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What do Polish adults know about persistent therapy? Preliminary results

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Abstract

Introduction: Continuous progress in medicine generates new ethical challenges faced by members of the healthcare system. The use of persistent therapy is referred to when the methods and measures used in treatment do not offer a realistic chance of recovery or significant improvement of the patient's condition.

Aim: The aim of the study was to analyse adults' knowledge about the use of persistent therapy.

Material and methods: The study involved 200 (100%) adults, the vast majority of whom were women (160; 80.00%). An original online survey questionnaire was used to conduct the study, consisting of questions covering the topic in question and regarding the sociodemographic data of the respondents. The study was completely anonymous and voluntary, and all respondents gave their informed consent to participate.

Results and discussion: The most common procedures included in the persistent therapy, according to the respondents, were mechanical circulatory support (124; 62.00%) and mechanical ventilation (90; 45.00%). Among the most frequently cited factors influencing the decision to discontinue persistent therapy, respondents mentioned the patient's statement of intent (146; 37.00%). There was also a statistically significant result (P = 0.002) indicating large differences in the level of knowledge between those declaring a conenction with patient care and those who did not declare such connection.

Conclusions: Among participants, knowledge regarding persistent therapy was incomplete, especially among non-medical respondents. Informational activities should therefore be undertaken to raise public awareness about end-life decisions and treatment options in the last hours of one's life.

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1. INTRODUCTION

The relentless advances in medicine not only contribute to improving the health and prolonging the lives of patients, but also generate new ethical challenges to be faced by members of the healthcare system and, above all by doctors as the decision-makers for most treatments and related medical procedures.

The phrase 'persistent therapy' is used in Polish medical literature and between healthcare members. In the non-legislative Polish Code of Medical Ethics, the phrase 'persistent therapy' appears in article 32: 'In terminal conditions, the physician is not obliged to undertake and carry out resuscitation or persistent therapy and to apply extraordinary measures. The decision to discontinue resuscitation rests with the physician and is related to the assessment of therapeutic chances." According to the 2008 Consensus of the Polish Working Group on Ethical Problems of the End of Life, 'persistent therapy' is defined as 'the use of medical procedures to sustain the vital functions of a terminally ill patient that prolong their dying, involving undue suffering or violation of the patient's dignity. They do not include basic care, relief of pain and other symptoms, and feeding and hydration, as long as they are in the best interests of the patient.² Thus, there are several possible definitions of 'persistent therapy,' which, in addition to the one cited above, can be found in articles and guidelines from societies and teams related to intensive care, palliative medicine, paediatrics, etc.

In addition to the term 'persistent therapy,' especially in the foreign literature and also concerning patients in intensive care units, the term 'futile therapy' is more commonly used. Those two terms are often used interchangeably although they are not identical (the word 'futile' means 'having no results,' while 'persistent' is 'difficult to eliminate, persisting for a long time or constantly recurring'). Taking this fact into account, it is necessary to agree with the results of the analysis conducted by Ferdynus arising from the debates of the Polish Bioethics Society and assuming that the term 'persistent therapy' should not be abandoned in favour of the term 'futile therapy,' as the scopes of the meaning of the two terms do not overlap.³

The use of persistent therapy is referred to when the methods and measures used in treatment do not offer a realistic chance of recovery or significant improvement of the patient's condition. The decision to declare therapy persistent may be taken by both the patient and the physician whose rights to do so are equal.⁴ It should be emphasized that the decision of a patient declaring the pointlessness of further therapy is protected by Polish law. This is ensured, i.a., by Article 192 of the Criminal Code - 'Whoever performs a therapeutic procedure without the patient's consent shall be subject to a fine, restriction of freedom or imprisonment for up to 2 years.'5 However, the above fact does not release the doctor from the necessity of discussing decisions regarding future treatment with the patient, presenting all the benefits and harms carried, and, if further treatment is possible, convincing the patient to change it and, in both cases, making an appropriate entry in the medical records. The doctor's decision to continue or discontinue the current treatment should be made after a thorough assessment of the patient's current clinical condition and the performance of specialized examinations and taking into account the opinions of all members of the therapeutic group, as well as the treatment standards of the disease entity in question. The topic of persistent therapy appears from time to time in the media, stimulating increased public debate on this subject. However, does everyone have sufficient knowledge to speak out on the subject of the management of persistent therapy?

