

Forensic psychiatric assessment of fitness to test in cancer patients

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Summary

In the case of a will made by a person suffering from cancer, sometimes the party seeking to challenge it will raise as an argument the very fact that the testator has been diagnosed with cancer (regardless of its type, severity of symptoms, phase of development and dynamics). In the opinion of beneficiaries omitted in the will, this would deprive the testator of the ability to make a conscious or free decision and express his will. A substantive analysis of the court material requires that the experts not only follow the general principles of preparing psychiatric and psychological opinions in testamentary cases but also take into account certain psychopathological conditions and other factors specific to cancer. The aim of this literature review is to present these special circumstances in the context of the possibility of their use by experts when preparing an expert opinion on the assessment of the validity of the declaration of will. In assessing the mental state of the testator, experts should consider not only reactive mental disorders, cognitive deficits or disorders of consciousness, but also conditions characteristic of the neoplastic process: CRCDC (cancer-related cognitive dysfunction), CRF (cancer-related fatigue), CACS (cachexia-anorexia cancer-related syndrome). In their assessments, experts cannot ignore other factors specific to this disease: its phase nature, the degree of adaptation of the testator to the disease, family conditions that may influence the testator's property decisions.

Key words: cancer, mental disorders, will

Introduction

Some people declare that they would like to have time to prepare for death, including organizing their financial matters by drafting a will. This mainly concerns elderly individuals [1], who are at the highest risk of developing cancer, often accompanied by mental health issues [2]. This is especially important in light of the increasing number of diagnosed and projected oncological diseases [3, 4].

Despite increasingly effective methods of oncological treatment, the diagnosis of cancer still arouses fear, anger, terror, and a conviction of inevitably approaching death in many patients [5]. Intense somatic complaints and unpleasant effects of therapy, especially in the elderly, contribute to the occurrence of various mental problems [6]. This may prompt them to finally settle their affairs – to make a will. People who disagree with the patient's inheritance decisions often apply for the invalidation of such a will, citing not so much the presence of specific mental disorders in the testator, but the very fact of the presence of cancer or oncological treatment. In such situations, the court is obliged to appoint expert psychiatrists and psychologists. Naturally, the rules for preparing an opinion on the mental state of a testator suffering from cancer do not differ significantly from the general principles of giving opinions in so-called testamentary cases. However, it may be helpful for experts to take into account elements specific to this disease related to characteristic changes in the testator's mental state, his or her family relationships, the dynamics of the underlying disease or the adverse effects of oncological treatment. The aim of this literature review is to present these specific circumstances in the context of the possibility of their use by experts in the field of psychiatry and psychology when preparing an expert opinion on the assessment of the validity of a declaration of will.

Material and method

This literature review was conducted using a narrative analysis covering a wide range of oncological, psychiatric, psychological, and forensic topics, drawing on studies of varying complexity and structure, as well as theoretical works addressing specific issues. For this purpose, from May to July 2024, online databases, primarily PubMed and, to a lesser extent, Polish bibliographic databases of scientific journals, were searched for relevant original and review articles. The literature search used key words in English along with their Polish translations and possible combinations: cancer, mental disorders, depression, anxiety disorders, phases of cancer, adaptation to cancer, family in cancer, making a will, validity of a will, psychiatric expertise, psychological expertise. Publications in the field of forensic psychiatric and psychological assessments were also sought, particularly those related to evaluating mental capacity for drafting a will. Excluded were abstracts, commentaries, opinions, editorial pieces, publications in languages other than English or Polish, works focusing solely on the legal aspects of making a will, or the feasibility or effectiveness of oncological therapies, as well as other highly specialized cancer-related topics not directly relevant to the subject of this study. This process resulted in the identification of 68 publications. After preliminary review, the article selection criteria were refined, and works were categorized into the following thematic areas: the course and dynamics of cancer diseases; changes in a patient's life situation resulting from cancer; patient adaptation to the cancer process and oncological treatment; the occurrence of mental disorders during cancer; and the

principles of psychiatric and psychological assessments. Works that most broadly covered these thematic areas were selected, with particular emphasis on publications referencing more than one area. In the end, 46 full-text original and review publications in Polish and English, published up to 2024, were considered. In the next phase, the gathered data were analyzed and summarized within each thematic group and related to the criteria for psychiatric and psychological assessment in cases concerning the validity of a will. The final stage of the work involved identifying the areas and issues that play a significant role in psychiatric and psychological evaluation processes for individuals diagnosed with cancer who have drafted a will.

