World Health Organization

European Region

# Health needs assessment of the adult population in Ukraine

**Survey report**

**December 2022**

World Health Organization

European Region

# Health needs assessment of the adult population in Ukraine

**Survey report**

**December 2022**

**ABSTRACT**

The full-scale Russian Federation invasion of Ukraine has caused a deterioration in the level of access to health-care services and medicines in the country, particularly for people living in regions close to the front line and areas that are partially 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 in the second round of a quantitative cross-sectional survey of self-reported health needs of the general population in Ukraine. It presents the results of a survey conducted in December 2022.

**Keywords**

UKRAINE

EUROPE

HEALTH CARE QUALITY, ACCESS, AND EVALUATION

HEALTH SERVICES

WAR EXPOSURE

SURVEYS AND QUESTIONNAIRES

Document number: WHO/EURO:2023-6904-46670-68538



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

**Cataloguing-in-Publication (CIP) data.** CIP data are available at http://apps.who.int/iris.

# CONTENTS

# ACKNOWLEDGEMENTS

This report was prepared by the WHO Country Office in Ukraine: Aron Aregay (Health Information and Risk Assessment Officer), Denise Assaf (Health Information Officer), and Dr. 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), Dr. Emanuele Bruni (Incident Manager), Kateryna Fishchuk (Health Policy Officer), and Igor Semenenko (National Professional 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 Government of Germany for the health emergency response in Ukraine.

# EXECUTIVE SUMMARY

The World Health Organization Country Office in Ukraine (WHO Country Office in Ukraine) 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. Round 1 was conducted in September 2022, while Round 2 was conducted in December 2022. The total sample of each round consists of 4000 respondents. Using a questionnaire, data were collected by the Sociological group "Rating" through computer-assisted telephone interviews (CATI).

The survey results show that more than half of those who sought various types of health care faced at least one problem. The highest share of those who have encountered problems while seeking care are people seeking care related to chronic conditions – as noted by three quarters of the respondents. In addition, the findings demonstrate that the level of access to health care is still rather high and in Round 2 it increased for areas such as health care related to chronic conditions (where 95% in Round 2 stated they had managed to receive the services they needed, compared to 90% in Round 1), for children (97% in Round 2 compared to 92% in Round 1) and for injuries (97% in Round 2, compared to 93% in Round 1). At the same time, more than one fifth did not consult a doctor when needed, listing the main reasons as self-treatment, insignificant health problem and high cost.

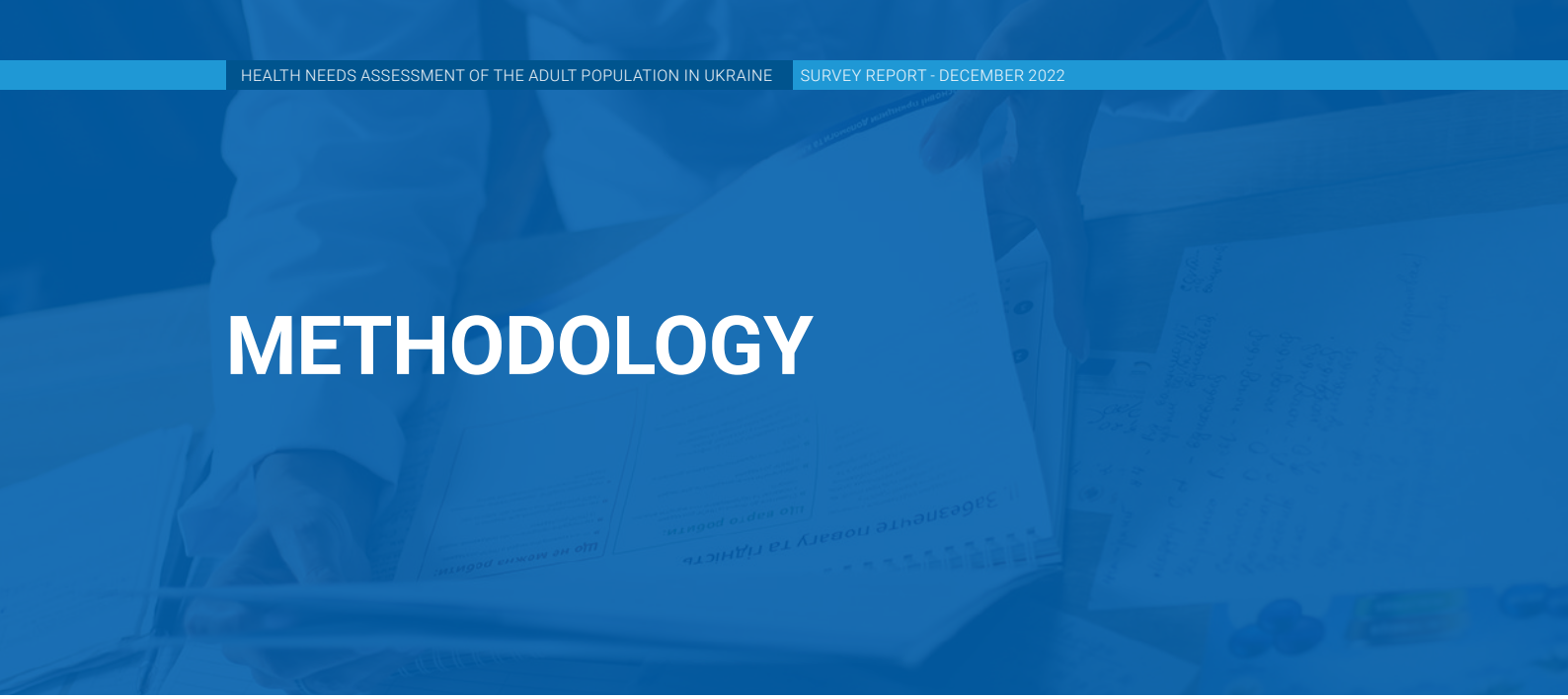
The main problems people faced while seeking health care were cost of medicines and treatment, time and transport. Meanwhile, the main barriers that prevented people from receiving care were unavailability of the services that were needed (for primary health care, and health services for chronic conditions and injuries) and refusal to provide the services (for ambulance service).

The level of access to medicines improved markedly – half as many respondents were now unable to find medicines (one in ten in Round 2, compared to one in five in Round 1). The relevance of all problems in obtaining medication decreased. Access barriers related to acute phase of the war decreased by up to three fold, such as unavailability of medicines, closing of pharmacies, long lines, and security concerns.

Another fact that could serve as evidence of some stabilization of the health system is that the relevance of all general systemic problems in the health-care sector has significantly decreased (cost of medicine and treatment, availability of health services, and access to vaccination), while the urgency of personal health problems remained unchanged.

Residents of regions that are experiencing or have experienced hostilities remain more vulnerable than people in other regions: they have a lower level of access to family doctors and to medicines; fewer of them sought primary health care, and a higher share faced problems when accessing.

In the Round 2 one fifth among people who were internally displaced have no access to family doctor, compared to 5% among people who remained in their home communities. Access to medicines significantly improved between the rounds overall, with no difference in the second round between people who were displaced and people who remained in their home communities.



# METHODOLOGY

## Background

On 24 February 2022 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 2022 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, became 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 2022. 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 Country Office in Ukraine 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 results of Round 1 of the health needs assessment, which was conducted in September 2022, show that half of those who sought various types of health care faced at least one barrier (5). The major barriers to accessing health care are cost, time constraints to get to and from health facilities, as well as limited transportation options. 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.

According to Round 1 results, 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%), sought primary health-care services and assistance for a chronic disease, managed to receive medical care for a child or for injuries, 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).

The second round of the survey will allow for an assessment of changes in the health-care needs of the Ukrainian population and the barriers they face in receiving services. 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 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 in these factors over time to understand the effect of continuing population movement, active combat, new developments, events, and measures taken;
- identify subgroups within people who have been internally displaced 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 the 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 achieve 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, and 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 (6). 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 for 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 a 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 Country Office in Ukraine 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.

As part of Round 1, the aim was to obtain a complete picture of the level of access to health care throughout the active phase of the war with Russia. Therefore, the assessed period in Round 1 was set as 24 February to 9 September – approximately six months. In Round 2 the assessed period was three months. To some extent, this influenced the distribution of answers to certain questions. In subsequent rounds a three-month period will be used.

In order to analyze health needs in more detail in Round 2, the data collection tool was expanded with additional questions related to:

- self-perceived health status and health behaviour; and
- postponing medical care when it was needed.

In addition, the blocks of questions on assessing access to certain types of medical care were expanded with questions regarding:

- the form of medical care (outpatient/inpatient);
- the presence of cases when respondents could not receive the health-care services they needed; and

- the main reason for the inaccessibility of needed services.

In addition, the section related to health information was excluded in Round 2, as the responses to these questions do not change often enough to warrant collection every three months. These questions will be included in the next rounds.

## 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.

Round 1 of the assessment was conducted on 9–14 September 2022. Round 2 fieldwork was conducted on 5–17 December 2022.

In Round 2 a total of 68 interviewers were initially recruited. All the interviewers had completed at least secondary-level education; roughly 88% were female. All the interviewers had no less than six months' experience conducting telephone interviews. Short trainings for the interviewers were conducted. The average interview duration was about 16 minutes. The field force size was 68 interviewers and three supervisors (audio control checkers), one coach and one field manager. Each supervisor performed daily monitoring of the appearance on phone lines, start and end times of interviews, and conducted daily selective listening to

*Damaged interior room in the Makariv District Hospital, Ukraine, 07 May 2022.*

© WHO / Andrei Krepkih

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. In terms of regional distribution, weighting was based on the parameter "Where did you live before 24 February 2022?" This approach helps to assess the internal movement of the people of Ukraine and obtain an estimated picture of the current population structure based on the parameter "Where do you live now?"

Within weighting, various weighting scenarios have been examined:

- according to statistics as of the end of 2021
- Oxford University population estimates as of 15 September 2022
- without weighting.

The results for different weighting scenarios showed no significant differences. Accordingly, the decision was made to keep the weighting based on statistical data as this ensures representative estimate data of the current population structure each round.

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 Country Office in Ukraine in .csv and .sav format. All files are stored on password-protected computers. Only WHO Country Office in Ukraine research team members have access to the raw data. Study findings and data collected as part of this project belong to WHO Country Office in Ukraine. 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 analyzed 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 (microregion and displacement status).

In this report, the analysis by target audience focuses on two groups – according to region of residence and affiliation with people who have been internally displaced or people who have remained in their home communities.

Compared to Round 1, Round 2 changed the approach to combining regions for analysis. For regional analysis, regions were consolidated into three macroregions in accordance with government regulations (Order No. 309 of the Ministry for Reintegration of the Temporarily Occupied Territories of 22 December 2022).

Other target groups (by type of settlement, age, sex, and income level) are also important for assessing health needs. However, to maximize the focus on the impact of the war on Ukraine's health-care system, this report is limited to an analysis of these two groups. A detailed analysis broken down by type of settlement, age, sex and income level is provided in the Round 1 report.

## 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 on the basis of 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 to health care, and experiences related to health. 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 as 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 participants 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.

Participant surveys are assigned a unique code that cannot be linked to individuals.

Participants receive the contact information of a relevant WHO Country Office in Ukraine 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 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 4001 respondents were interviewed during Round 2. Their geographical and gender distribution is consistent with national statistical information, with 67% living in urban areas and 33% living in rural areas, and with 45% of males and 55% of females.

The household composition data show that 39% of the respondents are living with children under 18 years. Thirty one 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 3%. The average number of household members was three.

| 18–29 y.o. | 30–39 y.o. | 40–49 y.o. | 50–59 y.o. | 60+ y.o. |
|---|---|---|---|---|
| 16% | 22% | 17% | 18% | 28% |

| ♀ | ♂ |
|---|---|
| 55% | 45% |



The survey reached respondents from most oblasts, except those in the Luhansk oblast. In Round 2 of the data collection, respondents from the Kherson oblast were reached (Fig. 1.1, Fig. 1.2).