2. AIM

The study aimed to analyse Polish adults' knowledge regarding persistent therapy, especially those related to the care of patients in the last moments of life.

3. MATERIAL AND METHODS

A total of 200 (100%) adults participated in the study, the vast majority of whom were women (160; 80.00%). The respondents ranged in age from 18 to 60 years. An original online survey questionnaire was used, consisting of questions covering the topic in question and the sociodemographic data of the respondents, prepared in Microsoft Forms and then distributed to the respondents via instant messaging. All data was collected from November 2020 to February 2021.

The inclusion criteria for the study were informed consent, age over 18 years and the ability to understand and answer the questions.

Respondents' knowledge was assessed by adding up the points awarded for correct answers to questions testing knowledge of persistent therapy. In the single-choice questions, 1 point was awarded for indicating the correct answer, and in the multiple-choice questions, 1 point was awarded for indicating each correct answer and also for not indicating each incorrect answer. The number of points possible ranged from 0 to 21, and point scores were standardized to a value of 100 by obtaining the percentage of correct answers. The results obtained were categorized into the following categories: lowest level (up to 48% correct answers), average level (from 49% to 62% correct answers), and highest level (from 63% to 100% correct answers). The percentage ranges were created for the purposes of this study, taking into account the difficulty of the questions asked and aiming to make the groups in each range as equal as possible.

The incidence of differences between the level of knowledge and gender, as well as the incidence of linkage to care and attitude to faith, was examined using the χ^2 test. Those with a link to caring for the patients included respondents declaring work in the healthcare system – doctors, nurses, paramedics, medical students and day-to-day carers of patients with significant disabilities. A 5% risk of inference error was assumed and a probability value of *P* less than 0.05 was considered statistically significant.

Table 1. General characteristics of the study group (200; 100%).

