

# Health needs assessment of the adult population in Ukraine

Survey report September 2022





**European Region** 

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## ABSTRACT

The full-scale invasion of Ukraine has caused a deterioration in the level of access to healthcare services and medicines in the country, particularly for people living in regions close to the front line and areas that are not partially or fully controlled by the Government of Ukraine, and for people who have been internally displaced.

Cost and time constraints involved in getting to and from health facilities, as well as limited transportation options were the main barriers to accessing essential health-care services. At the same time, the findings show that the country's health system remains resilient and that overall access to health services is fairly high.

This report is based on data collected through a quantitative cross-sectional survey of selfreported health needs of the general population in Ukraine. It presents results of the first round survey conducted in September 2022 and could help to address the specific healthcare needs of the population groups concerned.

#### **Keywords**

UKRAINE EUROPE HEALTH CARE QUALITY, ACCESS, AND EVALUATION HEALTH SERVICES WAR EXPOSURE SURVEYS AND QUESTIONNAIRES

Document number: WHO/EURO:2023-6904-46670-67870

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Suggested citation. Health needs assessment of the adult population in Ukraine: survey report September 2022. Copenhagen: WHO Regional Office for Europe; 2023. Licence: CC BY-NC-SA 3.0 IGO.

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# ACKNOWLEDGEMENTS

This report was prepared by WHO Country Office in Ukraine: Aron Aregay (Health Information and Risk Assessment Officer), and Alyona Mazhnaia (Social Science and Behavioural Insights) contributed with the design of the study protocol, guided analysis, writing and reviewing of the final report. Nam-Mykhailo Nguien (Social Scientist) and Denys Dmytriiev (Survey Data Analyst) were involved in data cleaning, analysis and report writing. Dr Jarno Habicht (WHO Ukraine Country Representative), Emanuele Bruni (Interim Incident Manager), Tomas Roubal (Health Policy Advisor), Kateryna Fishchuk (Health Policy Officer), reviewed the final report.

The authors would like to acknowledge the contributions of the Sociological group "Rating", Kyiv, Ukraine who conducted data collection under difficult circumstances due to the ongoing war.

This report was produced with the financial support of the German government to health emergency response in Ukraine.

# **EXECUTIVE SUMMARY**

The World Health Organization Country Office in Ukraine (WHO CO UKR) conducted a quantitative, serial and cross-sectional study to assess self-reported health needs and access to health services among the adult population in Ukraine. The total sample of Round 1 (September 2022) consists of 4000 respondents. Using a questionnaire, data were collected by the Sociological group "Rating" through computer-assisted telephone interviews (CATI) on 9–14 September 2022.

The survey results show that half of those who sought various types of health care faced at least one barrier. The major barriers to accessing health care are cost, time constraints to get to and from health facilities, as well as limited transportation options. At the same time, the findings recognize that the country's health system remains resilient and that overall access to some level of health services is still high. Of those who sought care, 95% reported having received primary care services and up to 90% had access to health services for chronic conditions. Moreover, 93% had access to a family doctor – mostly in person (83%) or by phone (81%).

One in five were unable to find the medicines they needed – the top three barriers being increase in price, unavailability in a nearby pharmacy, and long queues in local pharmacies. Forty-six percent faced the absence of necessary medicines in pharmacies.

Residents of areas not under the control of the Government of Ukraine and areas experiencing active hostilities have a lower level of access to health care. Fewer of them have access to a family doctor (85%), tried to obtain primary health-care services and assistance for a chronic disease, managed to receive medical care for a child or for an injury, and fewer were able to obtain the necessary medicines (one third have problems with obtaining medicines).

People who have been internally displaced experienced more problems as well. Only 80% of them have access to a family doctor. A higher share of displaced people sought emergency and primary health care and medical care for injuries than people who have remained in their home communities. People who have experienced displacement also reported having lower levels of access to medicines (one in three have problems with obtaining medicines) and the COVID-19 vaccine (23% were unable to obtain the vaccine).

## **METHODOLOGY**

#### Background

On 24 February the Russian Federation launched a full-scale invasion of Ukraine. The timing of the war, launched during the COVID-19 pandemic, added an unprecedented challenge to Ukraine's already overburdened health system, including its health workforce. The large-scale attacks that caused significant population displacement within and outside the country, combined with unprecedented attacks on health care, created a humanitarian crisis in the country with short- and long-term public health consequences.

The conflict in Ukraine escalated into a war in February 2022 and soon led to a shortage of health-care professionals, particularly in the eastern part of the country. The current invasion has likely exacerbated pre-existing public health issues (1). As Ukraine marked nine months of the war, WHO reported that the country's health system continued to be under severe pressure, with increased need for health-care services in areas with fewer hostilities and the health system's reduced ability to provide services in areas of active combat. At the end of November, more than 700 health-care attacks were verified (2). According to a WHO situation report, approximately 18 million people have been affected by the escalation of the war in Ukraine since 24 February 2022 (3). The results of a recent general population survey show that, as of 23 August 2022, 16% of the country's population, or about seven million people, were internally displaced (4). However, reliable information on health needs and access to health care is difficult to come by despite the multiple rapid needs assessments launched since 24 February. The International Organization for Migration (IOM) has conducted ten rounds of rapid representative assessment of the general population in Ukraine, focusing on displacement, mobility, and the full range of needs (4). The reports include estimates of needs for medicines and health services among displaced people at the level of 30% in late August, while among those not displaced, this estimate was at 25% (4). The situation remains very volatile, with high population mobility, retaking of control over areas that were under the temporary military control of the Russian Federation for some time, and restoration of functioning of public and private health facilities (pharmacies). Thus, monitoring the dynamics in the health needs of the population is vital to both the Government of Ukraine and the international humanitarian community. WHO CO UKR is conducting this serial cross-sectional survey to assess and monitor priority health needs and level of access to different categories of health services (packages) among displaced people and host communities, and to extrapolate the results to the general population.

The focus of this health needs assessment is to inform effective and appropriate health response and recovery efforts, including immediate interventions, development of policies, services, communication, and other interventions for the people in Ukraine.

#### Study aims and objectives

This study aims to gain insight into main self-reported health needs of displaced people and host communities at national and macroregional level, particularly in terms of access to primary and specialized health services, medicines, and other essential health services, to inform both the Government of Ukraine and international development agencies in the planning and implementation of the emergency response and recovery from the current disruption caused by the ongoing war in Ukraine.

The specific objectives are to:

- monitor self-reported health needs of the general population of Ukraine, including displaced people and host communities;
- monitor self-reported access to primary health-care services, family doctors, basic medicines and barriers in accessing these services at macroregion and/or priority oblast level;
- monitor self-reported access to specialized services and medicines at macroregion level, particularly in the central and western parts of Ukraine;
- document changes over time in these factors to understand the effect of continuing population movement, active combat, new developments, events, or measures taken;
- identify subgroups within internally displaced people and host communities with the highest unmet need to inform priority action;
- explore geographical variability in health needs and access to primary and specialized services; and
- assess the source of health information and level of trust in various sources of health information.

