

Militarised Cancer

People with a Diagnosis and the War in Ukraine

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War is an extraordinary and powerful event in a person's life. It changes destinies, evokes feelings of helplessness and doom, and brings suffering and death. War militarises lives, languages, and everyday experiences – even disease becomes a metaphorical image for war. When we talk about something dangerous or threatening, we often use such metaphors. Metaphors of war have also long penetrated the world of cancer, for instance with the so-called 'war on cancer'. The term's history closely intertwines with a speech given by American President Richard Nixon in 1971.¹ For the first time, a war on cancer was declared on an official level and a law was passed to create a network of research centres to investigate the disease. The aim was to turn cancer into an illness from which one was able to recover. The efforts of many researchers and government support led to positive results. Mortality from the disease decreased, but in public discourse, the term 'war on cancer' remained. The militarised vocabulary of the struggle and battle for life refers to those who 'won' or 'lost' against the disease, whether they are celebrities or ordinary people. A quick Google search for 'war on cancer' leads to many articles about the medical and social aspects of this 'war', a discourse on 'winners' or 'losers', and the 'battles' of doctors and patients against the sickness.² There are also calls from treating doctors to abandon the use of 'war on cancer' and apply the more neutral expression 'recovery from cancer', or to say that "we are 'living with cancer' for as long and as well as we can".³

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- 1 National Cancer Institute, U.S. National Institute of Health, "Milestone (1971). National Cancer Act of 1971", https://ntp.cancer.gov/timeline/noflash/milestones/m4_nixon.htm [accessed: 29.07.2024].
 - 2 Jonathan M. Chestnut et al., "Waging War on War Metaphors in Cancer and COVID-19", *JCO Oncology Practice* 16/10, 2020, 627–628, <https://ascopubs.org/doi/full/10.1200/OP.20.00542> [accessed: 29.07.2024]; and Vincent T. DeVita Jr., "The 'War on Cancer' and its impact", *Nature Clinical Practice Oncology* 1/55, 2004, 55, <https://doi.org/10.1038/ncponcoo36> [accessed: 13.04.2024].
 - 3 Young-Joon Surh, "The 50-Year War on Cancer Revisited: Should We Continue to Fight the Enemy Within?", *Journal of Cancer Prevention* 26(4), 2021, 219–223, here 221,

However, what happens to this militarised language during a real war? To offer one answer to this question, I look at Ukraine's experience since 24 February 2022, when Russia began the invasion of its territory. Tracking the connection between the 'real war' and the 'war on cancer' in digital media can help us see certain trends that have been emerging since the first days of the war. Militarised language in connection to cancer was not widely represented in the media or broader public discussions in Ukraine before the war and only appeared during it. At least, I could not find any earlier articles that used the words 'war', 'fight', 'confrontation', or 'battle'. Up until 2022, articles described the current treatment situation,⁴ the state of international clinical trials, and the plan for National Cancer Control Strategy.⁵ With the outbreak of the war, however, the situation began to change, and both vocabularies (of the war itself and the war on cancer) began to resonate and grow in the media. Meanwhile, since 24 February 2022, the physical destruction of medical infrastructure and the disruption of the usual system of cancer care have become real battles for survival.

This research aims to identify the changes and new processes that have been taking place in the oncological system of Ukraine since the Russian invasion on 24 February 2022. The focus is on large-scale phenomena such as the militarisation of mass media language in the spheres of oncology, the military experiences of patients and doctors, and the exodus of female cancer patients to other countries. 24 February 2022 created a considerable chasm in the lives and treatment of patients before and after this date, and became a point of complication in the provision of medical services to cancer patients; it also caused tectonic rifts in the entire oncological sphere of Ukraine. To understand how the situation changed and by what margin, I have conducted 'desk research'.⁶ I collected, organised, and analysed data available on open information sources (e.g., online media, open Facebook pages, Telegram channels, etc.).

As a result, I identified numerous cases of using military/war-related markers in stories about cancer treatment during the war, showing that militarisation of language occurred in discussions of cancer. In this militarisation process, war subtly invades society and relations between people, enters culture, and forms militarised

doi: 10.15430/JCP.2021.26.4.219. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8749321/> [accessed 29.07.2024].

- 4 Apteka.ua (Pharmacy.ua), "Onkologiya–2021: sohodennia ta perspektyvy rozvytku" ("Oncology – 2021: The Present and Prospects for Development"), no. 5 (1276), 08 February 2021, <https://www.apteka.ua/article/582977> [accessed: 29.07.2024].
- 5 A.P. Beznosenko, "Onkologiya v Ukraine: itogi 2021 goda" ("Oncology in Ukraine: The Results of 2021"), *Health.ua.com*, 20 June 2022, <https://health-ua.com/article/69965-onkologiya-vukran-pdsumki-2021roku> [accessed: 29.07.2024].
- 6 Midas PR Group, "Desk Research: How It Works and Why It's Your Key to Success", 30 October 2018, <https://www.midas-pr.com/desk-research-works-key-success/> [access: 13.04.2024].

behaviours, thoughts, and values.⁷ An important point in my research was the fact that the militarisation of language in the media was not necessarily related to official governmental or corporate policies but manifested in society in a spontaneous and uncontrolled way. This was to be expected because of the everyday survival needs and complications of opportunities for further treatment that the full-scale war brought with it. The struggle for life at this point became more important for cancer patients and required more efforts and actions on their part to receive treatment and find new hospitals and doctors. The war created new challenges for them and pushed them to take decisive steps in finding safe places and evaluating available treatment methods.

A previously unknown tendency also started to form: cancer patients left Ukraine to seek new and more effective treatment. The scale and significance of this process allow it to be characterised as an unprecedented practice. Waves of medical refugees formed, and, rather than the former isolated cases of travelling abroad for treatment, this became a mass phenomenon and included the involvement of governmental agencies (in particular, in the medical evacuation of patients that started in the summer of 2022). This process does not have an endpoint and continues as long as the war lasts. To understand the reasons, nuances, and depth of this medical exodus, I conducted individual interviews with women who have cancer. Through these interviews, I collected the first testimonies from cancer patients who decided to seek treatment abroad without relying on anyone's help in the first months of the full-scale invasion of Ukraine. Later, this information started to emerge on social media, where refugee women were exchanging experiences concerning treatment abroad in different European countries. Thus, an opportunity to extend the research coverage by studying new information sources appeared. For this, I used the methods of data organisation and logical comparative analysis of data in a historical context.

Still, it is necessary to emphasise the limitations that manifested themselves in this research. To a considerable degree, this study depends on the length and outcome of the war. Additionally, to understand the situation of the refugees, extended interviews need to be conducted with a larger number of respondents. New facts that might be uncovered this way could identify a broader spectrum of the cancer patient exodus, the phenomenon of cancer refugees, and the positive and negative nuances and consequences of these processes. However, the incompleteness of this research should be an incentive to continue and extend the circle of researchers, rep-

7 Roberto J. González, *Militarizing Culture: Essays on the Warfare State*, New York: Routledge, 2010; and Richard H. Kohn, "Using the Military at Home: Yesterday, Today, and Tomorrow", *Chicago Journal of International Law* 4/1, 2003, 165–192, <https://chicagounbound.uchicago.edu/cjil/vol4/iss1/12> [accessed: 29.07.2024].

representatives of the patient community, and other parties who are interested and engaged.

The Conditions of Oncological Treatment in Ukraine on the Eve of the War

The scale of the destruction and the critical state of Ukraine's cancer system in the first months of the war become clear when compared to the prewar period. Up until 24 February 2022, there were 1.3 million cancer patients in Ukraine, a country with a population of 44 million. Over the past 10 years, the incidence rate has increased by almost 35. Every year, there are about 160,000–180,000 new cases. Moreover, more than half of them are residents of Eastern Ukraine,⁸ where fighting is now actively underway.⁹ The last two pandemic years slowed down the usual rhythm of cancer detection and treatment. The number of newly discovered cases and deaths decreased. Doctors expected a boom of newly diagnosed patients in the post pandemic years (2022–2023), with most of them in the last stages of the disease.¹⁰ Many doctors and managers were ready to implement changes that would improve the cancer situation. In particular, the agenda included an increase in funding for the medical guarantees programme and a transition to a new prevention and treatment practice. To modernise healthcare, the construction of a new oncology centre with the latest technologies was planned in Kharkiv for 2022.¹¹ It would have been a stronghold for aiding several eastern regions simultaneously.

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- 8 Denis Krasnikov and Victoria Martyniuk, "Skhidna Ukraina poterpaie vid raku bilshe, nizh Zakhidna, i zavody – ne holovnyi faktor. Shcho kazhe statystyka" ("Eastern Ukraine Suffers from Cancer More Than Western Ukraine, and Factories Are Not the Main Factor: What the Statistics Say"), *Forbes*, 05 November 2021, <https://forbes.ua/lifestyle/vostochnaya-ukraina-stradaet-ot-raka-bolshe-zapadnoy-i-zavody-ne-glavnyy-faktor-ch-to-govorit-statistika-05112021-2729> [accessed: 29.07.2024].
 - 9 Ukrainian Ministry of Health, "Shist bezoplatnykh doslidzhen dlia rannoho vyivlennia onkologii" ("Six Free Tests for Early Detection of Cancer"), 08 June 2022, <https://moz.gov.ua/article/news/shist-bezoplatnih-doslidzhen-dlja-rannogo-viyavlennja-onkologii> [accessed: 29.07.2024].
 - 10 Priamyi (Direct), "V Ukraini diut shist obstezhen dlia vyivlennia onkologichnykh zakhvoriuvan – MOZ" ("Six Examinations for Detecting Cancer in Ukraine – Ministry of Health"), 08 June 2022, <https://prm.ua/v-ukraini-diiut-shist-obstezhen-dlia-vyivlennia-onkologichnykh-zakhvoriuvan-moz/> [accessed: 29.07.2024].
 - 11 UNIAN: Informatsiine ahenstvo (UNIAN: Information Agency), "Velyke budivnytstvo: u Kharkovi znavytsia novyi onkotsentr na pivtysiachi lizhok" ("Big Construction: A New Oncology Centre with Five Hundred Beds to Be Built in Kharkiv"), 07 February 2022, <https://www.unian.ua/health/velike-budivnictvo-u-harkovi-z-yavitsya-noviy-onkocentr-na-piv-tisyachi-lizhok-novini-harkova-11696071.html> [accessed: 29.07.2024].

