

The background of the cover is a photograph of several hands of different skin tones holding a bright yellow cloth. The hands are positioned around the cloth, with some fingers visible at the edges. The lighting is soft, and the colors are vibrant.

UNDERSTANDING HEALTH NEEDS OF UKRAINIAN REFUGEES & DISPLACED POPULATIONS

SUPPORTING THE HUMANITARIAN RESPONSE

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Study webpage - <https://www.the-ciru.com/resin-ukraine>

The background of the entire page is a photograph showing the silhouettes of a group of people walking away from the viewer towards a horizon. The sky is filled with large, white, fluffy clouds against a darker blue background. The people are in the foreground, their forms dark against the lighter sky. One person in the center-right is carrying a child on their back.

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BACKGROUND

THE INVASION OF UKRAINE BY THE RUSSIAN FEDERATION ON 24 FEBRUARY 2022 HAS RESULTED IN MILLIONS OF PEOPLE BECOMING EITHER INTERNALLY DISPLACED OR REFUGEES IN OTHER COUNTRIES, CREATING A HUMANITARIAN CRISIS AND PUBLIC HEALTH EMERGENCY.¹ ONE OF THE KEY CONCERNS IS TO ADDRESS HEALTHCARE NEEDS.

The United Nations High Commissioner for Refugees (UNHCR) advocates for access to free healthcare as their highest priority during times of crisis.^{2,3} European Union countries have adopted resolutions of the EU Council that refugees should receive the same rights to healthcare as citizens of that country.⁴ Similar policies apply to some European countries outside of the EU (e.g., the United Kingdom).⁵ However, policy does not always translate into practice, and there have been noted frustrations from refugees and displaced people about their inability to access healthcare.⁶ The health system available to internally displaced populations within Ukraine is fragmented and under-resourced, impacted further by numerous direct attacks on health facilities.⁷

As a result, there is an urgent need for inclusive and maximally representative data around the burden of disease and health needs within these populations. This policy brief reports data from an online health needs survey, which aims to support agencies such as the World Health Organization (WHO) with their decision-making, and for actioning help where the evidence points to the greatest need.

This report focuses on access to healthcare and medication, alongside other self-reported health variables. The survey was implemented online and required access to a mobile phone or other electronic devices. The survey was advertised on Facebook and, as such, the vast majority of participants were active on social media. Whilst the respondents here may not be fully representative of internally displaced and refugee populations, we present a rich dataset of

findings from **9523 participants** collected between April and June 2022. Data collection is ongoing at time of reporting.

Respondents reported being currently in almost every country inside (and outside of) Europe. Here, reporting is mostly focused on 12 countries only, including Ukraine. These countries were selected based on them being of specific interest to the WHO, or they are nations with larger sample sizes for more powerful comparisons.

This report presents key findings and policy recommendations, followed by more detailed analyses and description of methodology and limitations.

KEY FINDINGS

- Among our respondents, 39.1% reported being internally displaced within Ukraine, while 60.9% were refugees. Internally displaced respondents were mostly from Kyiv (28.6%), Kharkiv (15.9%), and Dnipro regions (8.0%). Outside of Ukraine, the countries with the highest numbers of respondents were Poland (20.8%), Germany (10.8%), Czech Republic (4.1%), and Slovakia (2.0%).
- By self-reported health status, 22.9% indicated they had excellent or good health, 57.5% reported average health, and 19.7% indicated poor or very poor health. Physical health was lowest in respondents located in Ukraine, Slovakia, and Hungary, and highest in those located in the UK, Romania, and France.
- Over 70% of respondents reported having at least one long-term chronic disease. Among respondents who reported a chronic disease, the most common conditions included persistent back pain (40.5%), depression or anxiety (37.5%), and hypertension (30.4%).
- 57.9% of respondents reported difficulties in accessing healthcare. These difficulties included a) not having access to healthcare facilities and not knowing where they are in the community (19.3%), b) knowing where healthcare facilities are but not having access to them (19.2%), and c) having access to healthcare facilities but not knowing where they are (19.4%).
- Access to healthcare was highest among respondents in Ukraine (52.3%) and Moldova (50.0%), and lowest among those located in Romania (26.1%) and Bulgaria (27.1%). Access to healthcare has increased across time, increasing between April (37.2%) and May (43.1%), and May and June (50.2%). However, this increase appears stronger for internally displaced respondents within Ukraine.
- Those displaced within Ukraine reported greater access to hypertension (74.9%) and back pain (70.5%) medication. However, access to hypertension and back pain medication was much lower among refugees with hypertension in Germany (51.4% and 33.8%, respectively) and Poland (45.1% and 36.2%, respectively). Overall, medication access varied greatly across different disease areas and geographical locations.
- Anxiety was reported by 95% of respondents, with 46.2% reporting anxiety every day during the past two weeks. These proportions were similar across most countries. Approximately 1 in 3 respondents reported poor sleep quality (typically, a strong predictor for physical and mental health). The poorest sleep quality was reported among respondents in Moldova, Ukraine, and Slovakia, and the highest was reported in the UK, France, and Romania.
- There were 284 (3.0%) respondents who reported having cancer, of which breast (38.7%) and cervical (10.1%) were the most common types. Of those who reported taking cancer medication (178; 62.5%), 44.4% reported that they did have access to medication, but 55.6% stated they did not have access to further medication for their cancer.
- 44.4% of respondents reported receiving welfare payments from their new location. This was highest in Czech Republic and Germany (>75%), and lowest (<10%) in Hungary, Italy, and Spain.
- Among other selected findings, 31% of respondents or 1 in 3 respondents rated that their oral health was poor or very poor. By access to food, 5% of respondents reported poor or very poor access. Most respondents (63.6%) are a caregiver for at least one child under the age of 18 years, and 37.3% of respondents stated that at least one of their children had a long-term chronic condition.
- Whereas 1.6% of respondents reported being injured in Ukraine as a result of a blast or explosion (with head injuries and hearing loss being the most common forms of injuries), 67.2% of respondents reported that they had personally witnessed a blast or explosion in Ukraine since Russia's invasion.
- There were several associations with anxiety and poor mental health. The strongest associations were gender (female; OR: 2.48), being injured in a blast or explosion (OR: 2.28), and having witnessed a blast or explosion in Ukraine (OR: 1.42).



