



## Factors influencing participation in shared decision making in the oncological setting

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**Abstract.** The increasing prevalence of cancer and the decreasing number of oncology specialists in Europe's workforce have led patients having to self-manage their conditions with the help of a health care professional. Ensuring cancer patients' good understanding of molecular profiling data is crucial for their active participation in illness-related decisions. Although shared decision making improves patients' knowledge and consideration of their needs, several difficulties remain in implementing shared decision making in cancer care. The objective of the research is to examine the relationship between sociodemographic aspects and knowledge of cancer-related topics and willingness to participate in cancer care. A cross-sectional study using a web-based questionnaire was conducted, including 1066 respondents among the population of Estonia. Logistic regression was used to answer research questions. There is a lack of knowledge and willingness of patients and their relatives to participate in shared decision making. Unlike in previous studies, higher readiness was observed among the ethnic minority and rural citizens. In addition to the factors previously identified, there is a need to consider a potential role of cultural and historical background of the health care system in determining the willingness and readiness of the general public to participate in shared decision making. These findings highlight the potential uniqueness of societies, in which paternalistic and autonomous approaches to patient care clash, and similar results may be found in other countries with a Soviet legacy. If there is a lack of readiness or willingness of a patient to participate, a physician should provide alternative means of support.

**Keywords:** public health, shared decision making, oncology care, patient education, patient-physician communication, cancer genomic testing, personalized medicine.

### 1. INTRODUCTION

Cancer is one of the leading causes of death in the world. In 2020, the cancer burden in the EU rose to 2.7 million new cases and 1.3 million deaths, and the risk of developing cancer before the age of 75 is estimated to be 30% [1]. The incidence of cancer in Europe is predicted to grow by 21% and mortality to rise 29% by the year 2040 [2]. In Estonia, about 8900 patients were diagnosed with cancer annually in the last five years [3] and approximately 3800 patients die of cancer each year [4].

Ultimately, cancer is becoming more widespread and prominent as cases rise.

Personalized medicine, also referred to as precision medicine, means using information about a patient's specific characteristics, such as genes or proteins, to understand and treat a disease [5]. Implementation of personalized medicine is a move away from a 'one-size-fits-all' conventional medicine approach [6]. In oncology, the implementation of precision medicine is widely touted as a standard of care, because cancer is a heterogeneous condition and thus has to be treated based on the specifics of the tumor and the patient [7]. As science is evolving, researchers have identified several predispositions to cancer

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as well as genomic differences in tumors. These findings have ultimately led to a more personalized approach in treating cancer [7]. Precision oncology, which involves molecular profiling of a tumor to find targeted treatment [8], plays an instrumental role in assisting oncologists with diagnosis, prognosis, and treatment of cancer [7]. Research has highlighted the importance of ensuring cancer patients' good understanding of molecular profiling data for their active participation in illness-related shared decision making (SDM) [9]. Patients understand the risks and benefits of treatment more clearly, are able to vocalize their preference and thus are more satisfied with their physician as well as treatment decisions [10]. Since the patient's viewpoint is paramount in the execution of implementing tumor genomics, it follows logically that an evaluation of the knowledge of such tests is vital.

Patient engagement in SDM is widely recognized as a feature of good quality health care [11]. SDM has been highlighted as a quality indicator of oncology care in numerous treatment guidelines. A systematic review found that during the years 2010–2019, 40% of breast cancer oncology guidelines supported the use of SDM in care setting [12]. Estonia has a Cancer Action Plan (CAP) for 2021–2030. The CAP provides an overview of effective patient-physician communication and sets goals to measure quality of life as well as patient satisfaction during the cancer journey and highlights the need of involving the patient in treatment decisions [13]. Thus, the implementation of SDM in Estonia is considered important in providing quality health care.