Psychiatric criteria for the invalidity of a will

It is considered that a will is made in a state that excludes conscious decision-making and expression of will, when during its execution the party to this act is unable to understand its nature, to grasp with memory and understanding what they dispose of, is unable to remember and understand who the beneficiaries are, whose interests are affected by the content of the will [7]. The most common sources of unconsciously made property decisions include dementia syndromes of various origins, more severe mental disabilities, psychoses of endogenous, exogenous, and organic origin, consciousness disorders syndromes (also in the course of somatic diseases such as cancers) [8].

Lack of freedom in making financial decisions is identified with a state in which a person recognizes the sense of their actions, but under the influence of certain mental dispositions is unable to resist external factors (suggestions, requests, behaviors aimed at arousing a sense of guilt, demands) [9]. The most common causes of loss of freedom in making decisions are indicated as severe somatic diseases (inflammatory, vascular, degenerative, post-surgery conditions, conditions leading to cerebral ischemia), including neoplastic diseases. They can lead to general asthenization, manifested by psychomotor slowing, apathy, impoverishment of interests, anxiety, depression, emotional lability, excessive psychophysical fatigue, which result in disturbances in decision-making processes [10]. Sometimes people from the patient's environment isolate them from their family, encourage them to distrust their loved ones, while at the same time winning them over with small kindnesses and help. Ultimately, they put him in a situation where they expect him to change his previous financial decisions in their favor, contrary to his actual preferences [11].

Mental disorders in the course of cancer

People with oncological diseases are at risk of developing various mental disorders resulting from the impact of a complex of adverse etiological factors. The most frequently reported are adaptation disorders (anxiety, depression, mixed), but organic

disorders, consciousness disorders, psychotic disorders, and other disorders specific to this disease may also occur [12]. In this group, a significant relationship is observed between anxiety disorders and depressive syndromes, which occur with a similar frequency [13], estimated at a general level of 20–45% of patients [14, 15]. It should be noted, however, that this frequency changes depending on the phase of the disease: in the diagnostic period, these syndromes affect 33% of patients, in the period of remission lasting up to a year – 15%, and in the period of relapse (the most psychologically burdensome) – 45%, while in the advanced phase of the disease the frequency decreases to 26% [16]. The co-occurrence of depressive and anxiety symptoms is more frequently observed right after cancer diagnosis, while depression without anxiety is observed in more advanced stages of the disease [14]. The development of anxiety and depressive disorders is caused not only by the information about the cancer diagnosis, but also by unfavorable prognosis, pain, body image disorders, mutilating effects of treatment (hair loss, amputations, stomas, weight loss, mastectomy, peripheral neuropathy), and neuropsychiatric sequelae of therapy [13, 17]. However, the most accurate predictor of the development of depression is its occurrence throughout the patient's life (it then increases almost 7-fold) [18].

Knowledge of these etiological factors may provide experts with a basis for searching for possible affective mental disorders. The highest level of anxiety is noted in patients with lung, breast, stomach, reproductive organs, and blood cancers [13, 17]. A unique type of anxiety in this group of patients is carcinophobia in people who have had cancer and are afraid of a recurrence of the disease in themselves or of being diagnosed with this disease in their relatives [12]. Depressive symptoms most often affect patients with cancers of the oral cavity and throat, pancreas, breast, and lung, slightly less often patients with colon cancer, gynecological cancers and lymphoma [19]. The risk of a depressive syndrome increases with age [18], so it concerns people who most often decide to make a will. In the case of elderly people, more pronounced symptoms of depression should be expected, which results from problems typical of this period of life: insomnia, recurrent physical fatigue, concentration disorders, more frequent thoughts about death [20]. Regardless of age, women with cancer are twice as likely to develop depressive disorders than men [18].

Usually, experts in their assessments consider the life situation of the testator, which may modify the clinical picture of possible mental abnormalities. Socioeconomic factors, i.e., low level of education, unemployment, absence due to illness, reduced income or financial difficulties contribute not only to the development of depressive disorders, but also to their severity. Moreover, it has been found that single people (without emotional support) experience depression four times more often than people in intimate relationships [18].

One of the most common sources of unconsciously made property decisions is dementia of various origins [8, 21]. In the advanced phase of cancer, especially in elderly

patients, various types of cognitive disorders can be expected related to the presence of cancer [22] or chemotherapy treatment [23]. Among disorders of consciousness, the most common is delirium, especially in the advanced phase of the disease (it may affect up to 85% of patients) [14, 24], symptoms of which usually deprive the testator of the ability to consciously and freely decide and express their will in a will [10]. Factors predisposing to its occurrence include old age, advanced disease, cognitive disorders, visual disorders, dehydration, postoperative period, alcohol or other psychoactive substance abuse. However, they are extremely rare as a result of chemotherapy [14].