The COVID-19 pandemic and various quarantine events coincided with the second stage of the medical reform. The plan was to shift the entire secondary chain of medical institutions, including oncological ones, to being financed by the National Health Service of Ukraine, but the pandemic prevented it. According to this plan, each oncological communal institution was supposed to receive several times higher funds for the treatment of patients compared to what they had been allocated through subventions from 2018 to 2020.¹² From 2020 to 2022, the total financing almost tripled.¹³ This meant better access to free medication and early diagnostics of cancer. Additionally, there were international randomised controlled trials, grants, partnership programmes, and projects. In Ternopil, for example, owing to the Together for Ukraine Foundation and Radiologists without Borders – US charity organisations connected to the Ukrainian diaspora – a free modern mammalogy office was opened. Women now had the opportunity to undergo a free examination using the Selenia Dimensions Mammography System, powerful and innovative digital equipment.¹⁴ Initiated by the company MSD, the first immune-oncology medication in Ukraine was registered.¹⁵ The words of the Director of the Sumy Oncological Dispensary, Volodymyr Shevchenko, seem fair: “[T]his is not just new equipment, this is a new epoch in treatment”.¹⁶

- 12 Anna Levchenko, “Dytyacha onkolohiya ta patsiyenty z vazhkymy suputnymy patolohiyamy dosi ye prerohatyvoyu derzhavnykh klinik – holovnyy likar NIR” (“Paediatric Oncology and Patients with Severe Comorbidities Are Still the Prerogative of State Clinics – Chief Medical Officer of the NIR”), *Interfax-Ukraina: Informatsiine ahentstvo (Interfax-Ukraine: Information Agency)*, 04 February 22, <https://interfax.com.ua/news/interviu/796147.html> [accessed: 29.07.2024].
- 13 Daria Kolomiets, “Kinsha Daria. Yak likuyut onkologiu v Ukraini ta skilky na tse vydilayae hroshey derzhava — vdipovidaie MOZ” (“How Oncology Is Treated in Ukraine and How Much Money the State Allocates for It – The Ministry of Health Answers”), *Suspilne novyny (Public News)*, 04 February 2022, <https://suspilne.media/203940-ak-likuyut-onkologiyi-cni-zahvoruvanna-v-ukraini-ta-skilki-na-ce-vidilae-grosey-derzava/> [accessed: 29.07.2024].
- 14 Nataliia Burlaku, “Rak u zhink. Shcho povinna robiti kozhna z nas, aby zhiti?” (“Cancer In Women: What Should Each of Us Do to Live?”), *20 Khvylyn, Ternopil (20 Minutes, Ternopil)*, 04 February 2023, <https://te.20minut.ua/Zdorovya/kozhna-z-nas-mozhe-zahvoriti-yak-u-ternopoli-pid-chas-viyini-likuyut-ra-11691867.html> [accessed: 29.07.2024].
- 15 Iryna Bondarchuk, “Nova era likuvannya raku vzhe v Ukraini” (“A New Era of Cancer Treatment Is Already in Ukraine”), *Ukrayinskiy medichnij zhurnal* 1/117, 2017, <https://www.umj.com.ua/article/105350/nova-era-likuvannya-raku-vzhe-v-ukraini> [accessed: 29.07.2024].
- 16 Nataliia Kalinichenko, “Popry viynu, onkokhvoli mayut otrimaty yakisnu medychnu dopomohu” (“Despite the war, cancer patients should receive quality medical care”), *Uryadoviyi kuryer (Government Courier)*, 23 July 2022, <https://ukurier.gov.ua/uk/articles/popri-viyinu-onkohvoli-mayut-otrimuvati-yakisnu-med/> [accessed: 29.07.2024] [author's trans.].

Oncology in Ukraine had a practice of diagnosing and treating oncological diseases, was integrated into international programmes and standards, and, on the eve of the war, was on the brink of medical reform. However, compared to other European countries, the Ukrainian oncological service had worse base indexes for cancer diagnostics and treatment. Based on the data from the European Federation of Pharmaceutical Industries and Associations (EFPIA), they were 2–2.5 times lower.¹⁷ Ukraine required further reform and changes in the diagnostics and treatment of cancer. But the war nullified these plans, as well as the general availability of timely treatment and assistance. Many people had to stop cancer treatment and care. There are thousands of such cases, and each person faces the decision of what to do instead.

The New Reality: An Outside Perspective

Russia's invasion of Ukraine on 24 February 2022 drew the attention of many people internationally, including oncologists. With the participation of the European Cancer Organisation and the American Society of Clinical Oncology (ASCO), the Special Network on the Impact of the War in Ukraine on Cancer was created. It incorporated 300 organisations and five general meetings were conducted in 2022.¹⁸ At the first meeting, on 10 May 2022, it was declared that “Ukrainian cancer patients, and their care, have been drastically impacted by Russia's invasion”.¹⁹ Among the identified key points were bombardments, destruction of critical infrastructure, mass relocations of patients, and other factors. This network's main tasks are now monitoring and analysing the situation in Ukraine, and creating effective assistance mechanisms. The United Nations, EFPIA, and other medical organisations around the world also expressed deep concern and condemnation.²⁰

Analytical articles about the increasing rate of threatening phenomena in the oncology of Ukraine also began to emerge. One of the first was a study by an anony-

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- 17 European Federation of Pharmaceutical Industries and Associations (EFPIA), *The Impact of the War in Ukraine on Oncology Patients: Overview and recommendations for European and Ukrainian health authorities and policymakers*, report, 2022, <https://www.efpia.eu/media/677256/the-impact-of-the-war-in-ukraine-on-oncology-patients.pdf> [accessed: 29.07.2024].
 - 18 European Cancer Organisation, “ECO-ASCO Special Network: Impact of the War in Ukraine on Cancer”, 04 June 2022, <https://www.europeancancer.org/topic-networks/20:impact-war-in-ukraine-on-cancer.html> [accessed: 29.07.2024].
 - 19 European Cancer Organisation, “ECO Statements on Ukraine”, 10 May 2022, <https://www.europeancancer.org/resources/246:eco-statement-of-support-for-ukraine.html> [accessed: 29.07.2024].
 - 20 European Federation of Pharmaceutical Industries and Associations (EFPIA), *The Impact of the War in Ukraine on Oncology Patients*.

mous author, “Russia’s war in Ukraine is killing cancer care in both countries”. It was published in English by the online media outlet of the peer-reviewed medical magazine *The BMJ* and details the rapid militarisation of the oncological community. The author writes that “the prognosis for cancer patients and survivors is getting darker by the day”.²¹ The article’s title presents a figurative and associative comparison of the oncological system with the combat space. Both have frontlines with killing, casualties, the wounded, and an enemy that brings destruction and extermination. That is, through metaphors of war, the anonymous author identified threats to and casualties among cancer patients and doctors, as well as the destruction of hospitals and violations of procedures and treatment systems.²² Reading it, I understood the author’s motives for anonymity. I assume they were familiar with oncology, especially in Russia. With the possibility of prosecution (or punishment) for using the words “Russia’s war in Ukraine” and “killing cancer care”, the author was forced to remain anonymous. Nonetheless, they tried to be objective in the text and assess the situation in the oncological system in Ukraine. Notably, this article appeared on 23 March 2022, less than a month after the full-scale invasion of Ukraine. It was a prompt response to the dangers that the field of oncology in Ukraine has been facing. It is worth noting that the anonymous author themselves used militarised language to explain the current situation.

A representative of the Royal College of London, Richard Sullivan, went even further in his assessment of the situation of oncological services in Ukraine. He suggested that the situation with cancer care is more complicated than in previous wars in Syria, Afghanistan, or Palestine: “One of these differences is the sheer volume of cancer care required for the Ukrainian population”.²³ Sullivan was convinced that before the war, Ukraine had a well-developed system of cancer treatment, unlike many other countries affected by conflicts. For this reason, the quick destruction of infrastructure, including hospitals, and dangerous travels for patients and medics became a serious challenge during the war. He wrote that the oncology system can become a de facto ‘second front’ of the war, one terrible and dangerous, which will require emergency measures and considerable efforts.

Opinions like this are also developed in the article “The War in Ukraine and Cancer Patients: Early Experiences from the Frontline” by Peter McIntyre, written by

21 Anonymous, “Russia’s war in Ukraine is killing cancer care in both countries”, *The BMJ*, 23 March 2022, <https://doi.org/10.1136/bmj.0701> [accessed: 29.07.2024].

22 Ibid.

23 Richard Sullivan, “What impact does war have on Ukrainian cancer care?”, *King’s College London*, 29 April 2022, <https://www.kcl.ac.uk/what-impact-does-war-have-on-ukrainian-cancer-care> [accessed: 29.07.2024].

the independent journalist with support from Richard Sullivan.²⁴ This report details how the cancer community responded to the challenges of delivering cancer care in the first three to four months of the Russian invasion. Drawing on witness testimonies, the author sought to capture the lived reality. He pointed out that people living with cancer were thrown into a state of great anxiety, separated from their clinical teams and even their medical records. According to the estimates of experts, in the first two months of the war, the number of cancer patients in Ukraine receiving surgery, chemotherapy, or radiotherapy was halved. People living with cancer felt that lifesaving treatments and care were available only at great risk. Some warehouses with medications were captured along with the occupied territories, medicine procurement logistics were disrupted, and the threat of the destruction or looting of those warehouses became real. Over 1 million people diagnosed with cancer found themselves in an extremely complicated survival situation.

Such assessments by foreign specialists coincided with the declaration of Ukrainian President Volodymyr Zelenskyy about the “complete stoppage of cancer patient treatment”²⁵ in the first months of the war. ‘Complete stoppage’ meant the disruption of the entire cycle and system of providing cancer treatment and care, with hospitals standing, partially or completely destroyed, without patients and doctors. This is the reality of war: when everything is being shelled, patients and doctors are evacuated, and all planned operations are cancelled. A considerable number of patients moved to Western Ukraine and to neighbouring European countries. The scale and urgency of the situation in the oncological sphere in Ukraine after 24 February 2022 caused a global feeling of concern in the European and international oncological community, creating a need for an effective and rapid response and the consolidation of efforts. To guarantee the uninterrupted treatment of Ukrainian children with cancer, they were evacuated to neighbouring European countries, and starting in the summer of 2022, an intergovernmental programme to evacuate adult patients began as well. Within this framework of supporting Ukrainian refugees, free oncological help was also provided. To the extent that it was possible, technical and legal barriers to patient transfers to a new host country were eliminated.

24 Peter McIntyre, “The war in Ukraine and cancer patients: Early experiences from the frontline”, *eCancer*, 22 September 2022, <https://ecancer.org/en/news/22234-the-war-in-ukraine-and-cancer-patients-early-experiences-from-the-frontline> [accessed: 29.07.2024].

25 Olha Demianchuk, “V Ukraini prypyneno likuvannia khvorykh n arak – Zelenskyi” (“Zelenskyy: Treatment of Cancer Patients Stopped in Ukraine”), *Korrespondent.Net (Correspondent.Net)*, 06 May 2022, <https://ua.korrespondent.net/ukraine/4475561-v-ukraini-prypyne-no-likuvannia-khvorykh-na-rak-zelenskyi> [accessed: 29.07.2024] [author’s trans.].

Two Wars, Two Fronts: The Militarisation of the Cancer-Related Media Space of Ukraine

The first Ukrainian publications comparing war and cancer appeared in March 2022, less than a month after the start of the war. *BBC News Ukraine* published an article about children with cancer.²⁶ One of the subheadings read, “They [the young patients] are fighting two wars”. The author of the article quotes paediatric oncologist Roman Kazym, who is “very angry about what happened [with Russia’s attack on Ukraine]” and regrets that “now these children fight two wars – one with cancer, the other with Russia”.²⁷ Another article appeared in *The Village*, in which the author talks about the experiences of different people who are “fighting cancer during the war”.²⁸ She relates the experiences of 17 people who already had or learnt about a cancer diagnosis on the eve of the war. These are short stories, and each describes treatment in the new reality. The article presents the war as an event that complicated treatment and made the ‘fight’ more difficult. The words of one of the authors – that the war deprived her of “a chance to fight the disease” – sound like a verdict for many people in Ukraine who were diagnosed with cancer.²⁹

The Ukrainian information space reacted quickly to the situation of the oncology system after the invasion on 24 February 2022. Articles about war and cancer began to appear sporadically at first and then regularly, and the platforms ranged from local and regional media to national and official newspapers. These digital publications of differing status, purpose, and scope of distribution raise the issue of cancer in their discussion of the war. The only component that unites them is the use of military vocabulary and cancer. Frequently, they use phrases such as ‘second war’, ‘second front’, ‘war squared’, and ‘two wars’. Eventually, journalists themselves began to acknowledge that “the media often call cancer the second front of the war”.³⁰

26 Filippa Roksbi, “Yak riatuiut vid viiny khvorykh na rak ukrainskykh ditei” (“How Ukrainian Children with Cancer Are Being Saved from War”), *BBC News Ukraine*, 26 March 2022, <https://www.bbc.com/ukrainian/features-60880184> [accessed: 29.07.2024].