Fig. 1.1. Respondents by oblast, N=4001

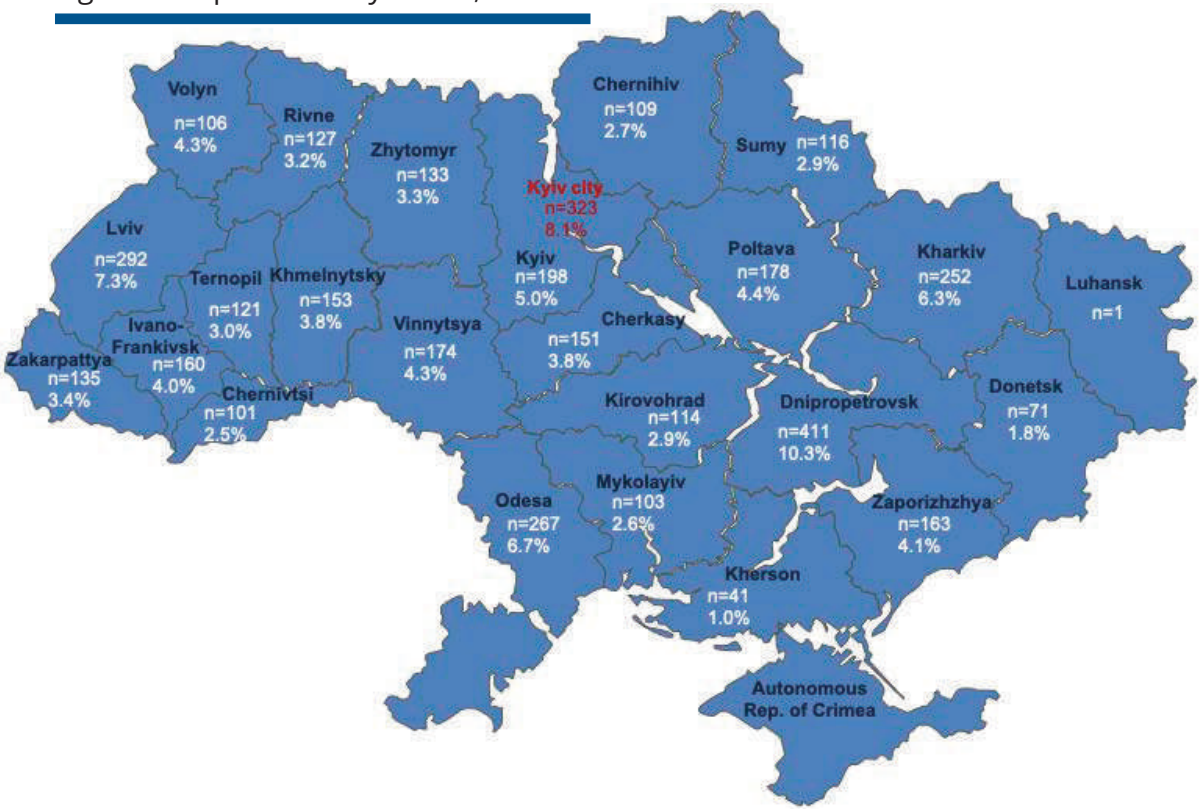
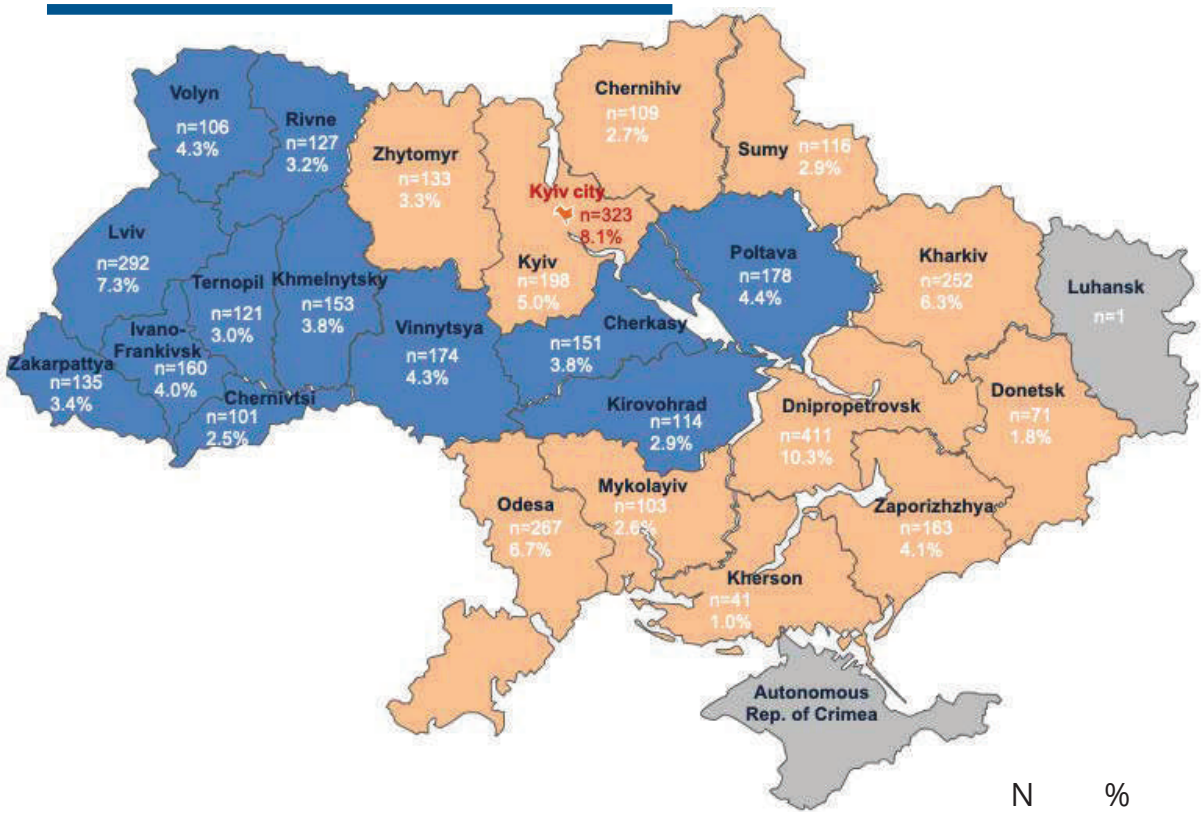



Fig. 1.2. Respondents by oblast status, N=4001




| | | N | % |
|---|---|---|---|
| | Areas that are experiencing or have experienced hostilities (in accordance with Order No. 309 of the Ministry for Reintegration of the Temporarily Occupied Territories of 22 December 2022: Dnipropetrovsk, Donetsk, Zhytomyr, Zaporizhzhya, Kyiv, Luhansk, Mykolayiv, Odesa, Sumy, Kharkiv, Kherson, Chernihiv) | 1865 | 45% |
| | City of Kyiv | 323 | 8% |
| | Rest of the country | 1813 | 44% |

With the constant migration of Ukrainians within and outside Ukraine, in Round 2, 74% of the respondents did not leave their permanent place of residence after 24 February 2022, 23% moved within the country, and 4% went abroad.

At the time of the interviews (December 2022) an additional question about the moving experience in the last three months was asked. According to the results, 88% did not leave their permanent place of residence, 11% moved back to Ukraine and 1% lived abroad.

If we compare the results of Round 1 and Round 2, the number of people who have been internally displaced has decreased (Table 1.1).

Table 1.1. Share of people who have been internally displaced

| | R1 | R2 |
|---|---|---|
| Live in the same place | 82.1% | 83.7% |
| Moved after 24 February 2022 | 17.9% | 16.3% |

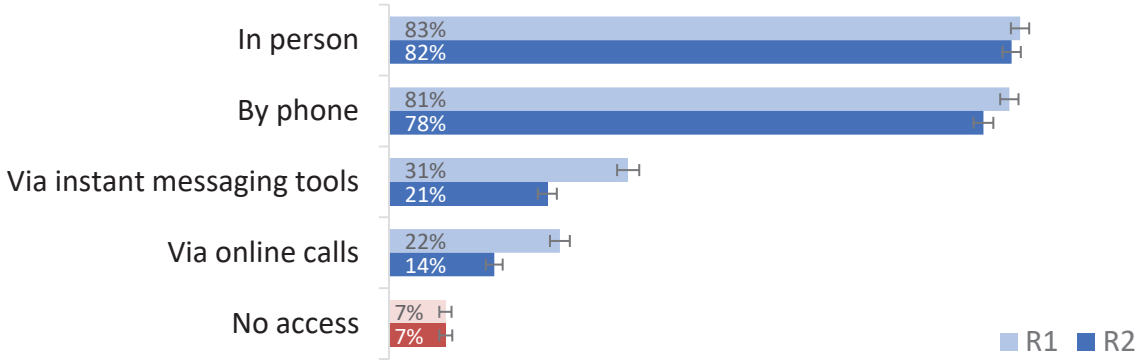
© WHO

# SECTION 2.
# ACCESS TO A FAMILY DOCTOR

In general, no significant changes (91% for Round 1 and 93% for Round 2) were found in the level of awareness of primary health-care facility location. At the same time, the level of awareness about the functioning of primary health-care facilities also did not change significantly and remained high (95% for Round 1 and 94% for Round 2).

However, the changes in the ways to access a family doctor: by phone (81% for Round 1 and 78% for Round 2), via instant messaging tools (31% for Round 1 and 21% for Round 2) and via online calls (22% for Round 1 and 14% for Round 2) were significantly lower than in the previous round (Fig. 2.1).

Fig. 2.1. Access to a family doctor (R1: N=4000, R2: N=4001)



Increased awareness of primary health-care facility location was reported in Round 2 in all areas. However, the functionality of primary health-care facilities is significantly lower in the city of Kyiv and areas that are experiencing or have experienced hostilities than in other regions in Ukraine. Access to family doctors also shows a decreasing trend of those who cannot access a family doctor in the city of Kyiv and areas that are experiencing or have experienced hostilities, but it is still significantly higher than in other regions (Table 2.1).

Table 2.1. Access to a family doctor by area

| | | Know the location of a primary health-care facility | Primary health-care facility is currently functioning | Cannot access a family doctor |
|---|---|---|---|---|
| Areas of active hostilities | R1 | 89% | 93% | 10% |
| | R2 | 91% | 92% | 9% |
| City of Kyiv | R1 | 84% | 89% | 14% |
| | R2 | 87% | 88% | 11% |
| Rest of the country | R1 | 93% | 97% | 4% |
| | R2 | 95% | 97% | 5% |

People who have been internally displaced have a significantly lower level of access to primary health-care facilities and family doctors than people who have remained in their home communities – 21% of those who have been internally displaced cannot access a family doctor, compared to 5% for people who have remained in their home communities. No significant changes were identified between the rounds of the survey (Table 2.2).

Table 2.2. Access to a family doctor by displacement status

| | | Know the location of a primary health-care facility | Primary health-care facility is currently functioning | Cannot access a family doctor |
|---|---|---|---|---|
| Displaced people | R1 | 83% | 94% | 20% |
| | R2 | 81% | 92% | 21% |
| People in their home communities | R1 | 92% | 95% | 5% |
| | R2 | 95% | 94% | 5% |

© WHO / Anne Pellichero

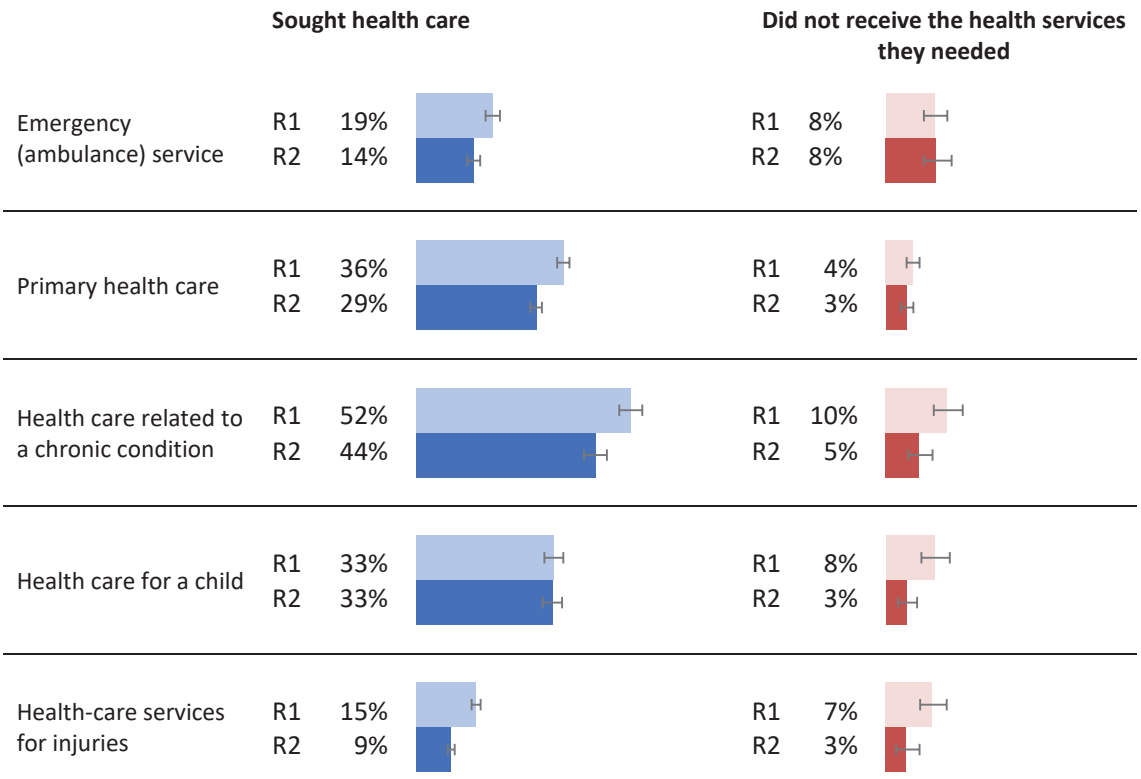
# SECTION 3. ACCESS TO HEALTH-CARE SERVICES

## CHANGES IN HEALTH-CARE ACCESS

In terms of seeking health care, the decrease in indicators is mostly within all types of health care, with the exception of health care for children, as observed in both Round 1 and Round 2 (Fig. 3.1). This decrease is likely related to the shortening of the evaluation period from six to three months.