Conditions specific to neoplastic disease

In people with cancer, and especially those undergoing oncological treatment, certain specific psychopathological conditions are encountered, the possible presence of which should be taken into account by experts when assessing the mental state of the testator when drawing up a will. One of them is cognitive disorders, previously called *chemobrain* and currently referred to as cancer-related cognitive dysfunction – CRCDD [25]. It is considered that CRCDD may be the result not only of chemotherapy [26], but also other forms of treatment: hormone therapy, radiotherapy, surgical procedures, as well as the consequence of persistent anxiety, fatigue or even the influence of genetic factors [27]. The frequency of this syndrome is estimated at 17–75%. In almost every third patient, it develops before the treatment is started, the causes of which are believed to be the impact of burdensome emotional factors [28]. CRCDD manifests itself in the weakening of the following cognitive functions: executive functions, learning from verbal material, psychomotor slowing, lack of flexibility of thinking, weakening of visual, verbal and non-verbal memory, reduced visual-spatial skills and speech fluency, as well as weakened ability to sustain attention [25, 29], i.e., factors that can potentially reduce the ability to perform legal acts. However, it should be remembered that these deficits in most cases are short-term, and only in every third patient do they persist for a long time (even for several years) [28].

A slightly different condition is cancer-related fatigue (CRF), which affects 40–100% of patients during oncological treatment and 14–40% of patients after oncological treatment (chemotherapy, hormonal, targeted, and immunological therapy). The fatigue syndrome consists of: a disturbing, persistent, subjective feeling of physical, emotional, and/or cognitive fatigue or exhaustion related to cancer or its treatment, which is completely disproportionate to the degree/amount of physical fatigue physiologically accumulated during the day. Its symptoms do not subside with rest and may make it difficult for the patient to function daily [30, 31]. Importantly, fatigue symptoms may occur alone, but also co-occur with a depressive syndrome (in the case of severe depression – 43%, moderate depression – 29%) [32].

Another condition to be considered by experts is cachexia-anorexia cancer-related syndrome (CACS), also known as cachexia-anorexia syndrome. It occurs in most

patients, but only in the advanced phase of the cancer (in 80% of patients with cancer of the digestive tract, pancreas, head, and neck, in 60% of patients with colon, lung, and prostate cancer, in 40% of patients with breast cancer, Hodgkin's lymphoma). At the time of death, this syndrome is diagnosed in 80% of patients, regardless of the type of cancer [33, 34]. It manifests itself not only in a decrease in body weight, but also in increasing weakness and fatigue, and a decrease in the quality of life, which in turn results in mental problems and negatively affects the patient's relations with the environment [35]. These conditions should be considered as a potential basis for the testator losing the freedom to make property decisions.

Adaptation to cancer

Patients are usually more involved in the therapy at the beginning of oncological treatment. As time passes, positive re-evaluation weakens, giving way to a sense of helplessness and anxiety [5]. This leads to a decrease in the quality of life of patients in all its dimensions – physical, emotional, social, cognitive, in social roles, and at work. The degree of adaptation to the disease is related to its image: the intensity of physical suffering, changes in appearance, adverse effects of treatment, duration of isolation from the family, functioning in a closed group of patients (observing the suffering and death of others, exchanging unpleasant information about the disease, treatment, creating pessimistic group relations), the need to comply with medical recommendations, giving up social roles, fear of disease relapse, professional and economic problems, or lack of sufficient support and understanding [36]. As a result, 40% of patients over the age of 70 experience a deterioration in their functioning [37]. Often, these elements are highlighted by the party disagreeing with the content of the will and presented as arguments for its invalidity. On the other hand, the higher the level of acceptance of the disease, the more often the patient uses the fighting spirit strategy and the less preoccupation with fear or helplessness. Experts can obtain information on this subject not only from witness statements, but also from oncological and possibly hospice documentation (parameters regarding acceptance of the disease and coping with it are standardly included in it).

Phases of cancer disease

Analyzing the dynamic changes in the patient's emotional state, several phases in the course of the neoplastic process were distinguished. In the first phase, after hearing the diagnosis, the patient usually represses this information and denies the problem, which may manifest itself in a lack of emotional involvement. In the second stage, anger, rage, rejection of help or discontinuation of treatment appear. In the next stage, such a person begins to "bargain" with fate, make promises of improvement in exchange for recovery, idealize people in whom he places his hope. The next stage is

dominated by sadness, a sense of uselessness and failure. In the last stage, acceptance of the disease usually comes, expressed by calmness or an attitude of resignation [38].