POLICY RECOMMENDATIONS

Short-term measures

- Continuous assessment of health needs of internally displaced populations and refugees, with data collected from a range of sources. Our results show that significant sample sizes can be reached in online surveys through advertising on social media.
- Use country-level data from surveys to highlight the concerning lack of access to healthcare and medicines. Advocates could highlight to decision-makers (i.e., governments) discrepancies in their policies around health rights of refugees and the reality of the situation within these populations.
- Ensure that health needs are accommodated within the local health systems, ranging from basic provisions, such as food and water for everyone, to access to specialist support such as mental health support service (including acute post-conflict effects on mental health).

Medium-term measures

- Embed longitudinal research within routine humanitarian and health service response around refugees and internally displaced populations. This would allow populations to be routinely followed up over a longer period of time (currently implemented in cross-sectional research surveys only).
- A renewed focus on other refugee and displaced populations, for example, those from Afghanistan, Tigray, or Venezuela. The Ukraine crisis has attracted great global attention, but goodwill and investment must also consider other similar groups in great need.
- A high-level health summit among many stakeholders that considers the lessons learned from the response to the invasion of Ukraine. The Summit should be used to advocate for improved policy and practice, improve collaborative responses between countries, identify knowledge gaps in priority areas, and advocate for increased research investment to fill those knowledge gaps.

METHODS

The data reported here took place between April and June 2022. The study was set up as rapidly as possible. Researchers involved in this project at the University of Southampton commenced discussions shortly after the invasion of Ukraine (24 February 2022). The university ethics committee prioritised the review of this study. Many colleagues, including Ukrainian nationals, provided voluntary contributions to study development, including translations of survey questions and appropriate tone of language. This support enabled us to make the survey live to participants at the start of April 2022, approximately 6 weeks after the invasion began.

The survey has been advertised on social media, predominantly Facebook. For instance, 97.2% of respondents indicated in the survey that Facebook was the source of the survey. There is significant discussion about the intrusive nature of Facebook advertising, and the algorithms that drive the adverts are somewhat of a 'black box', but they are undoubtedly powerful. Our aim was to utilise the social media advertising for public good during a humanitarian crisis. A Facebook business page was created (<https://bit.ly/3JudzBt>), and adverts were set to run from this page. Importantly, there has been significant 'snowballing' of this Facebook page, which has been shared by over 1.4k people. No payment or incentives were offered for completion of the survey.

apart from Russia. Qualtrics was the platform used to create the survey and collect data, which also has the capability for real-time reporting. These reports are automatically updated as new responses come through. At the request of the WHO, country-level reports were added to the study webpage (www.the-ciru.com/resin-ukraine).

The survey contains sociodemographic questions (e.g., age, gender, education, country living currently), including a mixture of categorical and Likert-scale questions assessing self-reported physical health and access to healthcare and medication.



The advertisement features the CIRU logo and the University of Southampton crest at the top. The main text is in Ukrainian, with a red background for the title and a yellow background for the body text. The background image shows hands holding a yellow cloth.