27 Ibid. [author’s trans.].

28 Viktoriia Kudryashova, “Tse liudy, iaki boriutsia z rakom pid chas viiny” (“These Are People Who Are Fighting Cancer During the War”), *The Village*, 3 June 2022, <https://www.the-village.com.ua/village/knowledge/practice/326609-rak-i-viyna> [accessed: 29.07.2024] [author’s trans.].

29 Ibid.

30 Maryna Stepanenko, “Dumaty pro maibutnie zaraz: ekspert MOZ Ukrainy pro zapobihannia epidemii raku psilia viyny” (“Thinking about the Future Now: Expert of the Ministry of Health of Ukraine on Preventing the Epidemic of Brain Cancer”), *Rfi-Ukraina*, 30 March 2023, <https://www.rfi.fr/uk/%D1%83%D0%BA%D1%80%D0%B0%D1%97%D0%BD%0%Bo/20230330> [accessed: 15.04.2024] [author’s trans.].

That is, for more than a year, war metaphors in cancer news were organic and unchanged.

Terribly, in the current Russo–Ukrainian War there have also been unexpected losses of doctors. This occurred not just on battlefields, where doctors were mobilised to the Armed Forces of Ukraine (AFU), but also from the Russian bombing and shelling of peaceful Ukrainian cities. These losses became a tragic part of the newly created information space about cancer and war. For example, during the shelling of Kyiv, Oksana Leontieva died on the way to the Okhmatdyt hospital, where she worked in the bone marrow transplant department for 11 years and treated children with blood cancer.³¹ Taras Gavrilenko, an oncological surgeon at the Zaporizhzhia Regional Antitumor Center, was killed during rocket attacks on Zaporizhzhia.³² The same fate befell Yevhenii Lutsenko, a young and promising oncological-thoracic surgeon at the Chernihiv Medical Center of Modern Oncology.³³ All this brings to mind the words of Hryhoriy Klymniuk, a children's oncologist at the National Cancer Institute: “[O]vercoming cancer in military conditions is almost a [death] sentence”.³⁴ This is difficult to read, considering that every oncologist saves hundreds and thousands of lives, especially when knowing that thousands of people who are ill in Ukraine still hope to recover. The scale of the disaster, as stressed by Sullivan when he writes of “the huge amount of cancer care that Ukrainians need”,³⁵ is evident.

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- 31 Marina Petik, “Vid udaru rosiiskoi rakety ii mashyna spalakhnula, iak sirnyk: y Kyevi zahynula likara Okhmatdytu, sin zalyshvsia syrotoi” (“A Russian Missile Hit Her Car Like a Match: A Doctor From the Kyiv Regional Medical Centre Was Killed and Her Son Was Left an Orphan”), *Obozrevatel (Observer)*, 12 October 2022, <https://news.obozrevatel.com/ukr/society/vid-udaru-rosijskoi-rakety-ii-mashyna-spalahnula-yak-sirnik-u-kyevi-zagin-ula-likar-ohmatdita.html> [accessed: 15.04.2024].
 - 32 Alyona Katashinska, “Zhertoviu raketnoho udaru u Zaporizhzhii stav vidmoii khirurg-onkolog” (“Famous Oncological Surgeon Becomes Victim of Missile Attack in Zaporizhzhia”), *Komsomolskaia Pravda in Ukraine*, 13 October 2022, <https://kp.ua/ua/incidents/a657652-zhertvoju-raketnoho-udaru-u-zaporizhzhii-stav-vidomij-khirurg-onkoloh> [accessed: 29.07.2024].
 - 33 Galina King, “Likari Chernihova: Evhenii Lutsenko ikhav u mikroavtobusi, iakii obstrili rosiis'ki neliudi” (“Doctors in Chernihiv: Yevheniy Lutsenko Was in a Minibus When It Was Fired Upon by Russian Proxies”), *Chernihiv.City*, 19 September 2022, <https://chernihiv.city/articles/234585/yevgeniy-lucenko-3-misyaci-vvazhavsya-bezvisti-zniklim> [accessed: 15.04.2024].
 - 34 Nataliia Buzhinetska, “Dolatu rak u voennykh umovakh – maizhe vyrok: istorii evakuatsii onkoxvorikh ditei z Ukrainy” (“Overcoming Cancer in Wartime Is Almost a Sentence: Stories of the Evacuation of Children with Cancer from Ukraine”), *Ukrayinska Pravda (Ukrainian Truth)*, 08 April 2022, <https://life.pravda.com.ua/health/2022/04/8/248153/> [accessed: 29.07.2024] [author's trans.].
 - 35 Sullivan, “What impact does war have on Ukrainian cancer care?”.

There have also been changes in the rhetoric of the patients themselves, who described their stories to journalists. They began to talk about undergoing treatment during the war as a heroic deed, about medical personnel as heroes, and about themselves as ‘winners’ in the war. They used metaphors of ‘heroism’ to describe the process of undergoing chemotherapy: “heroic” eight hours of waiting in line for an appointment or hunting for medicine and medical instruments.³⁶ From the occupied territories, patients added to the theme of ‘heroism’ descriptions of how they managed to get to and inside medical institutions: “[we] stood under the scorching sun for four hours”, “it was necessary to sail by boat to get treatment”, or “I will never forget how we drove under shelling and how [they] inserted a catheter for 30 minutes, also under fire”.³⁷ Journalists also contributed to this idea of heroism in their comments: “They are used to fighting, but now they are forced to battle on two fronts”.³⁸ This use of the military metaphors ‘fighting’ and ‘two fronts’ emphasises and enhances the importance of survival, turning the healing process into a frontline of war. War and cancer treatment become close in their significance and semantic content. Sometimes, patients and their loved ones took the stress of war as an incentive for recovery: “Due to an emergency, patients recovered 3–4 times faster”.³⁹

The articles are set in a combat space where there are literal and metaphorical enemies, defence forces, and military tasks. For example, one article includes the phrases “I stood in line for chemotherapy for seven hours” and “the only chance to survive is to go abroad”.⁴⁰ These words point to ‘winning’ under circumstances and difficulties that arose in the war. In addition, for successful conduct during the war, new military tactics, methods, and circumstances of treatment are needed. Even doctors and organisations that support cancer patients have switched to military rhetoric: “One war [was] with cancer, the second – in Ukraine. It was sheer despair”, recalls Olena Semenyuk, coordinator of the support programme of the Tabletochki

36 Kudryashova, “Tse liudy, iaki boriutsia z rakom pid chas viiny”.

37 Ibid.

38 Anastasia Loza, “Rak ne chekae na zaverhennia viiny”, – iak boriutsa za zhyttia onkohvori z Chernihivshchyny” (“Cancer Does Not Wait for the End of the War” – How Cancer Patients from the Chernihiv Oblast Fight for Their Lives”), *Suspilne novyny (Public News)*, 03 April 2022, <https://suspilne.media/224627-rak-ne-ckae-na-zaversenna-vijni-a-k-borutsa-za-zitta-onkohvori-z-cernigivsiini/> [accessed: 29.07.2024] [author’s trans.].

39 Tetyana Venglinska, “Fighting Disease During the War: A Story of a Cancer Patient”, *UkraineWorld*, 12 September 2022, <https://ukraineworld.org/articles/stories/story-cancer-patient> [accessed: 29.07.2024] [author’s trans.].

40 Inesa Matyushenko and Olga Syrotyuk, “Viina v kvadrati: shansy dlia onkopatsientiv na vyzhyvannia” (“War Squared: Chances for Cancer Patients to Survive”), *Hromadske*, 02 October 2022, <https://hromadske.ua/posts/vijna-v-kvadrati-shansi-dlya-onkopacyienti-v-na-vizhivannya> [accessed: 29.07.2024] [author’s trans.].

Charitable Foundation, about the first months of the war.⁴¹ Readers get the impression that new operational bases are formed from patient communities and charities, which seem to take command of the 'oncological front'. Moreover, the use of military vocabulary appears naturally. In times of war, militarised metaphors are part of everyday life. People start to compare the world around them to war and use military metaphors.

Nevertheless, their stories carry despair, fatalism, and a feeling of helplessness. Patients talked about going to places where there are doctors, hospitals, medicine, and equipment as their only chance of being saved – that is, either to Western Ukraine or abroad. They described their search for treatment as more difficult, exhausting, and destructive now: “[My] panic attacks started from fear about where and how to be treated now, and [I] lost six kilogrammes in a week because of this”.⁴² Others believed that the only chance to survive was to travel abroad.⁴³ People were frightened by an uncertain future, the fate of abandoned homes, and the difficult pursuit of survival. By telling such stories, they reinforced the devastating aspects of the war, showing themselves as its unjust victims. Only later, when they managed to improve their situation, they felt calmer about themselves, their lives, and their experiences.⁴⁴ The hope for survival is full of references to treatment abroad. Nevertheless, there are few such statements among the patient stories in Ukrainian online publications. The life experiences of those going abroad are mostly represented on social networks.

Articles about the initiatives of some patients, charitable organisations, and volunteers are unexpected and inspiring. They allowed cancer patients to navigate extremely difficult conditions and helped them make important decisions. Above all, the activities of two Ukrainian organisations aided cancer patients even before the war. These are the charitable foundation Inspiration Family and the patient organisation Athena: Women Against Cancer. Both were created by people who themselves once faced this disease. The war greatly changed their activities, forced them to respond quickly to challenges, and turned them into important agents of influence. In

41 Lina Krivoruchko, “Rak ne znae, shcho die velyka vijina: istorii medykov ta volonteriv, iaki boriutsia za zhyttia onkokhvorikh ditei” (“Cancer Does not Know That There is a Great War: Stories of Doctors and Volunteers Fighting for the Lives of Children with Cancer”), *Ukrayinska Pravda (Ukrainian Truth)*, 03 September 2022, <https://life.pravda.com.ua/health/2022/09/3/250299/> [accessed: 15.04.2024] [author's trans.].

42 Vita Sakhnik, “Koly u tebe dvi viiny. Iak onkokhvori znakhodiat prykhystok na Volyni” (“When You Have Two Wars: How Cancer Patients Find Refuge In Volyn”), *Pershii Kanal Sotsialnykh Novyn (First Social News Channel)*, 12 March 2022, <https://pershyj.com/p-koli-u-tebe-dv-i-viini-yak-onkohvori-znahodyat-prihistok-na-volini-56128> [accessed: 29.07.2024] [author's trans.].

43 Matyushenko and Syrotyuk, “Viina v kvadrati”.

44 Venglinska, “Fighting Disease During the War”.

the first three months of the war, they received more than 3,000 appeals from cancer patients. According to Anna Uzlova, the head of Inspiration Family, “[T]he first week was psychological hell. I just sat at the computer and kept answering questions. The number of requests was tearing me apart”.⁴⁵ The members of the organisation say that many people turned to them for help with finding doctors, medication, and money. Later, they organised a network of free online consultations with oncologists and created Telegram groups, Facebook pages, and Instagram posts. They provided information about the Contact Centre of the Ministry of Health of Ukraine, the possibility of obtaining treatment and residence in Western Ukraine, and the availability of oncological drugs. A new feature of their information campaigns was the possibility of treatment abroad. There was information about free assistance for Ukrainians through the Regina Maria Health Network in Romania, the National Cancer Institute in Lithuania, and the OmeaLife Foundation in Poland, among others. Another important area of work was collecting information about the required medication that had run out and writing letters of request for humanitarian aid to foreign manufacturers.⁴⁶

Cancer Medicine Shortages and Refugees with Cancer

Medicine shortages are one of the most painful issues of the war. Almost half of the media reports I consulted are related to problems regarding access to medications. In the first year of the full-scale war, there was no procurement of at least 22 types of medication, the majority of which were for cancer treatment. Sometimes, there were waiting periods of two to four months for the necessary medication.⁴⁷ In an interview, Iryna Koshkina, the representative of the charity foundation Svoi, said that starting in the autumn of 2022, shortages of necessary first-line medications for chemotherapy began. According to Koshkina, these medications were out of stock in oncology centres and pharmacies. She emphasised that she had never before had

45 Nastia Ivantsiv, “‘Rosiiia vbyvae ne lyshe bombamy’. Iak onkopatsienty zhyvut i pomyraiut pid cahs viinyi” (“‘Russia Kills Not Only with Bombs’: How Cancer Patients Live and Die During the War”), *LB.ua*, 20 May 2022, https://lb.ua/society/2022/05/20/517366_rosiya_vbivaie_lishe_bombami_yak.html [accessed: 29.07.2024] [author’s trans.].