SDM improves patient's knowledge, satisfaction with the clinical encounter, accommodation of patient's needs and in some cases even treatment outcomes [14–16]; however, studies have also shown difficulties in implementing SDM in cancer care, especially in terms of time and structural constraints in clinical practice [15–18], patients' ability to participate in SDM due to lack of knowledge [9,19–21] and even unwillingness [9,22,23]. Patient's willingness to participate in SDM is affected by their characteristics and cultural aspects [21]. Previous research has highlighted several sociodemographic groups that are less susceptible to information about cancer as well as less willing to participate in SDM: people with lower levels of education [15,21,24,25], living in rural areas [26], belonging to an ethnic minority [27,28], having a lower economic status [9], being male and middle-aged or older [25]. SDM is not self-evident; patients need to be assisted to achieve SDM, and one of the options is to improve knowledge on the subject and willingness to participate [21], especially focusing on groups that have been found to be less susceptible to information and less willing to participate.

The cultural landscape of a country's health care system also influences the use of SDM. Paternalistic or

autonomous approaches to patient management affect whether SDM is implemented and expected [29]. If paternalism is the dominant approach, then patients are not accustomed to voicing their opinions about treatment and care, making SDM difficult to enforce. With autonomous approach the situation is reversed [29]. Understanding the patients' cultural and sociodemographic differences provides great value in clinical practice and facilitates the SDM process.

The aim of this study is to investigate the relationship between sociodemographic aspects and knowledge of cancer-related topics such as personalized medicine and cancer genomic testing, and to learn whether cancer patients or their family members would ask how they could participate in cancer care. Research questions were posed as follows: 1. To what extent does knowledge about cancer-related issues and willingness to participate in SDM differ between sociodemographic groups? 2. To what extent does knowledge about cancer-related issues and willingness to participate in SDM differ between groups with different exposure to cancer?

## 2. MATERIALS AND METHODS

A cross-sectional study was conducted among the Estonian population using a web-based questionnaire about cancer information search and knowledge of cancer-related topics in February 2021. Data collection was conducted using a web-based panel of 54 000 members (4%) of the population of Estonia. The members of the panel received a link to the online questionnaire via e-mail. Demographic quotas were applied to ensure that the profile of respondents in each sample point reflected the actual population of Estonia. Population proportions were received from Statistics Estonia. The respondents were recruited according to the proportions by age, gender, language, place of residence, and settlement type in the age range of 20 to 75 years. The sample included 1066 respondents. Data were gathered in Estonian and Russian, as ethnic Russians constitute 25% of Estonia's population [30]. The questionnaire included 18 questions that were divided into four blocks: sociodemographic characteristics of participants and their exposure to cancer, cancer-related information search, attainable knowledge, and recognition of terms. There were single- and multiple-choice as well as open-ended questions. Data were weighted according to the sociodemographic profile of the population of Estonia aged 20–75 years.

Statistical analysis was conducted in line with the SAMPL Guidelines, which highlight the importance of specifying the purpose, description, assumptions, results and quality measurements [31]. Our aim was to examine various aspects influencing cancer treatment-related

information search, the respondents' motivation to understand what they themselves could do if diagnosed with cancer, and the general knowledge of personalized medicine and cancer genomic testing. Respondents could answer yes or no to the question of whether they had independently sought information about cancer treatment and treatment options in the past five years. In order to understand interest in contributing to cancer care, the following question was asked: What would you ask your doctor if you or a member of your family were diagnosed with cancer? Respondents wrote down the questions they had. The open-ended questions were grouped by the first author. One of the grouping factors was respondents asking what they could do themselves, indicating their interest in becoming involved in cancer care. Participants were asked to describe in their own words what personalized medicine and cancer genomic testing were. If they were able to answer the questions, it was coded that participants knew what these terms meant.

Analyses were conducted using SPSS software package, version 23. Descriptive analyses of participant characteristics and dependent variables were conducted as cross-tabulations. The authors used logistic regression because of the dichotomous nature of the dependent variables; it was the most suitable method to study differences between groups and compare results. Logistic regression was used to explain cancer treatment information search, interest in contributing to cancer care, knowledge of personalized medicine, and cancer genomic testing as dependent variables with the sociodemographic independent variables that were considered to be potentially relevant [32–34] and exposure to cancer within social sphere. A  $p$ -value  $< 0.05$  was considered as statistically significant. In the results, we present the odds ratio (OR), confidence interval and  $R^2$  (Cox and Snell and Nagelkerke) values. To avoid misleading results in the logistic regression model, the authors revised crosstabs between dependent and independent variables to ensure that each group contained at least a few respondents, and used Cramer's  $V$  to assess how strongly two independent variables are associated with each other to avoid a strong link between independent variables in the logistic regression model. Cramer's  $V$  showed an association greater than 0.5 for the region of residence between the settlement type and language; due to this, the region of residence variable was excluded from the analysis.