Опитування про стан здоров'я українських переселенців

Збір інформації, яка критично необхідна для планування гуманітарної та медичної допомоги українцям.

Запрошуються всі, хто залишив своє місце проживання через ситуацію в Україні.

The advert was targeted at male and female Ukrainian speakers over the age of 18, specifying that we were interested in the health needs of those who were displaced from home (i.e., inside or outside Ukraine). The advertising specifically targeted all European countries

Limitations

It is important to acknowledge key limitations in the respondents that are reached via these methods. In particular, respondents in this survey have access to an electronic device and the internet, and would be safe enough to complete and submit the survey. Facebook use is biased towards middle-aged women, who are typically highly-educated and live in Western or Central Ukraine (Leasure et al, University of Oxford, ongoing research). Thus, response bias is a key issue to acknowledge, and it is likely that our findings underestimate the overall health needs across the Ukraine population (e.g., acute health needs). It is also possible that, even though the survey was open to everyone, the health needs survey may have been mostly completed by respondents with a specific health condition. However, during a public health emergency, it is important to provide timely data. Here, we have developed methods for providing data that are quick, easy, cheap, and reproducible across different settings. Future surveys can absorb, adapt, and improve upon our approaches presented.



ANALYSIS AND DISCUSSION

We report analyses of selected questions from a sample of 9523 participants. The vast majority of our respondents were female (88.7%), mean age of 43.3 years (SD=11.5, range 8-93 years) and 71.5% reported receiving university or technical education.

Heat maps (figure 1) show respondents located in Ukraine and Poland who had no access to healthcare (1A, 1C) and satisfactory access to healthcare (1B, 1D). There are relatively few geographical differences in access to healthcare, though a little more pronounced in Ukraine. This makes it likely that personal circumstances surrounding arrival in a new location are more likely barriers to accessing healthcare. Map images were originally sourced from the Nations Online project (<https://www.nationsonline.org/oneworld/map/index.htm>).