46 BF Inspiration family support, “Anketa na ridkisini abo spetsyfichni liky...” (“Form for rare or specific medicines”), Telegram post, 28 February 2022, <https://t.me/onkosupporua/21> [accessed: 29.07.2024].

47 Natalya Helij, “Pid chas tryvog boyimosya perepadiv napruhy, bo todi mozhe vyty z ladu medychne obladnannya” (“During Alarms, We Are Afraid of Power Surges, Because then Medical Equipment Can Break Down – Oleh Duda”), *Espresso.Zahid (Espresso.West)*, 05 February, 2023, <https://zahid.espresso.tv/pid-chas-trivog-boimosya-perepadiv-naprugibo-todi-mozhe-viityi-z-ladu-medichne-obladnannya-oleg-duda> [accessed: 29.07.2024].

to face a situation like this: “[T]he oncology chat was simply bursting with the same questions: When will it be delivered?”⁴⁸ Almost every other day, there were messages about medication (shortages, deliveries, delays) in the Telegram chats. Based on the evaluation of the patient organisation Athena, the majority of calls (amounting to 2,424 in six months) to Patients Have a Right, a cancer patient information support hotline, were about free medication and the possibility of medical evacuation abroad.

Personal stories collected on the Facebook spaces of this community also talk about the lack of medication. The Facebook page of Athena declared May 2023 ‘Cancer Awareness Month’. In the same post, they told the story of Nadia from the Chernihiv Oblast, who searched for medication while her area was occupied. She owes her rescue to her brother, who went through several Russian checkpoints to get the medication Nadia and another woman needed at the Chernihiv Center of Modern Oncology. She said that what he did was “unbelievable”; he risked his life to be “able to do this” under those conditions.⁴⁹ Her labelling her brother’s actions as heroic is no exaggeration. At that time, Russian occupation forces besieged Chernihiv, and it remained under siege for almost 40 days. During this period, Russians killed 658 civilian residents of the oblast’s capital and injured over 1,000 others.⁵⁰ Put differently, the occupiers killed 16 civilians a day. Nadia’s brother’s search for medicine was a dangerous quest with numerous life-threatening encounters.

Patients in the Kherson Oblast, who were occupied for a long time, also reported complications getting medication. According to their testimonies, the pharmacies had almost no medication left, so they had to get them from Kharkiv, which remained under the control of the Ukrainian government. As a result, cancer patients had to wait two months to receive medication, which is extremely dangerous for such patients. Leaving the occupied territories was even harder. For example, it took

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- 48 Alla Kotliar, “Rak i viyna. Chomu v Ukraini nemaye bazovih onkopreparativ, i koly vony z’javlyansya” (“Cancer and War: Why There Are No Basic Oncological Drugs in Ukraine, and When They Will Appear”), *ZN.UA*, 28 January 2023, <https://zn.ua/ukr/HEALTH/rak-i-vijna-chomu-v-ukrajini-nemaje-bazovikh-onkopreparativ-i-koli-voni-zjavljatsja.html> [accessed: 29.07.2024] [author’s trans.].
- 49 Afina. Zhinky protiv raku (Athena: Women Against Cancer) (Facebook page), “Traven ye misiatsem obiznanosti pro melanoma...” (“May is Melanoma Awareness Month...”), Facebook post, 17 May 2023, https://m.facebook.com/story.php?story_fbid=pfbidoc5DU Tg7H3w4G8HwRPrXzCWfb3AUjLyWapg3huCptvKNfFvWD2L3Xzq2jjUXwDUa1l&id=386590811758587 [accessed: 29.07.2024] [author’s trans.].
- 50 Dobrota Valentyna, “Chernihivtsi za rik pislya okupatsiyi pyshayutsya perehodom na ukrayinsku movu i vzhe hotuyutsya do myru” (“A Year After the Occupation, the Residents of Chernihiv Are Proud to Switch to the Ukrainian Language and Are Preparing for Peace”), *TSN*, 03 April 2023, <https://tsn.ua/exclusive/chernigivci-za-rik-pislya-okupatsiyi-pishayutsya-perehodom-na-ukrayinsku-movu-i-vzhe-gotuyutsya-do-miru-2299600.htm> [accessed: 15.04.2024].

Khrystyna from Kherson five difficult days to get to Bremen, Germany, through Crimea.⁵¹ It took Olena from occupied Berdiansk almost the same amount of time to get to Kyiv. Olena writes that she had to get through 15 Russian checkpoints before she got to territory controlled by Ukraine.⁵² Each story like this is the tale of a small victory over the complications with treatment that were caused by the Russian aggression towards Ukrainians, especially those who have cancer.

Another courageous story is that of the Head of the Cherkasy Oblast Oncological Dispensary, Viktor Paramonov, and his driver. Viktoria Romaniuk, co-founder of Athena, told this story to the information agency *UkrInform*. Risking their lives, Paramonov and his driver brought medication to their oncological centre from the occupied Kyiv Oblast – specifically, from the warehouse of the national agency Medical Procurement of Ukraine in the Kyiv Oblast, where all medicine for public procurement is stored.⁵³ Paramonov said, “[O]nly a truly concerned individual could do a thing like this, considering the danger that existed then”.⁵⁴ And there were many other such examples in the first months of the war. Andriy Bezsonenko, an oncologist from Kyiv, did not exaggerate when he said that the “conscience and courage of Ukrainian oncologists will be recorded in world history”.⁵⁵

The medics in their interviews often emphasised that from the very start of the war, there were problems with medicine, and not only in the occupied territories. There are many stories about complications with medicine procurement in Western Ukraine, where patients and doctors from the eastern regions were evacuated. For

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- 51 Viktoriya Melnyk, “Rak ta vijna: yak dovodytsya zhyty onkohvorym na tymchasovo okupovanyh terytoriyah” (“Cancer and War: How Cancer Patients Live in the Temporarily Occupied Territories”), *Vikna (Windows)*, 18 September 2022, <https://vikna.tv/styl-zh yttya/likuvannya-onkologiyi-na-okupovanyh-terytoriyah/> [accessed: 29.07.2024].
 - 52 Inna Lebedenko, “Onkohvori ukrayintsi po kilka dib vybyrayutsya iz okupovanyh terytorij, schob otrymaty likuvannya, ta chasto chas vtracheno” (“Ukrainians with Cancer Take Several Days to Get Out of the Occupied Territories to Receive Treatment, But Often the Clock is Ticking”), *TSN*, 11 September 2022, <https://tsn.ua/exclusive/on kohvori-ukrayinci-po-killka-dib-vibirayutsya-iz-okupovanih-teritorij-schob-otrimati-likuva nnya-ta-chasto-chas-vtracheno-2132317.html> [accessed: 29.07.2024].
 - 53 Since 24 February 2022, many settlements in the north and west of Kyiv Oblast have been occupied. On 2 April, the Ukrainian military completely liberated the area from Russian soldiers.
 - 54 Lyubov Baziv, “Viktorii Romaniuk, spivzasnovnytsia HO ‘Afina. Zhinky proty raku” (“Victoria Romaniuk, Co-founder of the NGO ‘Athena: Women Against Cancer”), *Ukrinform*, 04 February 2023, <https://www.ukrinform.ua/rubric-society/3665315-viktoria-romanuk-sp ivzasnovnica-go-afina-zinki-proti-raku.html> [accessed: 29.07.2024] [author's trans.].
 - 55 Taras Zozulynskyj, “Yak voyuyut ukrayinski onkologhy” (“How Ukrainian Oncologists are Fighting”), *Detectives. Byuro zhurnalistskih rozsliduvan (Detectives: Office of Journalistic Investigations)*, 11 November 2022, <https://detectives.org.ua/publications/iak-voiuut-ukra-nsk-onkologi/> [accessed: 29.07.2024] [author's trans.].

example, an oncologist from Lviv, Andriy Moskva, when recalling his experience of the first four months, admitted that “the local hospital was not prepared for such a stream of patients [increased by several times], first and foremost, due to a lack of medication”. Yet the doctor has an optimistic view on resolving this problem: “Just like we have had success in reconquering each centimetre of our land, we are also constantly fighting for the lives of our people”.⁵⁶ That is, the doctor compared the combat victories of the AFU to overcoming the problems that emerged in the cancer treatment system due to Russian aggression. This remark is very important in understanding the militarisation of cancer in the Russo–Ukrainian War. It shows how, during the war, the media space of oncology became full of military images. Even though the interview was published a year and a half after the start of the war in Ukraine, the military metaphors continued to maintain their associative link with cancer. A crucial feature of this comparison is not general war terminology (like enemy, battle, front, victory, weapons, violence, etc.), but a specific army, the AFU.

The well-known Ukrainian journalist Yana Osadcha, meanwhile, compared cancer with ‘the second [Russian] army of the world’⁵⁷ (based on the rating of the international organisation Global Firepower⁵⁸). In her address to Ukrainians, she emphasised that “cancer is like ‘the second army of the world’: only scary when

56 Diana Pidtserkovna, “Vplyv viyny na onkologichni zakhvoryuvannya v Ukraini: vazhlyvist profilaktychnoho ohlyadu” (“The Impact of the War on Cancer in Ukraine: The Importance of Preventive Examinations”), *Sykhiv.Media*, 25 May 2023, <https://sykhiv.media/vplyv-viyny-na-zakhvoryuvanist-na-rak-v-ukrayini/> [accessed: 29.07.2024] [author’s trans.].

57 In the Ukrainian media, social media posts, and conversations after 24 February 2022, the phrase ‘the second [Russian] army of the world’ is often used. It is frequently put in quotation marks in texts or emphasised through a sarcastic tone of voice. Through this, Ukrainians convey that this expression is false. Even before the Russian invasion on 24 February, Russian media spread narratives about the strength of the Russian Army. They compared it to the US Army and identified it as one of the best. And on the eve of the invasion, another propaganda message was spread alongside this one: “reaching Kyiv in three days”. However, it was not possible to do so, and as a result, the inflated grandeur of the Russian Army collapsed. Even some Russian media acknowledged the inadequacy of the praise. Since then, the phrase ‘the second [Russian] army of the world’ has been placed in quotation marks, highlighting its falsity and injustice. Also see: Anton Pecherskyi, “‘Druha armii svitu’: chy varto nazvyvati tak viisko rashystiv” (“The Second Army of the World’: Should We Call the Ruscist Army This Way?”), *ArmiiaInform (ArmyInformation)*, 21 June 2022, <https://armyinform.com.ua/2022/06/21/druha-armiya-svitu-chy-varto-nazyvati-tak-vijsko-rashystiv/> [accessed: 29.07.2024].