During the data collection process, the first author worked for market research company RAIT Faktum & Ariko, which was hired by biotechnology company Roche Estonia to conduct market research. Roche Estonia defined the content of the questionnaire together with the corresponding author. The author has verbal consent by Roche Estonia to use this dataset. All relevant Personal Data Protection Act rules were followed. Section 6 of the

Personal Data Protection Act stipulates that processing special categories of personal data for scientific research without the consent of the data subject requires verification by an ethics committee [35]. However, since participation in the research was voluntary and the respondents willingly consented to participate in the study, no review by the ethics committee was required for this study [35]. When registering to participate in the web-based panel, respondents were informed about how their responses and data would be used.

### 3. RESULTS

Table 1 presents the descriptive results of the sample. The sample corresponds to the Estonian population. The majority of respondents were female and ethnic Estonians (52% and 68%, respectively), with secondary education (53%), and having income lower than 1000 euros per month per family member (62%). The latter corresponds to the general income level, where the average income per family member is 814 euros [36]. The mean age of the respondents was 47 years. The type of settlement, i.e. where the respondents lived, was almost equally distributed, with 36% living in the capital city, 31% in other cities and 33% in rural areas.

During the last five years, only 44% reported not having known anyone with cancer. 14% of the respondents had cancer within their family and 3% were cancer patients themselves. These results correspond to national statistics, according to which 4% have had cancer within their lifetime and 2% have had it within the last 12 months [37].

Table 2 describes the dependent variables. Even though there has been an extensive discussion on personalized medicine due to the Geenivaramu (Gene Bank) project [38], knowledge still remains as low as 20%. A similar knowledge gap is present with cancer genomic testing, where only 14% of the population knew what it is. Even though many respondents have had exposure to cancer within their social sphere (56%; see Table 1), only 23% have searched for cancer-related information individually, and 12% would have asked what they themselves could do if they were diagnosed with cancer.

Table 3 summarizes the outcome of the logistic regression with odds ratios (OR) and corresponding 95% confidence intervals regarding information search of cancer treatment-related topics (Model 1), interest to contribute to cancer care (Model 2), and knowledge of cancer-related terminology (Model 3 and Model 4).

Model 1 indicated that the probability of searching for cancer treatment-related information was significantly lower among people who had a cancer diagnosis among friends or relatives (OR = 0.48,  $p = 0.000$ ) or no cancer

**Table 1.** The study sample characteristics (n = 1066)

	Proportion (%)	n
<b>Gender</b>		
Male	48	512
Female	52	554
<b>Mother tongue</b>		
Estonian	68	727
Russian or other	32	339
<b>Income per family member per month</b>		
Under 500 EUR	20	217
500–1000 EUR	42	447
1000–1500 EUR	23	246
Over 1500 EUR	15	156
<b>Region of residence</b>		
Harju county	47	499
Central-Estonia	9	95
North-East Estonia	12	127
West Estonia	10	111
South Estonia	22	234
<b>Settlement type</b>		
Tallinn	36	380
Other cities	31	330
Borough or village	33	356
<b>Have you or people you know been diagnosed with cancer in the last 5 years?</b>		
Myself	3	34
In my family	14	145
Among relatives	25	263
Among friends or colleagues	23	248
None of the above	44	472
<b>Education</b>		
Primary education	7	70
Secondary education	53	566
Higher education	40	430
<b>Field of work</b>		
Healthcare or social care	5	56
Other	95	1010

**Table 2.** Descriptive statistics of dependent variables (n = 1066)

	Proportion (%)	n
<b>Searched for cancer treatment-related information within past 5 years</b>		
Yes	23	245
No	77	821
<b>Would ask the doctor what they could do themselves when diagnosed with cancer</b>		
Yes	12	133
No	88	933
<b>Know what personalized medicine means</b>		
Yes	20	208
No	80	858
<b>Know what cancer genomic testing means</b>		
Yes	14	147
No	86	919