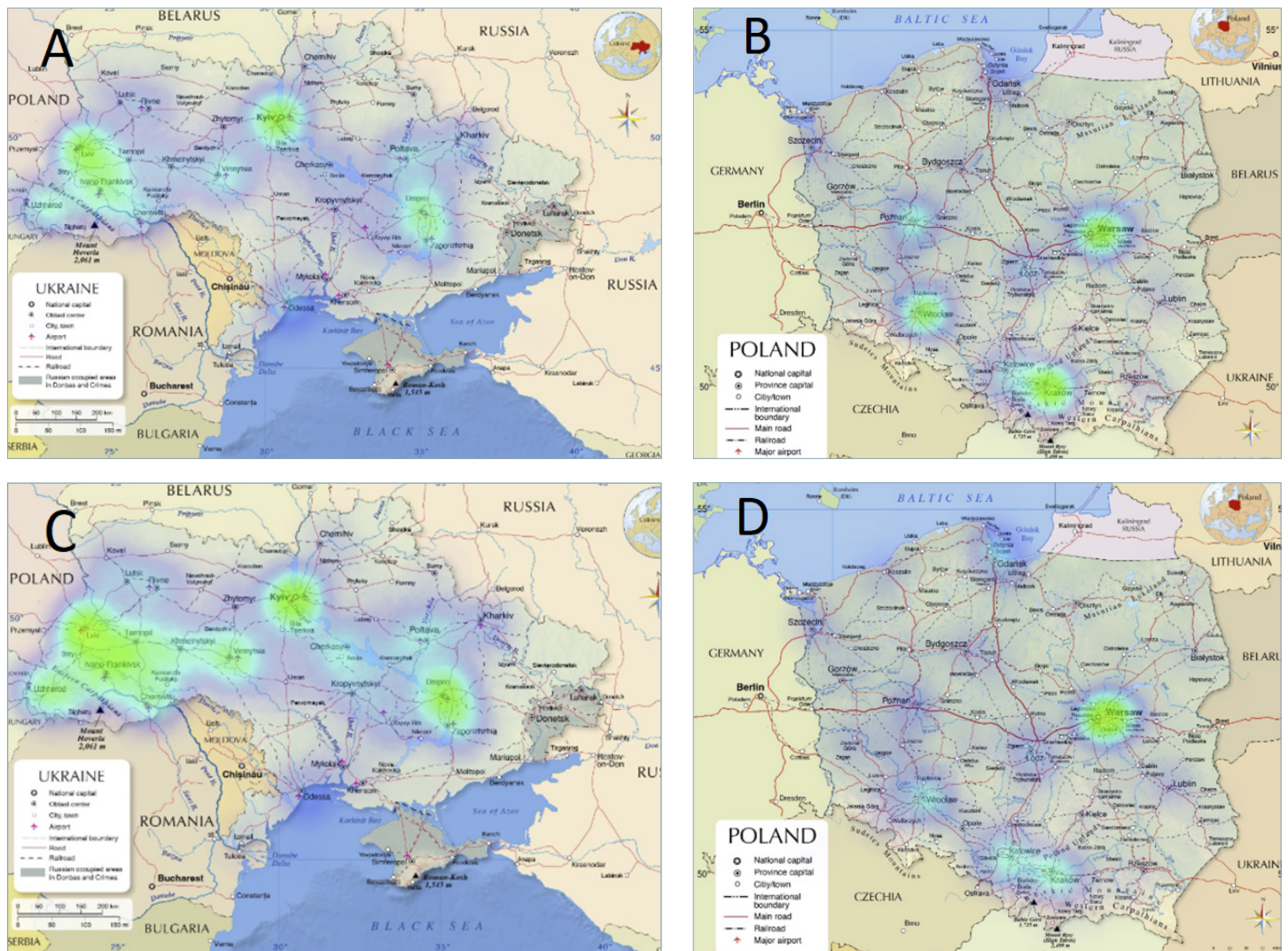


Figure 1. Heat maps showing respondents in Ukraine and Poland who did not have access to healthcare (A, B) and who reported satisfactory access to healthcare (C, D)

Access to healthcare

Whilst many countries suggest that refugees are entitled to healthcare, this is not always borne out by the reality. Our dataset contains responses from refugees and displaced populations who probably have greater mobility and access to digital technology, and thus may not be representative of the overall population. Yet even these groups are struggling to access a health centre or medication (**Figure 2**). Whilst internally displaced populations within Ukraine and Moldova may report better access to healthcare (52.3% and 50%, respectively), their health needs may be greater and the quality of healthcare available is uncertain. Outside of Ukraine, language difficulties and bureaucracy may be factors that limit access to healthcare.

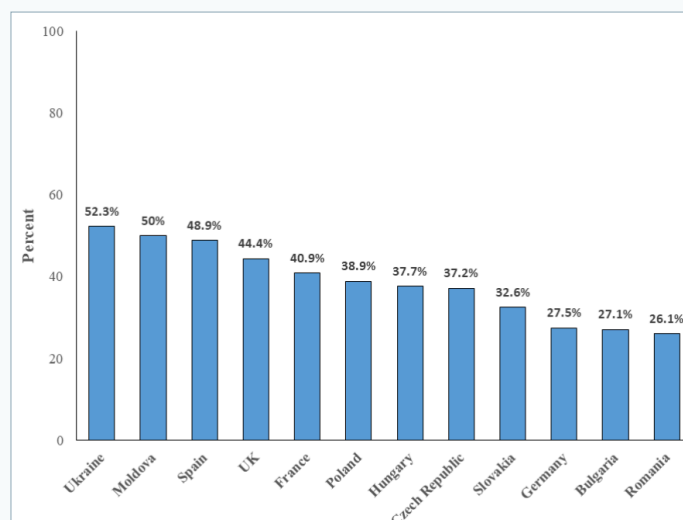


Figure 2. Percentage of respondents with self-reported access to healthcare facilities, by selected country

Physical health

Approximately 20% of respondents or 1 in 5 respondents rated their overall physical health was poor or very poor. By country (**Figure 3**), physical health was overall lowest in Ukraine, Slovakia, and Hungary, and highest in the UK, Romania, and France. The majority of respondents – almost 60% – rated that their health was average. These results demonstrate the urgent need for improving and preparing health services in localities receiving displaced or refugee populations.

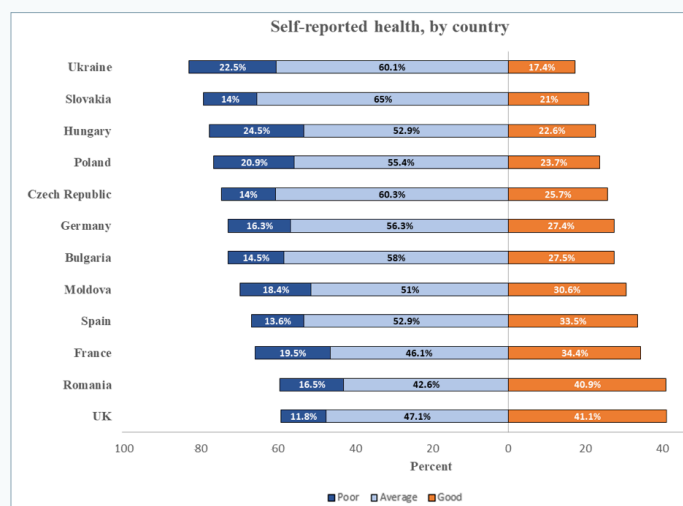


Figure 3. Self-reported physical health, by country.

