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One Year On: Poland's Public Health Initiatives and National Response to Millions of Refugees from Ukraine

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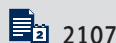
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The Russian military invasion of Ukraine on February 24, 2022, resulted in the largest refugee crisis in Europe since World War II. As a neighboring country to Ukraine, Poland was the main country to initially receive refugees. Between February 24, 2022, and February 24, 2023, 10.056 million refugees from Ukraine, mainly women and children, crossed the Polish-Ukrainian border. Up to 2 million of these refugees from Ukraine found shelter in private homes throughout Poland. More than 90% of the resident refugees in Poland were women and children, and approximately 900 000 refugees from Ukraine have sought employment, mainly in the services sector. Since February 2022, there has been rapid development of a national legal framework to ensure access to healthcare, including providing refugees who are healthcare workers with job opportunities. Epidemiological surveillance and prevention programs for infectious diseases and mental health support systems have been implemented. These initiatives have required the use of language translators to ensure that there are no barriers to understanding and implementing public health measures. Hopefully, the lessons learned from Poland and neighboring countries that have hosted millions of Ukrainian refugees can help future preparedness for supporting refugees. This review aims to summarize the lessons learned by the Polish public health services during the past year and outlines the public health initiatives that have been implemented and are still ongoing.

Keywords: **Health Policy • Poland • Public Health • Refugees • Review • Ukraine**

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Background

The Russian military invasion of Ukraine on February 24, 2022, resulted in the largest refugee crisis in Europe since World War II. As of February 2023, over 8 million refugees from Ukraine have been recorded as residing across Europe and of these, 4.6 million were registered for temporary protection, or its national equivalent [1]. As a neighboring country to Ukraine, Poland was the main country to initially receive refugees. Between February 24, 2022, and February 24, 2023, 10.056 million refugees from Ukraine, mainly women and children, crossed the Polish-Ukrainian border [1,2]. The highest migration peak was recorded in March 2022, when about 2 million refugees arrived [2]. In the remaining months of 2022, the number of refugees who arrived in Poland was approximately 700 000 [2]. At the same time, 8.148 million people entered Ukraine via Poland [2]. By the end of January 2023, nearly 2 million refugees from Ukraine found shelter in private homes throughout Poland [2]. Unlike in previous migration crises observed in Europe, refugee camps were not created, and a program of public funding was implemented for people who took refugees into their homes.

Over 1.5 million Ukrainians who crossed the border after February 24, 2022, received national protection status and a Powszechny Elektroniczny System Ewidencji Ludności (PESEL) UKR identity number, which guarantees free access to public services, including healthcare, education, social assistance, and the labor market [3]. Most registered refugees were women aged between 18 and 65 years (48.8%) and children (42.5%) [3]. Also, 3.5% of Ukrainian refugees were women above the age of 65 years [3]. Only 4.3% of Ukrainian refugees were men aged between 18 and 65 years, and 0.8% were men above the age of 65 years [3]. Approximately 900 000 refugees from Ukraine sought employment, mainly in the service sector, including in restaurants and the hotel industry.

The current refugee crisis caused by the armed conflict in Ukraine is the largest and most rapidly developing population crisis experienced by Poland and other central and eastern European countries. This review aims to summarize the lessons learned by the Polish public health services during the past year and outlines the public health initiatives that have been implemented and are still ongoing.

Rapid Development of a National Legal Framework for Public Health Support

In the past year, all Ukrainian citizens and their families who came to the Republic of Poland directly as refugees from the conflict in Ukraine have obtained a wide range of rights specified in the 'Special Act' on assistance to Ukrainian citizens as of March 12, 2022 [4].

The Act includes the following amendments:

- Development of specific rules for employing Ukrainian citizens and to enable them to undertake employment and to be economically active in Poland;
- Extension of the period of legal residence in Poland (including for Ukrainians who crossed the border before February 24, 2022);
- Provision of access to social assistance, parental benefits, family benefits, and maintenance support at national and local levels;
- Guaranteed access to the public healthcare systems with the same rights as Polish citizens.