Table 3. Regression analyses of cancer treatment information search, interest to contribute to cancer care and knowledge of personalized medicine and cancer genomic testing

	Model 1			Model 2			Model 3			Model 4		
	Searched for cancer treatment-related info (No/Yes)*			Interest to contribute to cancer care (No/Yes)**			Know what personalized medicine is (No/Yes)***			Know what cancer genomic test is (No/Yes)****		
	OR	95% CI Lower	Upper	OR	95% CI Lower	Upper	OR	95% CI Lower	Upper	OR	95% CI Lower	Upper
Female (ref. male)	0.99	0.72	1.35	<b>1.56</b>	1.05	2.32	0.99	0.72	1.38	0.81	0.55	1.18
Age (20–75)	1.00	0.99	1.01	1.01	0.99	1.02	<b>1.01</b>	1.00	1.02	1.00	0.99	1.02
Other language (ref. Estonian)	1.27	0.89	1.82	<b>2.10</b>	1.33	3.34	1.13	0.77	1.66	0.74	0.47	1.15
Secondary education (ref. primary education)	1.70	0.79	3.66	<b>4.34</b>	1.09	17.26	2.02	0.84	4.87	<b>4.68</b>	1.00	21.88
Tertiary education (ref. primary education)	2.13	0.98	4.66	3.92	0.97	15.86	<b>3.17</b>	1.30	7.75	<b>9.42</b>	2.00	44.32
Other cities (ref. Tallinn)	0.90	0.62	1.30	0.82	0.50	1.34	1.20	0.80	1.80	0.98	0.61	1.56
Rural area (ref. Tallinn)	1.06	0.70	1.60	1.61	0.95	2.74	<b>1.60</b>	1.04	2.47	1.24	0.76	2.01
501–1000 EUR (ref. up to 500 EUR)	0.88	0.58	1.32	1.09	0.67	1.80	1.46	0.94	2.27	1.66	0.96	2.86
1001–1500 EUR (ref. up to 500 EUR)	1.15	0.73	1.81	1.13	0.63	2.00	0.98	0.58	1.63	1.55	0.85	2.81
over 1500 EUR (ref. up to 500 EUR)	0.83	0.48	1.42	0.54	0.24	1.19	1.28	0.73	2.26	0.98	0.48	2.00
Field of work (ref. medical or social worker)	0.89	0.47	1.69	1.67	0.66	4.20	0.93	0.47	1.83	0.61	0.30	1.24
Cancer diagnosis among friends or relatives (ref. myself or within family)	<b>0.48</b>	0.33	0.70	1.18	0.69	2.00	1.34	0.85	2.09	1.22	0.73	2.05
No cancer diagnosis within social sphere (ref. myself or within family)	<b>0.22</b>	0.15	0.33	0.83	0.48	1.43	0.84	0.53	1.33	0.84	0.50	1.43

Significant  $p$ -values ( $p < 0.05$ ) are given in bold.

\*Cox &amp; Snell R Square is 0.064 and Nagelkerke R Square is 0.097;

\*\*Cox &amp; Snell R Square is 0.039 and Nagelkerke R Square is 0.075;

\*\*\*Cox &amp; Snell R Square is 0.038 and Nagelkerke R Square is 0.061;

\*\*\*\*Cox &amp; Snell R Square is 0.040 and Nagelkerke R Square is 0.073.

diagnosis within social sphere (OR = 0.22,  $p = 0.000$ ) compared to respondents who had a cancer diagnosis themselves or in their family. This result showed that people are not motivated to search for information on cancer unless the topic is relevant to them.

Model 2 showed the interest in contributing to cancer care. Women (OR = 1.56,  $p = 0.029$ ) were significantly more interested to contribute than men. Respondents from the ethnic minority (OR = 2.10,  $p = 0.002$ ) were more interested in contributing to their own cancer care than the Estonian ethnic majority population. Interest in contributing to cancer care did not differ between groups where cancer occurred in the family compared to the participants, who did not know anyone with cancer (OR = 0.93,  $p = 0.502$ ). Apparently, after facing a challenge of such life-threatening disease, active participation is not something that people are willing to engage in.