Access to health care has generally improved for the following services: health care related to chronic conditions, health care for children and health care for injuries. No changes in access to emergency service and primary health care were observed.

Fig. 3.1. Dynamics of health-care access



## PRIMARY HEALTH CARE

Within Round 2, 29% of all respondents sought primary health-care services in the last three months (Fig. 3.2).

Of those who sought primary care, 66% reported that they faced at least one problem when accessing (Fig. 3.3).

Eight percent of the respondents reported that they have experienced situations where they could not receive the primary health-care services they needed. Some of them continued to seek those services and were successful. However, 3% of those who sought primary care did not receive any services at all.

Fig. 3.2. Share of those who sought primary health care, R2, N=4001

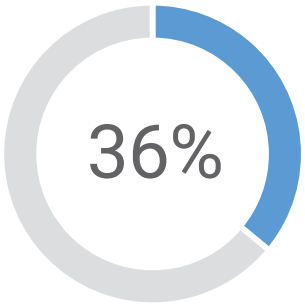
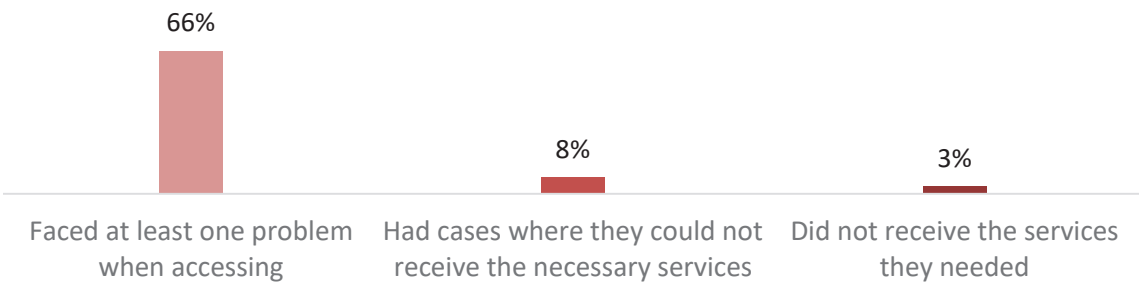



Fig. 3.3. Access to primary health care, R2, N=1170




The main problem the respondents faced was cost of medicines, cited by almost half of them (Fig. 3.4). Next in terms of relevance were problems related to cost of treatment, time and transport. Unofficial payments were reported as a problem by every tenth respondent.

The main barriers that led to not receiving services differ from problems faced by the respondents. The main barrier to accessibility of primary health care is that in some cases the services or health professionals needed were not available – a quarter of those who did not obtain the services pointed to the following problems (Fig. 3.5).

Fig. 3.4. Problems when seeking primary health-care services, R2, N=1170

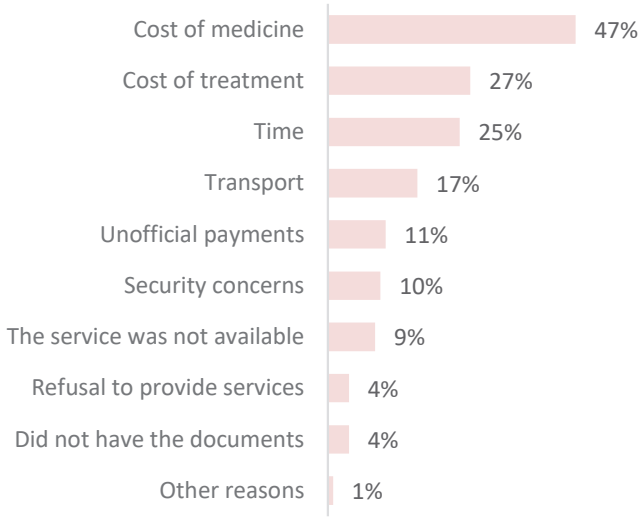
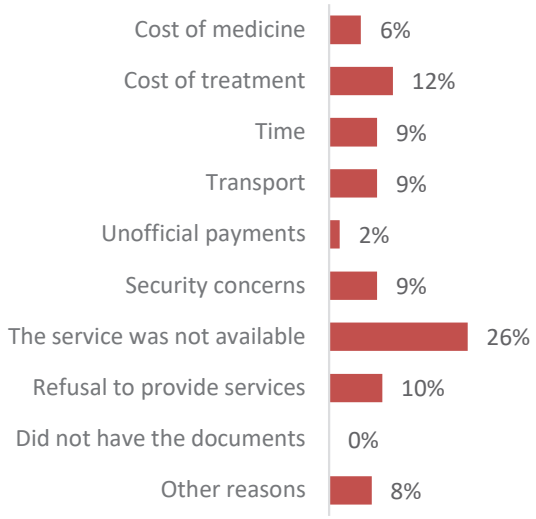



Fig. 3.5. Main barriers that led to inaccessibility of primary care, R2, N=88




No significant differences in terms of access to primary health care were observed among people who have been internally displaced.

Within regions, in areas that are experiencing or have experienced hostilities, fewer respondents sought primary health-care services and a higher share of them faced different problems than in the rest of Ukraine (Table 3.1).

Table 3.1. Access to primary health care by region

| | | Sought health care | Faced at least one problem when accessing | Had cases where they could not receive the necessary services | Did not receive the health services they needed |
|---|---|---|---|---|---|
| Areas of active hostilities | R1 | 33% | - | - | 5% |
| | R2 | 26% | 70% | 8% | 4% |
| City of Kyiv | R1 | 41% | - | - | 5% |
| | R2 | 28% | 62% | 10% | 4% |
| Rest of the country | R1 | 38% | - | - | 4% |
| | R2 | 33% | 62% | 7% | 3% |

## HEALTH CARE FOR CHRONIC CONDITIONS

In general, as in Round 1, in Round 2 30% of all respondents reported having chronic conditions (or living with people with chronic conditions).

Of those, forty-four percent sought the relevant health care for their condition in the last three months (Fig. 3.6). This care was mostly related to cardiovascular diseases – 58% of those who have a chronic condition suffered from cardiovascular disease (Fig. 3.7). A quarter reported having diabetes.

In most cases, care was provided on an outpatient basis (79%), at home, but 30% received inpatient care.

Fig. 3.6. Share of those who sought care for a chronic condition, R2, N=1195

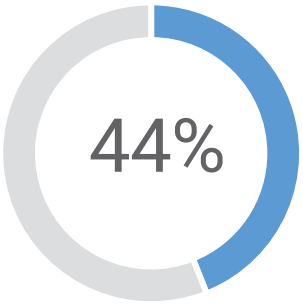
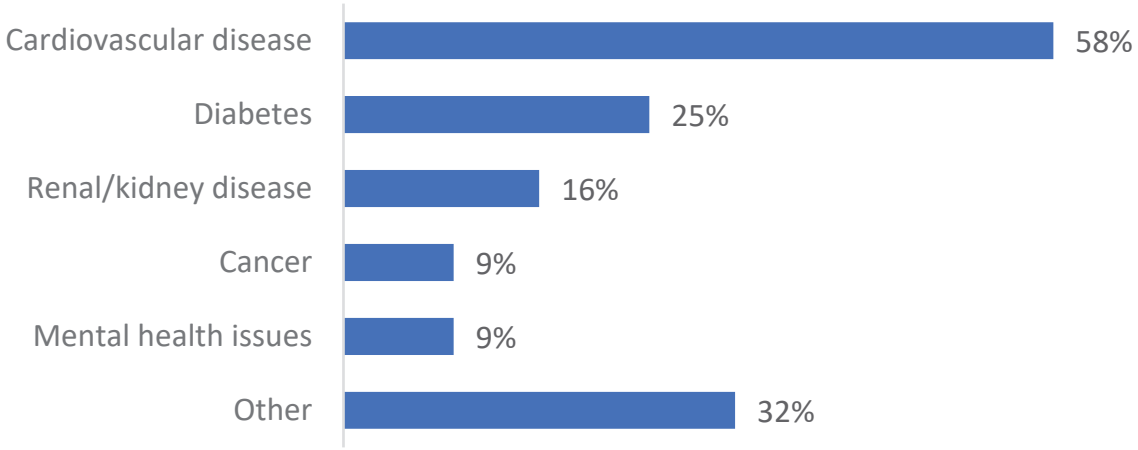



Fig. 3.7. Chronic conditions reported by respondents and/or members of their household, R2, N=521




Three quarters of those who sought care for a chronic condition faced at least one problem (Fig. 3.8), the main one being cost of medicines, cited by 59% of the respondents (Fig. 3.9). Other major barriers are cost of treatment, time and transport.

Ten percent were not able to receive health services for their chronic condition. Five percent were unable to receive any services at all. The main barrier in access to health care was unavailability of the services needed, as stated by a quarter of those who have experienced lack of access to services (Fig. 3.10).

Fig. 3.8. Access to health care related to a chronic condition, R2, N=521

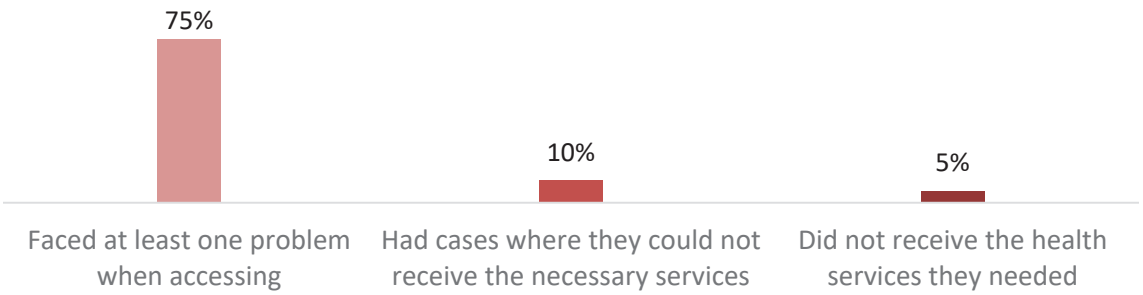



Fig. 3.9. Problems when seeking health care related to a chronic condition, R2, N=521

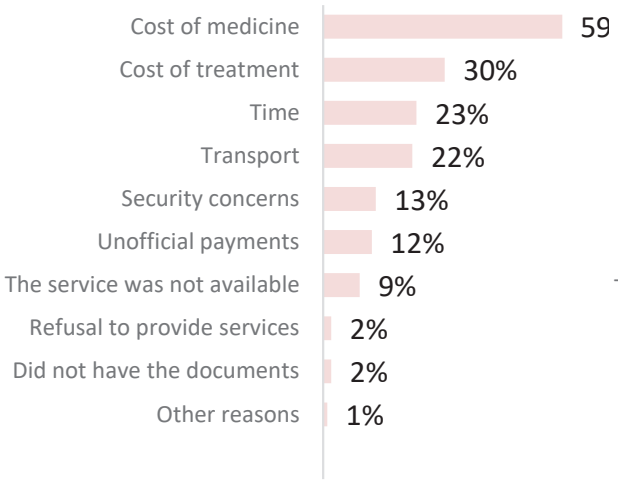
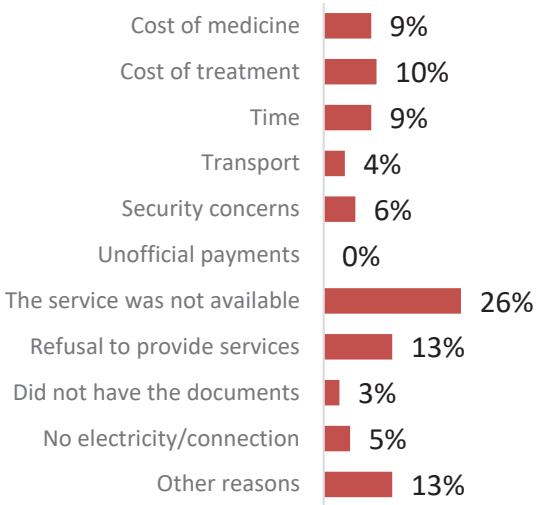



Fig. 3.10. Main barriers that led to inaccessibility of health care related to a chronic condition, R2, N=54



No significant differences within target groups were observed in Round 2. In addition, in Round 1, people from areas that are experiencing or have experienced hostilities were less likely to seek care than people in other regions. In Round 2 no significant differences between the regions were observed (Table 3.2).

