



What challenges does the humanitarian crisis and large number of refugees from Ukraine pose for Polish oncology?

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ABSTRACT

The war in Ukraine has led to a massive influx of refugees into Poland, posing a major challenge for the health care system. The large number of refugees will undoubtedly lead to a substantial increase in the number of patients requiring treatment for a wide range of conditions, including cancer. In the present article, we describe and discuss the many difficulties faced by cancer treatment centres in Poland due to these circumstances. Key issues include the lack of proper diagnostic testing in this population and differences in oncological practices between Poland and Ukraine. Other problems include difficulties in obtaining patients' medical records and communication issues caused by the language barrier. In addition, in the context of the ongoing COVID-19 pandemic, the low vaccination rate among Ukrainian refugees is also a significant risk factor. Addressing these challenges will require a comprehensive approach involving the national health care agency and individual cancer centres. This is especially important in oncology due to the interdisciplinary nature of the field, which requires the contribution of specialists from many different fields as well as appropriate funding.

Key words: cancer epidemiology; chemotherapy; radiotherapy; Ukraine refugees

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Introduction

In recent years, a growing number of Ukrainians have migrated to Poland in search of work and a better life; as a result, Ukrainians now comprise an increasing proportion of patients in the health care system. The current war in Ukraine and the resulting humanitarian crisis has substantially increased the inflow of refugees from Ukraine, many of whom who require medical care, including cancer treatment. Since the war began, more than two million Ukrainian citizens — mainly women, children, and older men — have crossed the border into Poland. The Polish Cancer Society estimates that this situation will lead to

a 5% to 10% increase in the number of patients with cancer [1].

According to GLOBOCAN data, there were 162,594 new cases of cancer and 84,194 deaths in Ukraine (population: ≈ 44 million) in the year 2020. In that same year in Poland (population: ≈ 38 million), there were 204,575 newly diagnosed cases of cancer and 119,319 deaths [2, 3]. The ratio of new cases to the total number of inhabitants was 0.37 in Ukraine versus 0.54 in Poland, suggesting that the incidence of malignant neoplasms in Poland is higher than in Ukraine. However, early data on Ukrainian patients treated at oncology centres in Poland since the start of the current war suggest that the number of cases may be higher than sug-

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gested by official data. It seems likely that the lower ratio of new cases in Ukraine is, at least partially, due to limited access to diagnostic testing and treatment for cancer in that country. Consequently, many of these patients have more advanced disease at diagnosis, which implies a much more complex treatment process.

At the Greater Poland Cancer Center (GPCC) in Poznan, Poland, we expect the number of patients with advanced disease to rise substantially in the coming months as refugees continue to enter Poland. In particular, these patients will likely present without the full complement of diagnostic tests (both imaging and histopathological), which will have to be performed in order to develop a proper treatment plan. We also expect many patients to present with advanced disease requiring long-term specialised treatment, including surgery, radiotherapy, and chemotherapy.

There are many differences between Poland and Ukraine in cancer management, but also in the incidence profile. For example, the incidence of stomach cancer in men is substantially higher in Ukraine than in Poland. Among women, cervical cancer is among the five most common cancers in Ukraine, but in Poland in on seven [2, 4] (Fig. 1–4).

We have also observed differences between the two countries in terms of the management of

patients at different stages of the disease. For example, in Poland, after all necessary tests are performed as part of the initial work-up, the patient is usually referred to a tumour board comprised of cancer specialists (surgeons, radiation oncologists, and clinical oncologists) who jointly decide on the treatment of the patient. By contrast, in Ukraine, it appears that the diagnostic work-up is insufficient, leading sometimes to inadequate treatment. Another example involves the use of diagnostic imaging. At the GPCC, patients with advanced cervical cancer undergo positron-emission tomography (PET), which alters the treatment decision in 30% of cases due to novel findings, such as metastases to the pelvic and/or periaortic lymph nodes, or distant metastases [5]. By contrast, in Ukraine, PET is not widely available and thus treatment for advanced cervical cancer in Ukraine is initiated without PET-based diagnostic images, making it challenging to properly treat patients who have already started treatment in Ukraine. In addition, we have encountered patients who had initiated chemotherapy in Ukraine but who would not be considered suitable for chemotherapy at our centre due to the advanced stage of the disease. Continuation of chemotherapy in these patients is further complicated from the formal point of view under the agreement with the National Health Fund in Poland.