Depending on the phase of illness in which the will was made, motivation of its author may result from completely different motives, sometimes incomprehensible to those around him. His property decisions may be the result of anger or rage directed towards individual family members, an expression of a sense of failure in life and resignation. They may also be the result of a rational and balanced life review or reflections on individual relatives (e.g., transferring property to a person with whom the testator had a strong emotional bond; to a person to whom he felt obligated; to a person who, in his opinion, needed financial support the most).

Family relationships in cancer

In assessing the reasons that guided the testator in making a will, experts do not omit the analysis of his family relations, the overall home situation, the nature of contacts between individual family members (especially with the beneficiary), conflicts, dependencies, obligations or expectations [39]. Information about the diagnosis of cancer, which is still perceived as a deadly threat, is not only a very serious psychological burden for the patient himself, but also for his relatives, who may react with fear, anxiety, a sense of helplessness. The patient himself may be ashamed of the diagnosis and fear social isolation [40], which may lead to activities (including testamentary ones) that are supposed to provide him with support, e.g., by promising to transfer his property in exchange for care. However, a typical reaction of a family in which cancer appears is an increased need for experiencing cohesion and closeness. Usually, spatial, time, and ideological barriers disappear then. The patient's relatives are ready to move in with him or allow him to live with them, they devote more time and attention to him (not only to help with treatment). Such a family avoids discussing sensitive topics or topics that have previously caused misunderstandings and conflicts. At the same time, their emotional distance from outsiders and those outside the immediate (at that time) family environment increases [41]. During oncological therapy, the patient, apart from emotional support, also expects logistical assistance (help in organizing visits to the doctor and diagnostic tests, transport to the hospital, etc.) [38].

Taking into account these dynamic changes in intra-family relations, the expert analyses the testator's ability not only to assess the rights of the persons to whom he has left his estate, but also his ability to understand the essence of the conflict or complications that may be caused by his property decisions [42]. It is therefore necessary to distinguish those family factors that have contributed to making specific testamentary dispositions for a long time and those that determined them already during the cancer process [39].

Discussion

Currently, cancer is often a long-term diagnostic and therapeutic process, with relapses, remissions and periods of disease progression. Over this time, the patient's mental state also changes dynamically. By determining the phase of the disease in which the will was made, it is possible to focus on the most common mental disorders and possible changes in the testator's behavior. Usually, the statutory heirs omitted in the will draw attention to the fact that it was made in the last phase of the disease (which is not necessarily reflected in reality), they focus on physical ailments and the therapy used. For this reason, it is necessary to track changes in the testator's mental state not only in the period close to the date of the will, but until the moment of his death. Psychopathological conditions specific to the advanced stage of the disease, such as CRCD (cancer-related cognitive dysfunction), fatigue syndrome, and cachexia-anorexia syndrome, should always be the focus of the expert psychiatrist and psychologist, not only because of their high frequency in the late stages of the disease, but above all because of the nature of the symptoms [25, 26, 28, 30, 31, 34]. They may predispose the testator to increased suggestibility, submissiveness towards other people, transferring important property decisions to them. They may also induce the patient to withdraw from emotional relationships with people who were important and valued to them so far. At the same time, one cannot rule out a situation in which the decision to make a will, even in the advanced stage of the disease and despite certain mental abnormalities, may be a manifestation of reconciliation with the approaching death and constitute an expression of a rational striving to finally arrange property matters.

In response to the diagnosis of cancer, the testator may react physiologically – with anger, anxiety, fear or rage. Among the mental disorders, the most frequently observed are adaptation disorders: depressive-anxiety syndromes and, in more advanced stages of the disease, depression without anxiety. Their diagnosis is difficult due to the dynamic impact of many factors on the patient at different times [14] and their similarity to the symptoms resulting from the cancer itself – sleep disorders, decreased activity, lack of appetite, and weight loss [25]. However, their frequency is not as high as one might expect (regardless of the phase of the disease: major depression – 15%, mild depression – 20% of patients) [17]. Depressive-anxiety disorders occur because of a constellation of aggravating factors [38], especially in people who have experienced depression in the past [18]. Information on depressive disorders, apart from witness testimonies, is included in psychiatric documentation from the period before the onset of cancer (this documentation may be omitted by the parties to the proceedings, as it sometimes concerns a distant time). At the same time, one cannot lose sight of the fact that regardless of the phase of the cancer disease (the possible presence of etiological factors), more than half of oncological patients do not reveal anxiety or depressive disorders.

In court actions for invalidation of a will, in many cases, the testator's verbal communication, memory, orientation, and concentration disorders are highlighted. Any non-standard behavior of the testator is supposed to be evidence of dementia. However, cognitive impairment in people with cancer (assuming that they did not show symptoms of dementia before the disease) most often takes the form of only mild cognitive impairment [28] and does not have to co-occur with symptoms of depression or anxiety [25]. As a rule, this type of cognitive impairment does not negatively affect the mental capacity of the person to perform legal acts, including making a will.