Table 3.2. Access to health care related to a chronic condition

| | | Sought health care | Faced at least one problem when accessing | Had cases where they could not receive the necessary services | Did not receive the health services they needed |
|---|---|---|---|---|---|
| Areas of active hostilities | R1 | 47% | - | - | 9% |
| | R2 | 42% | 75% | 14% | 7% |
| City of Kyiv | R1 | 56% | - | - | 6% |
| | R2 | 44% | 73% | 10% | 5% |
| Rest of the country | R1 | 57% | - | - | 11% |
| | R2 | 45% | 75% | 6% | 4% |

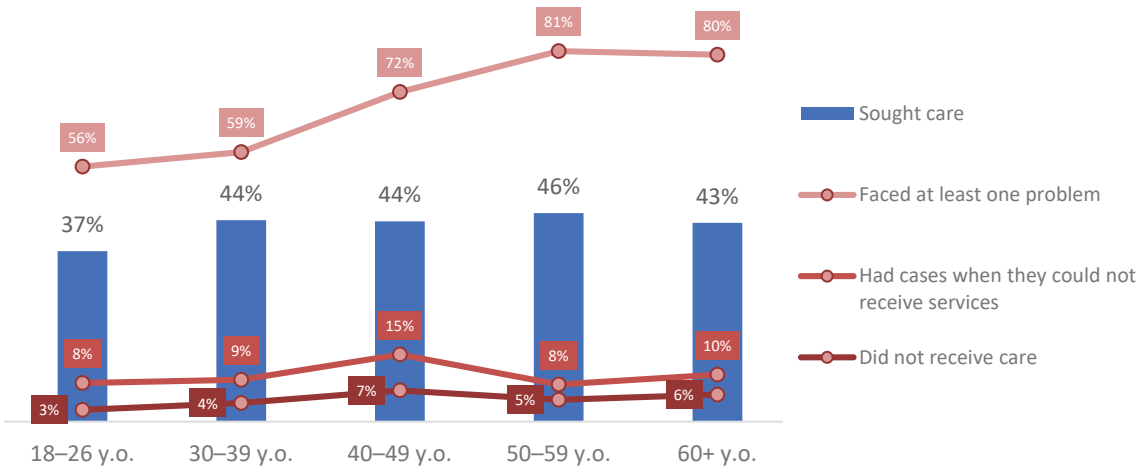
The proportion of people with chronic diseases increases with age – from 13% among people aged 18–29 years to 47% among those aged 60 years and older (Table 3.3).

Table 3.3. Share of respondents with chronic conditions by age, R2

| | 18–26 y.o. | 30–39 y.o. | 40–49 y.o. | 50–59 y.o. | 60+ y.o. |
|---|---|---|---|---|---|
| People with chronic conditions live in the household | 13% | 17% | 29% | 34% | 47% |

In terms of access to care for chronic diseases, in Round 2, younger respondents (under 39 years) were less likely to face problems (at least one) in seeking care than older respondents (over 50 years) (Fig. 3.11). No significant differences were observed for other access indicators.

Fig. 3.11. Access to health care related to a chronic condition by age, R2




## EMERGENCY (AMBULANCE) SERVICE

In total, 15% of the respondents needed emergency medical assistance (ambulance services) in the last three months (Fig. 3.12).

Sixty percent of those who sought emergency health care received it on an outpatient basis. In addition, 45% received inpatient services.

One in ten people seeking services faced inaccessibility of the services. Eight percent did not receive the services they needed at all (Fig. 3.13).

Unlike other types of medical care, the main barrier in the inaccessibility of services is refusal to provide services – 57% of those who had cases where they could not receive the services reported this issue (Fig. 3.14). Often, this meant that ambulances did not respond to the call, but, for example, provided consultations over the phone instead.

Fig. 3.12. Share of those who sought emergency medical services, R2, N=4001

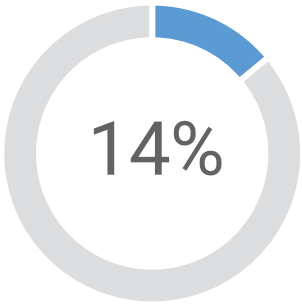
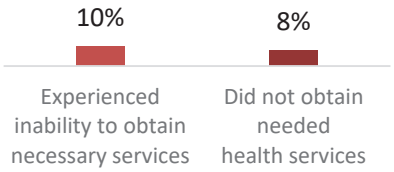


Fig. 3.13. Access to emergency medical services, R2, N=560



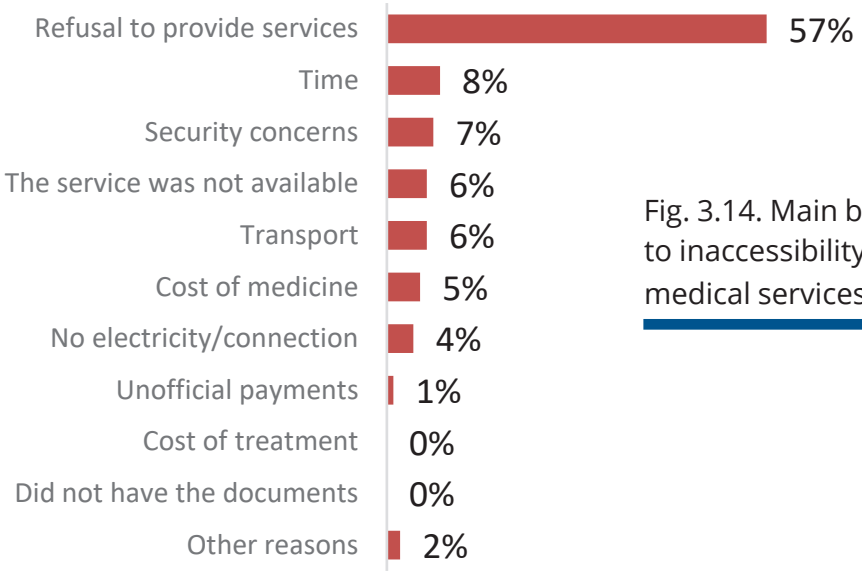
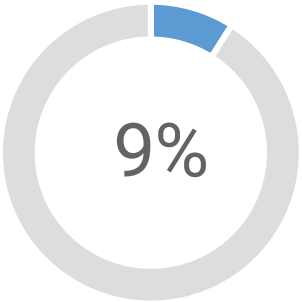




Fig. 3.14. Main barriers that led to inaccessibility of emergency medical services, R2, N=58

## HEALTH-CARE SERVICES FOR INJURIES

Fig. 3.15. Share of those who sought health-care services for injuries, R2, N=4001




In general, in the last three months, one in ten respondents reported having sought medical care for injuries (Fig. 3.15).

Most of these cases (76%) were treated on an outpatient basis.

More than half of those who sought care (59%) reported that they faced at least one barrier when seeking care (Fig. 3.16).

While the main problems are cost of medicines, time and transport, for this type of health

care the problem of unofficial payments is quite pronounced, with 16% of respondents reporting it (Fig. 3.17).

Seven percent of those who sought care have experienced lack of access to the services they needed. Three percent did not receive services at all.

The main barrier to access to health services for injuries is unavailability of services or health professionals – as cited by 29% of those who have faced lack of access to this type of health care (Fig. 3.18).

Fig. 3.16. Access to health-care services for injuries, R2, N=341

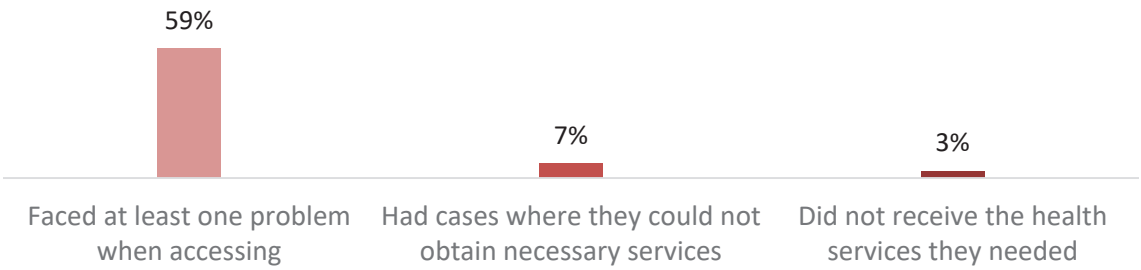



Fig. 3.17. Problems when seeking health-care services for injuries, R2, N=341

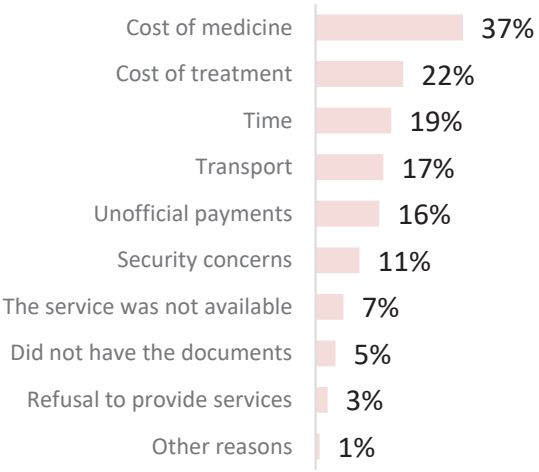
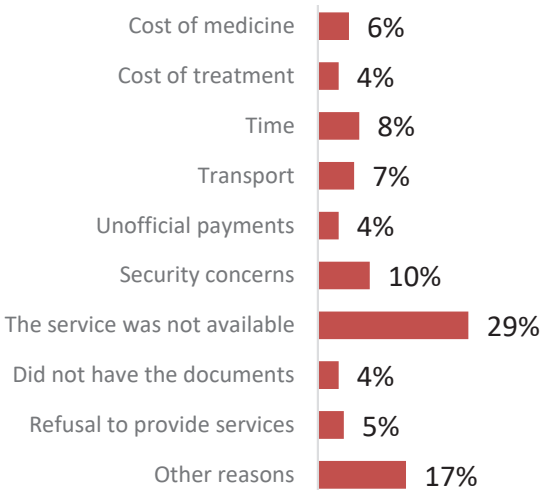



Fig. 3.18. Main barriers that led to inaccessibility of health-care services for injuries, R2, N=23



Within target groups in Round 1, people who have been internally displaced are more likely to seek health care for injuries than people who have remained in their home communities. And in Round 2 there are no statistically significant differences between these groups (Table 3.3).

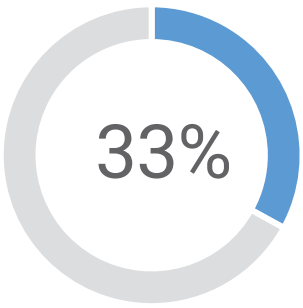
No differences were observed within regions.

Table 3.3. Access to health-care services for injuries

| | | Sought health care | Faced at least one problem when accessing | Had cases where they could not receive the necessary services | Did not receive the health services they needed |
|---|---|---|---|---|---|
| Displaced people | R1 | 17% | - | - | 4% |
| | R2 | 8% | 67% | 9% | 1% |
| People in their home communities | R1 | 14% | - | - | 8% |
| | R2 | 9% | 58% | 6% | 4% |

## HEALTH CARE FOR A CHILD

Fig. 3.19. Share of those who sought health care for a child, R2, N=1558




In the past three months, one third (33%) of the respondents who have a child sought medical care for their child (Fig. 3.19). The vast majority of them (85%) received these services on an outpatient basis.

Slightly more than half (52%) faced various difficulties (Fig. 3.20), key among them being the cost of medicines, time needed to get to the services, cost of treatment and transport (Fig. 3.21).

Five percent of those who sought health care for a child reported having been unable to

receive the services they needed. The main barriers were cost of treatment and inaccessibility of the services (Fig. 3.22).

Three percent of the respondents who sought health care for a child did not receive care at all.