Sex Join Second Se	Study group	N	%
Men 40 20.00 Age, years 18–25 86 43.00 26–35 41 20.50 36–45 36 18.00 46–55 30 15.00 >55 37 18.50 Place of residence 1 24.50 City <50 000 inhabitants	Sex		
Men 40 20.00 Age, years 18-25 86 43.00 26-35 41 20.50 36-45 36 18.00 46-55 30 15.00 >55 37 18.50 Place of residence 7 18.50 City <50 000 inhabitants	Women	160	80.00
18–25 86 43.00 26-35 41 20.50 36-45 36 18.00 46-55 30 15.00 >55 37 18.50 Place of residence 1 15.50 City <50 000 inhabitants	Men	40	20.00
18–25 86 43.00 26-35 41 20.50 36-45 36 18.00 46-55 30 15.00 >55 37 18.50 Place of residence 1 15.50 City <50 000 inhabitants	Age, years		
36-45 36 18.00 46-55 30 15.00 >55 37 18.50 Place of residence		86	43.00
46-55 30 15.00 >55 37 18.50 Place of residence	26–35	41	20.50
>55 37 18.50 Place of residence	36–45	36	18.00
Place of residence City <50 000 inhabitants	46–55	30	15.00
City <50 000 inhabitants	>55	37	18.50
City 50 000 - 100 000 inhabitants 31 15.50 City > 100 000 inhabitants 60 30.00 Village 60 30.00 Level of education	Place of residence		
City > 100 000 inhabitants 60 30.00 Village 60 30.00 Level of education	City <50 000 inhabitants	49	24.50
Village 60 30.00 Level of education 3 1.50 Primary 3 1.50 Junior high school 3 1.50 Secondary 71 35.50 Vocational 12 6.00 Higher 111 55.50 Marital status 2 1.00 Divorced 11 5.50 Married 81 40.50 Single 106 53.00 Having an offspring 7 3.50 Yes 93 46.50 No 107 53.50 Social/professional activity 7 3.50 Unemployed 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Attitude towards faith 22.50 1.00 No answer 2 1.00 Relationship to care for the patients 7 3.50 Yes 102 51.00	City 50 000 - 100 000 inhabitants	31	15.50
Level of education 3 1.50 Primary 3 1.50 Junior high school 3 1.50 Secondary 71 35.50 Vocational 12 6.00 Higher 111 55.50 Marital status 11 5.50 Marrital status 2 1.00 Divorced 11 5.50 Married 81 40.50 Single 106 53.00 Having an offspring 2 1.01 Yes 93 46.50 No 107 53.50 Social/professional activity 107 53.50 Unemployed 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Non-believer 45 22.50 No answer 2 1.00 Relationship to care for the patients 102 51.00	City >100 000 inhabitants	60	30.00
Primary 3 1.50 Junior high school 3 1.50 Secondary 71 35.50 Vocational 12 6.00 Higher 111 55.50 Marital status 2 1.00 Divorced 11 5.50 Married 81 40.50 Single 106 53.00 Having an offspring 2 1.00 Yes 93 46.50 No 107 53.50 Social/professional activity 2 1.50 Unemployed 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Attitude towards faith 2 1.00 Believer 153 76.50 No answer 2 1.00 Relationship to care for the patientts 2 1.00	Village	60	30.00
Junior high school 3 1.50 Secondary 71 35.50 Vocational 12 6.00 Higher 111 55.50 Marital status 111 55.50 Widowed 2 1.00 Divorced 11 5.50 Married 81 40.50 Single 106 53.00 Having an offspring 7 3.55 Vocational activity 107 53.50 Social/professional activity 7 3.50 Student 35 17.50 Employed 5 2.50 Acttitude towards faith 35 17.50 Believer 153 76.50 Non-believer 45 22.50 No answer 2 1.00 Relationship to care for the patients 102 51.00	Level of education		
Secondary 71 35.50 Vocational 12 6.00 Higher 111 55.50 Marital status 111 55.50 Marital status 2 1.00 Divorced 11 5.50 Married 81 40.50 Single 106 53.00 Having an offspring 7 3.50 Yes 93 46.50 No 107 53.50 Social/professional activity 7 3.50 Vuemployed 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Non-believer 153 76.50 Non-believer 45 22.50 No answer 2 1.00 Relationship to care for the patients 7 3.50	Primary	3	1.50
Vocational 12 6.00 Higher 111 55.50 Marital status 111 55.50 Widowed 2 1.00 Divorced 11 5.50 Married 81 40.50 Single 106 53.00 Having an offspring 106 53.00 Yes 93 46.50 No 107 53.50 Social/professional activity 107 53.50 Vunemployed 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Non-believer 153 76.50 Non-believer 45 22.50 No answer 2 1.00 Relationship to care for the patients Yes 102	Junior high school	3	1.50