From the judicial point of view, more important than minor deficits in memory or attention are information on the level of social, family or community functioning of the testator [10] as well as their involvement in the oncological treatment process. The expert obtains information on this subject not only from witness statements, but also from oncological and hospice treatment documentation, which increasingly often contains data on the patient's attitude during treatment and their attitude to the disease. The way the testator adapts to cancer is influenced by factors present even before the disease, i.e., their personality traits, disposition, decision-making style, ways of coping with previous life difficulties [43] (witnesses often point this out).

During illness, the dynamically changing situation means that this adaptation is influenced by many variables: emotional, somatic, family, material, social [5, 36, 37]. The more of these aggravating factors the expert is able to identify in the case material, the more unstable the mental state of the testator should be expected and the greater the risk of mental disorders. In such a situation, it cannot be ruled out that when making property decisions, the testator could have been guided by a distorted assessment of his situation and prospects. On the other hand, greater acceptance of the disease is treated as an emotional determinant of more efficient functioning: a sense of competence, appreciation of life, frequent and deeper relationships with others [44], and not as an expression of depression, fear, resignation and, submission.

Diagnosis of cancer in one of the family members usually causes previous disagreements and misunderstandings to disappear for the good of the patient. As a result, the sick person and the people taking direct care of them become isolated from the wider environment (including the family) [39, 41]. The party disagreeing with the provisions of the will raises the fact that the testator was probably dependent on the heir, because being in a serious health condition, he made a will in his favor. The fact that the testator, who found himself in a difficult psychological and health situation, in which he could count on help, support, attention of a person close to him and then decided to pass on his life achievements to him should not be automatically treated as a loss of freedom of decision-making. The testator's behavior becomes understandable when the case material shows that the people dissatisfied with the content of the will in fact avoided real care for him. They usually justify their attitude towards him with old animosities,

while it is known that even significant conflicts with people who are involved in the care of the testator become unimportant in the face of his illness. Information about family relations, apart from witness statements, is usually included in the testator's medical documentation (annotations about people accompanying the patient during visits, visiting him during hospitalization, authorized to information about his health, living with him, and providing actual care).

It is important to pay attention to the place where the will was made. Court experts are particularly cautious about activities that were carried out in places intended for sick people (hospitals, including post-operative wards and intensive care units, hospices, nursing homes). Doubts may be raised by activities carried out in a place other than the testator's place of residence or a notary's office (situations common during oncological treatment) [21]. In a new situation, in a new place, especially with a worsened somatic condition, the testator may react with confusion, disorientation, psychomotor agitation, anxiety, deterioration of various cognitive functions, and even psychotic symptoms. It is true that in oncological patients delirium syndromes occur first of all (the symptoms of which are easily noticeable to bystanders or medical personnel), however, this only concerns patients in the advanced phase of the disease, sporadically in its earlier stages and very rarely they are an adverse effect of chemotherapy [14].

A model combining legal and medical knowledge was developed, which is intended to facilitate the assessment of the state of consciousness of a living testator [7]. However, there are no obstacles to adopting it also for deceased testators whose mental state is reconstructed based on case files and medical documentation. The following cognitive functions are assessed: (1) the testator's understanding of the nature of the will: memory of concepts such as "death," "property," "inheritance," and "ownership," the ability to verbalize and understand them, as well as sufficient language skills; (2) the testator's knowledge of the nature and size of the estate: memory of these aspects of the estate (assets, history of the estate, understanding the value of individual things); (3) the testator's knowledge of close persons: memory of persons who may be potential heirs, relations with heirs; (4) the ability to present the method of disposing of the estate: the ability to justify individual dispositions of one's own property, the ability to predict the consequences for inheritors, but also for those excluded from inheritance [45]. Similar criteria for assessing legal capacity come from the case of *The Banks v. Goodfellow* and come down to assessing: (1) understanding the nature of the act and its consequences; (2) knowledge of the nature and size of the property held; (3) knowledge of persons who have a legitimate claim to be beneficiaries; (4) understanding the consequences of the division of the estate; (5) whether the testator is free from any illusions influencing the disposition of the property, and (6) the ability to clearly and coherently express wishes in an orderly disposition plan [46].

In terms of assessing the freedom of decision-making, psychological analysis of a specific legal act comes down to determining whether it was undertaken as a result

of emotional or material dependence or helplessness resulting from a poor somatic condition, financial difficulties or other [39], which should be taken into account during the cancer process. This particularly applies to older people, who are more likely to suffer from cancer, but also more likely to make a will, who are considered more susceptible to suggestions and manipulation [9, 11].