Long-term health conditions

Over 70% of respondents reported having at least one long-term chronic disease. The proportion of participants who reported having a chronic disease was highest in Ukraine (72.6%), followed by France (72.1%) and Slovakia (71.5%) (**Figure 4**). Among respondents who reported a chronic disease, the most common long-term chronic diseases included persistent back pain (40.5%), depression or anxiety (37.5%), hypertension (30.4%), and allergies including rhinitis, hay fever, or dermatitis (22.8%).

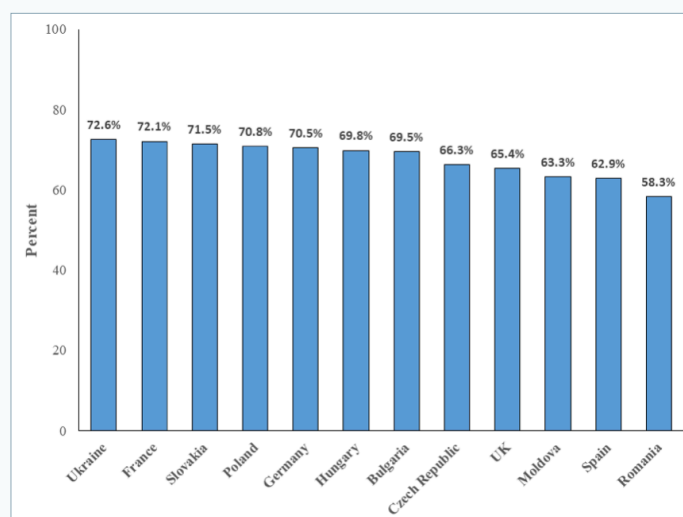


Figure 4. Percentage of respondents reporting long-term health conditions, by selected country.

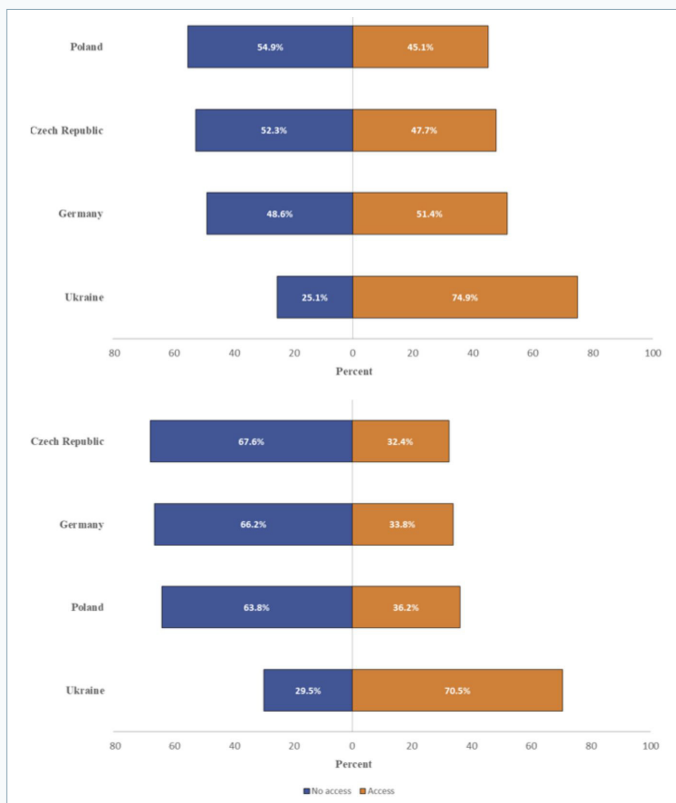
ANALYSIS AND DISCUSSION

Access to medication

When considering access to medication for hypertension and back pain – two of the most commonly-reported conditions – respondents in Ukraine reported the highest access to hypertension and back pain medication, suggesting that internally displaced individuals may still have some level of access to medicine (**Figure 5**). Language barriers, local bureaucracy, and lack of awareness of local healthcare centres or pharmacies may play a role in lower access to medications for refugees.

Figure 5.

