**Appendix 1. Sampling methods.**Four-stage random sampling, random at every stage was developed for this survey. Sample is representative for adult population which lives in Ukraine, isn’t serving in military, is not imprisoned and/or is not admitted to the hospital at the time of the survey. First, Ukraine's population was stratified by region (24 regions and Kyiv city), then the population of each region was stratified by urban and rural population, except for Kyiv city, where the population is entirely urban. As a result, the population of Ukraine was divided into 49 strata. The number of interviews to be conducted in each stratum has been defined with regard to the proportion of adults in that stratum. Number of settlements, per stratum, where interviews to be conducted, was also determined.

After the stratification, the sampling points (settlements), where interviewers had to work, were selected. During the first stage, selection of settlements in each stratum was conducted. Urban settings were selected with the probability proportional to the number of adults in the city or town. For the rural strata, first the rayons (sub-regions) were selected with probability proportional to the number of adults of the rural population in the area, and then villages were randomly selected within each rayon. On the second stage the voting stations were selected among each city, town, and village selected during prior stages. During the third stage, the address (e.g. street, house number and, in the case of high-rise apartment building, - apartment number.)where the interviewers started the survey was selected for each voting station. On the fourth stage, the selection of the respondents (with subsequent interviews) by the modified route method took place.

The survey has been conducted only in the areas controlled by Ukraine in Luhansk region, while in Donetsk region the survey included both areas controlled and not controlled by Ukraine.

**Appendix 2. Crosstabs analysis of dependent variables.**

|  |  |
| --- | --- |
|  | Variable that determines people who use money or connection or both coping strategies, % |
| neither money nor connections | only money | only cons | used money and con | Total |
| 41.05 | 4.35 | 3.21 | 51.38 | 100.00 |
| **Ask contacts of service provider from others** |
| Strongly disagree | 13.75 | 11.36 | 3.08 | 3.66 | 8.11 |
| Disagree | 28.11 | 15.91 | 12.31 | 14.05 | 19.84 |
| Difficult to say | 14.84 | 14.77 | 18.46 | 6.26 | 10.54 |
| Agree | 36.67 | 54.55 | 50.77 | 59.58 | 49.68 |
| Strongly agree | 6.63 | 3.41 | 15.38 | 16.46 | 11.83 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| **Pay to medical doctor to establish good relations and attitude** |
| No | 75.27 | 27.27 | 41.54 | 19.17 | 43.27 |
| Don't know/Difficult to say | 12.06 | 6.82 | 16.92 | 4.62 | 8.17 |
| Yes | 12.67 | 65.91 | 41.54 | 76.20 | 48.56 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| **Improving the quality of consultation** |
| I can get a good consultation and treatment only via connections | 2.30 | 0.00 | 20.31 | 19.13 | 11.40 |
| I can get a good consultation and treatment only via payment | 26.51 | 46.59 | 20.31 | 17.77 | 22.71 |
| Both connections and cash payment | 5.81 | 17.05 | 28.13 | 40.68 | 24.90 |
| I can get a good consultation and treatment without any gift | 29.54 | 11.36 | 9.38 | 7.18 | 16.63 |
| Difficult to say | 35.84 | 25.00 | 21.88 | 15.24 | 24.35 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| **Connections are more important than money** |
| Strongly disagree | 4.95 | 5.68 | 6.15 | 2.79 | 3.91 |
| Disagree | 41.25 | 55.68 | 35.38 | 31.09 | 36.47 |
| Difficult to say | 23.28 | 14.77 | 21.54 | 11.74 | 16.92 |
| Agree | 19.42 | 18.18 | 23.08 | 43.50 | 31.87 |
| Strongly agree | 11.10 | 5.68 | 13.85 | 10.88 | 10.84 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| **Both money and connections are important** |
| Strongly disagree | 7.73 | 5.68 | 4.62 | 2.50 | 4.85 |
| Disagree | 26.57 | 19.32 | 15.38 | 8.57 | 16.64 |
| Difficult to say | 19.93 | 10.23 | 24.62 | 6.74 | 12.88 |
| Agree | 37.08 | 46.59 | 33.85 | 58.86 | 48.59 |
| Strongly agree | 8.70 | 8.70 | 21.54 | 23.31 | 17.04 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

**Appendix 3. Questions in the omnibus survey by topic.**

1. **Opinion on state**

I think that the State (government, etc.) acts in my interests.