Higher 111 55.50 Marital status 111 55.50 Widowed 2 1.00 Divorced 11 5.50 Married 81 40.50 Single 106 53.00 Having an offspring 106 53.00 Yes 93 46.50 No 107 53.50 Social/professional activity 107 53.50 Venemployed 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Attitude towards faith 2 1.00 Reliever 153 76.50 No answer 2 1.00 Relationship to care for the patients Yes 102 51.00	Secondary	71	35.50
Marital status Widowed 2 1.00 Divorced 11 5.50 Married 81 40.50 Single 106 53.00 Having an offspring 7 3.50 Yes 93 46.50 No 107 53.50 Social/professional activity 107 53.50 Venemployed 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Non-believer 45 22.50 No answer 2 1.00 Relationship to care for the patients Yes 102 51.00	Vocational	12	6.00
Widowed 2 1.00 Divorced 11 5.50 Married 81 40.50 Single 106 53.00 Having an offspring 7 7 Yes 93 46.50 No 107 53.50 Social/professional activity 7 3.50 Venemployed 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Attitude towards faith 2 1.00 No answer 2 1.00 Relationship to care for the patients Yes 102 51.00	Higher	111	55.50
Divorced 11 5.50 Married 81 40.50 Single 106 53.00 Having an offspring 106 53.00 Yes 93 46.50 No 107 53.50 Social/professional activity 107 53.50 Venemployed 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Attitude towards faith 153 76.50 Non-believer 45 22.50 No answer 2 1.00 Relationship to care for the patients Yes 102 51.00	Marital status		
Married 81 40.50 Single 106 53.00 Having an offspring	Widowed	2	1.00
Single 106 53.00 Having an offspring	Divorced	11	5.50
Having an offspring Yes 93 46.50 No 107 53.50 Social/professional activity 107 53.50 Veree 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Attitude towards faith 153 76.50 Non-believer 45 22.50 No answer 2 1.00 Relationship to care for the patients Yes 102 51.00	Married	81	40.50
Yes9346.50No10753.50Social/professional activity10753.50Unemployed52.50Pensioner73.50Student3517.50Employed15376.50Attitude towards faith15376.50Believer15376.50Non-believer4522.50No answer21.00Relationship to care for the patients10251.00	Single	106	53.00
No10753.50Social/professional activityUnemployed52.50Pensioner73.50Student3517.50Employed15376.50Attitude towards faith15376.50Believer15376.50Non-believer4522.50No answer21.00Relationship to care for the patients10251.00	Having an offspring		
Social/professional activityUnemployed52.50Pensioner73.50Student3517.50Employed15376.50Attitude towards faith15376.50Believer15376.50Non-believer4522.50No answer21.00Relationship to care for the patients10251.00	Yes	93	46.50
Unemployed 5 2.50 Pensioner 7 3.50 Student 35 17.50 Employed 153 76.50 Attitude towards faith 153 76.50 Non-believer 45 22.50 No answer 2 1.00 Relationship to care for the patients 102 51.00	No	107	53.50
Pensioner73.50Student3517.50Employed15376.50Attitude towards faith15376.50Believer15376.50Non-believer4522.50No answer21.00Relationship to care for the patients10251.00	Social/professional activity		
Student3517.50Employed15376.50Attitude towards faithBeliever15376.50Non-believer4522.50No answer21.00Relationship to care for the patientsYes10251.00	Unemployed	5	2.50
Employed15376.50Attitude towards faith15376.50Believer15376.50Non-believer4522.50No answer21.00Relationship to care for the patients10251.00	Pensioner	7	3.50
Attitude towards faithBeliever15376.50Non-believer4522.50No answer21.00Relationship to care for the patients76.50Yes10251.00	Student	35	17.50
Believer15376.50Non-believer4522.50No answer21.00Relationship to care for the patientsYes10251.00	Employed	153	76.50
Non-believer4522.50No answer21.00Relationship to care for the patients7251.00	Attitude towards faith		
No answer21.00Relationship to care for the patients10251.00	Believer	153	76.50
Relationship to care for the patientsYes10251.00	Non-believer	45	22.50
Yes 102 51.00	No answer	2	1.00
	Relationship to care for the patients		
No 98 49.00	Yes	102	51.00
	No	98	49.00