#### Study design

This is a quantitative, serial and cross-sectional study. A survey questionnaire will be used to conduct four waves of data collection between September 2022 and June 2023. Assessment of the same core variables over the rounds of data collection will allow the study team to monitor the situation and identify critical health needs of the population in the volatile situation and guide appropriate response by government and partners. However, depending on programmatic needs, the questionnaire will be updated without dropping the core variables.

#### Sampling strategy

The total sample consists of 4000 adult Ukrainians. The sample size was chosen to obtain an acceptable level of congruence between the distribution of the current demographics in the sample and the adult population currently in Ukraine (age, gender, rural/urban living area, macroregion), matching the estimated current population composition in Ukraine derived from various available sources of data. Based on the study team's preliminary work, varying estimates indicate that approximately 30% had at least one household member who attempted to access general health services since 24 February 2022 (*5*). While these estimates are not representative, they indicate the necessary sample size to explore access to health services. Extrapolating on the targeted 4000 participants could yield approximately 1200 observations that allow exploring the main challenges at population level.

The inclusion criteria include anyone 18 years or older residing in Ukraine at the time of data collection. The exclusion criteria are: people under 18 years of age or those not residing in Ukraine at the time of data collection. The CATI method used in the survey is based on a 100% random sample of mobile phone numbers. The numbers are generated by special software that uses 12 codes of the three largest mobile operators in Ukraine: Kyivstar, Vodafone Ukraine and lifecell. Each randomly generated number package includes an equal number of each code (050, 063, 066, 067, 068, 073, 093, 095, 096, 097, 098, 099).

#### **Data collection instrument**

The data collection instrument (questionnaire) was developed based on a tool designed for emergency settings and contextualized to the current circumstances of people in Ukraine. The questionnaire was designed and approved by WHO CO UKR and programmed into the CATI software by the Sociological group "Rating". The questionnaire was translated into Ukrainian and Russian, which is understood by over 99% of Ukraine's adult population. No back translation was performed for this project, but during pre-test review several modifications were made to bring the translation closer to the original English meaning.

#### Fieldwork

Data are collected by the Sociological group "Rating" – a nongovernmental and independent research organization specializing in various types of sociological research in compliance with international standards, as approved by ESOMAR and WAPOR codes.

In Round 1 (September 2022) a total of 66 interviewers were initially recruited. All the interviewers had completed at least secondary-level education; roughly 87% were female. All the interviewers had no less than six months' experience conducting telephone interviews. Short trainings for the interviewers were conducted. Fieldwork lasted from 9 to 15 September 2022. The average interview duration was about 18 minutes. The field force size was 66 interviewers and three supervisors (audio control checkers), one coach and one field manager. Each supervisor performed daily monitoring of the appearance on lines, start and end times of interviews, and conducted daily selective listening to recordings of the interviews. According to the results of the checks, no deviations from the methodology were revealed.

#### Data management and analysis

The survey data obtained are weighted by regional (oblast of residence, type of settlement), gender and age indicators using data from the State Statistics Service of Ukraine as of 1 January 2021.

After the data collection and quality control stages, the data are further transferred for processing and reporting via secure electronic channels with non-identifiable data to WHO CO UKR in .csv and .sav format. All files are stored on password-protected computers. Only WHO CO UKR's research team members have access to the raw data. Study findings and data collected as part of this project belong to WHO CO UKR. WHO can use the data in anonymized form for preparing considerations for national health authorities in Ukraine and other countries and future research projects, and anonymized findings can be shared widely with WHO technical staff and partner organizations involved in the emergency response.

Based on a set of codes that have been pre-prepared for the questionnaire, the data are analysed using the SPSS statistical package. During the first round of data collection, an automated script (code) was prepared for the data analysis. To describe the results of the study, mostly descriptive statistics were used. The 95% confidence interval was used as a measure of the accuracy of the estimated parameters and differences between target groups (macroregion, type of settlement, age, sex, displacement status etc.).

#### **Ethical considerations**

This type of survey is, in principle, considered low-risk research. However, people living through and fleeing war may experience many emotions and may be sensitive to some topics, and many considerations have gone into making this study a safe space for participants and mitigating the impact of potential adverse reactions or events.

The study involves only non-identifiable data about humans. The variables and information requested do not allow identifying specific ethnic or disadvantaged population groups.

The interview questions were developed based on the standardized questions for needs assessment within the emergency context, with caution for the sensitive state of the participants. Any possible controversial or emotionally loaded questions were avoided, as were any questions about the participants' experiences during the war or displacement, except those that are strictly related to health service needs, access, and experiences. Interviewers were also briefed on individual protection referrals to apply to cases in which participants would be disclosing sensitive information and would require special support and services.

The study does not involve deception; participants were briefed before and debriefed at the end of the interviews. There are no physical or socioeconomic risks to participation in this study. No adverse events are foreseen.

Participation is strictly voluntary. Only participants providing informed consent were included in the research, and were instructed that they can exit the interview at any time at no risk to themselves or anyone dear to them. Participants provide informed consent before starting the questionnaire. This includes consent to participate in research.

The data collection instrument is designed not to collect any personally identifiable information, and no personally identifiable information is collected as part of the research. If participants themselves mention any such information during, before or after the interview, it is excised from any written documents related to the study.

All participants' surveys are assigned a unique code that cannot be linked to individuals.

Participants receive the contact information of a relevant WHO CO UKR researcher whom they can reach if they require any clarification about the study, have any questions or concerns, or would like to be informed of research outcomes.

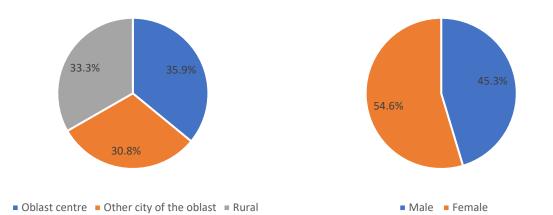
Participation in this study presents minimal ethical concerns. Participation is voluntary, and results will be anonymized. Study protocol has been submitted and approved by the CO "UIPHP" Institutional Review Board, FWA #00029648. Additionally, ethical clearance was received from the WHO Research Ethics Review Committee (WHO ERC) as research that is based on the collection of non-sensitive data, which are collected anonymously and are exempt from ERC review.

Informed consent to participate in the study was obtained from all participants before collecting data. Respondents are provided with information regarding their data processing within the study according to the requirements of the General Data Protection Regulation and national laws related to the protection of personal data. The specific information notice is available upon request, and the respondents can access and review the document. Before providing answers to the survey, all the respondents are asked for their consent to participate and to have the discussion recorded (for quality control purposes).

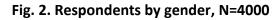
As part of the informed consent, respondents are informed that they can withdraw at any point and that this will not result in any penalty or affect the services they receive, health-care or otherwise. They are informed that if they would like to withdraw their consent to the use of their data, they can do so before the end of the call.