It is undoubtedly necessary to conduct further forensic psychiatric and psychological analyses focused on assessing the mental capacity of individuals with cancer to make wills. A systematic review of the literature on this subject, supplemented by case studies, would allow for the development of more precise guidelines for court evaluations in such cases.

Conclusions

1. Statement that the testator suffered from cancer at the time of making the will is an insufficient argument to challenge the content of the will.
2. Forensic psychiatric and psychological analysis of the testamentary capacity of a testator suffering from cancer requires tracking changes in their mental state not only around the time of will-making, but also prior to the illness and after the will has been made.
3. Determining the stage of cancer at the time the will was drafted allows experts to focus on the mental disorders most commonly associated with that particular phase of illness and assess their potential impact on the testator's behavior and decisions regarding their estate.
4. Experts must not overlook psychopathological states specific to the cancer process in the testator, such as reactive disorders of varying manifestations and origins, cognitive decline, CRCD (cancer-related cognitive dysfunction), fatigue, and cachexia-anorexia syndromes, or temporarily impaired consciousness.
5. From a forensic standpoint, it is essential to analyze the testator's ability to adapt to cancer, which is influenced not only by factors directly related to the illness and its treatment, but also by the testator's personality traits and secondary consequences of the disease (e.g., changes in social, financial, or professional status).
6. In assessing the testator's mental capacity to perform legal acts, psychiatric and psychological experts should also consider dynamic shifts in the individual's relationships with members of their close circle, including those named as heirs and those who were omitted from the will.

References

1. Feliksiak M, Roguska B. *Komunikat z badań. Stosunek do śmierci i zwyczaje funeralne*. CBOS 2019; 136: 1–13.
2. Rabin EE, Kim M, Mozny A, Cardoza K, Bell AC, Zhai L et al. *A systematic review of pharmacologic treatment efficacy for depression in older patients with cancer*. Brain Behav. Immun. Health 2022; 21: 100449. Doi: 10.1016/j.bbih.2022.100449.
3. *Krajowe profile dotyczące nowotworów: Polska 2023*. EU Country Cancer Profiles. Paris: OECD Publishing. 2023. doi.org/10.1787/aab579a7-pl.
4. Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A et al. *Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries*. CA Cancer J. Clin. 2021; 71(3): 209–249. Doi: 10.3322/caac.21660.
5. Religioni U, Czerw A, Deptała A. *Przystosowanie psychiczne pacjentów do wybranych chorób nowotworowych*. Psychiatr. Pol. 2018; 52(1): 129–141.
6. Jayani RV, Hamparsumian A, Sun C, Li D, Cabrera Chien L, Moreno J et al. *The relationship of mental health symptoms to chemotherapy toxicity risk in older adults with cancer: Results from the geriatric assessment-driven intervention study*. Cancer 2024; 130(22): 3894–3901. Doi: 10.1002/cncr.35482.
7. Wierciński J. *Brak świadomości albo swobody przy sporządzaniu testamentu*. Warsaw: Wolters Kluwer; 2013.
8. Gałęcki P. *Nieważność testamentu sporządzonego w stanie wyłączającym świadome albo swobodne powzięcie decyzji i wyrażenie woli*. In: Gałęcki P, Eichstaedt K, editors. *Psychiatria sądowa*, 1st ed. Warsaw: PZWŁ; 2022. P. 333–340.
9. Stanik JM. *Teoretyczne i metodologiczne problemy opiniodawstwa psychologicznego w sprawach o ważność oświadczenia woli i w sprawach testamentowych*. Przegl. Psychol. 2009; 52(3): 243–261.
10. Hajdukiewicz D. *Zaburzenia psychiczne a oceny sądowo-psychiatryczne w sprawach cywilnych*. In: Hajdukiewicz D, editor. *Opiniowanie sądowo-psychiatryczne w sprawach cywilnych*, 2nd ed. Warsaw: Institute of Psychiatry and Neurology; 2008. P. 166–181.
11. Zuscak S, Coyle I, Keyzer P, Machin MA. *The marriage of psychology and law: Testamentary capacity*. Psychiatr. Psychol. Law 2019; 26(4): 614–643. Doi: 10.1080/13218719.2018.1557506.
12. Sesiuk A, Rzepiela L. *Wybrane zaburzenia psychiczne w przebiegu chorób nowotworowych*. Psychiatr. Psychol. Klin. 2016; 16(1): 21–26.
13. Nikbakhsh N, Moudi S, Abbasian S, Khafri S. *Prevalence of depression and anxiety among cancer patients*. Caspian. J. Intern. Med. 2014; 5(3): 167–170.
14. de Walden-Gałuszko K, Majkowicz M, Zdun-Ryżewska A. *Zaburzenia przystosowania do choroby nowotworowej – trudności diagnostyczne zespołów depresyjnych*. Psychoonkologia 2013; 1(17): 10–15.
15. Walker J, Holm Hansen C, Martin P, Sawhney A, Thekkumpurath P, Beale C et al. *Prevalence of depression in adults with cancer: A systematic review*. Ann. Oncol. 2013; 24(4): 895–900. Doi: 10.1093/annonc/mds575.
16. Roy-Byrne PP, Davidson KW, Kessler RC, Asmundson GJ, Goodwin RD, Kubzansky L et al. *Anxiety disorders and comorbid medical illness*. Gen. Hosp. Psychiatry 2008; 30(3): 208–225.