Access to hypertension (top) and back pain (lower) medication, by selected country



Temporal trends of access to healthcare

Access to healthcare has increased across the data collection time period included here. across April (37.2%), May (43.1%), and June (50.2%) (**Figure 6**). However, this changes appears to be driven by responses from those within Ukraine. There, 58.7% reported access to medication in June, compared 50.3% and 49.3% in May and April respectively. Outside of Ukraine, 38.7% of refugees reported access to medication in June, compared to 37.7% and 32.8% in May and April respectively. All groups need support in accessing their required medications.

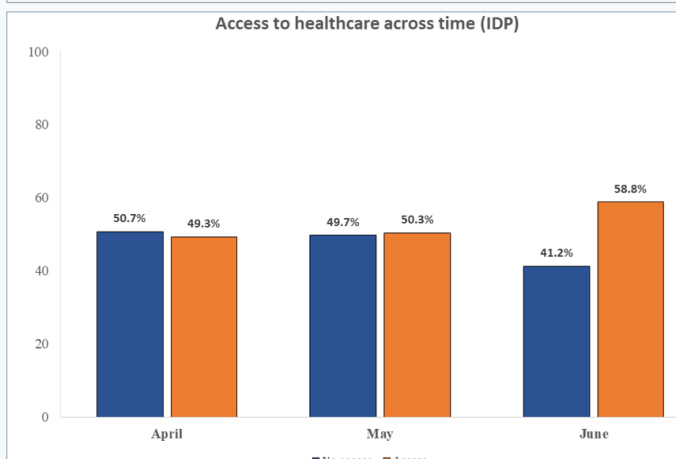
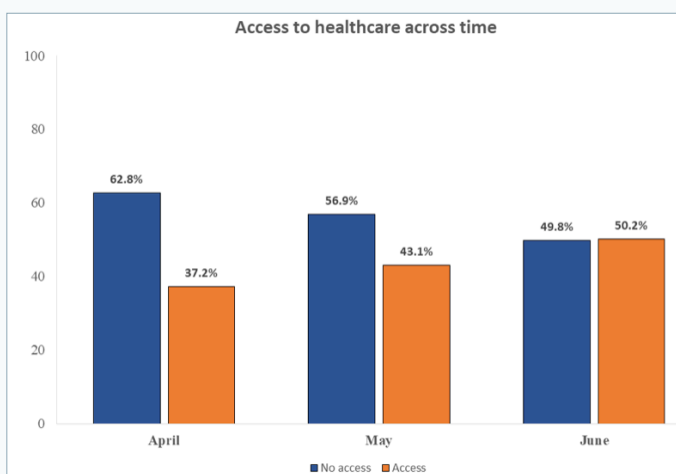
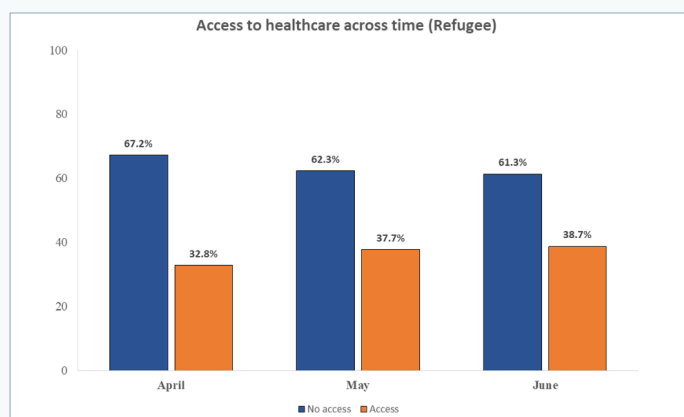


Figure 6. Percentage of people with access to healthcare in April, May, and June (**top right**), internally displaced respondents **within Ukraine** (**right**), and refugees **outside of Ukraine** (**above**).