58 Slovo i Dilo (Word and Deed), “Reyting najsynishykh armiy svitu: yake miste posilyi Ukrayina ta rosiya” (“Ranking of the World’s Strongest Armies: Where Ukraine and Russia Stand”), 06 January 2023, <https://www.slovoidilo.ua/2023/01/06/novyna/svit/rejty-nh-najsynishykh-armiy-svitu-yake-misce-posilyi-ukrayina-ta-rosiya> [accessed: 29.07.2024].

unknown, and when you start to resist it, it deflates”.⁵⁹ She presents a clear connection to destroying the myth of the invincibility of ‘the second [Russian] army of the world’, which was done by the AFU in the autumn of 2022. As Kyrlyo Budanov, Head of the Main Directorate of Intelligence of the Ministry of Defence of Ukraine, said in his interview with the Polish media outlet *Virtual Poland* (*Wirtualna Polska*), Ukrainians “helped the world to bust the stories about the ‘invincible Russian Army’”.⁶⁰ Correspondingly, the ‘incurability’ of cancer can also be viewed as a myth that can be busted. Given a proper diagnosis and treatment, cancer becomes controllable and curable. Such comparisons and associations influence emotional memory, and its modulating effects are focused on victory both in the war and the struggle against cancer.

The lack of medicine, as well as their high prices, became key factors in Ukrainian cancer patients becoming refugees. In their stories, interviews, and comments, they sadly described their misadventures in search of vital and affordable medication. The Ukrainian state, based on their perceptions, was unable to help, and they could not afford such medication themselves, so going abroad became the only salvation for them. For example, Tetiana Ushakova, in a Facebook group created by Athena, called “Athena. Women against cancer – a group of mutual support for cancer patients”, recalled her own quest for medication: “I needed a targeted medication. There was only one option to get it and try it – to leave. The price of it was too high for our family. Germany gave me this opportunity”.⁶¹ In their discussions in this Facebook group, women actively shared their experiences in resolving issues with medicine and treatment in Germany, Italy, Greece, Latvia, and other countries of the EU. They supported each other and advised others “to go abroad as refugees”.⁶² Bohdana Melnyk summarised this discussion perfectly: “[P]eople who write to you

59 Maksym Rozenko, “Rak – vin, yak “druha armiya svitu”: strashnyi, poky nevidomyi” – Osadcha pro vlasnu bitvu z Onko” (“Cancer Is Like the “Second Army of the World”: Scary, Yet Unknown” – Osadcha about Her Own Battle with Cancer”), *Radio Trek* (*Radio Track*), 05 June 2023, https://radiotrek.rv.ua/news/rak-vin-yak-druga-armiya-svitu-strashniy-lishe-poki---nevidomiy---osadcha-pro-vlasnu-bitvu-z-onko_309310.html [accessed: 29.07.2024] [author’s trans.].

60 Łukasz Maziewski, “Szef wywiadu wojskowego Ukrainy: Dostrzegamy istotne zmiany wewnątrz Rosji” (“Head of Ukraine’s Military Intelligence: We See Significant Changes Inside Russia”), *Wirtualna Polska: wiadomości* (*Virtual Poland: News*), 29 January 2023, <https://wiadomosci.wp.pl/szef-wywiadu-wojskowego-ukrainy-dostrzegamy-istotne-zmiany-wewnatrz-rosji-6860053735013056a> [accessed: 31.07.2024] [author’s trans.].

61 Athena. Women against cancer, https://t.me/athena_womenagainstcancer [accessed: 31.07.2024].

62 Nataliia Chupakhina (Facebook profile), “Chy ye shche yakes likuvannia?...” (“Are there any other treatments?...”), post in Facebook group “Athena. Women against cancer – a group of mutual support for cancer patients”, 08 June 2023, <https://www.facebook.com/groups/247646882376950/user/100013805553987/> [accessed: 15.04.2024] [author’s trans.].

are correct: we have calm, safety, and all medications are available".⁶³ The author singled out three key things cancer patients receive abroad: refuge from the war, undisturbed treatment, and free medication. For them, war becomes something to set aside temporarily. For this reason, their language is not saturated with military metaphors or associations with and correlations to the war, as 'the second front' is reduced to a minimum.

Unexpectedly, for cancer patients, the war became 'a window of opportunity' to access vital medication and the most modern and innovative treatments. Interviews that I conducted as part of the research group War, Migration and Memory of the Prisma Ukraïna Research Network at the Forum Transregionale Studien demonstrated how women with cancer saw this opportunity. They took it and tried to make use of it. For example, Natalia from Mykolaiv admitted that right before the war she heard from doctors that, in her case, only an expensive kind of treatment could help. Her family did not have money for this, and the government was not able to pay for her treatment. She saw treatment abroad under the status of temporary protection (based on the Temporary Protection Directive of the EU⁶⁴ and Paragraph 24⁶⁵ in Germany) as an opportunity, if not for remission, then at least for prolonging her life.⁶⁶ Similarly, Olena from Kyiv believed in better treatment conditions. She remembered that she and her husband decided that she needed to become a refugee to find treatment opportunities in Germany, in the hope that this treatment could help her enter

63 Darya Vladimirovna (Facebook profile), "U mene pytannya hto likuyetsya v Germaniyi..." ("I have a question about treatment in Germany..."), post in Facebook group "Athena. Women against cancer – a group of mutual support for cancer patients", 12 June 2023, <https://www.facebook.com/groups/247646882376950/search/?q=%D0%91%D1%96%D0%B6%D0%B5%D0%BD%D1%86%D1%96> [accessed: 15.04.2024] [author's trans.].

64 European Commission, "Temporary protection", https://home-affairs.ec.europa.eu/policies/migration-and-asylum/common-european-asylum-system/temporary-protection_en [accessed: 31.07.2024].

65 During the war, refugees from Ukraine are entitled to temporary protection in the EU under the Temporary Protection Directive. Their rights include a residence permit, access to the labour market and housing, medical care, and access to education for children. In Germany, the status of Ukrainian refugees is regulated by § 24 of the Foreigners' Legal Status Act. On the basis of this section, refugees receive a temporary residence permit called an *Aufenthaltstitel*. See: Yel'nveta Kamenieva, "Parahraf 24 v Nimechchyni dlia ukrainsiv v 2023 r. ta prodovzhennia statusu" ("Paragraph 24 in Germany for Ukrainians in 2023 and Extension of Status"), *Ukrainian in Germany*, 23 October 2023, <https://ukrainianinGermany.de/uk/legalisation-for-ukrainians-in-eu-uk/> [accessed: 31.07.2024].

66 Natalya, woman, 48 years old, Berlin, interview with author in the context of the Prisma Ukraïna War, Migration and Memory project.

remission. She also mentioned the high price of treatment in Ukraine as compared to free treatment in Berlin.⁶⁷

Another factor that made people decide to go abroad was the complicated situation with access to innovative medication in Ukraine. In an interview, Uzlova from Inspiration Family shared that a patient she supported from Kharkiv was, before the war, being treated with an innovative medication that cost 80,000 UAH (about 1,903.12 euros per treatment). She bought the first dose herself, pooling charity funds and support from her family. The second dose was provided as humanitarian aid from the pharmaceutical company in the first months of the war. After that, the patient decided to use the medical evacuation programme⁶⁸ and currently receives medication and the necessary care in Norway.⁶⁹

Some women went abroad to continue treatment with experimental medication that they started to take in Ukraine. For example, Yulia from Odesa took part in the randomised (arbitrarily controlled) study of an experimental medication before the war. The Russian aggression interrupted this study and her access to the medication. Wanting to continue the research, she went to Germany with her family. In Berlin, she continued to receive the medication, but, unfortunately, it did not provide the expected results.⁷⁰ The case of Yulia demonstrates that the window of opportunity

67 Olena, woman, 46 years old, Berlin, interview with author in the context of the Prisma Ukraine War, Migration and Memory project.

68 Since April 2022, the Ministry of Health of Ukraine, in cooperation with the European Commission, has been coordinating the referral and transportation of Ukrainian citizens for further treatment abroad. The medical evacuation of affected Ukrainians is carried out with the help of international partners, including the Government of the Republic of Poland, the World Health Organization, Médecins Sans Frontières (Doctors Without Borders), the Medical Mission Foundation, and paramedic transport teams from Poland, Germany, and other countries. Children and adults with complex mine-blast wounds and burn injuries, children and adults with cancer, and people with diseases requiring complex specialised treatment are transported to foreign clinics. The transportation and treatment of Ukrainian citizens in the medical evacuation programme are funded by international organisations and host countries. See: Ministry of Health of Ukraine, "MOZ: Yak podat y zaivku na Prohramu medychnoi evakuatsii tym, khto postrazhdav vid viiny" ("Ministry of Health: How to Apply for the Medical Evacuation Programme for Those Affected by War"), 25 July 2022: <https://www.kmu.gov.ua/news/moz-iak-podat-y-zaiavku-na-prohramu-medychnoi-evakuatsii-tym-khto-postrazhdav-vid-viiny> [accessed: 31.07.2024].

69 Antonina Adrychuk, "Problems of cancer patients: how they survive under conditions of war and deficit of medications", *Radio Svoboda (Radio Freedom)*, 18 March 2023, <https://www.radiosvoboda.org/a/onkokhvoli-defitsyt-likiv-dostup-medychni-posluy-y-viyna/32310626.html> [accessed: 31.07.2024].

70 Uliia, woman, 42 years old, Berlin, interview with author in the context of the Prisma Ukraine War, Migration and Memory project.

did not give everyone a chance for remission or recovery. Rather, it was an opportunity to prolong their lives, which was unavailable to them in Ukraine under the conditions of war, daily air-raid sirens, blackouts, problems with the water supply, and missile strikes.

As I analysed social media content, it became obvious how fleeting the window of opportunity is. The first wave of Ukrainians fleeing abroad was from February to July 2022. Once abroad, many women tried to go to EU countries and find hospitals and doctors by themselves. As foreign oncologists recalled, during the “first meetings the cancer patients from Ukraine demonstrated strong stress”.⁷¹ Sometimes, the situation was so bad that they did not have money to pay for a taxi to take them to the cancer centre.⁷² Starting in August, the Ukrainian Ministry of Health initiated medical evacuations for cancer patients, but not everyone was approved for it. According to Uzlova, the selection criteria were based on how complicated a case was and whether a foreign hospital agreed to accept the patient.⁷³ For this reason, cancer patients continued to become refugees. Based on data from a survey by the Global Medical Knowledge Alliance, conducted in April 2023 with Ukrainian cancer patients on social media, about 20 percent of patients left the country.⁷⁴ This is an approximate percentage, yet it gives an initial idea about the movement of cancer patients and their treatment options during the war. The survey concludes that a considerable part of those surveyed paid for treatment in Ukraine themselves, which can be considered an added stimulus to decide to go abroad for treatment. For example, Valeria Kharchenko, in the Facebook group “Ukrainians in Munich”, described her friend’s situation and asked for advice on resolving the issue of going abroad for treatment. According to her post, treatment in Ukraine costs about 100,000 UAH (about 2,377.83 euros), and the family does not have this money. For this reason, she assumes that the only chance for treatment is a trip to Germany. In response, the participants of the group shared their experiences and advised the friend to seek temporary protection for treatment. They argued that this would provide medical

71 Peter McIntyre, “The war in Ukraine and cancer patients”.

72 Ibid.

73 Anna Uzlova, “Fond pidtrymki doroslykh onkopatsiyentiv Inspiration family: dosvid medychnoyi evakuatsiyi ukrayinskykh onkopatsiyentiv” (“Inspiration Family Foundation to Support Adult Cancer Patients: The Experience of the Medical Evacuation of Ukrainian Cancer Patients”), *Health.ua.com*, 03 March 2023, <https://health-ua.com/article/72140-fond-pdtrimki-doroslih-onkopatcntv-Inspiration-family-dosvd-medichno-evakua> [accessed: 29.07.2024].