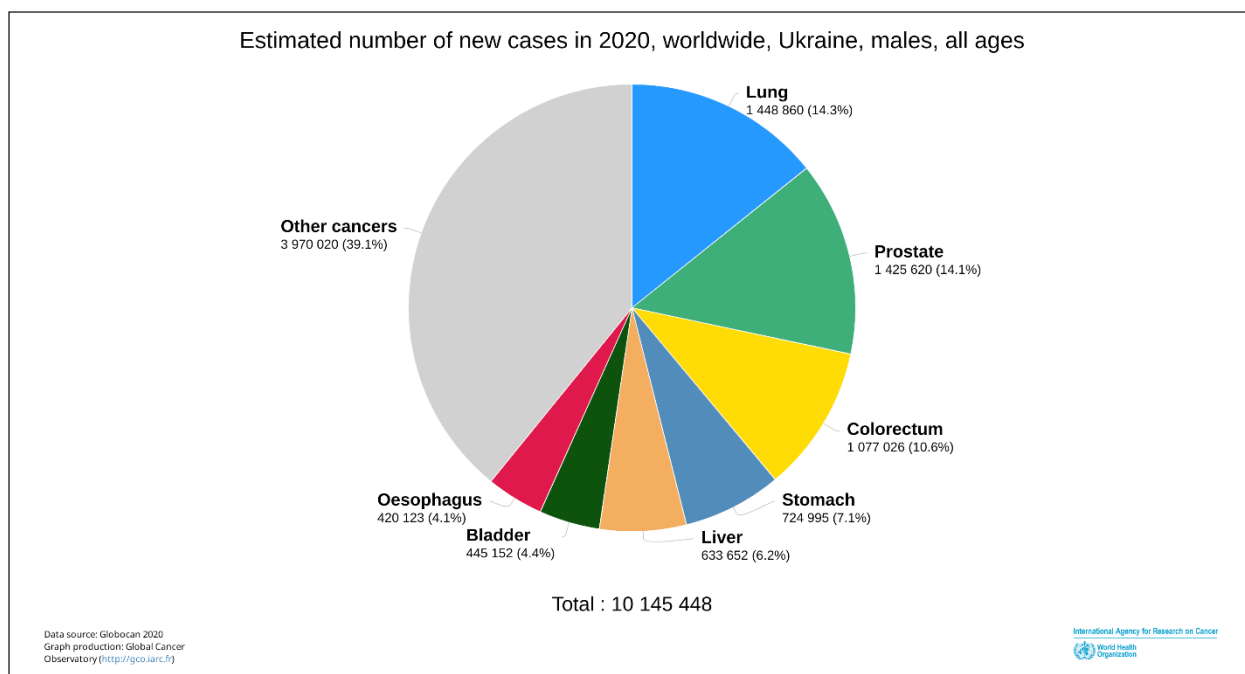


Figure 1. Disease profile in men in Ukraine in 2020

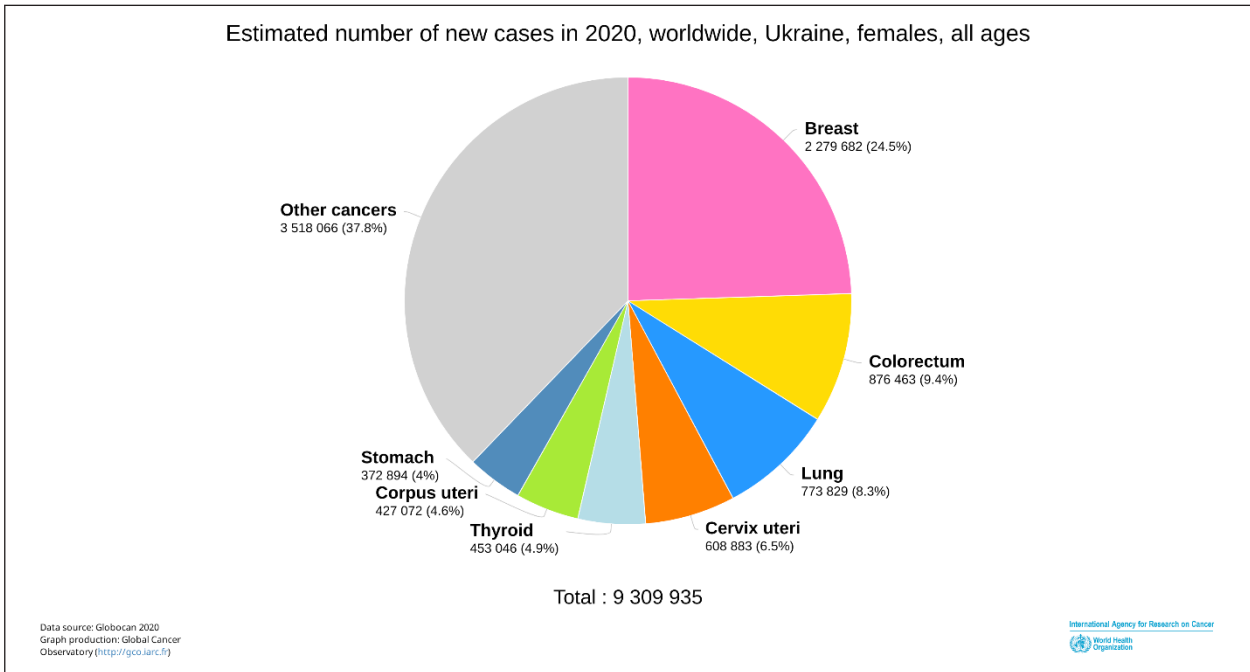


Figure 2. Disease profile in women in Ukraine in 2020

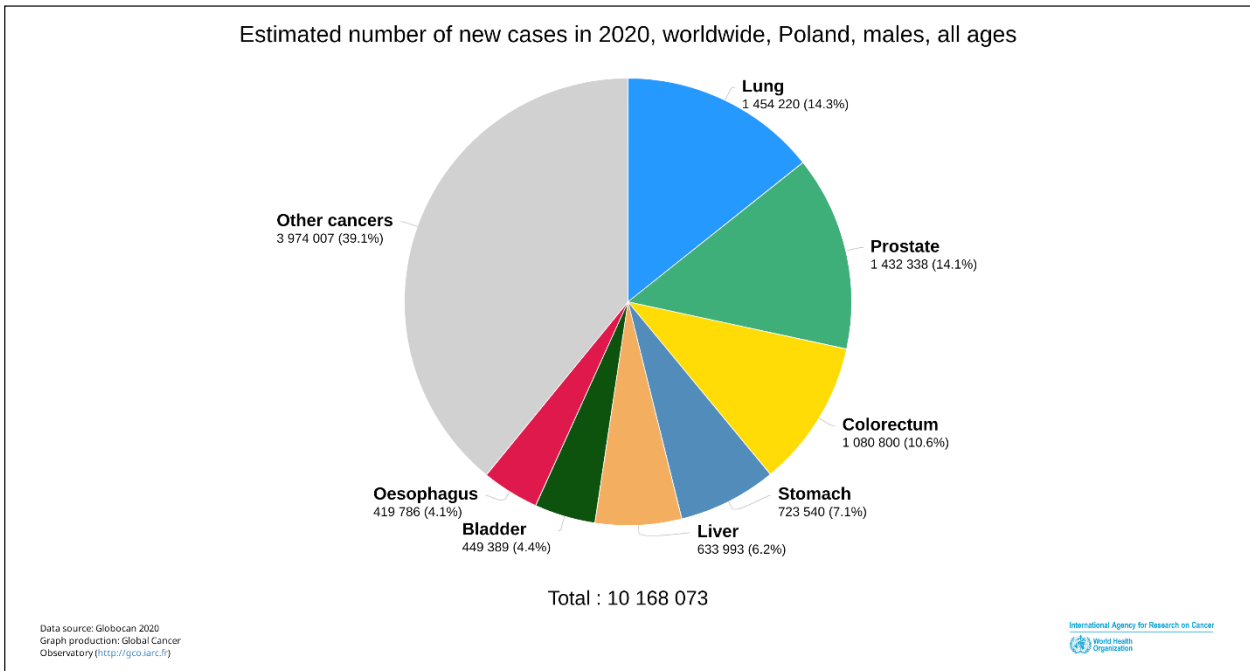


Figure 3. Disease profile in men in Poland in 2020

In Ukraine, patients do not have access to the wide range of immune therapies available in Poland as part of drug programs. Eligibility for inclusion in such programs is strictly defined in terms