The government does what is best for Ukraine.

The contribution of local authorities have improved public service provision in recent years.

People like me do not feel that the state protects them.

1. **Health status**

How do you perceive your present Health status?

1. **Medical connection or education**

Do you or your household/family members have medical education?

1. **Money vs connections usage**

Recall the last episode of you or your family health care service consumption, when you used connections, what you expected to get with connections?

Recall the last episode of your or your family health care service consumption, when you gave cash or gifts to doctor, what you expected to get with cash, gifts?

1. **Ask contacts of service provider from others**

I usually ask the name and the contact of the service provider when the person whom I trust or know well shares positive experience of health care service consumption.

1. **Pay to doctor to establish good relations and attitude**

Sometimes patients pay doctors to "establish good relations", for example, in order doctor remember you or your relative and the next time demonstrate responsible attitude. Have you had this experience in "establishing relations" with a doctor?

1. **Connections are more important than money**

Connections are more important than money when you use services of medical doctors.

1. **Both money and connections are important**

Both payment and connection are important in health care because payment serves to support low-paid doctors and connections is to ensure good treatment outcomes.

1. **Improving the quality of consultation.**

What types of techniques do you use to ensure better than sub-standard quality of medical consultation?

**Appendix 4. Descriptive statistics of independent variables included in regressions.**

**Table A. Descriptive statistics of independent variables included in regressions**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Obs | Mean | Std. Dev. | Min | Max |
| **Gender** |  |  |  |  |  |
| Male | 2022 | 0.39 | 0.49 | 0 | 1 |
| Female | 2022 | 0.61 | 0.49 | 0 | 1 |
| **Age: 18 to 92** | 2022 | 49.63 | 17.08 | 18 | 92 |
| **Education** |  |  |  |  |  |
| incomplete secondary | 2022 | 0.05 | 0.23 | 0 | 1 |
| specialized and specialized secondary | 2022 | 0.61 | 0.49 | 0 | 1 |
| incomplete higher | 2022 | 0.04 | 0.18 | 0 | 1 |
| full higher and some doctorate | 2022 | 0.30 | 0.46 | 0 | 1 |
| **Income\*** |  |  |  |  |  |
| not enought money even for food  | 2022 | 0.15 | 0.36 | 0 | 1 |
| enough for food but hard to buy clothes | 2022 | 0.54 | 0.50 | 0 | 1 |
| difficlut to say | 2022 | 0.02 | 0.14 | 0 | 1 |
| enough to buy food clothes and even save | 2022 | 0.27 | 0.44 | 0 | 1 |
| we can buy some expensive things and everything that we want | 2022 | 0.02 | 0.15 | 0 | 1 |
| **Settlement** |  |  |  |  |  |
| Village | 2022 | 0.32 | 0.47 | 0 | 1 |
| Small town up to 20 thousand  | 2022 | 0.12 | 0.32 | 0 | 1 |
| Medium town 20-99 thnd | 2022 | 0.15 | 0.36 | 0 | 1 |
| Big city 100-499  | 2022 | 0.22 | 0.42 | 0 | 1 |
| Very big city more than 500 thnd | 2022 | 0.19 | 0.39 | 0 | 1 |
| **Nationality\*** |  |  |  |  |  |
| Ukrainian | 2022 | 0.88 | 0.32 | 0 | 1 |
| Russian | 2022 | 0.07 | 0.25 | 0 | 1 |
| Russian and Ukrainian | 2022 | 0.03 | 0.18 | 0 | 1 |
| Other nationalities | 2022 | 0.02 | 0.12 | 0 | 1 |
| **Health status\*** |  |  |  |  |  |
| Very bad health | 2022 | 0.03 | 0.16 | 0 | 1 |
| Bad health | 2022 | 0.17 | 0.38 | 0 | 1 |
| Fair health | 2022 | 0.43 | 0.49 | 0 | 1 |
| Difficult to say | 2022 | 0.01 | 0.10 | 0 | 1 |
| Good health | 2022 | 0.30 | 0.46 | 0 | 1 |
| Very good health | 2022 | 0.04 | 0.20 | 0 | 1 |
| Perfect health | 2022 | 0.02 | 0.14 | 0 | 1 |
| **Macroregions\*,\*\*** |  |  |  |  |  |
| Western | 2022 | 0.23 | 0.42 | 0 | 1 |
| Eastern | 2022 | 0.35 | 0.48 | 0 | 1 |
| Central | 2022 | 0.13 | 0.34 | 0 | 1 |
| Southern | 2022 | 0.11 | 0.31 | 0 | 1 |
| Northern | 2022 | 0.12 | 0.33 | 0 | 1 |
| Kyiv | 2022 | 0.06 | 0.24 | 0 | 1 |
| **Index of the attitude toward state: 4 to 19** | 2016  | 7.86 | 3.11 | 4 | 19 |
| **Medical education /connections:**  |  |  |  |  |  |
| No medical doctors in my connections | 2022 | 0.60 | 0.49 | 0 | 1 |
| Difficult to say | 2022 | 0.05 | 0.21 | 0 | 1 |
| My friends are medical doctors | 2022 | 0.24 | 0.43 | 0 | 1 |
| My family members are medical doctors | 2022 | 0.08 | 0.27 | 0 | 1 |
| I am a medical doctor | 2022 | 0.04 | 0.19 | 0 | 1 |
| **\*values of these variables are regrouped in multinomial regression as shown in table B****\*\* constituents of macroregions are represented in table B** |