Refugee Access to Healthcare in Poland

Providing access to healthcare for refugees was a significant public health challenge in Poland. As in other European countries, at the beginning of 2022, the Polish healthcare had several ongoing challenges, including long waiting times, a limited number of healthcare workers (especially physicians and nurses), and geographical diversity that affected access to medical facilities [5]. Organizing medical points at the Polish-Ukrainian border and reception areas (mainly next to the largest railway or bus stations) was the first line of action undertaken to ensure immediate access to essential healthcare services after February 24, 2022.

However, all Ukrainians who crossed the Polish-Ukrainian border after February 24, 2022, also had access to healthcare services, including ambulatory care, hospital treatments, drug reimbursements, medical device supplies, preventive vaccinations, and medical rehabilitation [6]. The National Health Fund (NHF), the institution that finances healthcare, which is provided by public payments in Poland, allocated funding for public healthcare medical services for Ukrainian citizens [6]. Each healthcare provider received information on what scope of health service could be given to Ukrainian refugees with completed documentation to receive reimbursement from the NHF [6]. Providing medical advice to a person who arrived from Ukraine after February 24, was recorded in a report to the NHF that financed the service [6].

Between February 24 and June 30, 2022, there were 2230 reported hospitalizations of Ukrainian patients in Poland, which included 1494 children, 578 adult women, and 158 adult men [7]. Within the first 3 months of the onset of the conflict, 27 861 Ukrainian refugees, of whom 58% were children, received treatment in Polish healthcare facilities, mainly as outpatients [7]. In 2022, Poland had the highest total social and healthcare costs from accepting Ukrainian refugees, estimated at approximately 8.4 billion euros [8]. Germany had the second-highest estimated cost of accepting refugees, estimated

at more than 6.8 billion euros in 2022 [8]. Demographic data of refugees who received national protection status indicate that pediatric care services and women's healthcare resulted in the greatest burden for the Polish healthcare system [9]. Ukrainian refugees with chronic diseases often lacked medical documentation or the details were written in Ukrainian, so continuation of medical treatments, including for chronic or severe medical conditions such as cancer or for patients on immunosuppressive medication, has resulted in a significant challenge for healthcare professionals [9].

In 2022, in addition to medical services being provided to refugees residing in Poland, services were provided to people who were affected by the military conflict in Ukraine [10]. Train transportation services for the wounded or ill were launched in February 2022, which could transport about 160 people from the border town of Mościska in Ukraine directly to Warsaw [10]. Also, in September 2022, the new Medevac Hub, a medical evacuation center for patients from Ukraine, which was financed through the European Union (EU) Civil Protection Mechanism, was opened at the Rzeszów-Jasionka Airport, which is the closest airport to the Ukrainian border [10]. The Medevac Hub offers a safe space for patients arriving from Ukraine before being flown to other EU countries [10]. The Rzeszów-Jasionka Airport has also served as the main delivery and logistics point for medical supplies for citizens remaining in Ukrainian territory [10].

Healthcare Workers

Since the start of the war on February 24, 2022, the World Health Organization (WHO) identified hundreds of attacks on healthcare facilities in Ukraine, including hospitals, outpatient clinics, and pharmacies [11]. Many healthcare workers have also been among the refugees who left Ukraine. Therefore, to allow healthcare professionals to practice during their stay in Poland, the Ministry of Health introduced a dedicated procedure for obtaining a medical license for refugees from Ukraine [12]. By the end of 2022, approximately 1700 doctors and 860 nurses and midwives had received the temporary medical license [12]. A free e-learning course in Polish medical language was launched to remove language barriers, and by January 2023, a total of 1100 healthcare professionals had completed this course [12]. Also, on January 9, 2023, the Center for Medical Postgraduate Education, with the support of the Ministry of Health and WHO Europe, launched the Organization of Healthcare in Poland course, which almost 1200 doctors completed within the first month [13].

The current conflict also affected ongoing medical education for those who remained in Ukraine [14]. Excluding national students, there were thousands of foreign medical students

in Ukraine, including students from India [14]. After February 2022, classes were conducted online as much as possible. However, damage to the infrastructure of universities and colleges made remote teaching difficult, and Polish students from Ukrainian university medical departments were allowed to continue their education at Polish universities [14]. Ukrainian medical students were not transferred to Polish medical universities, to avoid depleting the Ukrainian healthcare system [14]. Ukrainian scientists could continue their research in Polish research institutions through expanded scientific exchange programs and research cooperation, including those organized by the Polish Academy of Sciences [14].