Fig. 3.20. Access to health care for a child, R2, N=515

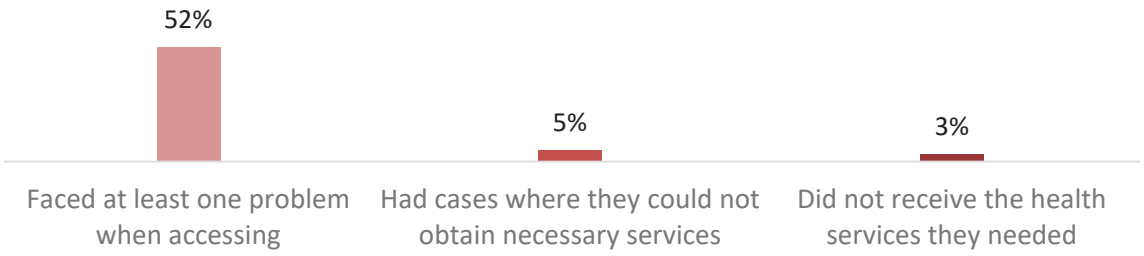



Fig. 3.21. Problems when seeking health care for a child, R2, N=515

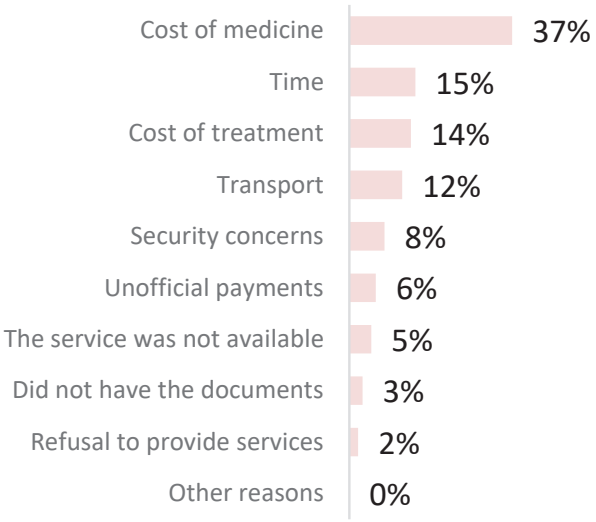
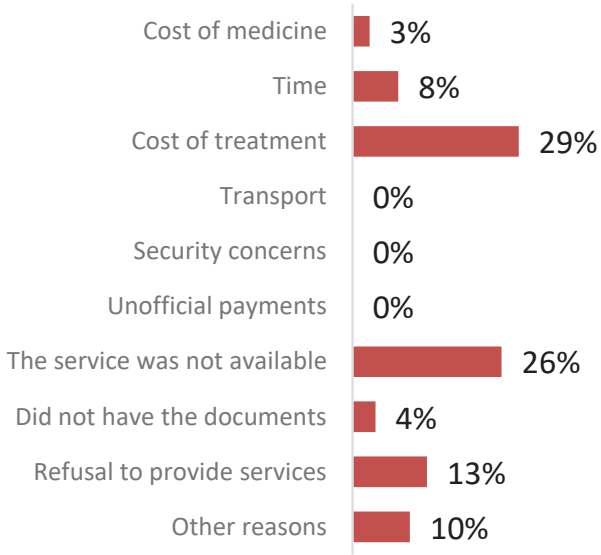



Fig. 3.22. Main barriers that led to inaccessibility of health care for a child, R2, N=27



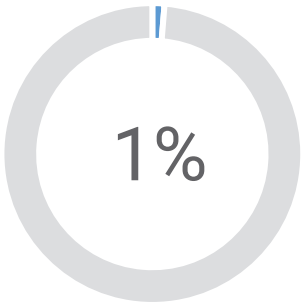
In Round 2 within territories that are experiencing or have experienced hostilities, a lower share of respondents reported that they had attempted to receive health services for a child, compared to the rest of Ukraine (Table 3.4).

Table 3.4. Access to health care for a child

| | | Sought health care | Faced at least one problem when accessing | Had cases where they could not receive the necessary services | Did not receive the health services they needed |
|---|---|---|---|---|---|
| Areas of active hostilities | R1 | 31% | - | - | 9% |
| | R2 | 26% | 60% | 7% | 3% |
| City of Kyiv | R1 | 32% | - | - | 2% |
| | R2 | 32% | 53% | 0% | 0% |
| Rest of the country | R1 | 36% | - | - | 8% |
| | R2 | 39% | 48% | 5% | 4% |

## PREGNANCY HEALTH-CARE SERVICES

Fig. 3.23. Share of those who sought pregnancy health-care services, R2, N=4001

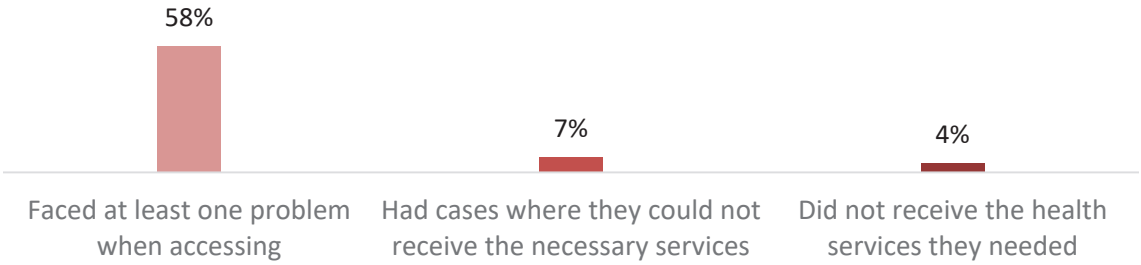



In Round 2, in the last three months, one percent of all respondents sought health services related to pregnancy (Fig. 3.23). Of those, fifty-six percent received these services on an outpatient basis, at home, while 45% received inpatient care.

More than half of those who sought pregnancy health-care services (58%) faced certain problems when receiving care (Fig. 3.24), key among them being cost of medicines and treatment, security concerns and transport.

Seven percent of those who sought care experienced situations where they were unable to receive services, while 4% did not receive them at all.

Fig. 3.24. Access to pregnancy health-care services, R2, N=51



# SECTION 4. ACCESS TO MEDICINES

Significant improvement in access to medicines was reported in Round 2 of the survey. Eleven percent of respondents could not obtain the necessary medicines, compared to 22% in Round 1. However, no differences between rounds were reported and the most needed among them were blood pressure (37%), heart (36%), and pain (34%) medications (Table 4.1).

Table 4.1. Main types of difficult-to-find medicines (R1: N=875, R2: N=422)

| | R1 | R2 |
|---|---|---|
| High blood pressure | 50% | 37% |
| Heart | 49% | 36% |
| Pain | 41% | 34% |
| Antibiotics | 32% | 28% |
| Sedative drugs | 33% | 19% |
| Mental health | 10% | 10% |
| Lung | 10% | 10% |
| Diabetes | 17% | 8% |
| Antiseptics | 17% | 7% |
| Fever | 15% | 6% |
| Birth control | 3% | 2% |
| Other | 15% | 22% |

Within target groups in Round 1, people who have been displaced had more difficulty obtaining medicines than people who have remained in their home communities, but in Round 2 there is no difference between these groups.

In terms of region, respondents from areas that are experiencing or have experienced hostilities have a significantly lower level of access to medicines than other regions. A significant improvement in access to medicines for diabetes, fever and antiseptics was reported for all areas. However, access to lung and mental health medicines decreased for areas experiencing hostilities (Table 4.2).

Table 4.2. Main types of difficult-to-find medicines by area

| | Areas of active hostilities | | City of Kyiv | | Rest of the country | |
|---|---|---|---|---|---|---|
| | **R1** | **R2** | **R1** | **R2** | **R1** | **R2** |
| Antibiotics | 32% | 30% | 29% | 22% | 34% | 25% |
| Antiseptics | 16% | 9% | 23% | 6% | 18% | 6% |
| Birth control | 2% | 1% | 7% | 0% | 3% | 4% |
| Diabetes | 17% | 8% | 19% | 9% | 16% | 9% |
| Fever | 18% | 8% | 19% | 11% | 9% | 3% |
| Heart | 53% | 39% | 43% | 22% | 43% | 35% |
| High blood pressure | 55% | 39% | 48% | 35% | 40% | 34% |
| Lung | 9% | 12% | 16% | 0% | 10% | 7% |
| Mental health | 8% | 12% | 10% | 7% | 12% | 8% |
| Sedative drugs | 35% | 19% | 33% | 26% | 29% | 17% |
| Pain | 42% | 32% | 46% | 43% | 35% | 35% |
| Other | 12% | 22% | 19% | 22% | 19% | 22% |

The relevance of all problems in obtaining medication decreased. However, it is worth noting that problems directly related to the war decreased dramatically – by a factor of 1.5–3 for barriers related to unavailability of medicines (46% in Round 1 and 26% in Round 2), closed pharmacies (27% in Round 1 and 17% in Round 2), long lines (45% in Round 1 and 14% in Round 2), and security concerns (16% in Round 1 and 9% in Round 2). This may indicate a certain stabilization and lessening of the crisis of the first months of the war that was observed in Round 1 of the survey.

The main problems in Round 2 results were still higher medicine prices (72%) and lack of money to buy medicines (29%) (Fig. 4.1). In Round 1 displaced people faced more problems with medicines than people who have remained in their home communities. But in Round 2 there is no difference between these groups (Fig. 4.2, Fig. 4.3).

Fig. 4.1. Main problems in obtaining medicines (R1: N=4000, R2: N=4001)

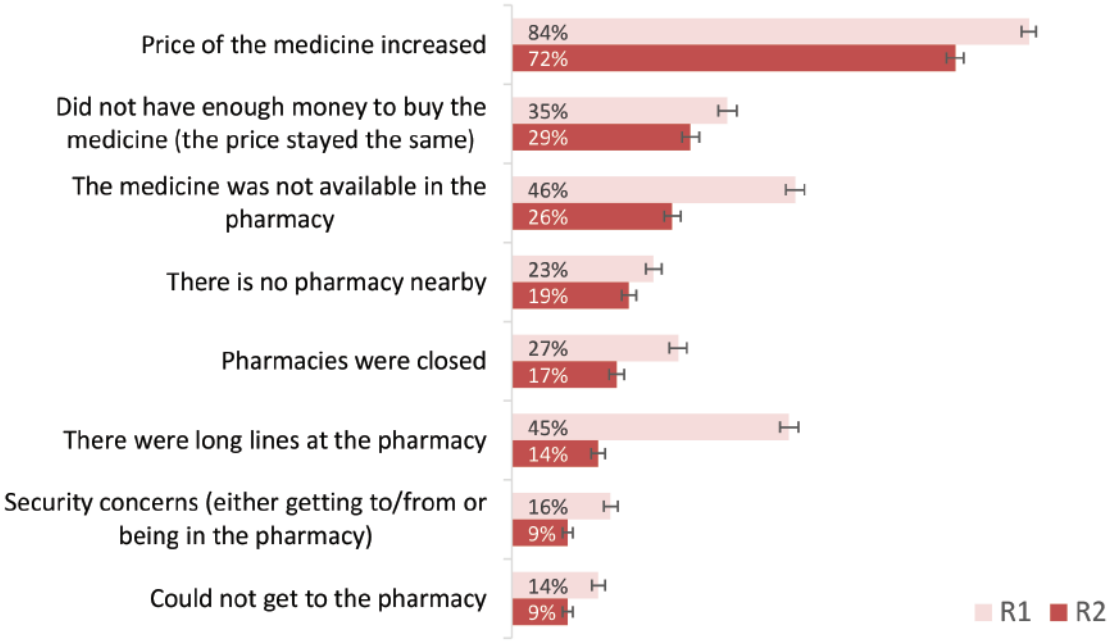



Fig. 4.2. Main problems in obtaining medicines among displaced people (R1: N=716, R2: N=650)