17. Pitman A, Suleman S, Hyde N, Hodgkiss A. *Depression and anxiety in patients with cancer*. BMJ 2018; 361: k1415. Doi: 10.1136/bmj.k1415.
18. Lee ARYB, Leong I, Lau G, Tan AW, Ho RCM, Ho CSH et al. *Depression and anxiety in older adults with cancer: Systematic review and meta-summary of risk, protective and exacerbating factors*. Gen. Hosp. Psychiatry 2023; 81: 32–42. Doi: 10.1016/j.genhosppsych. 2023.01.008.
19. Battat M, Omair N, WildAli MA, Alkaissi A, Amer R, Koni AA et al. *Assessment of depression symptoms among cancer patients: A cross-sectional study from a developing country*. Sci. Rep. 2024; 14(1): 11934. Doi: 10.1038/s41598-024-62935-x.
20. Topcu A, Yasin AI, Besiroglu M, Sucuoglu Isleyen Z, Alaca Topcu Z, Simsek M et al. *Prevalence and co-incidence of geriatric syndromes according to the ECOG performance status in older cancer patients*. Front. Med. (Lausanne) 2024; 11: 1331246. Doi: 10.3389/fmed.2024.1331246.
21. Shulman K, Herrmann N, Peglar H, Dochylo D, Burns C, Peisah C. *The role of the medical expert in the retrospective assessment of testamentary capacity*. Can. J. Psychiatry 2021; 66(3): 255–261. Doi: 10.1177/0706743720915007.
22. Parpa E, Tsilika E, Gennimata V, Mystakidou K. *Elderly cancer patients' psychopathology: A systematic review: Aging and mental health*. Arch. Gerontol. Geriatr. 2015; 60(1): 9–15. Doi: 10.1016/j.archger.2014.09.008.
23. Shaw C, Baldwin A, Anderson C. *Cognitive effects of chemotherapy: An integrative review*. Eur. J. Oncol. Nurs. 2021; 54: 102042. Doi: 10.1016/j.ejon.2021.102042.
24. Schein CH. *Distinguishing curable from progressive dementias for defining cancer care options*. Cancers (Basel) 2023; 15(4): 1055. Doi: 10.3390/cancers15041055.
25. Bury-Kamińska M, Szudy-Szczyrek A, Kozłowiec M, Janowska-Łęska O, Nowaczyńska A, Hus M. *Poziom depresji a pojawienie się zmian poznawczych u chorych na szpiczaka mnogiego – doniesienia wstępne*. J. Mod. Sci. 2022; 1(48): 461–475.
26. Janota A, Kołodziejczyk K, Piechowicz P, Dunaj P, Dzierżanowski T. *Mechanizmy powstawania zaburzeń poznawczych związanych z chemioterapią*. Med. Paliat. 2022; 14(3): 132–141. Doi: 10.5114/pm.2022.125856.
27. Bury M. *Chemobrain in patients suffering from cancer based on the example of multiple myeloma*. Curr. Probl. Psychiatry 2017; 18(1): 62–69.
28. Kuśmierek M, Jasionowska J, Maruszewska P, Kalinka-Warzocha E, Gałęcki P, Mikołajczyk I et al. *The impact of cancer treatment on cognitive efficiency: Chemobrain – does it exist?* Eur. J. Psychiatry 2020; 34(1): 20–26. doi.org/10.1016/j.ejpsy.2019.10.002.
29. Das A, Ranadive N, Kinra M, Nampoothiri M, Arora D, Mudgal J. *An overview on chemotherapy-induced cognitive impairment and potential role of antidepressants*. Curr. Neuropharmacol. 2020; 18(9): 838–851. Doi: 10.2174/1570159X18666200221113842.
30. Ma Y, He B, Jiang M, Yang Y, Wang C, Huang C et al. *Prevalence and risk factors of cancer-related fatigue: A systematic review and meta-analysis*. Int. J. Nurs. Stud. 2020; 111: 103707. Doi: 10.1016/j.ijnurstu.2020.103707.
31. Li P, Wang Q, Feng L, Ding Z, Fan W. *Bibliometric and visualization analyses of cancer-related fatigue research published worldwide from 2001 to 2023*. Front. Oncol. 2024; 14: 1338325. Doi: 10.3389/fonc.2024.1338325.