# **SECTION 1. PORTRAIT OF THE RESPONDENTS**

A total of 4000 respondents were interviewed. Their geographical and gender distribution is consistent with national statistical information, with 66.7% living in urban areas and 33% living in rural areas, and with 45.3% of males and 54.6% of females (Fig. 1, 2).



# Fig. 1. Respondents by type of settlement, N=4000



All age groups were sufficiently covered to conduct the analysis. The data on education level show that the majority of the respondents have a basic higher (38.7%) and secondary special education (37.2%) (Fig. 3, 4).

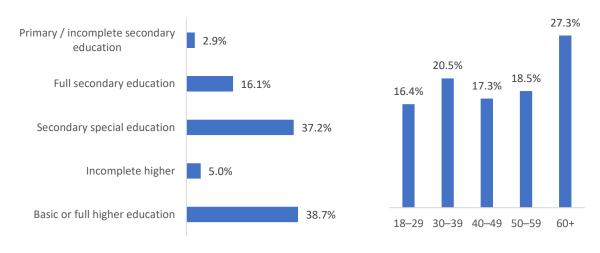
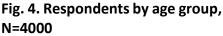


Fig. 3. Respondents by level of education, N=4000



The household composition data show that 40% of the respondents are living with children under 18 years. Thirty percent of households include members aged 65 years or older and 30% have chronic conditions. The proportion of households with pregnant or lactating members was 4%. The average number of household members was three (IQR: 2–4). The survey reached respondents from most oblasts, except those in the Luhansk and Kherson oblasts, which were largely not under Government control at the time of data collection.

Therefore, it was difficult to recruit respondents in the two oblasts due to very limited access to phone or Internet service at the time the interviews were being conducted (Fig. 5, 6).



Fig. 5. Respondents by oblast, N=4000

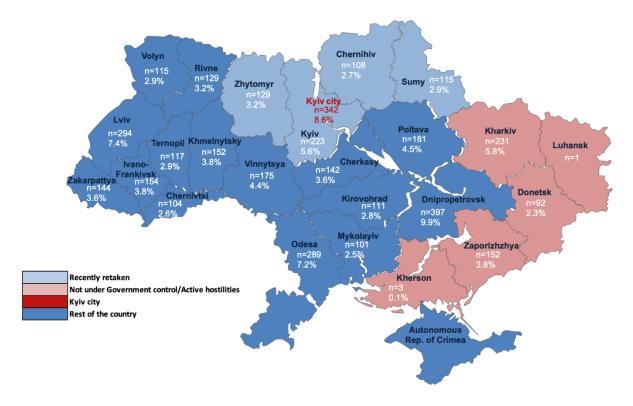


Fig. 6. Respondents by oblast status, N=4000

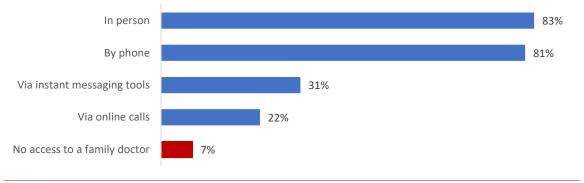
While many people fled the war and became refugees outside Ukraine, most Ukrainians remained in the country and became internally displaced. To illustrate, 72.8% did not leave their permanent place of residence after 24 February, 25% moved within the country and 3.4% went abroad.

At the time of the interviews (September 2022) 82.1% of the respondents were staying at the same place of residence as before 24 February. Among the 17.9% who left, 44.2% are renting, 35.4% are staying with family/friends, 9.7% are living in a shelter/camp, and 9.8% do not have a permanent place to stay.

# **SECTION 2. ACCESS TO A FAMILY DOCTOR**

In general, the majority (91%) were well informed and knew the location of the primary health-care facility. Of those, 95% confirmed that their primary health-care facility was currently functioning.

Eighty-three percent of the respondents stated that they could access family doctors via an in-person visit, while 81% could also do so by phone via online calls (22%) and instant messaging tools (31%). Only 7% of the respondents had no access to a family doctor (Fig. 7).





Ninety-two percent of the respondents in recently retaken areas and in the rest of the country were informed about the location of the nearest primary health-care facility, compared to 85% in the city of Kyiv and in areas not under Government control/areas experiencing active hostilities.

A slightly lower level of access to functioning primary health-care facilities was also reported in the city of Kyiv and areas not under Government control/areas experiencing active hostilities.

In-person access to a family doctor was available for 86% in the rest of the country and for 85% in recently retaken areas. Seventy-three percent of the respondents in the city of Kyiv had in-person access, compared to 67% in areas not under Government control/areas experiencing active hostilities. A lower level of access by phone was also prevalent in the city of Kyiv and areas not under Government control/areas experiencing active hostilities.

Five percent of the respondents in recently retaken areas and 6% in the rest of the country had no access to a family doctor, with 14% of the respondents in the city of Kyiv and 15% in areas not under Government control/areas experiencing active hostilities reporting the same.

Residents in rural areas have better access to functioning primary health-care facilities and their main channel for accessing a family doctor was by phone (88%).

No significant differences were reported in terms of knowing the location of a primary healthcare facility when broken down by gender and age. However, when it comes to ways to access family doctors, younger respondents aged 18–29 years were more likely to use instant messaging tools and online calls to reach their family doctors.

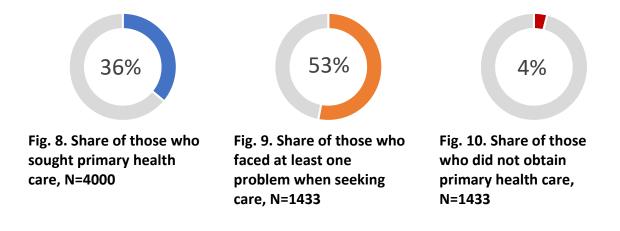
Expectedly, people who have been displaced had less knowledge of the location of primary health-care facilities than people who have remained in their home communities, with a lower share of those who had in-person access. The main way for displaced people to reach a family doctor was by phone (64%), and 20% had no access to a family doctor.

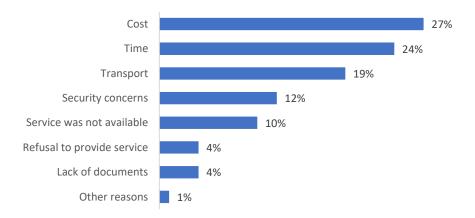
The income breakdown shows that respondents with a lower income had a lower level of access to family doctors (9%) and used instant messaging tools and online calls less often for this purpose. General awareness of the location of the primary health-care facilities was higher among households with an average monthly income of 10 000–20 000 hryvnias (95%).

# **SECTION 3. ACCESS TO HEALTH-CARE SERVICES**

### PRIMARY HEALTH CARE

More than one third (36%) of all respondents sought primary health-care services (Fig. 8). About half of them (53%) reported facing various obstacles in the process (Fig. 9). The main barriers were related to cost (27%), time required to access the services (24%) and transport arrangements necessary to get to the services (19%) (Fig. 11). Four percent of those who sought primary medical assistance were unable to obtain it (Fig. 10).