Comments: n – number of respondents.

4. RESULTS

The general characteristics of the study group are presented in Table 1. The largest group of respondents were aged between 18 and 26 (86; 43.00%) and had a university degree

(111; 55.50%) and were in active employment (153; 76.50%). The same number of respondents declared that they came from a rural area (60; 30.00%) as from a city of more than 100 000 inhabitants (60; 30.00%), and more than $\frac{3}{4}$ of the respondents (153; 76.50%) declared that they were believers.

The characteristics of the study group including knowledge of the definition of persistent therapy are shown in Table 2.

Most respondents (158; 79.00%) said that persistent therapy is the use of medical procedures to maintain the vital functions of a terminally ill patient prolonging their dying and involving undue suffering or violation of the patient's dignity, but 1 person (1; 0.50%) said that it is the use of medical procedures leading to the death of the patient.

The characteristics of the study group including knowledge of procedures classified as persistent therapy are shown in Table 3.

The most common procedures categorised by respondents as part of persistent therapy were mechanical circulatory support (124; 62.00%), as well as the provision of mechanical ventilation (90; 45.00%) and the supply of circulatory

 Table 2. Characteristics of the study group including knowledge regarding the definition of persistent therapy.

Definition	N	%
It is the use of medical procedures to sustain the vi- tal functions of a terminally ill person that prolongs their dying, involving undue suffering or violation of the patient's dignity.	158	79.00
It is the artificial maintenance of a person's vital functions by medical apparatus.	37	18.50
It is the disconnection of the patient from the med- ical apparatus in strictly defined cases.	4	2.00
It is the application of medical procedures that leads to the patient's death.	1	0.50
Evaluation of abbreviations: <i>n</i> number of respond	ente	

Explanation of abbreviations: n – number of respondents.

 Table 3. Characteristics of the study group including knowledge of procedures classified as persistent therapy.

Procedures classified as persistent therapy	Ν	%
Mechanical circulatory support	124	62.00
Mechanical ventilation	90	45.00
Administration of cardiovascular stimulating drugs (e.g. catecholamines)	88	44.00
Parenteral nutrition (intravenous route)	70	35.00
Performing specialised invasive procedures and examinations	60	30.00
Transfusion of blood products	58	29.00
Cardiopulmonary resuscitation	56	28.00
Management of renal replacement therapy (dialysis)	54	27.00
Enteral nutrition (gastrointestinal route)	46	23.00
Pain relief	40	20.00
Patient hydration	28	14.00
Performing basic care	26	13.00
Administering antibiotics	20	10.00

Comments: n – number of respondents.

Table 4. Characteristics of the study group including knowledge of the unambiguity of the definitions of the terms 'persistent therapy,' 'euthanasia,' and 'palliative treatment.'

Definitions	Ν	%
Persistent therapy & Euthanasia		
Persistent therapy = Euthanasia	4	2.00
Persistent therapy ≠ Euthanasia	168	84.00
No knowledge	28	14.00
Persistent therapy & Palliative treatment		
Persistent therapy = Palliative treatment	26	13.00
Persistent therapy \neq Palliative treatment	108	54.00
No knowledge	66	33.00

Comments: n – number of respondents.

stimulation drugs (88; 44.00%). The fewest respondents included antibiotic therapy among the procedures discussed (20; 10.00%).

The characteristics of the study group including knowledge of the unambiguous definitions of the terms 'persistent therapy,' 'euthanasia' and 'palliative treatment' are shown in Table 4.

Almost 15% of respondents did not know whether the definition of 'persistent therapy' was synonymous with the definition of 'euthanasia', and 13.00% of respondents (26) said that 'persistent therapy' was synonymous with 'pallia-tive treatment'.

The characteristics of the study group including the knowledge of those who can decide to terminate treatment considered as persistent are presented in section A of Table 5 along with the characteristics of the study group including respondents' knowledge of possible factors influencing the decision to discontinue therapy (section B) and pro futuro statement of intent (section C).

Slightly more than $\frac{1}{4}$ of respondents (54; 27.00%) said that the cessation of treatment considered to be persistent therapy should be decided by the entire therapeutic team caring for the patient. The most common factors influencing the decision to discontinue therapy included: a statement of intent previously expressed by the patient (146; 37.00%), as well as the patient's clinical condition (120; 60.00%). Most participants (176; 88%) correctly defined the pro futuro statement of intent.

Table 6 shows the characteristics of the study group including differences in the level of knowledge regarding persistent therapy between women and men (section A), the existence of a connection with patient care (section B) and attitudes towards faith (section C).