Epidemiological Infectious Disease Surveillance Programs

The spread of infectious diseases poses one of the biggest challenges for public health authorities during massive migrations, including those caused by war [15]. The current conflict in Ukraine began in the third year of the COVID-19 pandemic. As of February 2022, the COVID-19 vaccination rate in Ukraine was estimated to be 38% of the population, contrasting with 56% in Poland [16]. Owing to the Polish model of refugee care, which included accommodation of refugees in private homes instead of refugee camps, no mass outbreaks of COVID-19 were recorded. All Ukrainian refugees who crossed the border after February 24, 2022, had free access to COVID-19 vaccinations, and dedicated leaflets in Ukrainian were widely distributed. However, by April 15, 2022, only 35 400 refugees were vaccinated against COVID-19 in Poland, which is about 0.01% of Ukrainians who entered Poland at that time [17]. Over 40% of Ukrainian refugees in Poland were children, so there were major concerns about infectious disease outbreaks among these age ranges. In 2019, most measles cases reported in the WHO European Region were in Ukraine [18]. In 2021, the overall vaccination rate in Ukraine was 80% for poliomyelitis and 81.9% for measles [19]. Vaccine hesitancy has been a growing public health concern, as childhood vaccination coverage rates among children have decreased in recent years [20]. All children who remained as refugees for at least 3 months in Poland were required to be vaccinated to prevent 11 infectious diseases, following the national vaccination program or immunization schedule [21]. These vaccinations are free and performed in primary healthcare centers, which is the same for Polish citizens. Currently, national epidemiological data on the incidence of measles and other preventable diseases in the Ukrainian refugee population in Poland during 2022 are not available.

Effective management of tuberculosis and HIV represents a significant challenge for the health systems of hosting countries. In Poland, tuberculosis and HIV treatment, including

medicines and admissions to clinics and hospitals, are free of charge, including for refugees [19]. Tuberculosis can be relatively easily diagnosed by primary care physicians and respiratory medicine specialists and treated in dedicated hospital wards. Epidemiological estimates indicated that up to 8000 female Ukrainian refugees may be unaware of their HIV status, and up to 18 000 may require treatment [22]. HIV screening in Poland is mostly targeted at drug users and men who have sex with men. A significant gap in HIV diagnosis during the COVID-19 pandemic in Poland and newly detected cases among refugees may lead to an increase in HIV cases being reported within the coming years. As there was no health screening on Polish-Ukrainian borders, further public health interventions should also include a rapid diagnosis of infectious diseases among refugees and access to treatment.

Mental Health Programs

Several recent studies have reported that the Russian military invasion of Ukraine significantly impacted mental health, including increased psychological distress, anxiety, and sleeping disorders [23,24]. Post-traumatic stress disorder was reported to occur among those displaced both inside and outside Ukraine [24]. Dedicated call centers and hotlines with psychological assistance in Ukrainian were the most common actions undertaken to provide psychological support. However, mental health services are one of the weakest parts of the Polish healthcare system, and this is due to a significant shortage of trained specialists (especially child psychiatrists). Also, the language barrier also poses a significant challenge for healthcare professionals and non-governmental organizations.

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Conclusions

The Russian military invasion of Ukraine and continued occupation of part of the country has resulted in a large and rapidly developing refugee crisis that has required major public health interventions. Lessons learned from Poland and neighboring countries that host millions of Ukrainian refugees include the need for legal regulations providing access to public services and healthcare. Some Ukrainian refugees are experienced healthcare professionals who have been supported to maintain their professional training and practice during their stay in Poland. A further important lesson has been the approach to overcoming language barriers and ensuring epidemiological surveillance for possible transmission of infectious disease and protection from infection by public health measures, including sanitation and disease prevention, vaccination, diagnosis, and adequate treatment supported by national recommendations and programs in the host country. Poland has also demonstrated the importance of introducing supportive approaches to reduce stress and anxiety experienced by refugees and displaced persons from Ukraine.

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