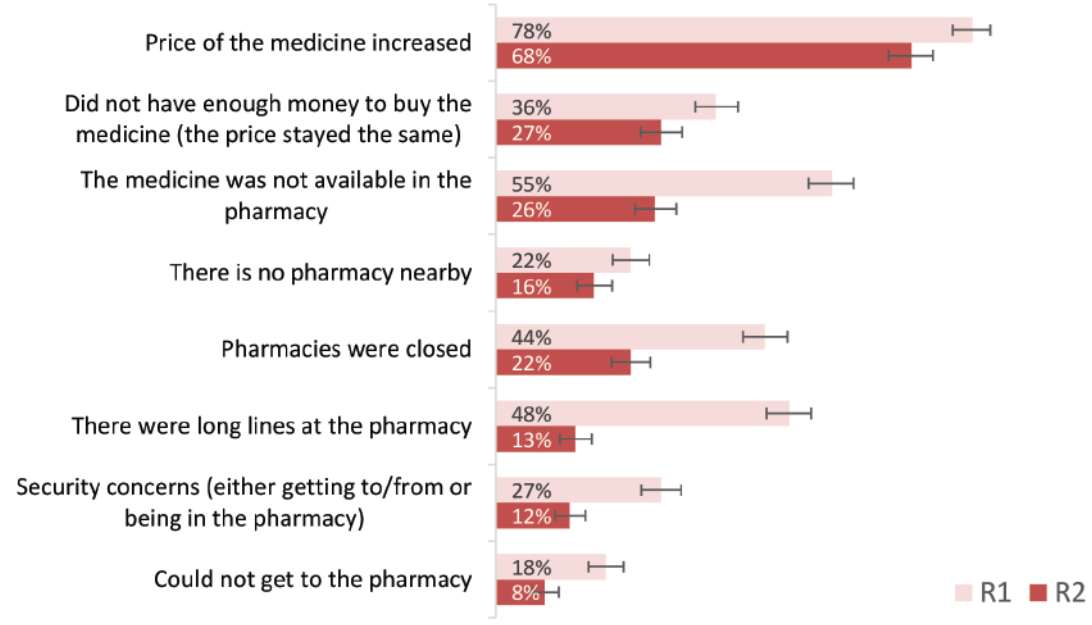
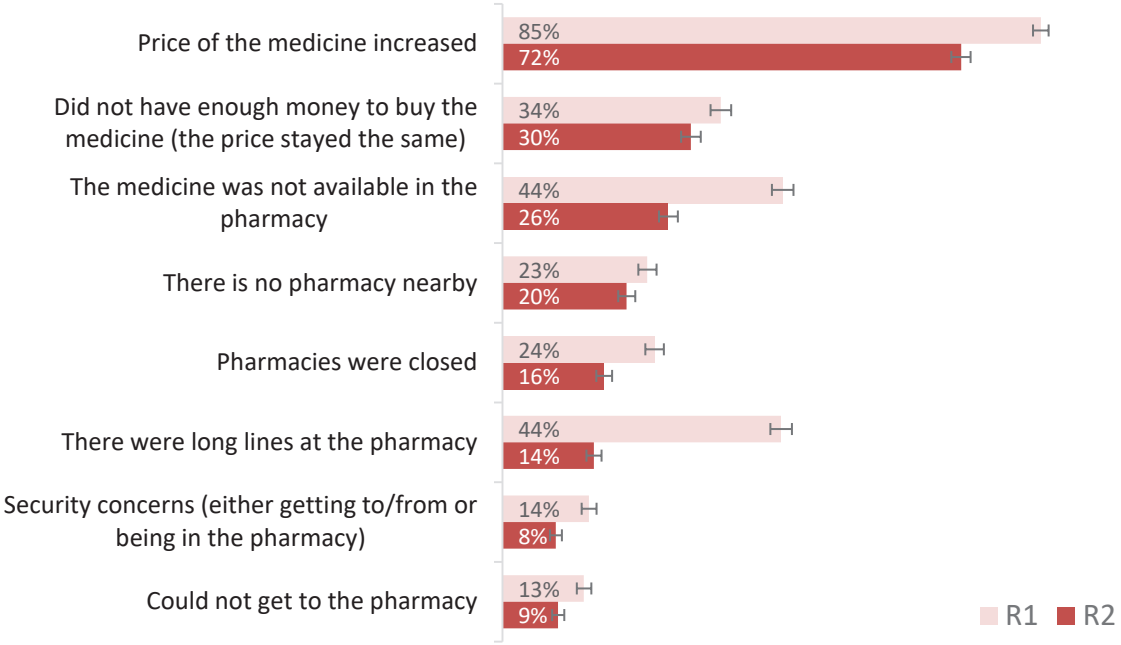


Fig. 4.3. Main problems in obtaining medicines among people who have remained in their home communities (R1: N=3284, R2: N=3351)



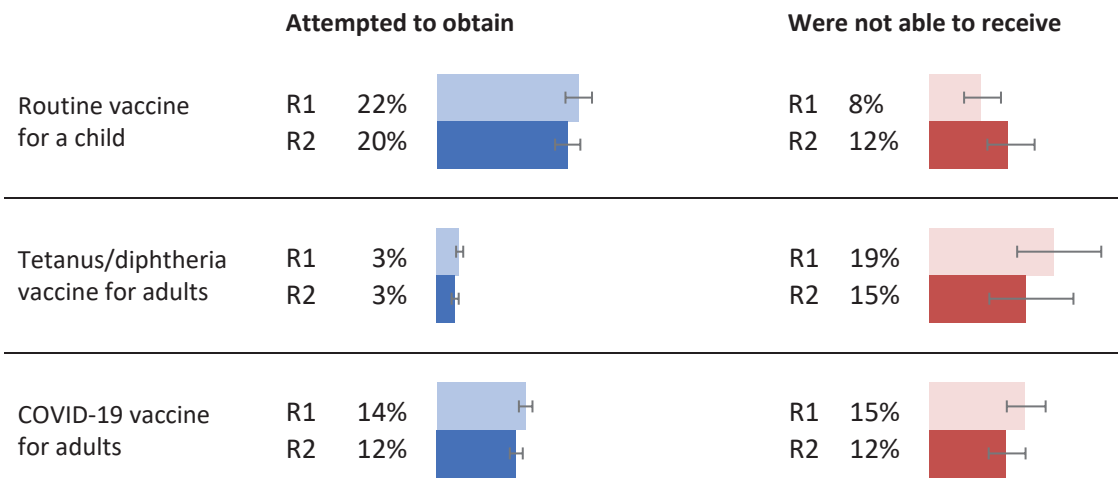

© WHO / Agata Grzybowska

# SECTION 5.
# ACCESS TO VACCINATION

In terms of access to vaccination no significant differences were observed between the rounds overall (Fig. 5.1). In Round 2 one fifth of the respondents who have a child reported attempting to obtain routine vaccinations for children in the past three months. Twelve percent of them were not able to obtain them.

In Round 2 three percent of all respondents attempted to access the tetanus/diphtheria vaccine for adults, and 15% of them did not receive it. The COVID-19 vaccine was sought by 12% of respondents, and 12% of them did not receive it.

Fig. 5.1. Changes in access to vaccination

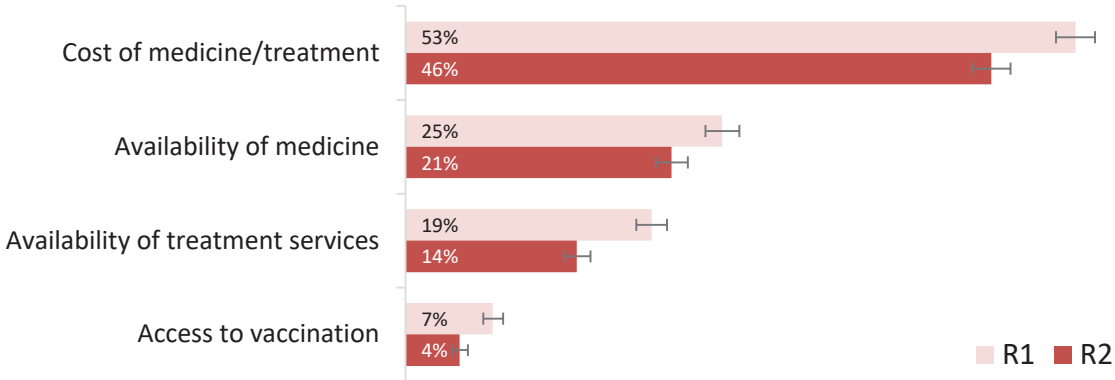


© WHO

# SECTION 6. MAIN PROBLEMS RELATED TO HEALTH

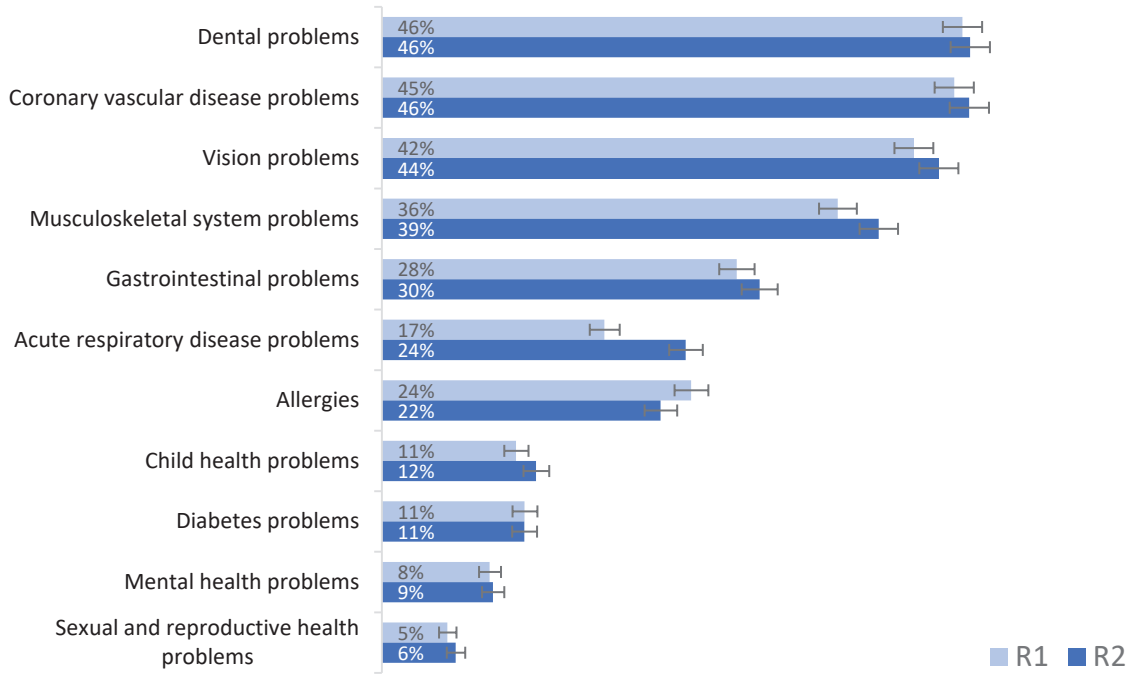
The main barrier to access to health services faced by the respondents' households remains the cost of medicines/treatments (53% in Round 1 and 46% in Round 2). However, according to the results of Round 2 of data collection, all structural problems related to the health system – cost of medicines/treatment, availability of medicines and treatment and access to vaccination – significantly decreased in importance (Fig. 6.1).

Fig. 6.1. Main structural problems with the health-care system related to health (R1: N=4000, R2: N=4001)




No significant changes were reported for personal problems related to particular diseases, except for acute respiratory disease, where an increase was identified, most likely due to seasonal changes (Fig. 6.2).

Fig. 6.2. Main personal health problems (R1: N=4000, R2: N=4001)




People who have been internally displaced were more likely to report problems related to availability of medicines (24%) and mental health (11%) than people who have remained in their home communities. However, coronary vascular disease problems (48%), acute respiratory disease problems (25%), vision problems (45%), and musculoskeletal system problems (40%) were more common for people who have remained in their home communities.

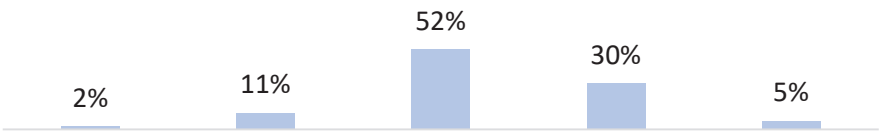
© WHO

# SECTION 7. SELF-PERCEIVED HEALTH STATUS AND HEALTH BEHAVIOUR

## SELF-PERCEIVED HEALTH STATUS

The question about self-assessment of health was added during data collection in Round 2. Overall, most of the respondents assessed their health as average (52%), with more than 30% assessing it as good and 5% as very good. Poor and very poor health was cited by 11% and 2%, respectively. Respondents from the city of Kyiv (38%) were more likely to assess their own health as good than respondents from other regions (28% in areas that are experiencing or have experienced hostilities and 30% in the rest of the country). No significant differences were reported between people who have remained in their home communities and people who have been internally displaced (Fig. 7.1).