#### Fig. 11. Main problems when seeking primary health-care services, N=1433

Since Russia's invasion of Ukraine, residents of regions that include areas not under Government control, or regions where active hostilities have been taking place, have sought primary health care significantly less often (27%) than residents of other regions (35–41%). People who have been internally displaced were more likely to seek primary health care (39%) than people who have remained in their home communities (35%). At the same time, the level of access to primary health-care services does not depend on the region of residence or displacement status.

Access to primary health care also has certain gender peculiarities. Women tend to seek medical care more often than men (38% compared to 33%, which is statistically significant). This may be due to the general trend that women are overall more responsible for their health.

There is also a clear association between the level of access to primary health-care services and income level. The lower the respondents' income, the less likely they were to seek medical care and to receive the help they needed (Fig. 12).

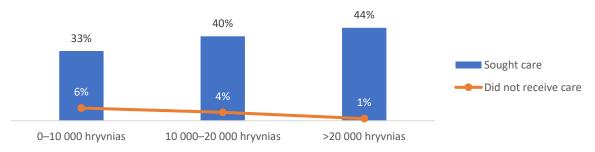


Fig. 12. Access to primary health care by income level

#### HEALTH CARE FOR CHRONIC CONDITIONS

In general, 30% of all respondents reported that they or members of their household live with a chronic condition. The main chronic condition reported by the respondents was cardiovascular disease (61%) (Fig. 13).

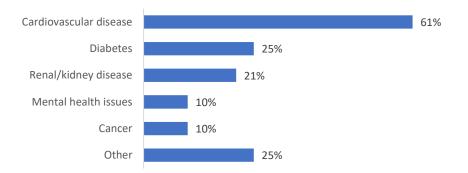


Fig. 13. Chronic conditions reported by respondents and/or members of their household, N=1211

Approximately half of the people with a chronic condition (52%) sought care for that condition (Fig. 14). One tenth of those who sought assistance could not obtain it (Fig. 16). At the same time, when receiving medical care, more than half of the respondents (57%) reported facing various problems, the main one being cost, as reported by 35% of the participants (Fig. 15, 17). It is important to note that, compared to other types of medical care, the problems related to cost were expressed the most with respect to care for chronic conditions.

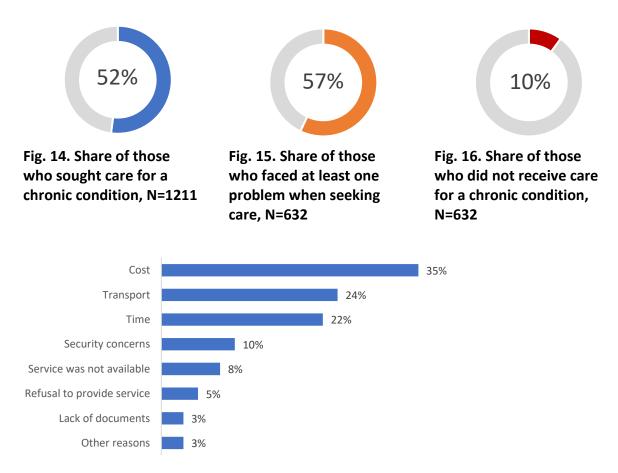


Fig. 17. Main problems when seeking care for a chronic condition, N=632

Respondents from areas not under Government control/areas experiencing active hostilities were significantly less likely (38%) to seek health care for a chronic disease than residents of Ukraine's other regions (53–56%). The level of access to this type of medical care did not vary depending on the place of residence.

As with primary health care, women sought care for chronic conditions more often than men (54% compared to 49%). In addition, women were less likely than men not to receive the medical care they needed (8% compared to 12%).

In terms of income, people with lower incomes sought medical care for chronic conditions less often than those with higher incomes. In addition, the percentage of people who did not receive medical care tended to be inversely proportional to income level (Fig. 18).

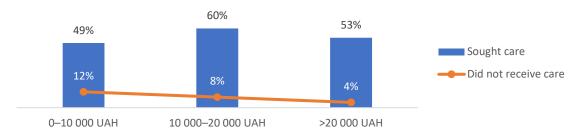


Fig. 18. Access to care for a chronic condition by income

#### **EMERGENCY (AMBULANCE) SERVICE**

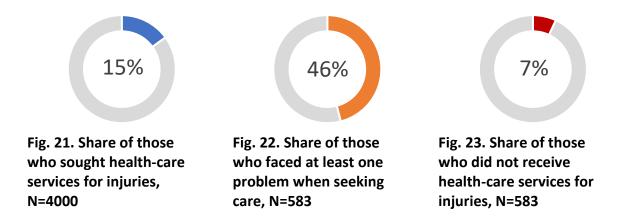
In total, one fifth of the respondents needed emergency medical assistance after 24 February (Fig. 19). Eight percent of those who sought emergency health-care services were unable to obtain them (Fig. 20).



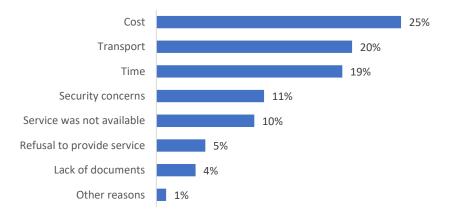
People who have experienced displacement needed emergency medical care at a higher rate (23%) than people who have remained in their home communities (18%). Other target groups do not differ in the level of need for ambulance services, but exhibit certain differences in the level of access to assistance. Therefore, a significantly lower proportion of residents of oblast centres reported being unable to receive assistance (4%) compared to those in other types of settlements. Furthermore, a significantly smaller share of respondents from Kyiv did not have access to emergency medical care (3%) compared to those in other regions (7–11%).

#### **HEALTH-CARE SERVICES FOR INJURIES**

In general, 15% of all respondents reported having sought medical care for injuries (Fig. 21). Forty-six percent of those in need of assistance faced problems in accessing services for injuries (Fig. 22). Seven percent were entirely unable to receive the help they needed (Fig. 23).



The top three problems faced by the respondents – cost, transport and time needed to receive the service – were similar to those faced when seeking other types of medical care (Fig. 24).



#### Fig. 24. Main problems when seeking health-care services for injuries, N=583

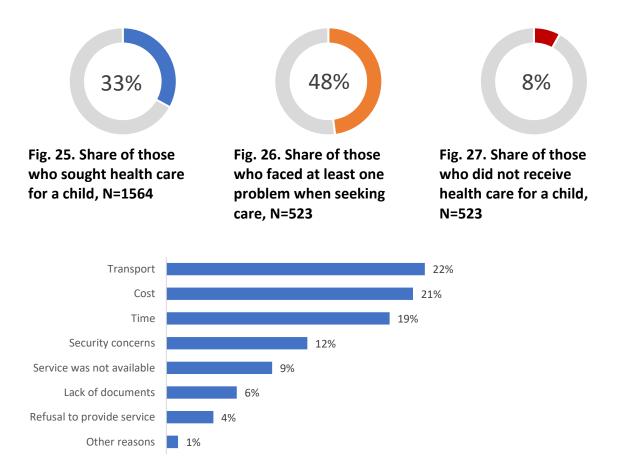
Access to medical care for injuries does not vary significantly by geographic area, but displaced people sought this type of assistance more often (17%) than people who have remained in their permanent residences (14%). However, there is no difference in the level of access to services between these groups. Men reported seeking help for injuries more often than women (17% and 13%, respectively).