32. Lobefaro R, Rota S, Porcu L, Brunelli C, Alfieri S, Zito E et al. *Cancer-related fatigue and depression: A monocentric, prospective, cross-sectional study in advanced solid tumors*. ESMO Open 2022; 7(2): 100457. Doi: 10.1016/j.esmoop.2022.100457.
33. Prado CM, Baracos VE, McCargar LJ, Reiman T, Mourtzakis M, Tonkin K et al. *Sarcopenia as a determinant of chemotherapy toxicity and time to tumor progression in metastatic breast cancer patients receiving capecitabine treatment*. Clin. Cancer Res. 2009; 15(8): 2920–2926. Doi: 10.1158/1078-0432.CCR-08-2242.
34. Shih YA, Wang C, Jin S, Feng W, Lu Q. *Decision making of artificial nutrition and hydration for cancer patients at terminal stage – A systematic review of the views from patients, families, and healthcare professionals*. J. Pain Symptom Manage. 2021; 62(5): 1065–1078. Doi: 10.1016/j.jpainsymman.2021.04.013.
35. Modlińska A, Wyszadko A. *Zespół wyniszczenia w przebiegu choroby nowotworowej z uwzględnieniem leczenia octanem megestrolu*. Med. Paliat. 2012; 4(2): 67–74.
36. Nayak MG, George A, Vidyasagar MS, Mathew S, Nayak S, Nayak BS et al. *Quality of life among cancer patients*. Indian J. Palliat. Care 2017; 23(4): 445–450. Doi: 10.4103/IJPC.IJPC_82_17.
37. Presley CJ, Han L, Leo-Summers L, Hurria A, Gross CP, Davidoff AJ et al. *Functional trajectories before and after a new cancer diagnosis among community-dwelling older adults*. J. Geriatr. Oncol. 2019; 10(1): 60–67. Doi: 10.1016/j.jgo.2018.05.017.
38. Adamczyk N, Makara-Studzińska M, Sidor K, Pucek W, Wdowiak A. *Problemy psychiczne i społeczne występujące u osób z rozpoznaniem nowotworowym, po zabiegach chemioterapii*. Eur. J. Med. Technol. 2024; 3(4): 67–75.
39. Dalal PK, Tripathi A, Kar SK, Narayan CL, Matkar A. *Mental capacity including testamentary capacity*. Indian J. Psychiatry 2022; 64(1): 25–34. Doi: 10.4103/indianjpsychiatry.indianjpsychiatry_696_21.
40. Kapela I, Bąk E, Krzemińska SA, Foltyn S. *Ocena poziomu akceptacji choroby i satysfakcji z życia u chorych na raka jelita grubego leczonych chemioterapią*. Piel. Zdr. Publ. 2017; 26(1): 53–61.
41. Zielazny P, Zarzeczna-Baran M, Wojtecka A. *System rodzinny a nowotwór – wybrane zagadnienia*. Med. Og. Nauk Zdr. 2013; 19(4): 439–444.
42. Brenkel M, Whaley K, Herrmann N, Crawford K, Hazan E, Cardiff L et al. *Case for the standardized assessment of testamentary capacity*. Can. Geriatr. J. 2018; 21(1): 26–31. Doi: 10.5770/cgj.21.283.
43. Malicka I, Szczepańska J, Anioł K, Rymaszewska J, Woźniowski M. *Zaburzenia nastroju i strategię przystosowania do choroby u kobiet leczonych operacyjnie z powodu nowotworu piersi i narządów rodnych*. Współcz. Onkol. 2009; 13(1): 41–46.
44. Kozak G. *Zróźnicowanie strategii radzenia sobie z nowotworem chorych w przebiegu wybranych nowotworów złośliwych*. Anest. Ratow. 2012; 6: 162–170.
45. Martin RC, Gerstenecker A, Hebert K, Triebel K, Marson D. *Assessment of testamentary capacity in older adults: Description and initial validation of a standardized interview instrument*. Arch. Clin. Neuropsychol. 2022; 37(6): 1133–1147. Doi: 10.1093/arclin/acac028.

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46. Vajawat B, Hegde PR, Varshney P, Malathesh BC, Kumar CN, Math SB. *Civil responsibility in geriatric psychiatry*. Indian J. Psychol. Med. 2021; 43(5): 60–65. Doi: 10.1177/02537176211031062.

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