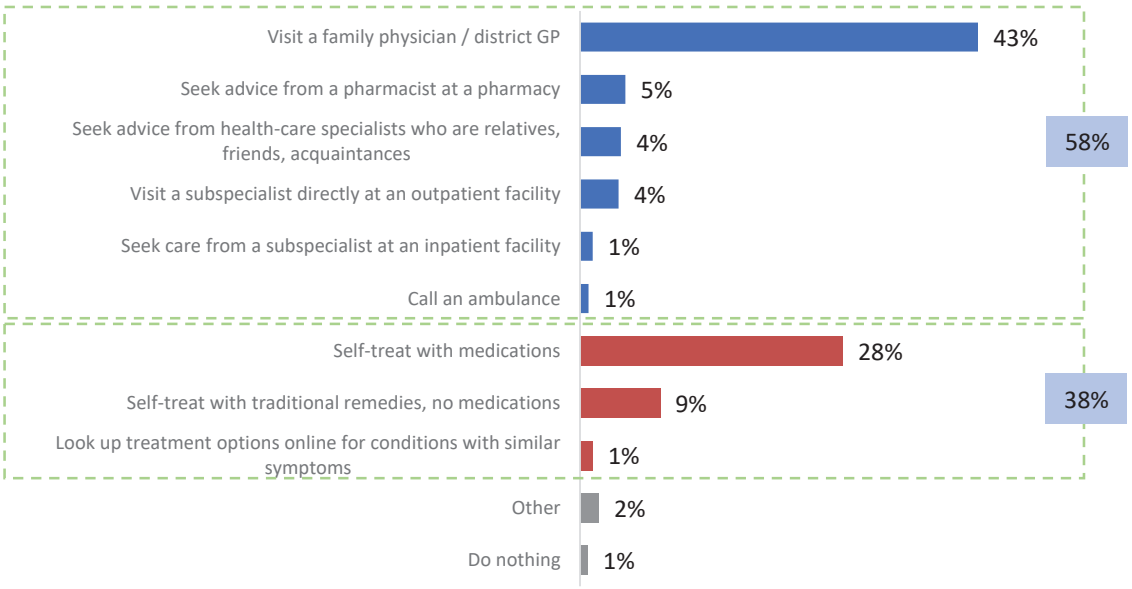
Fig. 7.1. Self-perceived health status, N=4001



## HEALTH BEHAVIOUR

A new question on behaviour in case of illness was also added. More than half of the respondents have attempted to receive some assistance from health-care providers, mostly from a family doctor. In addition, 38% engage in self-treatment (Fig. 7.2).

Fig. 7.2 Health behaviour when sick, N=4001



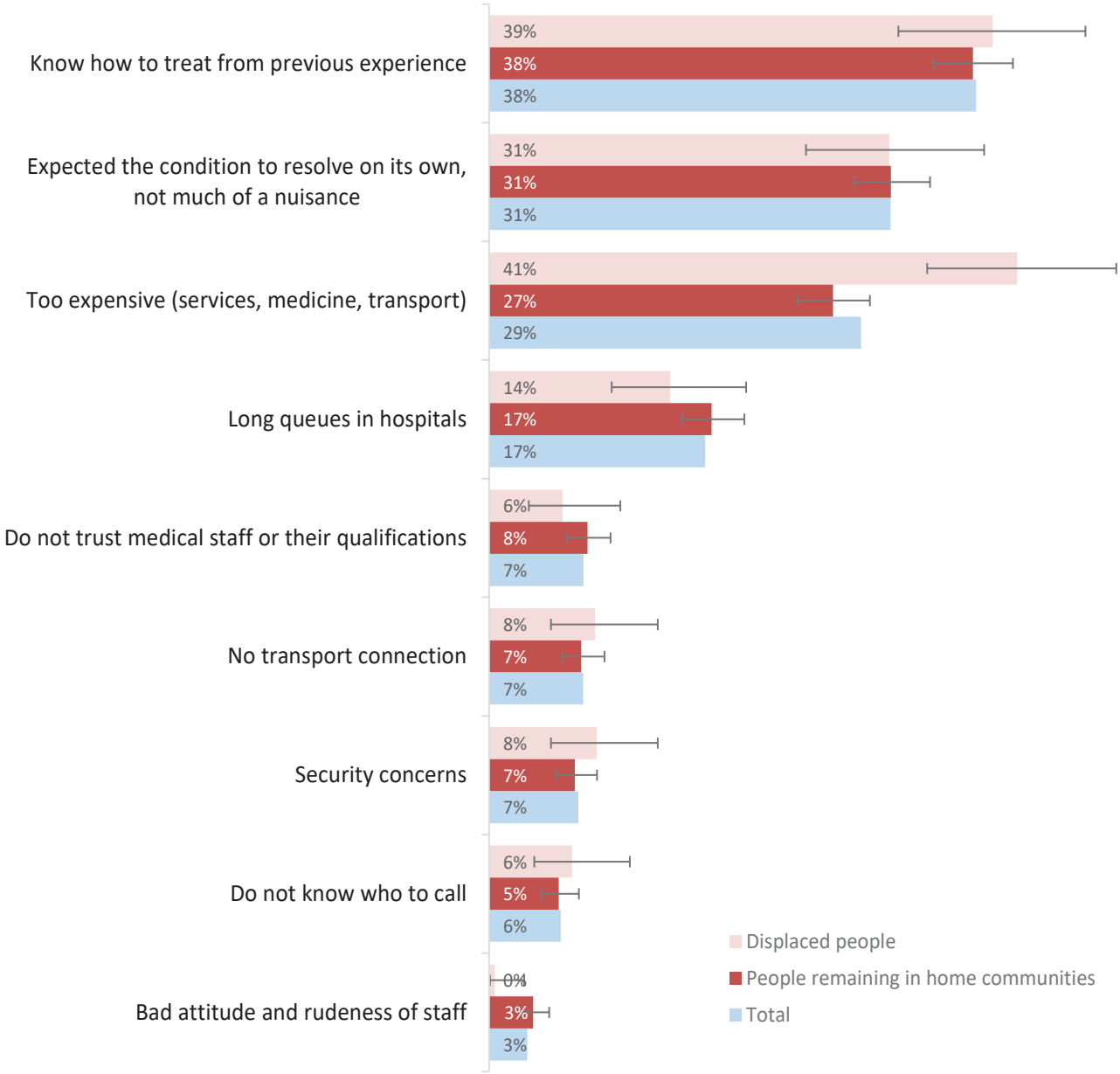

The differences by area of residence showed that respondents from the city of Kyiv were more likely to visit a subspecialist directly at an outpatient facility – 8% compared to 4% in areas that are experiencing or have experienced hostilities and other regions – and more likely to seek advice from health-care specialists who are relatives, friends, acquaintances – 7% compared to 4% in areas that are experiencing or have experienced hostilities and in other regions.

People who have been internally displaced were more likely to self-treat with medications than people who have remained in their home communities – 35% and 27%, respectively, and seek advice from a pharmacist – 8% and 4% for people who have remained in their home communities. At the same time, respondents who have remained in their home communities were more likely to visit family doctors – 45% compared to 31% for people who have been internally displaced.

Twenty-eight percent postponed medical care – in this respect no significant changes were observed by area or respondent status. For the majority (38%) the main reason for postponing medical care was knowledge about the treatment that was needed based on previous experience. However, for people who have been internally displaced the main reason for postponing medical care was high cost (services, medicines, and transport) – 41% (Fig. 7.3).

Analyses by area showed that the share of security concerns (11%) and transportation reasons (9%) was higher in areas that are experiencing or have experienced hostilities than in other regions.

Fig. 7.3. Reasons for postponing medical care



## MENTAL HEALTH

In general, 13% reported having people in their household who are too upset or worried to perform their usual daily activities. People who have been internally displaced had the highest proportion of those who are now too upset or anxious to go about their normal daily activities – 17% compared to 12% for people who have remained in their home communities. It is worth noting an increase in the share of respondents who experienced this in the city of Kyiv (9% for Round 1 and 13% for Round 2) (Table 7.1).

Table 7.1. Too upset or worried to do their usual daily activities by status and area

| | | Displaced people | People remaining in their home communities | Areas that are experiencing or have experienced hostilities | City of Kyiv | Rest of the country |
|---|---|---|---|---|---|---|
| Is anyone in your household currently too upset or worried to do their usual daily activities? | R1 | 16% | 13% | 14% | 9% | 15% |
| | R2 | 17% | 12% | 13% | 13% | 14% |

© WHO

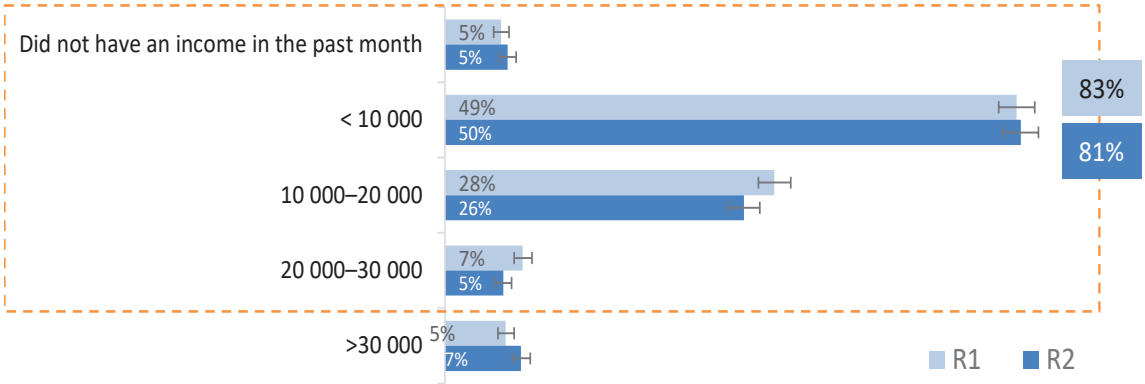
# SECTION 8. MEDICAL EXPENSES

## INCOME

In terms of income, no significant differences between the rounds were observed. Most respondents (more than 80%) continue to have a monthly income below 20 000 hryvnias, which is approximately US$ 500 (Fig. 8.1).

The respondents' income varied across different areas, with higher incomes reported in the city of Kyiv, while for more than half (53%) of the respondents in areas that are experiencing or have experienced hostilities the level of income was below 10 000 hryvnias.

Fig. 8.1. Monthly household income (R1: N=4000, R2: N=4001)

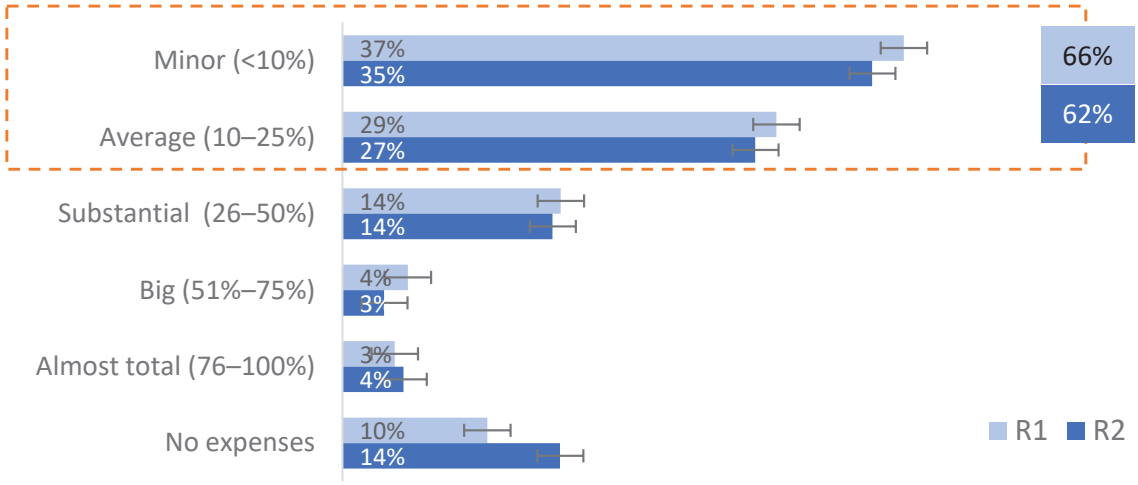


## HOUSEHOLD EXPENDITURE ON HEALTH-CARE SERVICES AND MEDICINES

For most of the respondents (62% for Round 2), household medical expenses accounted for less than a quarter of their income (Fig. 8.2). In Round 2 the share of those who have no medical expenses increased from 10% to 14%.

No significant differences were reported in health-care expenditure by area or displacement status.