Women most often presented an average level of knowledge (35.00%) and men a high level of knowledge (40.00%). Gender differences in knowledge levels were not statistically significant (P > 0.05). Participants connected with patient care most often represented the highest level of knowledge (45; 44.12%), while respondents who did not have a connection to caring for the patients on daily basis most often represented the lowest level of knowledge (41; 41.84%). This observation was statistically significant. Believers were most likely to represent an average level of knowledge (35.95%), and non-believers had the highest level (48.89%). According to the result of the χ^2 test, a statistically significantly higher (P < 0.05) level of knowledge was found for non-believers compared to believers.

Table 5. Characteristics of the study group including respondents' knowledge regarding authorities allowed to terminate
persistent therapy, possible factors influencing the decision to discontinue therapy and <i>pro futuro</i> statement of intent.

	N	%
Termination of persistent therapy can be decided by		
Doctor	60	30.00
The entire therapeutic team caring for the patient	54	27.00
Closest family	40	20.00
Patient	36	18.00
A court or other state institution	4	2.00
Possible factors influencing the decision of therapy termination		
Prior declaration of intent by the patient	146	37.00
The clinical condition of the patient	120	60.00
Opinion of the members of the therapeutic team caring for the patient	100	50.00
Will of the patient's family	50	25.00
Patient's age	34	17.00
Type and cost of used therapeutic measures	18	9.00
Pro futuro statement of intent is:		
A statement of intent in which a person expresses their wishes and preferences regarding treatment for a situation that may occur in the future, during which he or she will not be able to participate in making informed therapeutic decisions	176	88.00
It is the decision of the treating physician as to the further therapeutic management of the terminally ill patient	10	6.00
It is a statement by the patient as to their preferred treatment methods	10	5.00

Comment: n – number of respondents.

		Variables		χ^2	df	Р
	Sex	Women, <i>n</i> (%)	Men, <i>n</i> (%)			
A	Level of knowledge					
Section /	Low	52(32.50)	12(30.00)			
	Average	56(35.00)	12(30.00)	0.83	2	0.66
0,	High	52(32.50)	16(40.00)			
	Total	160(100)	40(100)			
	Existence of a connection with the care of the patients	Yes	No			
8	Level of knowledge					
Section B	Low	23(22.55)	41(41.48)			
Sect	Average	34(33.33)	34(34.69)	12.06	2	0.002
	High	45(44.12)	23(23.47)			
	Total	102(100)	98(100)			
	Attitude towards faith	Believers	Non-believers			
J	Level of knowledge					
ion	Low	54(35.29)	10(22.22)			
Section	Average	55(35.95)	13(28.89)	6.55	2	0.038
	High	44(28.76)	22(48.89)			
	Total	153(100)	45(100)			

Tab. 6. Characteristics of the study group, taking into account differences in the level of participants knowledge depending on their sex, existence of a connection with patients care and attitudes towards faith.

Comments: n – number of respondents, df - degrees of freedom, P – statistical significance.

5. DISCUSSION

In the conducted research respondents were given several definitions of persistent therapy from which they were asked to choose the correct one. Unfortunately, as mentioned earlier 'persistent therapy' was not comprehensively defined yet, hence the choice of this way of asking the mentioned question. Most respondents (158; 79.00%) from the study group claimed that persistent therapy was the use of medical procedures to sustain the vital functions of a terminally ill patient prolonging their dying and involving excessive suffering or violation of the patient's dignity. Similar definitions were chosen by respondents in the study by Bazaliński et al. Approximately 70% of respondents in their group defined persistent therapy as 'therapy that does not achieve a therapeutic goal but merely sustains vital functions, becomes a cause of excessive pain and suffering without bringing any benefit to the patient.' As many as 13.00% of respondents from the aforementioned study defined the term in question as 'the provision of treatment that prolongs the life of chronically and terminally ill patients,' and 10.00% as 'any available therapeutic modality implemented to delay life-threatening organ failure with evidence of imminent patient death."