Model 3 and Model 4 results were assessed to evaluate knowledge of personalized medicine and cancer genomic testing. For both topics, education was an aspect influencing the level of knowledge. The respondents with tertiary education were three times more likely (OR = 3.17,  $p = 0.011$ ) to know what personalized medicine is and nine times more likely (OR = 9.42,  $p = 0.005$ ) to know what cancer genomic testing is than the respondents with primary education. Model 3 indicated that the likelihood of knowing what personalized medicine is became more probable with increasing age (OR 1.01,  $p = 0.039$ ). The respondents living in rural areas (OR = 1.04,  $p = 0.033$ ) are more likely to know about personalized medicine than those living in the capital city. Regarding knowledge of personalized medicine and cancer genomic testing, there were no differences between the people who had cancer in their family as compared to the people who did not know anyone with a cancer diagnosis (OR = 0.84,  $p = 0.453$ , OR = 0.84,  $p = 0.530$ ). This indicates an information gap that is present in cancer patients and their immediate family.

#### 4. DISCUSSION

The survey findings show that knowledge levels of personalized medicine and cancer genomic testing remain low among the general public and there is no difference between the people who have cancer in their family and the people who do not know anyone with cancer. This result highlights three aspects. Firstly, cancer patients and their immediate family have not been informed of general cancer topics like personalized medicine and cancer genomic testing. This finding is supported by previous research highlighting time and structural constraints in cancer care [15–18], due to which there is no time in the clinical setting to deal with patient education. Secondly,

low levels of knowledge may be because when receiving such a life-threatening diagnosis people are not receptive to information. Thirdly, cancer patients and their immediate family may not be willing to acquire such knowledge. Previous studies have similarly suggested that cancer patients are unable to acquire information [9,19–21] and unwilling to learn about cancer topics during disease [9,22,23]. Thus, close and ongoing physician-patient communication is needed for the patient to attain a reasonable level of knowledge, allowing them to have an active role in SDM. This requires support from the treating physician as well as other members of the care team, for example oncology nurses. Their contribution to patient education can have a positive effect on patient satisfaction with treatment decisions.

Even though information about cancer treatment is widely accessible [39], the present study outlines that such information search is only widespread among the people who are already affected by cancer, and there was no difference between other sociodemographic groups. Supporting cancer patients with relevant information throughout the care journey is therefore an important task for the healthcare professionals. Providing relevant information to the patient may help them in becoming a more active participant in the SDM process.

The results of this study suggest that people may be ready and looking for information during a family member's cancer treatment, since the probability of searching for information was much lower if the respondent only knew a friend with cancer or did not know anyone with cancer. Regardless, respondents lack interest in understanding what they themselves could do, as our results show only 12% of the population would try to comprehend their role, indicating unwillingness to take part in SDM or bear individual responsibility in wider terms than pure obedience to medical instructions.

The findings of this study align with previous research demonstrating cancer patients' lack of interest in actively participating in cancer care [9,22,23]. Cultural aspects, including approaches to patient management, might remain influenced by a paternalistic mentality more in societies of Soviet heritage, even if extensive measures are taken to implement change towards SDM [40], as it has been done in Estonia [39]. In a culture of paternalistic heritage, during cancer treatment patients are likely to remain passive recipients, for whom decisions are made by the physician. It could be fruitful in the oncological setting to empower patients to ask questions and express their preferences for their role of participation [16,21], since, as seen from the analysis, the majority (88%) would not consider having any role in cancer care on their own. In a culture of Soviet heritage, the change towards less paternalistic and more autonomous approach in patient management has not happened overnight and will con-

tinue to need more time and effort [39]. Therefore, resources should be allocated to activities which accelerate this transition. The authors of this research suggest that educating both physicians and patients about the importance of patient autonomy will make a difference in the long run.

The present research outlines that in Estonia, knowledge of cancer genomic testing and personalized medicine is quite low – 14% of the population understands what genomic testing is and 20% know the meaning of personalized medicine. Due to low awareness, it would be unreasonable to expect the patient to have demands and be able to make decisions in cancer care [21]. Ultimately, it is expected that the decisions are made by the doctor. In this context, educating patients about general cancer topics may facilitate their more active participation in SDM process. More educated patients have a greater ability to understand the physician's explanations, ask consecutive questions, and have more fruitful discussions about treatment decisions [21].