of time frames and treatment schedules. Therefore, patients will often not receive treatment according

to the schemes provided in Poland, also due to the commencement of treatment in Ukraine without specific medications.

Another issue is related to difficulties in obtaining medical records and data on previous oncological treatments from the treating hospital in

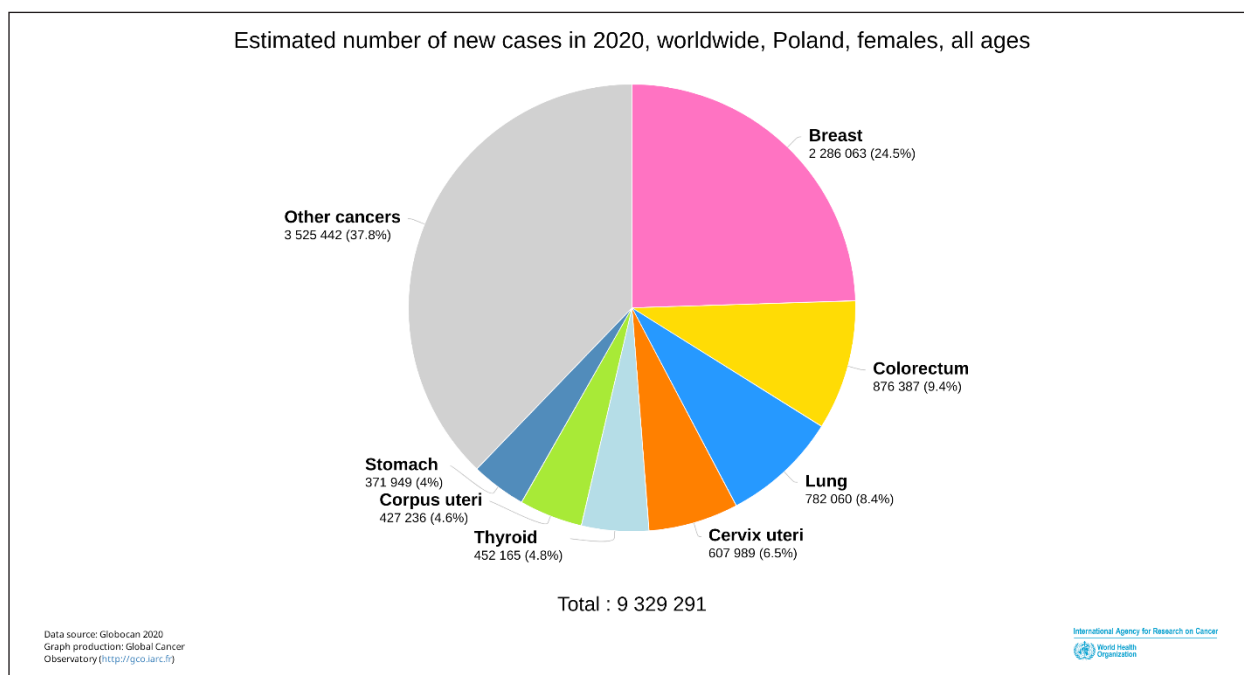


Figure 4. Disease profile in women in Poland in 2020

Ukraine. Understandably, patients fleeing a war often do not have time (or simply forget) to obtain medical records and treatment-related documentation. Unfortunately, the absence of these key documents often results in a delay in restarting treatment. Moreover, even when medical records are available, these need to be translated into Polish by a professional translator to ensure the accuracy of the information, both for legal reasons and to ensure proper evaluation of the course of therapy.