The procedures most frequently included by respondents as part of persistent therapy were mechanical circulatory support (124; 62.00%), as well as the provision of mechanical ventilation (90; 45.00%) and the supply of circulatory stimulation drugs (88; 44.00%). The fewest respondents included antibiotic therapy among the procedures discussed (20; 10.00%). Procedures of persistent therapy include ineffective cardiopulmonary resuscitation, administration of catecholamines, conducting renal replacement therapy, mechanical ventilation, transfusion of blood products, parenteral nutrition and performing specialized invasive procedures and examinations. Their use in terminally ill patients is disproportionate to the therapeutic options aimed at improving the clinical condition and is burdensome and very costly for patients, and their use may only temporarily prolong life.⁷

To correctly understand the nature of persistent therapy, it is necessary to distinguish it from euthanasia and palliative care for a terminally ill patient. Only 4 respondents (2.00%) from the self-reported study group claimed that 'persistent therapy' is synonymous with 'euthanasia,' and 13.00% (26 people) claimed that 'persistent therapy' is synonymous with 'palliative care.' Persistent therapy is not synonymous with euthanasia, i.e., the intentional causing or hastening of death, resulting from the assumption that the only effective liberation of a person from suffering is to shorten their life.8 It is also not synonymous with palliative treatment, which can be defined as the holistic care of the terminally ill patient, the main aim of which is to improve the quality of life and maintain the patient's optimal function. Unlike supportive care, which focuses on enabling the further treatment, palliative care aims to minimize the symptoms of the disease and the side effects of treatment and includes addressing the psychosocial and spiritual needs of the patient.9 Related to the above terms are the attitudes presented by medical personnel towards the patient at the end of life. The first (euthanasic) is based on the conviction that the only way to free the patient from suffering is to shorten, i.e. take his or her life. The second (therapeutic persistence) is based on undertaking persistent therapy on

the patient to prolong his or her life. The third, hospice, focuses on improving the patient's quality of life through appropriate palliative care that provides relief from diseaserelated discomfort while abandoning persistent therapy.¹⁰ When deciding to discontinue treatment, it should be borne in mind that this decision entails a great responsibility, not only legally but also ethically. When making this decision, it is important to remember that the patient's best interests must come first. The wishes of the patient's family should be relegated to the background, as they often do everything possible to ensure that their loved one lives at least one day longer, without always understanding that continuing treatment may only prolong their suffering and postpone death.

More than one-quarter of the respondents (54; 27.00%) said that the cessation of treatment considered persistent therapy should be decided by the entire therapeutic team caring for the patient, and more than half of the respondents (104; 52.00%) knew that the doctor can abandon persistent therapy in the case of terminally ill patients. It is generally agreed that the decision not or to discontinue therapy considered persistent should be made within the team of professionals caring for the patient. It should not be kept secret in any way, especially from the patient and his or her family, unless the doctor decides to use therapeutic privilege allowing him or her to provide the patient with incomplete information about his or her condition in a situation where providing complete information would have negative health consequences for the patient or the patient simply does not want to know everything about his or her condition. It should be emphasized that therapeutic privilege allows limiting, in terms of scope, the information provided to the patient about the patient's condition and prognosis, but does not authorize the provision of untruths to the patient.11 Gubiński commenting on the norms concerning the construction of the therapeutic privilege on the grounds of the Polish Code of Medical Ethics, explained that its aim is 'not to harm people doomed to a quick passing away, to prolong the existence of hope in them, not to plague the fading life, not to accelerate the weakening of the organism's defence power.'12

Decisions to discontinue a particular type of treatment are made in strictly defined clinical situations, i.e. clear evidence of brain death, an incurable disease with a poor prognosis and no possibility of effective treatment, and when the treatment given to the patient causes suffering and there is no chance of improvement in the patient's clinical condition. Regardless of the decision taken, the patient must be given appropriate care. It can be said that by ending one type of treatment, another type of treatment is started, but with a different aim and course.