**Table B. Descriptive statistics of selected regrouped socio-demographic variables included in multinomial logistic analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Obs | Mean | Std. Dev. | Min | Max |
| **Health status** |  |  |  |  |  |
| Bad health | 2003 | 0.20 | 0.40 | 0 | 1 |
| Average health | 2003 | 0.43 | 0.50 | 0 | 1 |
| Good health | 2003 | 0.37 | 0.48 | 0 | 1 |
| **Income** |  |  |  |  |  |
| not enought money even for food  | 1983 | 0.15 | 0.36 | 0 | 1 |
| enough for food but hard to buy clothes | 1983 | 0.55 | 0.50 | 0 | 1 |
| enough to buy food clothes and even save | 1983 | 0.27 | 0.45 | 0 | 1 |
| we can buy some expensive things and everything that we want | 1983 | 0.02 | 0.16 | 0 | 1 |
| **Nationality** |  |  |  |  |  |
| Ukrainian | 2022 | 0.88 | 0.32 | 0 | 1 |
| Russian | 2022 | 0.07 | 0.25 | 0 | 1 |
| Other nation | 2022 | 0.05 | 0.21 | 0 | 1 |
| **Macroregions** |  |  |  |  |  |
| Western | 2022 | 0.23 | 0.42 | 0 | 1 |
| Volynsyi region, Rivnenskyi region, Zakarpatskyi region, Ivano-Frankivskyy region, Lvivsky region, Ternopilsky region, Khmelnytskyi region, Chernivetskyy region |
| Eastern | 2022 | 0.35 | 0.48 | 0 | 1 |
| Donetskyi region, Luhanskyy region, Dnipropetrovskyi region, Zaporizhkyi region, Luhanskyi region |
| Central | 2022 | 0.19 | 0.39 | 0 | 1 |
| Cherkaskyi region, Vinnytskyi region, Kirovohradskyi region, Poltavskyi region |
| Southern | 2022 | 0.11 | 0.31 | 0 | 1 |
| Mykolaivskyi region, Odeskyi region, Khersonskyi region |
| Northern | 2022 | 0.12 | 0.33 | 0 | 1 |
| Zhytomyrskyi region, Kyivskyi region Chernihivskyi region, Sumskyi region |