74 Global Medical Knowledge Alliance, “Patient experience with cancer care before and after the war in Ukraine – Abstract”, 01 June 2023, <https://gmka.org/news/patient-experience-with-cancer-care-before-and-after-the-war-in-ukraine-abstract/> [accessed: 31.07.2024].

insurance, which allows treatment with minimal expenses and temporary protection status.⁷⁵ An interesting feature of this discussion was the references to official websites, which informed Ukrainian patients on how to act and where to seek medical help for cancer patients. That is, there were rapidly formed information resources that instructed on the procedures for actions, coordination of treatment, regional particularities, and terms of acceptance. A majority of patients were accepted by countries that have an administrative border with Ukraine, yet there was also considerable inflow to Germany, Italy, Latvia, Lithuania, and Estonia.⁷⁶

Most of these patients were women; there were much fewer men. This is due to limitations imposed on men travelling abroad during the current war. As a result, Western doctors who specialised in forms of cancer that are more prevalent in women received the largest surplus loads. Accordingly, women used the window of opportunity to go abroad for treatment to a greater extent. In conventional and on social media, they shared their experiences and their perceptions of European oncology and its positive and negative features and compared them with their previous experiences of treatment in Ukraine. For example, Albina from Bakhmut compared Ukrainian and European oncology systems as follows: “[E]verything that is outer space for me is routine for them”. And, like most Ukrainian refugees with cancer, she concluded that “Ukraine should adopt European practices after the war” and that “the personal experience of each refugee” will add to achieving this common cause.⁷⁷

Nonetheless, the situation with cancer patients is still in an undefined, temporary state. It is not known what will happen to them in the future: will they return to Ukraine, or will they remain in the country that they are in now? Regardless of the answer, it is obvious that the oncology situation in Ukraine is complicated, even though doctors say that oncological services were able to regroup and continue to work.⁷⁸ Even in the first half year of the war, expert opinions warned

75 Valeriya Harchenko (Facebook profile), “Skylalas neprosta situaciya. Dopomozhit z poradoyu...” (“A difficult situation happened. Help with advice...”, post in the Facebook group “Ukraintsi v Miunkheni / Ukrainer in München / Ukrainians In Munich”, 22 October 2022, <https://m.facebook.com/groups/1688306774761735/permalink/3562473980678329/> [accessed: 31.07.2024].

76 O. O. Kovaliov and K.O. Kovaliov, “Yak naslidky viyny mozhut vplyvaty na zakhvoryuvaniist na rak v Ukraini ta krayinah Yevrosoyuzu” (“How the Effects of War Can Affect Cancer Incidence in Ukraine and the EU”), *Health.ua.com*, 14 January 2023, <https://health-ua.com/article/71485-yak-nasldki-vjni-mozhut-vplivati-nazahvor-yuvanst-narak-vukran-takranah-vros> [accessed: 31.07.2024].

77 Tetiana Semakovska, “Yak likuyut rak v Nimechchini: dosvid bakhmutyanky” (“How Cancer Is Treated in Germany: The Experience of a Bakhmut Woman”), *Bahmut.in.ua*, 13 February 2023, <https://bahmut.in.ua/62-korysnee/4287-yak-likuyut-rak-v-nimechchini-dosvid-bakhmutyanky> [accessed: 31.07.2024] [author’s trans.].

78 Oleksiy Yaremenko et al., “Naymasshtabnisha podiya vitchyznyanoyi onkologiyi – UpToDate 3.0. Congress” (“The Largest Event in National Oncology – Uptodate 3.0

of an echo of the war through cancer morbidity after the war's end. For example, the Head of the Ukrainian Ministry of Health, Viktor Liashko, forecasts growth in the number of cancer patients in the next 5–10 years.⁷⁹ Oleksiy Kovaliov, an oncologist and Ministry of Health expert, agrees with him. Based on the example of previous wars in Vietnam, Iraq, and Afghanistan, he also forecasts an increase in cases of the disease among both the military and civilians. The causes of this are chemicals used in bombardments, shelling, and missile strikes, the use of prohibited weapons, and constant stress.⁸⁰ In her annotation, the journalist Maria Stepanenko, who interviewed Kovaliov, used an interesting comparison of “how war metastasises the nation's health and what to do about this”.⁸¹ That is, here there is a reversal of metaphors: she views war through cancer-related terminology, where metastases (remote manifestations of a pathological process) are used to describe the predicted growth of cancer cases after the war, and the war itself is seen as a pathological tumour.

Conclusions

The militarisation of the oncological sphere has been evident since the start of the war. In online publications of various fields and types, the number of articles on cancer expressed in the language of war or comparing cancer to it has increased significantly. These articles heroise or victimise cancer patients, doctors, patient organisations, and charitable foundations. The language of military metaphors makes these stories visible and accessible, and allows the reader to see a reflection of their lived reality. The ‘second war’ and the ‘war squared’ are the most common militarised metaphors, which emotionally colour the experiences of those connected to cancer and reveal the depth of the humanitarian crisis caused by the war. The militarisation of the oncological sphere during the war is not only a prompt reaction to new situations in the Russo–Ukrainian War but also impacts and transforms them. More than before, the voices of people who are marginalised and made taboo because of the disease, have a wider reach. They are recognised as more involved in socially important processes, and their stories become valuable to society.

Congress”), *Health.ua.com*, 13 January 2023, <https://health-ua.com/article/71478-najmas-shtabnsna-podya-vtchiznyano-onkolog-kongres-UpToDate30> [accessed: 31.07.2024].

79 *Slovo i dilo (Word and Deed)*, “Lyashko rozpoviv, yak viyna vplyne na zdorov'ya ukraintiv u dovhostrokovi perspektyvi” (“Lyashko Explains How the War Will Affect the Health of Ukrainians in the Long Term”), 18 August 2022, <https://www.slovoidilo.ua/2022/08/18/novyna/suspilstvo/lyashko-rozpoviv-yak-vijna-vplyne-zdorovya-ukrayinciv-dovhostrokovij-perspektyvi> [accessed: 31.07.2024].

80 Stepanenko, “Dumaty pro maybutnie zaraz”.

81 Ibid.

Strikingly, their rhetoric, their descriptions of the events, and the words they used to express their feelings have changed since the start of the war. “Russia doesn’t only kill with bombs”⁸² is how they define their experience and the reality they faced in the first months. The destruction of the established system of cancer care led to numerous invisible victims of the war. Many patients could not get help in time and died. Getting to a hospital was heroism, a courageous act. Because of the war, patients and doctors began to express their thoughts and experience events through militarised metaphors and to describe the world in which they sought cancer treatment through the language of war, fighting, and combat.

People perceive treatment as something more complicated when they use war metaphors compared to other terms and descriptions. A sharp increase in the prevalence of such metaphors shows the scale and depth of the humanitarian crisis that emerged in the Ukrainian oncology sphere. And the more we compare the language of people who stayed in Ukraine for treatment to that of those who left the country, the more obvious the difference in their preference for war-related metaphors. In the information space of Ukraine, after a year of war, military associations and comparisons remain widely used. In some cases, they become a reflection of real victories and defeats in the Russo–Ukrainian War. Conversely, refugees with cancer use words connected to hope, possibility, prospects, calmness, and safety. For them, treatment abroad is a ‘window of opportunity’ to access better European medical care and its innovative methods and medication. Even if treatment turns out to be ineffective, they see it as a chance to extend the time of their lives. An unprecedented practice of ‘treatment abroad’ emerged as a form of temporary protection. The international community of cancer patients and international healthcare organisations played a positive role in this. Yet this status is temporary – that is, for now, we do not have any effective control, and there are no prospects for a prolonged stay in EU countries for these patients. Many unresolved issues remain.

There is also a need to coordinate efforts and conduct new research to help overcome the consequences of the Russian armed aggression for oncology in Ukraine. I support the position of the oncologists of Ukraine, voiced at the oncology congress *UpToDate 3.0* on 24–25 November 2022: “And today it is possible that the full-scale war can cause an increase in cancer mortality and incidence rate, compared to the indicators expected in times of peace. For this reason, it is important to create a separate programme to study the consequences of war on the incidence of cancer in Ukraine”.⁸³ It is important to apply maximum efforts to mitigate the adverse consequences of the war in Ukraine, including in the sphere of oncology. And here, it is important to work in all areas – with patients and their communities, oncologists, and international oncological organisations.

82 Ivantsiv, “Rosiiia vbyvae ne lyshe bombamy”.

83 Yaremenko, “Naymasshtabnisha podiya vitchyznyanoyi onkolohiyi” [author’s trans.].

Bibliography

- Adriychuk, Antonina, "Problems of cancer patients: how they survive under conditions of war and deficit of medications", *Radio Svoboda (Radio Freedom)*, 18 March 2023. <https://www.radiosvoboda.org/a/onkoxhvorii-defitsyt-likiv-dostup-medychni-posluhy-viyna/32310626.html> [accessed: 31.07.2024].
- Afina. Zhinky protiv raku (Athena: Women against Cancer) (Facebook page), "Travenye misiatsem obiznanosti pro melanoma..." ("May is Melanoma Awareness Month..."), Facebook post, 17 May 2023 https://m.facebook.com/story.php?story_fbid=pfbidoc5dUTg7H3w4G8HwRPrXzCWfb3AUjLyWapg3huCptvKNfFvWD2L3Xzq2jjUXwDUa1l&id=386590811758587 [accessed: 31.07.2024].
- Anonymous, "Russia's war in Ukraine is killing cancer care in both countries", *The BMJ*, 23 March 2022, <https://doi.org/10.1136/bmj.0701> [accessed: 31.07.2024].
- Apteka.ua (Pharmacy.ua), "Onkolohiya – 2021: sohodennia ta perspektivy rozvytku" ("Oncology – 2021: The Present and Prospects for Development"), no. 5 (1276), 08 February 2021, <https://www.apteka.ua/article/582977> [accessed: 31.07.2024].
- Baziv, Lyubov, "Viktoriiia Romaniuk, spivzasnovnytsia HO 'Afina. Zhinky proty raku'" ("Victoria Romaniuk, Cofounder of the NGO 'Athena: Women Against Cancer'"), *Ukrinform*, 04 February 2023, <https://www.ukrinform.ua/rubric-society/3665315-viktoria-romanuk-spivzasnovnica-go-afina-zinki-proti-raku.html> [accessed: 31.07.2024].
- Beznosenko, A.P., "Onkologiya v Ukraine: itogi 2021 goda" ("Oncology in Ukraine: The Results of 2021"), *Health.ua.com*, 20 June 2022, <https://health-ua.com/article/69965-onkologiya-vukran-pdsumki-2021roku> [accessed: 31.07.2024].
- BF Inspiration family support, "Anketa na ridkisini abo spetsyfichni liky..." ("Form for rare or specific medicines"), Telegram post, 28 February 2022, <https://t.me/onkosoportua/21> [accessed: 31.07.2024].
- Bondarchuk, Iryna, "Nova era likuvannya raku vzhe v Ukrayini" ("A New Era of Cancer Treatment Is Already in Ukraine"), *Ukrayinskiiy medichniiy zhurnal* 1/117, 2017, <https://www.umj.com.ua/article/105350/nova-era-likuvannya-raku-vzhe-v-ukrayini> [accessed: 31.07.2024].
- Burlaku, Nataliia, "Rak u zhinok. Shcho povinna robiti kozhna z nas, aby zhiti?" ("Cancer In Women: What Should Each of Us Do to Live?"), 20 Khvylyn, *Ternopil (20 Minutes, Ternopil)*, 04 February 2023, <https://te.zominut.ua/Zdorovya/kozhna-z-nas-mozhe-zahvoriti-yak-u-ternopoli-pid-chas-viyni-likuyut-ra-11691867.html> [accessed: 31.07.2024].
- Buzhinetska, Nataliia, "Dolatu rak u voennykh umovakh – maizhe vyrok: istorii evakuatsii onkoxhvorikh ditei z Ukrainy" ("Overcoming Cancer in Wartime Is Almost a Sentence: Stories of the Evacuation of Children with Cancer from