All of the above is connected with another difficulty: the language barrier. Conducting a proper medical history and physical examination is essential to evaluating the patient's condition and determining his/her eligibility for treatment. Difficulties in communication between the patient and the physician (in both directions) can severely hinder the clinical interview and examination. In this regard, the availability of interpreters prior to and during treatment can be enormously helpful. At the GPCC, a hotline staffed by Ukrainian speaking representatives has been set up for patients to help them make appointments at the centre. Similarly, the National Health Fund has also established a hotline to facilitate access to cancer care for patients from Ukraine. In addition, volunteer translators are increasingly being used to help with patient ex-

aminations. Interestingly, some of the refugees are doctors and nurses who have previously been in Poland and many of these professionals speak both languages (Ukrainian and Polish). Given their language skills and medical training, they can facilitate communication and reduce some of the stress caused by the language barrier. Although the main stressors are the cancer itself and the patient's refugee status, the language barrier further complicates this situation [6].

Another important issue is related to the costs of treating these refugees. Highly specialised diagnostic tests and treatments are expensive. On February 26, 2022, the Polish government passed an act granting Ukraine citizens entering the country the same right to medical care (paid by the National Health Fund) as those enjoyed by Polish citizens [7]. This act guarantees the payment of all treatment costs (both inpatient and outpatient), including treatment provided by general practitioners. Regulations on access to health care, *inter alia*, for Ukrainian refugees entered into force on March 12 and, in principle, will apply retroactively from February 24. Under the provisions of the law, Ukrainians fleeing the war are entitled to medical benefits and reimbursement for medications and medical devices on the same terms offered to insured citizens of Poland.

Under the new law, the following people are granted the right to medical benefits in Poland, which are the same as those for insured persons (excluding spa treatments and rehabilitation, the right to treatment abroad, and reimbursement for treatment abroad under the “cross-border” directive):

- Ukrainian citizens and non-Ukrainian spouses who have entered Poland by crossing the border;
- Ukrainian citizens in possession of a Polish ID Card (in these cases, the citizens are not required to have crossed the Polish-Ukrainian border);
- immediate family members of a Ukrainian citizen with a Polish ID Card who entered Poland on or after February 24, 2022.

“Close” family members can include any of the following: spouse; ascendants (parents, grandparents); descendants (children, grandchildren); siblings; and individuals legally related to the aforementioned people in the same line or rank (e.g., son-in-law, daughter-in-law, father-in-law, mother-in-law, brother-in-law, step-son); adopted children and/or children of the spouse; and any co-habitants.

A major challenge is determining whether or not the refugee is legally allowed to be in Poland. Some people may find it difficult to show proof of identity and/or address, thus impeding their ability to demonstrate their immigration status. At present, legal immigrants are those individuals with valid Ukrainian citizenship who have crossed the Polish border on or after February 24, 2022. In most cases, a passport showing the stamp of the Border Control Service is sufficient.

Another issue is the low vaccination rate among the refugee population compared to the Polish population (34.5% vs. 58.6%, respectively), which could increase the incidence of SARS-CoV-2 [8]. Ukrainian refugees in Poland are not required to undergo testing for the SARS-CoV-2 virus nor are they required to quarantine after entry. Nevertheless, free testing and access to vaccination against COVID-19 have been introduced [9,10].

Conclusions

The number of refugees in Poland is by far the largest observed to date in Europe in the 21st century. No other European country has had to accept more than 2 million refugees in a single month, which obviously poses a major challenge to our

country. It is not known how long the war between Russia and Ukraine will last, nor how many people will ultimately cross the border into Poland. However, it is clear that this emergency will require the reorganization of the Polish health care system, especially oncology, where early diagnosis and timely initiation of appropriate therapy play a key role in treatment outcomes.

Conflicts of interest

None declared.

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