#### HEALTH CARE FOR A CHILD

Between 24 February and 14 September one third (33%) of the respondents who have a child sought medical care for their child (Fig. 25). Slightly less than half (48%) faced various

difficulties, key among them being (Fig. 26) the transport necessary to get to the services (due to a lower share of respondents who faced problems related to cost than among routine and emergency medical services) (Fig. 28).

The analysis shows that 8% of those who sought health care for a child were unable to receive the medical care that was needed (Fig. 27).





Residents of recently retaken territories and areas not under Government control/areas experiencing active hostilities reported a lower level of access to child health services than respondents in other parts of the country (including Kyiv). The share of those who did not receive the necessary services is significantly higher in recently retaken territories, areas not under Government control and areas experiencing active hostilities (Fig. 29).

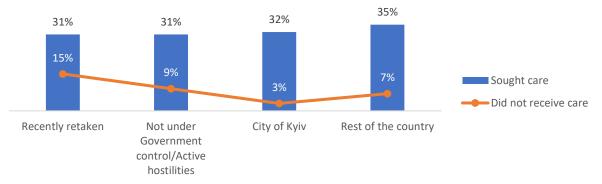
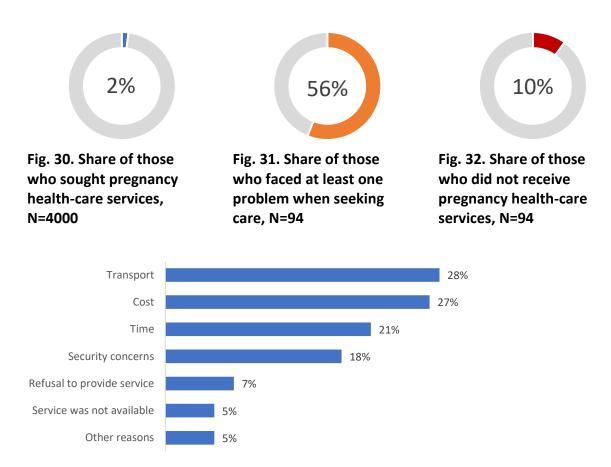


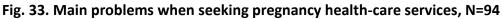
Fig. 29. Access to health care for children by region

There are no significant differences in the demand for or access to health services for children compared to other target groups.

#### **PREGNANCY HEALTH-CARE SERVICES**

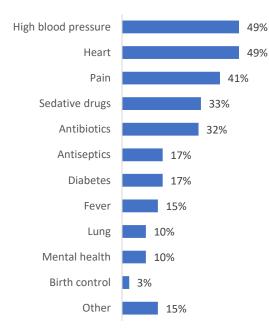
In terms of pregnancy-related medical services, 2% of all respondents reported needing them during the assessment period (Fig. 30). Fifty-six percent of all participants who sought such services faced certain problems when receiving care (Fig. 31). As with medical services for children, the top two problems related to transport (28%) and cost (27%) (Fig. 33). Ten percent of the respondents reported being unable to obtain pregnancy health-care services (Fig. 32).





# **SECTION 4. ACCESS TO MEDICINES**

Access to medicines was cited as one of the main problems related to health, with 22% of respondents reporting that they were unable to obtain the necessary medicines in the period from 24 February to September 2022. The most needed among them were blood pressure (49%), heart (49%), and pain (41%) medications (Fig. 34). The main problems with obtaining medicines were increased prices (84%), unavailability in pharmacies (46%), and long lines at pharmacies (45%). Approximately one third of the respondents (35%) reported that they did not have enough money to buy the medicines, even if the price had not increased (Fig. 35).



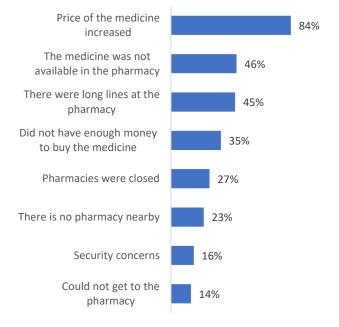
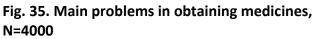


Fig. 34. Main types of difficult-to-find medicines, N=875



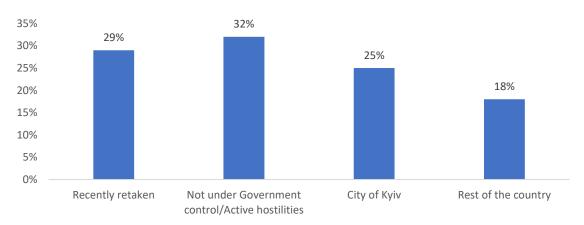


Fig. 36. Respondents reporting inability to obtain medicines by area, N=4000

The main problems with access to medicines were reported in areas not under Government control/areas experiencing active hostilities – one in three respondents (32%) could not obtain medicines. In other parts of the country the situation was much better, with only one in five respondents (18%) reporting problems with access to medicines (Fig. 36).

No differences in the top three needed medicines were reported by type of area. However, respondents in recently retaken areas faced fewer problems with accessing antiseptics (14%) compared to those in Kyiv (23%), and respondents from areas not under Government control/areas experiencing active hostilities were more frequently unable to obtain fever medicines (25%).

Females were more frequently than males unable to obtain medicines – 23% compared to 21%, respectively. Furthermore, a higher share of females than males could not obtain top three medicines – 53% to 46% for blood pressure medication, 53% to 43% for heart medication, and 44% to 37% for pain medication.

As for differences among age groups, younger respondents aged 18–29 years reported antibiotics as the most needed type of medicine they were unable to obtain (37%). Blood pressure medication was sought by people aged 30–39 years (40%), 40–49 years (48%), 50–59 years (61%), and 60+ years (65%).

People who have been internally displaced faced lower levels of access to medicines than those who have remained in their home communities: 29% and 20%, respectively.

It should also be noted that displaced people more often than people who have remained in their home communities were unable to obtain fever (21%) or mental health medications (14%).

In terms of income level, expectedly, people with lower incomes had lower levels of access to medicines. However, the top three medicines that could not be obtained were the same, irrespective of income level.

The breakdown by territory shows that higher prices were the main barrier to obtaining necessary medicines. However, compared to recently retaken areas and areas experiencing active hostilities, respondents from other parts of the country reported fewer problems with availability of medicines in pharmacies (42%), long lines (36%) and closed pharmacies (18%).

One of the main barriers for respondents in the city of Kyiv were closed pharmacies – more than half (51%) cited it as a barrier. One in five people in recently retaken areas (20%) and areas not under Government control/experiencing active hostilities (18%) stated that they were unable to get to a pharmacy.