- Ukraine”), *Ukrayinska Pravda (Ukrainian Truth)*, 08 April 2022, <https://life.pravda.com.ua/health/2022/04/8/248153/> [accessed: 31.07.2024].
- Chestnut, Jonathan M., et al., “Waging War on War Metaphors in Cancer and COVID-19”, *JCO Oncology Practice* 16/10 2020, 627–628, <https://ascopubs.org/doi/full/10.1200/OP.20.00542> [accessed: 31.07.2024].
- Chupakhina, Nataliia, (Facebook profile), “Chy ye shche yakes likuvannia?...” (“Are there any other treatments?...”), post in Facebook group “Athena. Women against cancer – a group of mutual support for cancer patients”, 08 June 2023, <https://www.facebook.com/groups/247646882376950/user/100013805553987/> [accessed: 15.04.2024].
- Demianchuk, Olha, “V Ukraini prypyneno likuvannia khvorykh n arak – Zelenskyi” (“Zelenskyy: Treatment of Cancer Patients Stopped in Ukraine”), *Korespondent.Net (Correspondent.Net)*, 06 May 2022, <https://ua.korrespondent.net/ukraine/4475561-v-ukraini-prypyneno-likuvannia-khvorykh-na-rak-zelenskyi> [accessed: 31.07.2024].
- DeVita Jr., Vincent T., “The ‘War on Cancer’ and its impact”, *Nature Clinical Practice Oncology* 1/55, 2004, 55, <https://doi.org/10.1038/ncponco036> [accessed: 31.07.2024].
- Dobrota, Valentyna, “Chernihivtsi za rik pislya okupatsiyi pyshayutsya perehodom na ukrayinsku movu i vzhe hotuyutsya do myru” (“A Year After the Occupation, the Residents of Chernihiv Are Proud to Switch to the Ukrainian Language and Are Preparing for Peace”), *TSN*, 03 April 2023, <https://tsn.ua/exclusive/chernigivci-za-rik-pislya-okupatsiyi-pishayutsya-perehodom-na-ukrayinsku-movu-i-vzhe-hotuyutsya-do-miru-2299600.html> [accessed: 31.07.2024].
- European Cancer Organisation, “ECO-ASCO Special Network: Impact of the War in Ukraine on Cancer”, 04 June 2022, <https://www.europeancancer.org/topic-networks/20:impact-war-in-ukraine-on-cancer.html> [accessed: 31.07.2024].
- European Cancer Organisation, “ECO Statements on Ukraine”, 10 May 2022, <https://www.europeancancer.org/resources/246:eco-statement-of-support-for-ukraine.html> [accessed: 31.07.2024].
- European Commission, “Temporary protection”, https://home-affairs.ec.europa.eu/policies/migration-and-asylum/common-european-asylum-system/temporary-protection_en [accessed: 31.07.2024].
- European Federation of Pharmaceutical Industries and Associations (EFPIA), *The Impact of the War in Ukraine on Oncology Patients: Overview and recommendations for European and Ukrainian health authorities and policymakers*, report, 2022, <https://www.efpia.eu/media/677256/the-impact-of-the-war-in-ukraine-on-oncology-patients.pdf> [accessed: 31.07.2024].
- Global Medical Knowledge Alliance, “Patient experience with cancer care before and after the war in Ukraine – Abstract”, 01 June 2023, <https://gmka.org/news/patient-experience-with-cancer-care-before-and-after-the-war-in-ukraine-abstract/> [accessed: 31.07.2024].

- González, Roberto J., *Militarizing Culture: Essays on the Warfare State*, New York: Routledge, 2010.
- Harchenko, Valeriya, (Facebook profile), "Sklalas neprosta situaciya. Dopomozhit z poradoyu..." ("A difficult situation happened. Help with advice..."), post in the Facebook group "Ukraintsi v Miunkheni / Ukrainer in München / Ukrainians In Munich", 22 October 2022, <https://m.facebook.com/groups/1688306774761735/permalink/3562473980678329/> [accessed: 31.07.2024].
- Helij, Natalya, "Pid chas tryvog boyimosya perepadiv napruhy, bo todi mozhe vytyt z ladu medychne obladnannya" ("During Alarms, We Are Afraid of Power Surges, Because then Medical Equipment Can Break Down – Oleh Duda"), *Espresso.Zahid* (*Espresso.West*), 05 February, 2023, <https://zahid.espresso.tv/pid-chas-trivog-boi-mosya-perepadiv-napruhi-bo-todi-mozhe-viyti-z-ladu-medichne-obladnann-ya-oleg-duda> [accessed: 31.07.2024].
- Ivantsiv, Nastia, "'Rosiiia vbyvae ne lyshe bombamy'. Iak onkopatsienty zhyvut i pomyraiut pid cahs viiny" ("Russia Kills Not Only with Bombs': How Cancer Patients Live and Die During the War"), *LB.ua*, 20 May 2022, https://lb.ua/society/2022/05/20/517366_rosiya_vbivaie_lishe_bombami_yak.html [accessed: 31.07.2024].
- Kalinichenko, Nataliia, "'Popry viynu, onkokhvoli mayut otrimaty yakisnu medychnu dopomohu'" ("Despite the war, cancer patients should receive quality medical care"), *Uryadoviiy kuryer* (*Government Courier*), 23 July 2022, <https://ukurier.gov.ua/uk/articles/popri-vijnu-onkohvoli-mayut-otrimuvati-yakisnu-med/> [accessed: 31.07.2024].
- Kamenieva, Yelizaveta, "Parahraf 24 v Nimechchyni dlia ukraintsiv v 2023 r. ta prodovzhennia statusu" ("Paragraph 24 in Germany for Ukrainians in 2023 and Extension of Status"), *Ukrainian in Germany*, 23 October 2023, <https://ukrainiani.ngermany.de/uk/legalisation-for-ukrainians-in-eu-uk/> [accessed: 31.07.2024].
- Katashinska, Alyona, "Zhertoviu raketnoho udaru u Zaporizhzhzi stav vidmoii khirurg-onkolog" ("Famous Oncological Surgeon Becomes Victim of Missile Attack in Zaporizhzhzia"), *Komsomolskaia Pravda in Ukraine*, 13 October 2022, <https://kp.ua/ua/incidents/a657652-zhertvoju-raketnoho-udaru-u-zaporizhzhzi-stav-vidomij-khirusn-onkoloh> [accessed: 31.07.2024].
- King, Galina, "Likari Chernihova: Evhenii Lutsenko ikhav u mikroavtobusi, iakii obstriliali rosiis'ki neliudi" ("Doctors in Chernihiv: Yevheniy Lutsenko Was in a Minibus When It Was Fired Upon by Russian Proxies"), *Chernihiv.City*, 19 September 2022, <https://chernihiv.city/articles/234585/yevgenij-lucenko-3-mis-yaci-vvazhavsya-bezvisti-zniklim> [accessed: 15.04.2024].
- Kohn, Richard H., "Using the Military at Home: Yesterday, Today, and Tomorrow", *Chicago Journal of International Law* 4/1, 2003, 165–192, <https://chicagounbound.u.chicago.edu/cjil/vol4/iss1/12> [accessed: 31.07.2024].

- Kolomiets, Daria, “Kinsha Daria. Yak likuyut onkologiu v Ukraini ta skilky na tse vydiliaye hroshey derzhava — vdipovidaie MOZ” (“How Oncology Is Treated in Ukraine and How Much Money the State Allocates for It – The Ministry of Health Answers”), *Suspilne novyny (Public News)*, 04 February 2022, <https://suspilne.media/203940-ak-likuut-onkologicni-zahvoruvanna-v-ukraini-ta-skilki-na-ce-vidilae-grosey-derzava/> [accessed: 31.07.2024].
- Kotliar, Alla, “Rak I viyna. Chomu v Ukrayini nemaye bazovih onkopreparativ, I koly vony z'yavlyansya” (“Cancer and War: Why There Are No Basic Oncological Drugs in Ukraine, and When They Will Appear”), *ZN.UA*, 28 January 2023, <https://zn.ua/ukr/HEALTH/rak-i-vijna-chomu-v-ukrajini-nemaje-bazov-ikh-onkopreparativ-i-koli-voni-zjavljatsja.html> [accessed: 31.07.2024].
- Kovaliov, O. O., and K.O. Kovaliov. “Yak naslidky viyny mozhut vplyvaty na zakhvoryuvanist na rak v Ukrayini ta krayinah Yevrosoyuzu” (“How the Effects of War Can Affect Cancer Incidence in Ukraine and the EU”), *Health.ua.com*, 14 January 2023, <https://health-ua.com/article/71485-yak-nasldki-vjni-mozhut-vp-livati-nazahvoryuvanst-narak-vukran-takranah-vros> [accessed: 31.07.2024].
- Krasnikov, Denis, and Victoria Martyniuk, “Skhidna Ukraina poterpaie vid raku bilshe, nizh Zakhidna, i zavody – ne holovnyi faktor. Shcho kazhe statystyka” (“Eastern Ukraine Suffers from Cancer More Than Western Ukraine, and Factories Are Not the Main Factor: What the Statistics Say”), *Forbes*, 05 November 2021, <https://forbes.ua/lifestyle/vostochnaya-ukraina-stradaet-ot-raka-bolshe-zapadnoy-i-zavody-ne-glavnyy-faktor-chto-govorit-statistika-05112021-2729> [accessed: 31.07.2024].
- Krivoruchko, Lina, “Rak ne znae, shcho die velyka vijina: istorii medykiv ta volonteriv, iaki boriutsia za zhyttia onkokhvorykh ditei” (“Cancer Does not Know That There is a Great War: Stories of Doctors and Volunteers Fighting for the Lives of Children with Cancer”), *Ukrayinska Pravda (Ukrainian Truth)*, 03 September 2022, <https://life.pravda.com.ua/health/2022/09/3/250299/> [accessed: 31.07.2024].
- Kudryashova, Viktoriia, “Tse liudy, iaki boriutsia z rakom pid chas viiny” (“These Are People Who Are Fighting Cancer During the War”), *The Village*, 3 June 2022, <https://www.the-village.com.ua/village/knowledge/practice/326609-rak-i-vijna> [accessed: 29.07.2024].
- Lebedenko, Inna, “Onkohvori ukrayintsi po kilka dib vybyrayutsya iz okupovanyh terytorij, schob otrymaty likuvannya, ta chasto chas vtracheno” (“Ukrainians with Cancer Take Several Days to Get Out of the Occupied Territories to Receive Treatment, But Often the Clock is Ticking”), *TSN*, 11 September 2022, <https://tsn.ua/exclusive/onkohvori-ukrayinci-po-kilka-dib-vibirayutsya-iz-okupovanih-teritoriy-schob-otrimati-likuvannya-ta-chasto-chas-vtracheno-2132317.html> [accessed: 29.07.2024].
- Levchenko, Anna, “Dytyacha onkolojiya ta patsiyenty z vazhkymy suputnimy patolohiyamy dosi ye prerohatyvoyu derzhavnykh klinik – holovnyy likar NIR”