Sleep quality and mental health

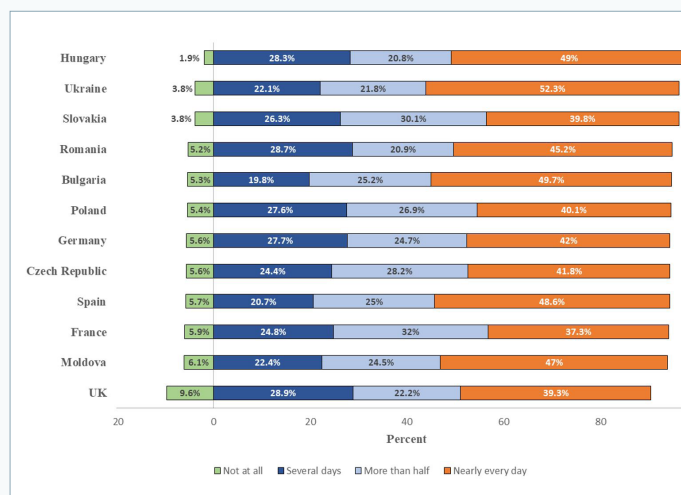
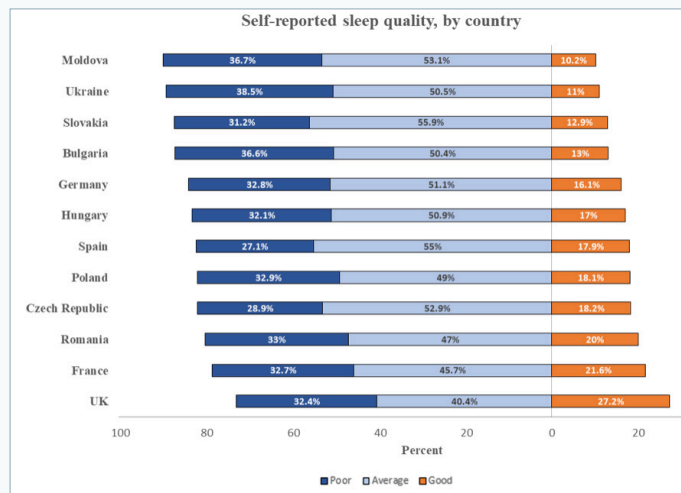
Approximately 1 in 3 respondents reported poor sleep quality during the 2 weeks prior to their completing this survey. The lowest sleep quality was reported among respondents in Moldova, Ukraine, and Slovakia, with highest reported in the UK, France, and Romania (**Figure 7**). Low quality of sleep is known to be associated with exacerbation of physical and mental health conditions, including anxiety. For example, 95% of respondents reported anxiety during the past 2 weeks, with 46.2% of respondents reporting that they felt anxious every day during the past 2 weeks (**Figure 8**). Participants in most countries reports similar levels of anxiety. See our published demography report for further discussion.⁸

Figure 7 (top right).

Self-reported sleep quality, by selected country.

Figure 8 (right).

Self-reported anxiety, by selected country.

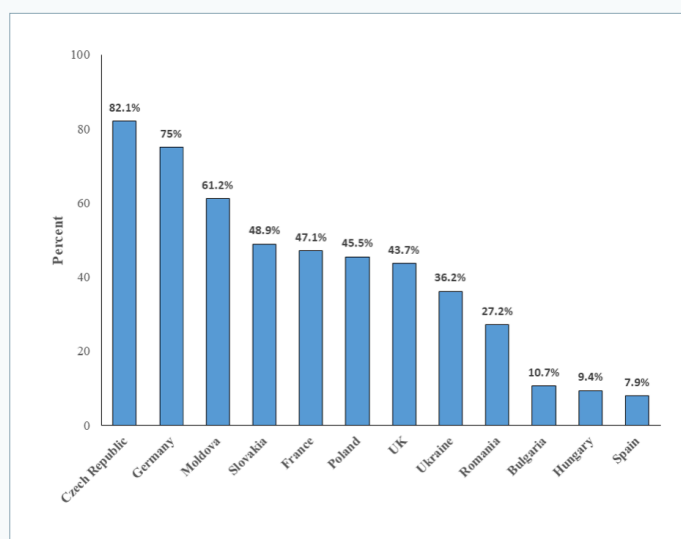


Welfare payments

Overall, 44.4% of respondents reported that they had received some form of welfare support from the government. Welfare payments were highest among respondents in Czech Republic (82.1%) and Germany (75%), and lowest in Spain (7.9%) and Hungary (9.4%) (**Figure 9**). Welfare payments are vital, as some refugees may be asked to pay for healthcare, and dentistry and medication are common reasons for out of pocket expenditure. Given that welfare applications often take weeks, if not, longer, to process (e.g., the UK), this may explain lower rates of payments received in these countries. There is more discussion on this topic in the associated demography report published from this study.⁸

Figure 9.

Percent of respondents who had received welfare payments, by selected country. Image from our demography report.⁸