Forty percent of the rural population faced the problem of insufficient funds to buy medicines and lack of pharmacies nearby, whereas the urban populations of oblast centres and other cities faced long lines – 48% and 47%, respectively.

Increased prices affected women more than men – 88% to 78% and 40% of females did not have enough money compared to 28% of males.

Increased prices affected 92% of the respondents aged 60 years and over, with 50% of them reporting that they did not have enough money for medicines. More than half of the respondents aged 18–29 years (53%) and 30–39 years (53%) faced long lines.

Increased prices, availability and long lines affected both displaced people and people who have remained in their home communities, but displaced people were more frequently unable to get to a pharmacy (18%) and more likely to have security concerns (27%).

# **SECTION 5. ACCESS TO VACCINATION**

Twenty-two percent of households with children attempted to obtain routine vaccinations for children. Only 8% of them were not able to receive the vaccination in the period from 24 February to August 2022.

Three percent of all respondents attempted to access the tetanus/diphtheria vaccine for adults, but 19% of those who sought it were not able to obtain it.

The COVID-19 vaccine was sought by 14% of respondents, and 15% of them were not able to receive it.

The breakdown shows no significant differences in the percentage of respondents who sought any type of vaccine except for those in areas not under Government control/areas experiencing active hostilities, where 13% were not able to obtain a vaccine for a child. Access to the COVID-19 vaccine for adults was not prevalent in areas not under Government control/areas experiencing active hostilities – only 7% of all respondents tried to access it, but people living in the city of Kyiv and in recently retaken areas more often reported not being able to receive the COVID-19 vaccine than respondents in other areas.

There is a significant difference in access to the tetanus/diphtheria vaccine in rural areas and other cities – 23% reported not being able to receive it.

Respondents who have experienced displacement were more often unable to receive a vaccine for a child (14%) or the COVID-19 vaccine for adults (23%) than respondents who have remained in their home communities (6% and 13%, respectively).

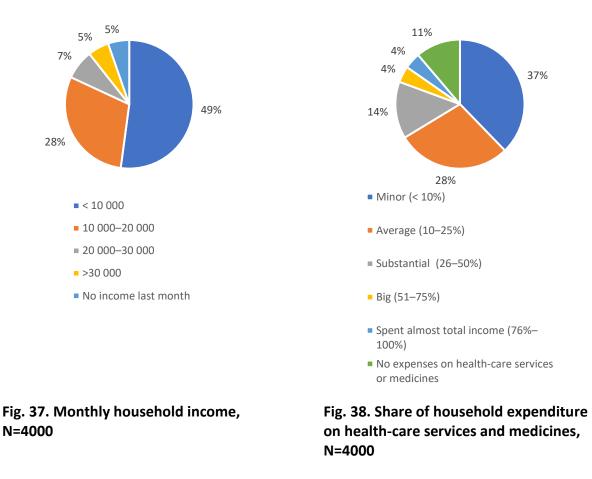
No significant differences in vaccination access in terms of gender and age group were identified during data analysis.

# **SECTION 6. MEDICAL EXPENSES**

#### INCOME

Two thirds of the respondents reported having a monthly household income of less than 20 000 hryvnias, with almost half (49%) stating that they earned less than 10 000 hryvnias, and 28% earning between 10 000 and 20 000 hryvnias (Fig. 37).

Respondents' income varied across different areas, with higher incomes in the city of Kyiv, for urban populations compared to other groups, and for among males and younger age groups. No significant differences were identified with respect to displacement status.



#### HOUSEHOLD EXPENDITURE ON HEALTH-CARE SERVICES AND MEDICINES

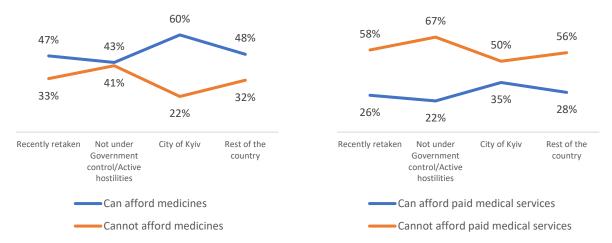
Thirty-seven percent of the respondents reported that they had a minor (<10%) expenditure on health, while (Fig. 38) 8% reported a big and almost total income expenditure. The breakdown analysis shows an increase in expenditure in areas not under Government control/areas experiencing active hostilities and rural areas, as well as among women.

The differences in age groups show that due to lower incomes for older groups and their greater needs related to medicines and medical services, they are spending more of their monthly incomes on health services and medicines.

No significant differences were identified in terms of displacement status.

#### ABILITY TO AFFORD MEDICINES AND PAID MEDICAL SERVICES

In terms of affordable medicines and paid medical services, a total of 48% respondents can afford the medicines they need, and only 28% can afford paid medical services. The same trend is observed in the geographical breakdown, with respondents from the city of Kyiv more likely to report being able to afford medicines (60%) than respondents from other areas, as well as being able to afford paid medical services (35%) (Fig. 39, 40).



# Fig. 39. Ability to afford medicines by area, N=4000

# Fig. 40. Ability to afford paid medical services by area, N=4000

The same distribution existed between people living in urban and rural, with respondents in oblast centres and other cities more likely to afford medicines and services.

The younger population was more likely to be able to afford medicines and paid medical services. No significant differences were identified with respect to displacement status (Fig. 41).

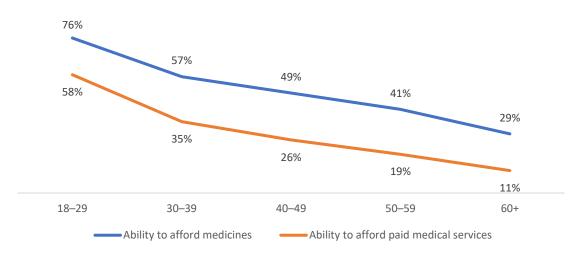
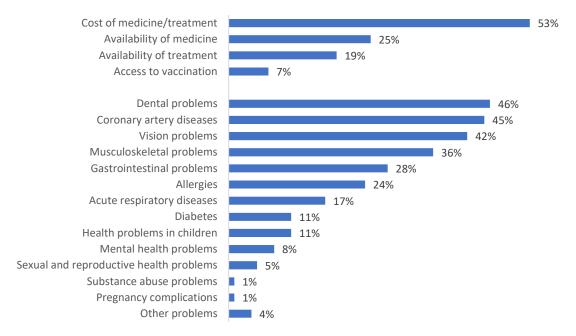


Fig. 41. Ability to afford medicines and paid medical services by age, N=4000

# SECTION 7. MAIN PROBLEMS RELATED TO HEALTH

The main barrier to access to health services currently experienced by the respondents' households is the cost of medicines/treatments (53%). The main health problems reported were dental problems (46%), coronary vascular disease problems (45%) and vision problems (42%). When it comes to access to medical services, 25% experienced barriers in terms of availability of medicines, and 19% – in terms of availability of treatments (Fig. 42).