Previous research has implied that people living in the countryside may not have access to high-speed internet, which hinders education, e-learning, and e-health programs [26]. However, in Estonia, there are no differences in having internet access at home between rural and urban settings [41]. Our research findings suggest that rural families may be more receptive to cancer-related information compared to urban families, indicating a more extensive role of internet in rural families. This finding may signal that patients from rural areas are more ready to be a part of SDM. The difference between rural and urban residents may derive from their situation – a rural citizen has limited access to a physician and is forced to be more independent and active in the context of their treatment, while a city dweller's access to treatment may be much closer to home and thus easier. Patients from urban setting may need more support from the physician in attaining knowledge of cancer-related topics, which ultimately supports their participation in SDM.

Another differentiator, which has been extensively highlighted in previous research [15,21,24], is education. Similarly, our findings convey that higher levels of education support awareness of cancer topics. This may implicate that patients with higher education are more ready for SDM than those with lower-level education. Participation in SDM may be harder for patients with lower levels of education, due to their lower ability to understand physicians' explanations. Therefore, physicians and oncology nurses may need to pay more attention to supporting patients with lower levels of education.

Previous research has demonstrated that, compared to men, women are more interested in having a voice in treatment decisions [25] and developing new healthier habits [42]. According to our survey, women are more

interested in understanding what they themselves can do during cancer treatment than men. Thus, it might be fruitful to involve a female family member in the process of SDM.

Our findings suggest that sociodemographic aspects do not affect the initiative to search information about cancer. Thus, supporting patients with attaining relevant information about cancer treatment would be beneficial for all counterparts. Furthermore, the regression model showed no difference in information-seeking attitude between ethnicities, although previous studies have suggested that in Estonia, the Russian-speaking minority was less likely to know about proper information sources to update themselves on health-related topics [27,28]. In this study, a contradictory finding appears in a matter where the ethnic minority is more willing to participate in cancer care than the ethnic majority. Previous research has highlighted that the Russian minority in Estonia was not as content with health care management [28] and fewer of them felt that health care provider showed them care and consideration during the visit [27]. This may be a trust issue towards the health care system and its providers, which was noted in previous research [43–45], and due to this the ethnic minority may be more interested in contributing themselves. Thus, winning the trust of ethnic minority patients requires building a long-term relationship. Using the broader SDM approach, the physician can help the patient voice their preference and reflect upon these preferences empathically, thus building trust between them. Based on our study results, it can be argued that the ethnic minority patients in Estonia are more ready and eager to be a part of the SDM process and Estonians prefer a more paternalistic approach to the treatment process, even though previous research has suggested otherwise [42]. The ethnic minority in Estonia, who in this research consisted mainly of Russian-speaking respondents, may have more information sources about cancer treatment via Russian media, but for Estonian-speaking population access to materials in Estonian is limited. This access to more information may result in Russian-speaking respondents having more questions and concerns about their treatment options and consequently being more active participants in treatment decisions.

The study has some limitations. Cross-sectional study design is susceptible to misclassification due to recall bias. Population-based panels are an extract of the actual population in which participation bias may occur. This research was conducted as an online study, and thus the population that does not use or have access to the Internet could not participate. Since the prevalence of cancer is higher among the age group 65+ [3] and the proportion of Internet users among 65+ age group is lower (65%) compared to younger age groups (usage varies from 86–99%) [46], this might mean that the sample over-represented

respondents who are not personally affected by the topic. Finally, this research examined sociodemographic characteristics as influential factors of knowledge, but the model showed low explanatory power, suggesting that knowledge and interest to participate in cancer care are affected by characteristics that were not covered in this study. Despite these limitations, the authors believe that this study provides valuable insights into the possible reasons of SDM failure in the countries where paternalistic heritage has shaped the patient-physician relationship.