- ("Paediatric Oncology and Patients with Severe Comorbidities Are Still the Privilege of State Clinics – Chief Medical Officer of the NIR"), *Interfax-Ukraina: Informatsiine ahenstvo* (*Interfax-Ukraine: Information Agency*), 04 February 22, <https://interfax.com.ua/news/interview/796147.html> [accessed: 31.07.2024].
- Loza, Anastasia, "Rak ne chekae na zaverhennia viiny", – iak boriutsa za zhyttia onkokhvoli z Chernihivshchyny" ("Cancer Does Not Wait for the End of the War" – How Cancer Patients from the Chernihiv Oblast Fight for Their Lives"), *Suspilne novyny* (*Public News*), 03 April 2022, <https://suspilne.media/224627-rak-ne-ckae-na-zaversenna-vijni-ak-borutsa-za-zitta-onkohvoli-z-cernigivsinii/> [accessed: 31.07.2024].
- Matyushenko, Inesa, and Olga Syrotyuk, "Viina v kvadrati: shansy dlia onkopatsientiv na vyzhyvannia" ("War Squared: Chances for Cancer Patients to Survive"), *Hromadske*, 02 October 2022, <https://hromadske.ua/posts/vijna-v-kvadrati-shansi-dlya-onkopacyientiv-na-vizhivannya> [accessed: 31.07.2024].
- Maziewski, Łukasz, "Szef wywiadu wojskowego Ukrainy: Dostrzegamy istotne zmiany wewnątrz Rosji" ("Head of Ukraine's Military Intelligence: We See Significant Changes Inside Russia"), *Wirtualna Polska: wiadomości* (*Virtual Poland: News*), 29 January 2023, <https://wiadomosci.wp.pl/szef-wywiadu-wojskowego-ukrainy-dostrzegamy-istotne-zmiany-wewnatrz-rosji-6860053735013056a> [accessed: 31.07.2024].
- McIntyre, Peter, "The war in Ukraine and cancer patients: Early experiences from the frontline", *eCancer*, 22 September 2022, <https://ecancer.org/en/news/22234-the-war-in-ukraine-and-cancer-patients-early-experiences-from-the-frontline> [accessed: 31.07.2024].
- Melnyk, Viktoriya, "Rak ta vijna: yak dovodytsya zhyty onkohvorym na tymchasovo okupovanyh terytoriyah" ("Cancer and War: How Cancer Patients Live in the Temporarily Occupied Territories"), *Vikna* (*Windows*), 18 September 2022, <https://vikna.tv/styl-zhyttia/likuvannya-onkologiyi-na-okupovanyh-terytoriyah/> [accessed: 31.07.2024].
- Midas PR Group, "Desk Research: How it Works and Why It's Your Key to Success", 30 October 2018, <https://www.midas-pr.com/desk-research-works-key-success/> [access: 31.07.2024].
- Ministry of Health of Ukraine, "MOZ: Yak podaty zaiavku na Prohramu medychnoi evakuatsii tym, khto postrazhdav vid viiny" ("Ministry of Health: How to Apply for the Medical Evacuation Programme for Those Affected by War"), 25 July 2022: <https://www.kmu.gov.ua/news/moz-iak-podaty-zaiavku-na-prohramu-medychnoi-evakuatsii-tym-khto-postrazhdav-vid-viiny> [accessed: 31.07.2024].
- National Cancer Institute, U.S. National Institute of Health, "Milestone (1971). National Cancer Act of 1971", https://dtp.cancer.gov/timeline/noflash/milestones/m4_nixon.htm [accessed: 31.07.2024].

- Pecherskyi, Anton, “‘Druha armiiia svitu’: chy varto nazyvaty tak viisko rashystiv” (“‘The Second Army of the World’: Should We Call the Ruscist Army This Way?”), *ArmiiaInform (ArmyInformation)*, 21 June 2022, <https://armyinform.com.ua/2022/06/21/druga-armiya-svitu-chy-varto-nazyvaty-tak-vijsko-rashystiv/> [accessed: 31.07.2024].
- Petik, Marina, “Vid udaru rosiiskoi rakety ii mashyna spalakhnula, iak sirnyk: y Kyevi zahynula likara Okhmatdytu, sin zalyshvsia syrotoiui” (“A Russian Missile Hit Her Car Like a Match: A Doctor From the Kyiv Regional Medical Centre Was Killed and Her Son Was Left an Orphan”), *Obozrevatel (Observer)*, 12 October 2022, <https://news.obozrevatel.com/ukr/society/vid-udaru-rosiiskoi-rakety-ii-mashyna-spalahnula-yak-sirnyk-u-kievi-zaginula-likar-ohmatdita.html> [accessed: 15.04.2024].
- Pidtserkovna, Diana, “Vplyv viyny na onkologichni zakhvoryuvannya v Ukraini: vazhlyvist profilaktychnoho ohlyadu” (“The Impact of the War on Cancer in Ukraine: The Importance of Preventive Examinations”), *Sykhiv.Media*, 25 May 2023, <https://sykhiv.media/vplyv-viyny-na-zahvoryuvanist-na-rak-v-ukrayini/> [accessed: 31.07.2024].
- Priamyi (Direct), “V Ukraini diit shist obstezhen dlia vyivlennia onkologichnykh zakhvoriuvan – MOZ” (“Six Examinations for Detecting Cancer in Ukraine – Ministry of Health”), 08 June 2022, <https://prm.ua/v-ukraini-diiut-shist-obstezhen-dlia-vyivlennia-onkologichnykh-zakhvoriuvan-moz/> [accessed: 31.07.2024].
- Roksbi, Filipa, “Yak riatuiut vid viiny khvorykh na rak ukrainskykh ditei” (“How Ukrainian Children with Cancer Are Being Saved from War”), *BBC News Ukraine*, 26 March 2022, <https://www.bbc.com/ukrainian/features-60880184> [accessed: 31.07.2024].
- Rozenko, Maksym, “Rak – vin, yak ‘druha armiya svitu’: strashnyi, poky nevidomyi’, – Osadcha pro vlasnu bitvu z Onko” (“Cancer Is Like the ‘Second Army of the World’: Scary, Yet Unknown’ – Osadcha about Her Own Battle with Cancer”), *Radio Trek (Radio Track)*, 05 June 2023, https://radiotrek.rv.ua/news/rak-vin-yak-druga-armiya-svitu-strashniy-lishe-poki---nevidomiy---osadcha-pro-vlasnu-bitvu-z-onko_309310.html [accessed: 31.07.2024].
- Sakhnik, Vita, “Koly u tebe dvi viiny. Iak onkohvori znakhodiat prykhystok na Volyni” (“When You Have Two Wars: How Cancer Patients Find Refuge In Volyn”), *Pershii Kanal Sotsialnykh Novyn (First Social News Channel)*, 12 March 2022, <https://pershyj.com/p-koli-u-tebe-dvi-viiny-yak-onkohvori-znahodyat-prihistok-na-volini-56128> [accessed: 31.07.2024].
- Semakovska, Tetiana, “Yak likuyut rak v Nimechchini: dosvid bakhmutyanky” (“How Cancer Is Treated in Germany: The Experience of a Bakhmut Woman”), *Bahmut.in.ua*, 13 February 2023, <https://bahmut.in.ua/62-korysnee/4287-yak-likuyut-rak-v-nimechchini-dosvid-bakhmutyanky> [accessed: 31.07.2024].

- Slovo i Dilo (Word and Deed), "Reytyng najsyl'nishykh armiy svitu: yake mistse posilyi Ukrayina ta rosiya" ("Ranking of the World's Strongest Armies: Where Ukraine and Russia Stand"), 06 January 2023, <https://www.slovoidilo.ua/2023/01/06/novyna/svit/rejtynh-najsyl'nishyx-armij-svitu-yake-misce-posilyi-ukrayina-ta-rosiya> [accessed: 31.07.2024].
- Slovo i dilo (Word and Deed), "Lyashko rozpoviv, yak viyna vplyne na zdorovya ukraintsev u dovhostrokoviy perspektyvi" ("Lyashko Explains How the War Will Affect the Health of Ukrainians in the Long Term"), 18 August 2022, <https://www.slovoidilo.ua/2022/08/18/novyna/suspilstvo/lyashko-rozpoviv-yak-vijna-vplyne-zdorovya-ukrayinciv-dovhostrokovij-perspektyvi> [accessed: 31.07.2024].
- Stepanenko, Maryna, "Dumaty pro maibutnie zaraz: ekspert MOZ Ukrainy pro zapobihannia epidemii raku psilia viyny" ("Thinking about the Future Now: Expert of the Ministry of Health of Ukraine on Preventing the Epidemic of Brain Cancer"), *RFI-Ukraina*, 30 March 2023, <https://www.rfi.fr/uk/%D1%83%Do%BA%D1%80%Do%Bo%D1%97%Do%BD%o%Bo/20230330> [accessed: 15.04.2024].
- Sullivan, Richard, "What impact does war have on Ukrainian cancer care?", *King's College London*, 29 April 2022, <https://www.kcl.ac.uk/what-impact-does-war-have-on-ukrainian-cancer-care> [accessed: 31.07.2024].
- Surh, Young-Joon, "The 50-Year War on Cancer Revisited: Should We Continue to Fight the Enemy Within?", *Journal of Cancer Prevention* 26(4), 2021, 219–223, doi: 10.15430/JCP.2021.26.4.219. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8749321/> [accessed 31.07.2024].
- Ukrainian Ministry of Health, "Shist bezoplatnykh doslidzhen dlia rannoho vyavlennia onkologii" ("Six Free Tests for Early Detection of Cancer"), 08 June 2022, <https://moz.gov.ua/article/news/shist-bezoplatnih-doslidzhen-dlja-rannogo-vijavlennja-onkologii> [accessed: 31.07.2024].
- UNIAN: Informatsiine ahenstvo (UNIAN: Information Agency), "Velyke budivnytstvo: u Kharkovi znavytsia novyi onkotsentr na pivtysiachi lizhok" ("Big Construction: A New Oncology Centre with Five Hundred Beds to Be Built in Kharkiv"), 07 February 2022, <https://www.unian.ua/health/velike-budivnictvo-u-harkovi-z-yavitsya-noviy-onkocentr-na-piv-tisyachi-lizhok-novini-harkov-a-11696071.html> [accessed: 31.07.2024].
- Uzlova, Anna, "Fond pidtrymki doroslykh onkopatsiyentiv Inspiration family: dosvid medychnoyi evakuatsiyi ukrayinskykh onkopatsiyentiv" ("Inspiration Family Foundation to Support Adult Cancer Patients: The Experience of the Medical Evacuation of Ukrainian Cancer Patients"), *Health.ua.com*, 03 March 2023, <https://health-ua.com/article/72140-fond-pdtrimki-doroslih-onkopatent-v-Inspiration-family-dosvd-medichno-evakua> [accessed: 31.07.2024].
- Venglinska, Tetyana, "Fighting Disease During the War: A Story of a Cancer Patient", *UkraineWorld*, 12 September 2022, <https://ukraineworld.org/articles/stories/story-cancer-patient> [accessed: 31.07.2024].

Vladimirovna, Darya, (Facebook profile), “U mene pytannya hto likuyetsya v Germaniyi...” (“I have a question about treatment in Germany...”), post in the Facebook group “Athena. Women against cancer – a group of mutual support for cancer patients”, 12 June 2023, <https://www.facebook.com/groups/247646882376950/search/?q=%D0%91%D1%96%D0%B6%D0%B5%D0%BD%D1%86%D1%96> [accessed: 15.04.2024].

Yaremenko, Oleksiy et al., “Naymasshtabnisha podiya vitchyznyanoyi onkologhiyi – UpToDate 3.0. Congress” (“The Largest Event in National Oncology – Uptodate 3.0 Congress”), *Health.ua.com*, 13 January 2023, <https://health-ua.com/article/71478-najmasshtabnsha-podya-vtchiznyano-onkolog-kongres-UpToDate30> [accessed: 31.07.2024].

Zozulynskyj, Taras, “Yak voyuyut ukrayinski onkologhy” (“How Ukrainian Oncologists are Fighting”), *Detectives. Byuro zhurnalistykh rozsliduvan (Detectives: Office of Journalistic Investigations)*, 11 November 2022, EUROSSaccessed: 31.07.2024].