#### Fig. 42. Main problems related to health, N=4000

When broken down by area, the data show that the main barriers related to health are the same for all areas, but a higher share of respondents from areas not under Government control/areas experiencing active hostilities reported on the general availability of medicines (33%) and treatment services (29%) compared to respondents from other areas. No significant differences were identified between urban and rural populations in this respect.

In terms of gender breakdown, more than half of the female respondents (57%) identified cost as the main barrier to accessing health services. In general, women were more likely than men to report other problems related to health.

There are significant differences among age groups, with older respondents stating that they have a higher level of reported problems with their health. The trend is related to all problems mentioned with increasing proportion with increasing age. Forty percent of the respondents aged 18–29 years cited dental issues as the main problem for the age group. Cost is a barrier for most of the respondents aged 60 years and over (67%).

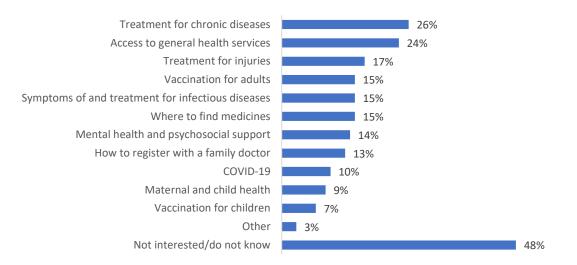
Breakdown by displacement status did not reveal any significant differences in terms of main health problems. However, in terms of income, respondents with an income of  $10\ 000-20\ 000$  hryvnias and more than 20 000 hryvnias reported dental problems as their main health complaint (44% and 41%, respectively), while for the group with an income of  $0-10\ 000$  hryvnias (52%), the main problem was coronary vascular disease.

Cost is the main barrier for the 0–10 000 hryvnia and 10 000–20 000 hryvnia income groups, reported by 65% and 46%, respectively.

# **SECTION 8. HEALTH INFORMATION**

#### **HEALTH INFORMATION SOUGHT**

Treatment for chronic diseases (26%), access to health services (24%) and treatment for injuries (17%) were among the most common types of health information sought by the population. However, almost half (48%) of the population was not interested in receiving it (Fig. 43).



#### Fig. 43. Health information sought, N=4000

In terms of geographical breakdown, it should be noted that 18% of the respondents in areas not under Government control/areas experiencing active hostilities also sought information on where to find medicines, which is significantly more than in other areas. Respondents in the city of Kyiv were more likely to state that they needed information on vaccination for adults (24%) and registering with a family doctor (21%).

In general, the health information needed was easy to obtain in all areas except for areas not under Government control/areas experiencing active hostilities (62%) (Fig. 44).



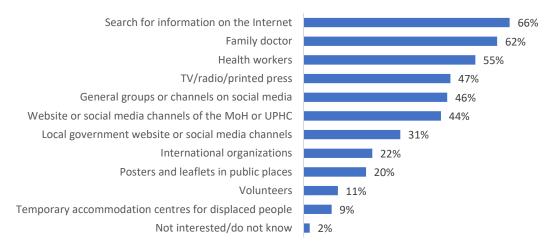
Fig. 44. Ease of obtaining health information by area, N=4000

Traditionally, women were more likely than men to access health information, and younger respondents aged 18–29 years stated that they sought information about mental health services and psychological support (15%) more often than other age groups.

Twenty-one percent of people who have been displaced required information on registering with family doctors and 30% on general access to health services.

#### HEALTH INFORMATION CHANNELS

The most popular channels for obtaining health information in Ukraine are the Internet (66%), family doctors (62%) and health workers (55%). The local media as well as official sources of information, such as the Ministry of Health (MoH) or the Ukrainian Public Health Centre (UPHC) also tend to be used by the population (44%). However, it is worth mentioning that facilities/centres for displaced people (9%) and volunteers (11%) were not among key sources of health information (Fig. 45).



#### Fig. 45. Channels for obtaining information, N=4000

Internet searches were the prevailing source in the city of Kyiv (75%) and active combat territories (70%) at a higher rate than in other areas – 63% for recently retaken areas and 64% for the rest of the country. On the other hand, family doctors and other health workers are the more popular channel for recently retaken areas (66% and 57%, respectively) and the rest of the country (66% and 58%, respectively).

The difference between the type of localities underscores the fact that urban populations of oblast centres and other cities are more likely to use the Internet to search for health information (71% and 66%, respectively), while rural populations seek health information from family doctors and other health workers (70% and 62%).

The younger population stated that they use the official social media channels of the MoH and UPHC (66%) as well as health workers (63%) as a source of information more often than other age groups, but are less likely to rely on family doctors (59%).

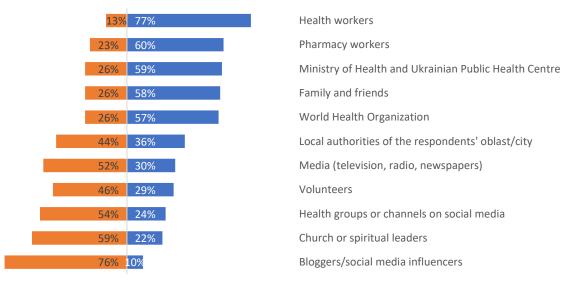
For people aged 18 to 39 years, the Internet remains the main channel for obtaining health information (74%).

The difference with respect to the channels used between people who have been displaced and people who have remained in their home communities indicates that – due to a lack of personal contacts in the areas to which they have been displaced – displaced people turn to general groups on social media (50%) and official websites (51%) to obtain health information.

The breakdown by income does not show significant differences in the results.

## TRUST IN INFORMATION CHANNELS

The most trusted channels of information cited by the population were health workers (77%), pharmacy workers (60%), and the MoH and UPHC (59%). In addition, family members and friends (58%) as well as WHO (57%) had a positive balance of trust. The other sources of information received less favourable ratings (Fig. 46).





#### Fig. 46. Trust in information channels, N=4000

Broken down by area, the data show no significant differences between urban and rural areas, except for church or spiritual leaders, who tend to have more influence among rural populations.

People living in areas not under Government control or in areas experiencing active hostilities are more likely to trust local authorities or local pharmacy workers compared to official information channels. The younger population is generally more likely than older people to trust official channels of information and health workers.

The degree of trust in information channels shows no significant differences when broken down by income or displacement status.

# SECTION 9. MENTAL HEALTH

The assessment included one question related to the participants' mental health: "Is anyone in your household currently too upset or worried to do their usual daily activities?". In general, 14% of the respondents answered this question in the affirmative. Analysis of the distribution of answers to this question among the target groups identifies three vulnerable categories of the population in terms of potential mental health problems:

- older people people over 60 years had the highest proportion of those who are now too upset or anxious to go about their normal daily activities (20%, compared to 12–13% among people aged 30–59 years, and 7% among people aged 18–19 years);
- residents of rural settlements (17%, compared to 12–13% among residents of oblast centres and other cities); and
- people with a low income (17% of those with an income of 0–10 000 hryvnias, 12% of those with an income of 10 000–20 000 hryvnias, and 7% of those with an income higher than 20 000 hryvnias).