For terminally ill patients, in particular, the aforementioned palliative care is relevant at this point. Palliative care is a form of care provided to terminally ill patients in the terminal phase of their illness, in whom there is no chance of a full recovery and death is only a matter of time. Its basic principle is to accept death as the natural end of life, and the key aim is not to cure the patient but to improve the quality of life, reduce illness-related distress, including pain relief, and provide psychological and spiritual support to the patient and family during the dying process.¹³

The most common factors influencing the decision to discontinue therapy included the statement of intent previously expressed by the patient (146; 37.00%), as well as the patient's clinical condition (120; 60.00%), and almost 90% of respondents (176; 88.00%) correctly answered the question regarding the function of the pro futuro statement of intent. The current patient rights in Poland, from a formal point of view, meet the requirement covering the issues of empowerment and autonomy and respect for the dignity of the patient. However, there is no explicit reference in them to the possibility of making a statement concerning treatment for the future - pro futuro, in particular with regard to the use of persistent therapy when the patient's condition will not allow for making informed decisions. Due to the specificity of the aforementioned declaration, the consideration of its relevance, legitimacy and feasibility in Poland and the possible consequences of its application concern not only health professionals but also people for whom the analysed declarations have a medical-ethical and general human dimension. The patient's right to self-determination is one of the inalienable ethical standards in modern medicine. Without the patient's consent, preceded by adequate information, the doctor cannot take any therapeutic action. However, what seems obvious at a general level can be extremely complicated in the implementation context in the case of a patient with whom there is no contact and who has not previously determined his or her decisions concerning sustaining his or her life in the event of illness. The dilemma becomes even more apparent when the patient decides to exercise his or her autonomy in the form of influencing the possible future behaviour of physicians regarding his or her treatment when he or she is unable to express his or her will.14

The assessment of the level of knowledge showed that those with a connection to caring for the sick most often represented the highest level of knowledge (45; 44.12%), while respondents who do not have a connection to caring for the patients daily most often represented the lowest level of knowledge (41; 41.84%). The result (P < 0.05) is statistically significant and indicates large differences in the level of knowledge between those declaring the presence of a connection with care for the sick and those who do not declare said connection. The study covered healthcare workers, including nurses. Gaps in their knowledge negatively affect patients' health, and as caregivers who spend the most time with patients, their knowledge of end-of-life decisions should be constantly expanded and improved. Limitations of the study must include the small group of respondents, as well as the differences in the group in terms of respondents' gender, age and level of education which is not representative of the Poles general population. However, it should be noted that there are not many studies in the literature on the assessment of adults' knowledge of persistent therapy, hence the survey shows at least a small percentage of how

adults' knowledge of the topic in question presents itself, with a particular focus on comparing the knowledge of those with no connection to patient care and those working in the health sector. Further research in this area could lay the groundwork for a change in the perception of endof-life decisions by patients, their families, and members of the health system, who, by increasing their knowledge, will be able to have more frequent discussions with patients on described topic.

6. CONCLUSIONS

Knowledge of surveyed adults regarding persistent therapy was insufficient, especially among non-medical professionals.

Information and education activities should be carried out to improve the public's knowledge about the management of persistent therapy, and the possibility of its discontinuation by both patients and members of the therapeutic team.

Conflict of interest

None declared.

Funding

None declared.

Ethics

The described study was submitted for evaluation to the Bioethics Committee of the Medical University of Silesia in Katowice, which issued an opinion on 17.10.2017 (KNW/0022/KB/223/17) stating that the questionnaire study is not a medical experiment and does not require the consent of the said committee to conduct it. However, it recommends that, despite the content of the above opinion, all measures should be taken to conduct the study following the applicable ethical principles and legal provisions, the most important of which was to ensure the total anonymity of the respondents and the voluntariness of their participation in the survey. All respondents gave their informed consent to participate, confirming this fact by ticking the appropriate box in the questionnaire, in accordance with the prepared survey protocol displayed to each respondent before starting to complete it.

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