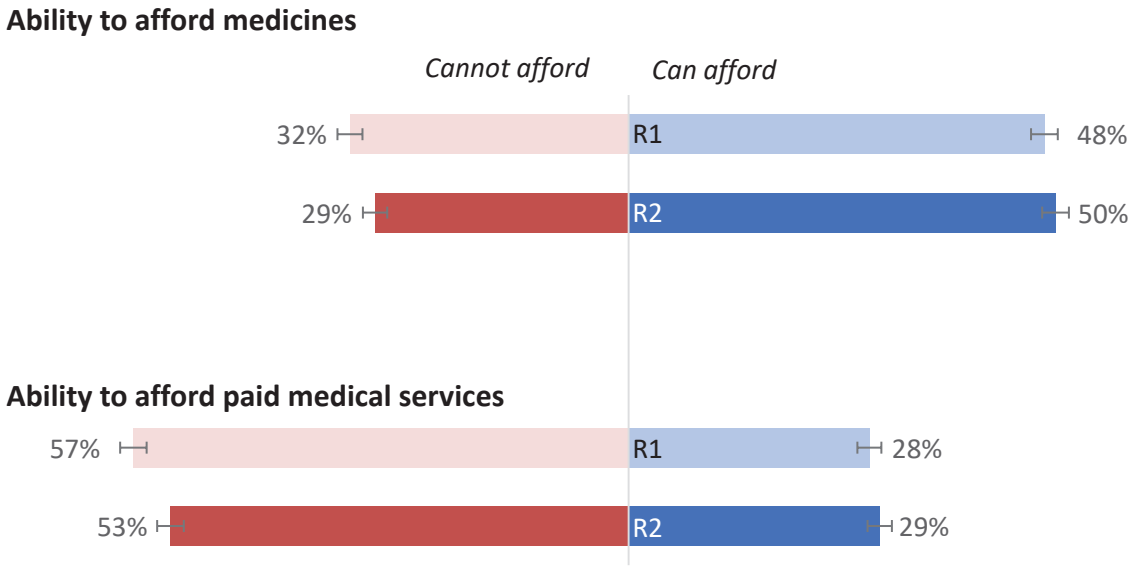
Fig. 8.2. Share of household expenditure on health-care services and medicines (R1: N=3806, R2: N=3784)




## ABILITY TO AFFORD MEDICINES AND PAID MEDICAL SERVICES

Furthermore, in Round 2 the study team observed that the share of those who cannot afford medicines or paid medical services significantly decreased. However, 30% still cannot afford the medicines they need, and more than half (53%) cannot afford paid health services (Fig. 8.3).

Fig. 8.3. Ability to afford medicines and paid medical services (R1: N=4000, R2: N=4001)




Respondents from areas that are experiencing or have experienced hostilities are less likely to be able to obtain medicines or paid medical services than in the city of Kyiv and other regions.

The differences in terms of displacement status are not significant (Fig. 8.4, Fig. 8.5).

Fig. 8.4 Cannot afford medicines by area and displacement

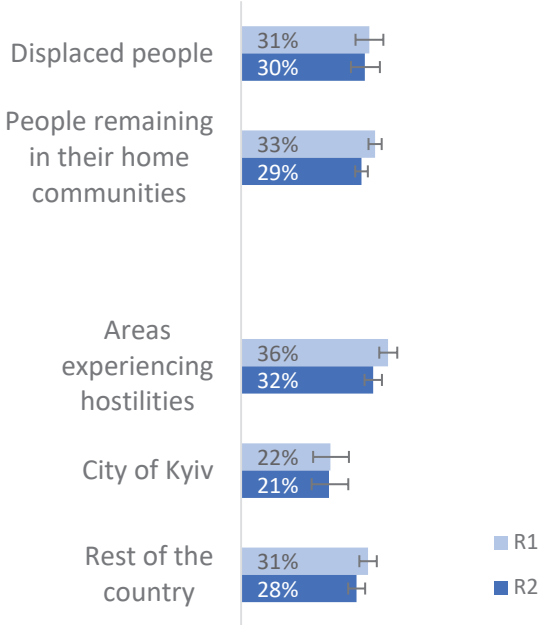
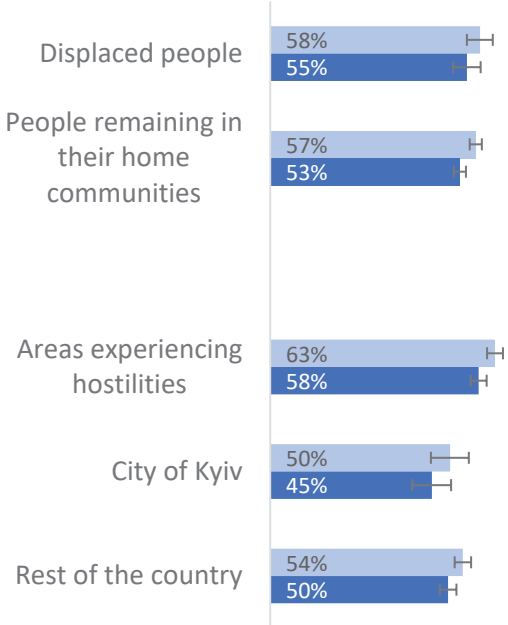



Fig. 8.5 Cannot afford paid medical services by area and displacement



© WHO

# SUMMARY

## Access to health care

Compared to Round 1, in Round 2 the level of need for medical services reported needs present decreases, probably influenced also by the shorter assessment period. The level of access to health services increased among people who sought healthcare for chronic conditions, injuries and for children.

The main barrier people faced while seeking health care was cost of medicines and treatment, time and transport. Meanwhile, the main barriers preventing people from receiving assistance were unavailability of the services needed (for primary health care, and health services for chronic conditions and injuries) and refusal to provide services (for ambulance service).

Within primary health care and health services for chronic conditions, one in ten people faced the problem of unofficial payments.

More than one fifth of the respondents did not see a doctor when they needed it. The main reasons were self-treatment, insignificance of the problem, and high cost.

## Access to medicines

The level of access to medicines improved significantly – half as many respondents were unable to find medicines (only one in ten in Round 2). The problems connected to the war crisis decreased dramatically – by a factor of 1.5–3 for barriers related to unavailability of medicines, closing of pharmacies, long lines, and security concerns. Higher medicine prices continued to be the main barrier.

### General problems related to health

The actuality of all general systemic problems in the health-care sector has significantly decreased (cost of medicines and treatment, availability of medicines and health services, access to vaccination). The urgency of problems related to personal health remained unchanged, except for acute respiratory diseases, where relevance has increased.

### Regions

Residents of regions that are experiencing or have experienced hostilities have a lower level of access to family doctors than the rest of Ukraine. Fewer respondents from areas affected by active combat sought primary health care and a higher share of them faced problems when accessing.

In oblasts that are experiencing or have experienced hostilities, a higher share of respondents reported that they could not obtain the necessary medicines than respondents from other regions.

People from areas that are experiencing or have experienced hostilities are also less likely to afford medicines or paid medical services than the rest of the country.

### People who were internally displaced

People who were internally displaced remain a more vulnerable group in terms of access to primary health care than people who remained in their home communities – fewer of them know the location of the primary health-care facility and fewer have access to family doctors (one fifth have no access, compared to 5% among people who remained in their home communities).

Access to medicines has significantly improved, with no difference in the second round between people who were displaced and people who remained in their home communities.

# 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.

# REFERENCES[1]


1. Patel SS, Erickson TB. The new humanitarian crisis in Ukraine: Coping with the public health impact of hybrid warfare, mass migration, and mental health trauma. Disaster medicine and public health preparedness; 2022 (doi:10.1017/dmp.2022.70).

2. Statement – Winter in Ukraine: people's health cannot be held hostage. Statement by Dr Hans Henri P. Kluge, WHO Regional Director for Europe. Copenhagen: WHO Regional Office for Europe; 2022 (https://www.who.int/europe/news/item/21-11-2022-statement---winter-in-ukraine--people-s-health-cannot-be-held-hostage).

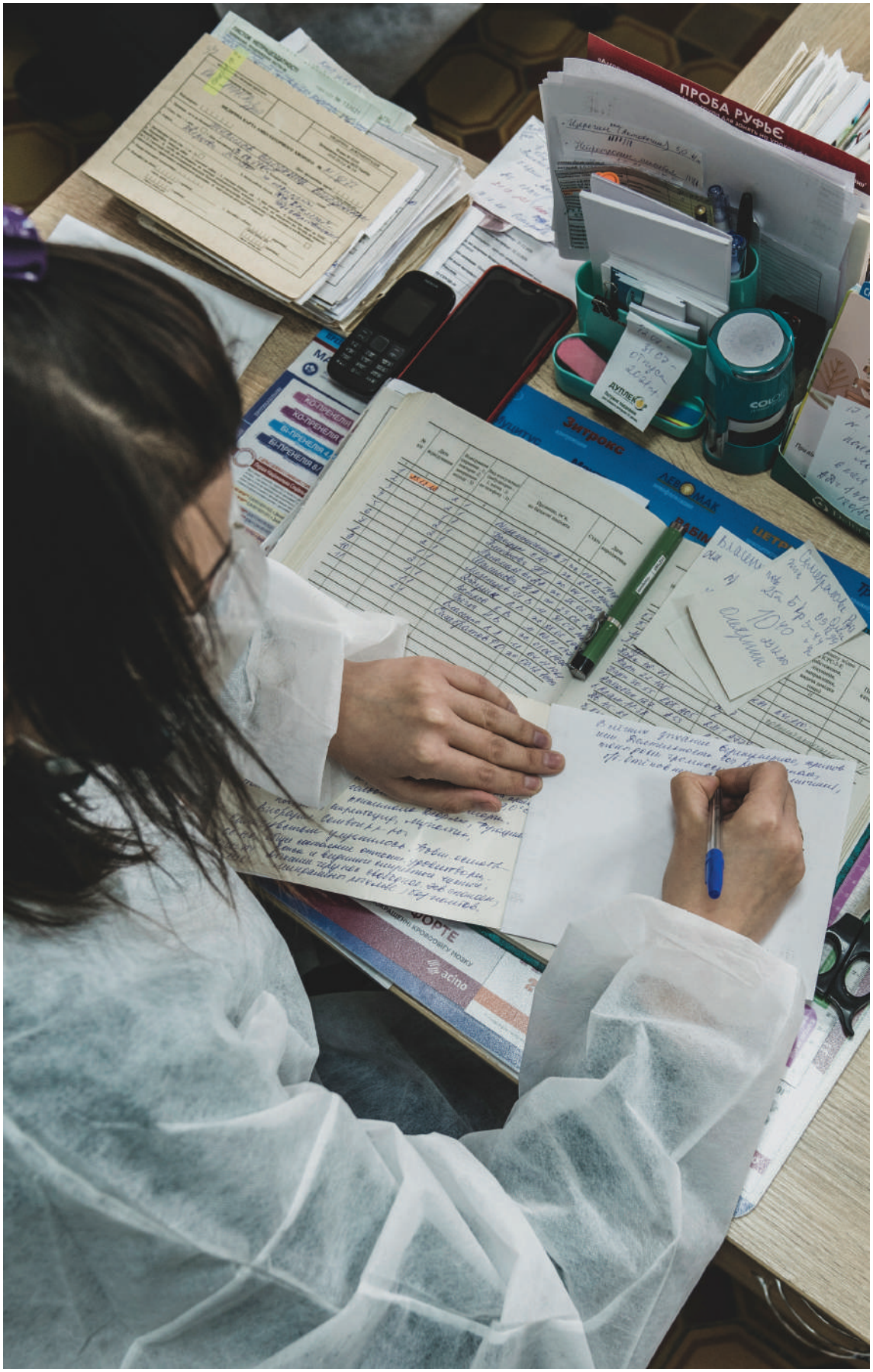
3. War in Ukraine: situation report from WHO Ukraine country office. Issue No. 32, 16 November 2022. Copenhagen: WHO Regional Office for Europe; 2022 (https://apps.who.int/iris/handle/10665/364532).

4. International Organization for Migration (IOM), Ukraine Internal Displacement Report: General Population Survey – Round 8, 23 August 2022". International Organization for Migration; 2022 (https://reliefweb.int/report/ukraine/iom-ukraine-internal-displacement-report-general-population-survey-round-8-23-august-2022).

5. Health needs assessment of the adult population in Ukraine: survey report, September 2022. Copenhagen: WHO Regional Office for Europe; 2023 (https://apps.who.int/iris/handle/10665/365564).

6. Emergency in Ukraine: external situation report #12. Reporting period: 12–18 May 2022. Copenhagen: WHO Regional Office for Europe; 2022 (https://apps.who.int/iris/handle/10665/354407).


1. All links accessed 20 February 2023.




© WHO

## 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 is one of six regional offices throughout the world, each with its own programmed geared to the particular health conditions of the countries it serves.

**Member States**
Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Türkiye
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

World Health Organization
Country Office in Ukraine

Yaroslavska Str 58,
04071 Kyiv, Ukraine
Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01
Email: eurowhoukr@who.int
Website: www.who.int/ukraine

WHO/EURO:2023-6904-46670-68538