Other groups have shown no significant differences with respect to mental health concerns.

# SUMMARY

#### Access to primary health care and family doctors

In general, more than 90% of the respondents from Ukraine (except the Luhansk and Kherson regions, and the Autonomous Republic of Crimea) know where their primary health-care facility is located and these facilities are mostly functioning (95%). The majority of the respondents (93%) reported that they have access to their family doctor – mostly in person (83%) or by phone (81%).

However, the full-scale war has had a significant negative impact on access to family doctors. Therefore, a much smaller number of residents of regions that are partly under the temporary military control of the Russian Federation, or where active hostilities have been taking place, know the location of their primary health-care facility – only 85%. In addition, 15% of the people living in these areas report that they do not have access to a family doctor.

Among displaced people, there are also fewer people who know the location of the healthcare facility near them (only 83%). Moreover, almost half of the displaced people surveyed report that they do not have access to a family doctor in person (46%), and one in five has no access in any form.

#### Access to routine medical services

Primary health-care services were sought by more than one in three respondents. More than half of those who sought primary health-care services faced at least one barrier. The top three barriers were cost, time and transport. Only 4% were unable to obtain the assistance they needed.

More than half of the respondents who live with a chronic condition sought medical care for that chronic condition, and 57% of them faced at least one barrier. The main problem was cost – relevant for 35% of participants (problems related to cost were expressed the most with respect to care for a chronic condition, compared to other types of medical care). One in ten respondents could not obtain the necessary medical care when they needed it.

Those living in areas not under Government control/areas experiencing active hostilities tend to seek both types of routine health-care services (primary health-care services and health care for chronic conditions) less often than those living in other parts of the country. At the same time, displaced people sought primary services at a significantly higher rate than people who have remained in their home communities.

#### Access to emergency medical services

One fifth of the respondents needed emergency (ambulance) care, and 8% of them did not receive the care they needed. Health care for injuries was sought by 15% of the participants. The level of access is close to emergency – 7% were not able to receive the necessary assistance.

People who have been displaced reported needing emergency services at a significantly higher rate than people who have remained in their home communities: 23% compared to 18% for ambulance care, and 17% compared to 14% for injuries.

#### Access to health care for a child

One in three people who have children reported having sought health care for their child. Eight percent of them did not receive the care that was needed and 4% did not have access to primary health care. Access to this type of assistance is lower in recently retaken areas and areas not under Government control/areas experiencing active hostilities, where 15% and 9%, respectively, of the respondents in this category were unable to receive services (compared to 3% in the city of Kyiv and 7% in the rest of the country).

#### Access to medicines

One in five respondents reported having been in situations when they were unable to find medicines after 24 February. The top three barriers are increase in price, unavailability in a nearby pharmacy and long queues in local pharmacies. People living in areas not under Government control/areas experiencing active hostilities and people who have been displaced are at significantly higher risk of not obtaining the medicines they need than respondents from other groups.

#### Income

Most of the respondents (83%) have a monthly household income lower than 20 000 hryvnias. At the same time, for two thirds of the participants (65%), the expenditure on health care and medicines represented up to a quarter of their family budget.

One third of the respondents cannot afford medicines, and more than half cannot afford paid medical services. This figure is even lower for residents of areas not under Government control/areas experiencing active hostilities: 41% cannot afford medicines and 67% cannot afford paid medical services.

Household income significantly affects the level of access to health-care services – the lower the participants' income, the lower their access to primary care, emergency services, care for chronic conditions, and medicines.

#### Gender aspects

Gender specifics are primarily associated with greater vulnerability of women (especially allfemale households), who generally have significantly lower incomes and a higher share of expenses on health-care services and medicines of their total budget than men. In addition, women tend to seek routine medical services (primary and chronic diseaserelated) more often than men. Men, in turn, are more likely than women to seek care for injuries.

#### Access to health information

More than half of the respondents (52%) reported searching for general health information during the survey period. The main reported channel for obtaining information was the Internet (66%), but medical workers were cited as the most trusted source (77%).

One in four respondents searched for information on treatment for chronic diseases (26%) and access to general health services (24%). Finding medicines was among the top three categories of information sought in areas not under Government control/areas experiencing active hostilities (18%).

# LIMITATIONS OF THE STUDY

The study team recognizes that the emergency context imposes certain limitations on the study.

Even if the proposed sampling strategy is used to ensure as representative a sample as possible, some population groups are expected not to be reached, including the elderly, some people in rural areas with limited access to phones or facing connectivity issues, disadvantaged population groups such as migrants, people who are homeless or people with mental health conditions. These population groups may bear a greater burden from the current emergency than the average Ukrainian citizen. The survey cannot claim to represent their views, and the social benefit of the study may consequently diminish. The findings of the survey need to be interpreted in this context. Conducting supplementary, more tailored, focused data collection with specific population groups may be considered.

Since the findings related to the population at large may not apply to specific disadvantaged population groups, this affects the generalizability of the study's findings. To overcome these limitations, the impact of recommendations informed by this study on specific populations will be cautiously considered before a wide-scale rollout. This is possible, for example, with specific messages or communication initiatives, service provision planning, or outreach initiatives.

Further, the data may be limited to territories with active cell phone service during data collection. Under current circumstances, it is difficult to predict which of the country's oblasts will not be sufficiently represented in the survey. However, the study team hopes to overcome some of these limitations by increasing the sample size to 4000 participants (previous representative national surveys in Ukraine collected responses from 1000 to 2000 participants). In addition, the complexity of the current crisis and the public response is immense, and CATI can only serve to monitor a few key topics rather than explore them in depth. Crucially, this survey can identify issues of concern that may need to be explored through other means, such as supplementary qualitative data collection.

Another limitation of the study is that the items included in the instrument have been widely used in emergency settings. However, few of them have been validated through a rigorous process within the context of war. This is due to the ethical principles of data collection during an emergency and priority setting for efforts, and it needs to be considered a limitation in the interpretation of the findings.

Self-reported behaviours are known to sometimes differ from actual behaviour, not least due to the social desirability effect, and so the findings related to behaviour should be interpreted with this reliability limitation in mind.

Recruiting people via phone and conducting interviews using CATI has some limitations, as opposed to other, more direct recruitment measures and face-to-face interviews. However, many such studies were conducted during the COVID-19 pandemic. The Sociological group "Rating", currently conducting multiple public opinion surveys in Ukraine using the same recruitment and data collection strategy, concluded that people in Ukraine are currently willing to share data, particularly upon learning that they can contribute to the public good. Given the current emergency, the advantages of this approach far outweigh the possible limitations.

Despite these limitations, this rapid health needs assessment can contribute important perspectives that will inform response and recovery planning.

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<sup>&</sup>lt;sup>1</sup> All references accessed 13 December 2022.

#### The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe isone of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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