## 5. CONCLUSIONS

To conclude, the ethnic minority is more interested in understanding what they themselves could do during cancer care than the ethnic majority. In addition, people living in rural areas are more knowledgeable about personalized medicine. These results show the potential uniqueness of societies where paternalistic and autonomous approaches to patient management collide, which may be the case in many countries of Soviet heritage. Adequate counseling, which is a prerequisite for the patient to make individual decisions, means additional effort for doctors and a burden on the medical system. The physician's role in the SDM process is to create an environment for the patient where it is easy to be a part of treatment decisions. This will shape future encounters between the patient and the physician into more of a partnership than the paternalistic model [29].

Patient involvement and a more patient-centered approach has been a central topic in Estonian healthcare [39]. The results of the study show that there is a lack of patient interest, so the health care system should intervene because the system expects and needs people to be active in making treatment decisions. In addition, because the majority of people are not ready to comprehend their role in SDM, the treating physicians are not considering the patients' cultural and background factors.

Women and the ethnic minority, who are more interested in taking individual responsibility, are more likely to be more demanding of the physician and expect accurate explanations from them. Failure to listen to the patient's concerns and answer questions due to time constraints may leave the patient questioning and being dissatisfied with the medical system. These results point to the following needs: education and adequate information channels, as well as a supportive environment. Patients, physicians, and other healthcare professionals should be educated about the implementation of SDM. The physician may not have time for these discussions about patient preferences, so this time should be allocated for the physician and the patient. Implementing SDM

should be an easy option and the environment should support it.

Healthcare providers are key executors of SDM. Further research should focus on exploring their attitudes about SDM, as well as barriers and facilitators in the clinical setting. If barriers are addressed, SDM should become more widespread. Monitoring the implementation of SDM in hospitals will identify any shortcomings in this process and ultimately help overcome them.

The model of logistic regression showed a rather small explanatory power, meaning that besides sociodemographic and economic aspects there are other factors influencing the willingness to participate in SDM. Thus, investigation of other aspects would provide additional information. Previous literature has highlighted that sociocultural conditions of the country affect attitudes towards SDM [29], and these attitudes should be researched.

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## **Tegurid, mis mõjutavad patsiendi valmisolekut osaleda jagatud otsuste tegemisel onkoloogilise haiguse korral**

Birgit Aasmäe ja Kadi Lubi

Vananev elanikkond, kasvav vähkkasvajate levimus ja onkoloogiaspetsialistide arvu vähenemine Euroopas on kaasa toonud olukorra, kus patsient peab ravimeeskonna toetusel olema kaasatud oma seisundi haldamisse. Patsiendi kaasamist raviotsuste tegemisse peetakse üheks kvaliteetse tervishoiu tunnuseks ning see on enesehooldel lahutamatu osa. Vähipatsientide teadlikkus oma haigusest ning selle ravist on hädavajalik võimaldamaks neil aktiivselt osaleda haigusega seotud otsustes. Kuigi jagatud otsustes osalemine (*shared decision making* ehk SDM) suurendab patsientide teadlikkust ja patsiendi vajadustega arvestamist, esineb vähivast patsiendi kaasamisel mitmeid raskusi.

Uuringu eesmärk oli analüüsida, kas esineb seos sotsiaaldemograafiliste tunnuste ning teadlikkuse ja valmisoleku vahel osaleda SDM-is. Tegemist oli veebipõhise läbilõikeuuringuga, milles osales 1066 Eesti inimest. Valimi kirjeldamiseks ning vastajate hinnangute esitamiseks kasutati risttabeleid. Vastuste analüüsimiseks kasutati logistilise regressiooni meetodit. Tulemused osutavad, et patsientidel ja nende lähedastel napib teadmisi ja tahet SDM-is osaleda. Erinevalt varasematest uuringutest täheldati venekeelse rahvusvähemuse ja maal elavate inimeste kõrgemat valmisolekut SDM-iks. Lisaks mainitud teguritele tuleb arvestada ka tervishoiusüsteemi kultuurilist ja ajaloolist tausta. Tulemused toovad esile selliste ühiskondade eripära, kus on põimunud paternalistlik ja individualistlik patsiendi käsitus. Sarnased tõdemused võivad kehtida ka teistes Ida-Euroopa riikides. Kui patsiendil puudub valmisolek või soov SDM-is osaleda, peaks arst olema valmis olukorraga leppima ja pakkuma muid võimalusi patsiendi toetamiseks.