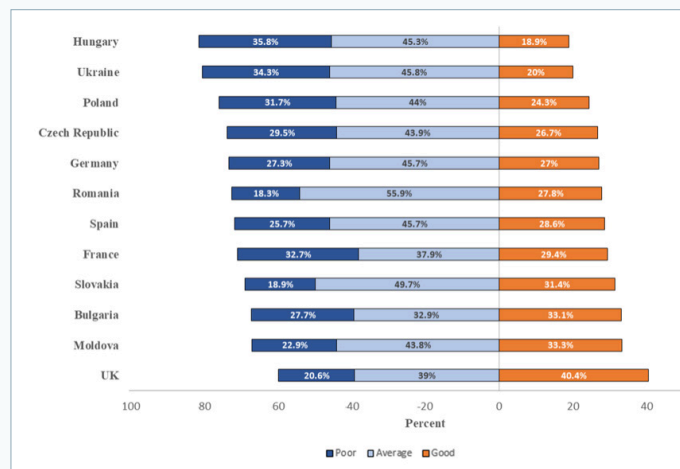
ANALYSIS AND DISCUSSION

Oral health

Approximately 31% of respondents or 1 in 3 respondents rated that their oral health was poor or very poor. Self-reported oral health (Figure 10) was lowest in Hungary, Ukraine, and Poland, and highest in the UK, Moldova, and Bulgaria. The majority of respondents – over 40% – reported average oral health. These results demonstrate the urgent need for improving and preparing dental health services in localities receiving displaced or refugee populations.

Figure 10.

Self-reported health of teeth and gums, by selected country.

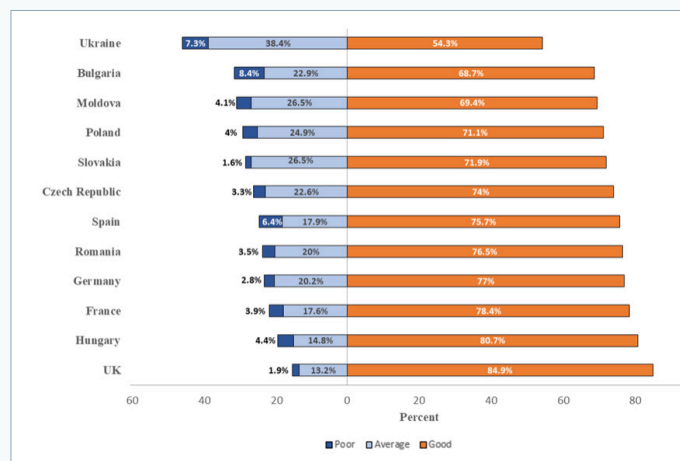


Access to food

Overall, approximately 5% of respondents reported poor or very poor access to food (Figure 11). Almost one third of respondents (28.4%) reported average access to food, whereas 66.4% reported that their access to food was good or excellent. Respondents from Ukraine, Bulgaria, and Moldova reporting the poorest access to food, whereas those from the UK, Hungary, and France reported good access to food. Food access is still an issue for many people within Ukraine and in refugee countries. Food shortages or a lack of money may be factors that impact people's ability to access food in these countries.

Figure 11.

Access to food, by selected country.

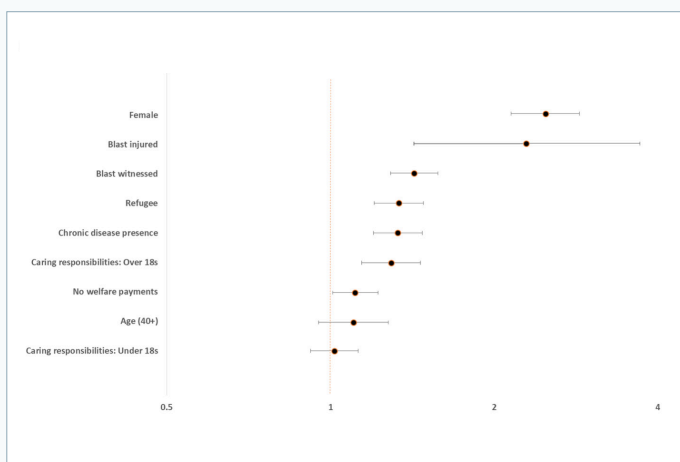


Predictors of anxiety

There were several predictors of anxiety and poor mental health. A combined logistic regression model revealed that gender was most strongly associated with anxiety; females were 2.48 times more likely to express anxiety compared to males (OR: 2.48; 95% CI: 2.14-2.87; $p = .000$). The next strongest association was being injured in a blast or explosion (OR: 2.28; 95% CI: 1.41-3.70; $p = .000$), followed by witnessing a blast or explosion in Ukraine (OR: 1.42; 95% CI: 1.28-1.57; $p = .000$). Other associations included being a refugee, having a chronic disease, having caring responsibilities for over 18s, and not receiving welfare payments.

Figure 12.

Predictors of anxiety were examined using a binary regression model. Reference categories are male, no blast injuries, no blasts witnessed, internally displaced, no chronic disease, no caring responsibilities for over 18s, welfare payments received, 18-39, and no caring responsibilities for under 18s.





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For more information

Further results, methods and study documents are available at the study webpage

<https://www.the-ciru.com/resin-ukraine>

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