the first nationwide population-based survey about preferences for and experiences with treatment decision making in Hungary. Most respondents preferred to participate to some extent in the decision-making process. Overall, 52% experienced a match between their preferred and their perceived roles in decision making, whereas 32% preferred more

Table 3. Relationship between preferred and perceived role in treatment decision making (n = 424).

Perceived role	Preferred role						
	Patient decides (%)	Patient decides, considering physician's opinion (%)	Shared decision (%)	Physician decides, considering patient's preferences (%)	Physician decides (%)		
Patient decided	59	10	4	5	11		
Patient decided, considering physician's opinion	7	50	10	5	0		
Shared decision	24	19	51	12	25		
Physician decided, considering patient's preferences	10	15	19	58	16		
Physician decided	0	6	15	21	47		

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 Table 4. Determinants of satisfaction with decision (multiple linear regression).

	Coefficient	Standard error*	<i>P</i> value
Intercept	6.24	0.533	<.0001
Self-perceived health status Excellent Very good/good Fair/bad	Ref. 0.687 1.252	0.398 0.428	.0856 .0036
Preferred-perceived congruence Congruent Preferred more participation Preferred less participation	Ref. -0.114 -0.575	0.218 0.273	.6014 .0359
SDM-Q-9 (0-100)	0.045	0.004	<.0001

Note. Dependent variable: satisfaction with decision (SWD) 0-10 numeric rating scale.

SDM-Q-9 indicates 9-item Shared Decision Making questionnaire.

*Standard errors are corrected for heteroscedasticity.

participation and 16% preferred less participation. Whereas SDM was generally the most preferred decisional role, only a smaller fraction of the population actually perceived it. Both sociodemographic and health status variables influenced the preferred and perceived roles in decision making, in addition to the match between these roles.

Preferences exhibited by the Hungarian general public toward participation in the decision-making process appears to be similar to the results of national surveys conducted in other countries.^{13-15,18-20} In the United States, 62% of the population preferred SDM, 28% desired an active role, and 9% desired a passive one.¹⁴ A large 8-year follow-up study among the elderly general population (57-84 years) in Germany found that 46% of the participants reported a preference for an active role in the decision-making process, whereas 30% preferred SDM and 24% preferred a passive role.²¹ Findings from the present study indicate that most members of the Hungarian general public preferred to be involved in healthcare decisions (77%), and yet half of them experienced either a more active or more passive role compared with their preferences. These results indicate a large potential for improving the involvement of patients in the treatment decision-making process in Hungary.

Relatively few associations are known between sociodemographic factors and the preferred and perceived roles in treatment decisions.¹¹ Our results are congruent with previous research findings, such as elderly people more often preferring and perceiving a passive role.^{15,21} This pattern may be explained by the changing attitudes and expectations toward health with aging.^{44,45} An interesting observation from the survey was that less educated people preferred a more active role-13% of them wished to decide on their own, contrasting previous studies in which the preference for an active role was more prevalent among more educated people.^{15,18-21} This may be an indicator of a mistrust of physicians in this subgroup of the population in Hungary, which could be improved through educational programs and physicians' efforts to engage patients more actively in the decision-making process. On the other hand, highly educated respondents preferred less involvement in decision making, likely owing to understanding the weight of responsibility associated with making such decisions.

Satisfaction is a meaningful indicator of patient experience of healthcare services.⁴⁶ Most of the existing research demonstrated no association between role mismatch and patient satisfaction,⁴⁷ and only few studies reported a failure to achieve the desired level of participation adversely affecting patient satisfaction.^{48,49} Our results showed that attaining role congruence and experiencing SDM were both positively associated with SWD. It seems, therefore, that patient satisfaction may be improved in 2 ways; first, through tailoring the decisional role to reflect patients' preferences, and second, through practices that encourage SDM.

Currently, we are not aware of any formal strategic plan to introduce SDM at a national level in Hungary. It is hoped that this study marks the beginning of a larger research endeavor on patient involvement in Hungary. To gain commitment from policy makers, more research evidence is needed about the potential impact of SDM on clinical outcomes, healthcare costs, and health inequalities in the Hungarian context. At the micro and meso level of healthcare, medical schools, healthcare providers, and professional societies need to embrace the concept of SDM. Organizing training for clinicians in SDM and developing patient decision aids in Hungarian language would also be indispensable.²

Among limitations of the study, the results may be susceptible to recall bias because participants were retrospectively queried about treatment decisions they had been involved in during the preceding 6 months. Earlier research suggests that when preferences are assessed retrospectively, patients tend to prefer a more passive role as compared with the outcome of prospective studies.¹¹ Nevertheless, the actual time elapsed between the decision and the completion of the survey was in most cases likely to be less than 6 months, taking into account the high proportion of respondents with chronic illnesses in our sample. A wide variety of treatment decisions, medical areas, and acute and chronic illnesses treated in primary and specialized care settings were lumped together in this study. Future studies exploring experiences with specific types of medical decisions or focusing on 1 particular medical specialty would be particularly useful. Extending this research is suggested to investigate the role of additional predictors of preferences, such as risk aversion, having a regular doctor, patients' trust in their physicians, and caregivers' involvement in the decision (eg, family members).

Conclusions

Shared decision making is the most preferred decisional role; nevertheless, Hungary seems to fall behind other European countries in patient involvement in medical decision making. Shared decision making was associated with a higher satisfaction with treatment decisions, providing the first empirical evidence about the beneficial effects of SDM on patients at a national level in Hungary and, broadly, in Central and Eastern Europe. To improve the adoption of SDM in Hungary, promoting the value and practice of patient involvement through educational programs and broader health policies is recommended. We hope that our results encourage further research and foster the implementation of SDM projects at various levels of the healthcare system in Hungary.

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Supplemental Material

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