



# REPORT

on the results of a telephone survey of the adult population of Ukraine on risk factors for non-communicable diseases





# **REPORT** on the results of a telephone survey of the adult population of Ukraine on risk factors for non-communicable diseases

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**Disclaimer:** The findings and conclusions contained in this report are those of the authors and do not necessarily reflect the official position of the U.S. Centers for Disease Control and Prevention (CDC).

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## **CONTENTS**

LIST OF TERMS AND ABBREVIATIONS	5
INTRODUCTION	6
METHODOLOGY	7
KEY FINDINGS	8
Self-assessment of health	8
Alcohol consumption	9
Physical activity	12
Diet	14
Fruit and vegetable consumption	14
Fruit consumption	15
Vegetable consumption	16
Water consumption	17
Salt consumption	18
Sugar consumption	19
Food labeling	21
Arterial hypertension	22



# LIST OF TERMS AND ABBREVIATIONS

- CDC US Centers for Disease Control and Prevention
- PHC SI "Pubic Health Center of the Ministry of Health of Ukraine"
- WHO World Health Organization
- NCD non-communicable disease
- CVD cardiovascular disease

**CATI** (Computer Assisted Telephone Interviewing) - is a method of data collection based on conducting surveys through telephone conversations, using computer systems to control the process and collect information effectively.



# **INTRODUCTION**

Non-communicable diseases (hereinafter - NCDs), which include cardiovascular and oncological diseases, diabetes mellitus, chronic respiratory diseases, and mental disorders, are rather widespread in Ukraine. They negatively affect the quality of life of the population, put a burden on the healthcare system, and cause most premature deaths.

According to the State Statistics Service of Ukraine<sup>1</sup>, more than 82% of deaths were caused by NCDs (64% by cardiovascular diseases (hereinafter - CVDs), 10% by malignancies) in 2022. 2021 statistics also showed that more than 78% of deaths were caused by NCDs, a significant proportion of which were due to CVDs (60%). Most NCDs are based on the so-called preventable behavioral risk factors.

Therefore, the prevention and control of NCDs begin with understanding how the main risk factors, such as smoking, alcohol consumption, unhealthy diet, physical inactivity, etc., affect the risk of developing NCDs.

Since the beginning of the full-scale invasion in Ukraine, the situation with chronic diseases has only worsened; as access to medical care and medicines has deteriorated in many regions, people are forced to leave their homes, and many are experiencing financial difficulties<sup>2</sup>.

In 2023, the Public Health Center of the Ministry of Health of Ukraine (hereinafter referred to as the PHC), together with the Centers for Disease Control and Prevention in the United States (hereinafter referred to as the CDC), surveyed the adult population of Ukraine who stayed in Ukraine during the survey period to provide key information to help understand the current state of health of the population, identify new trends and risks that the country may face in the future, and identify effective strategies to respond to the growing burden of NCDs.

The recommendations provided herein are based on WHO health guidelines, including risk factors for noncommunicable diseases.

This review can be an important tool for public health professionals, particularly those specializing in NCDs prevention. It may also be of interest to decision-makers involved in preventing and controlling chronic diseases at various levels of government. In particular, the document is intended to promote general population awareness about NCDs risk factors to detect and prevent them promptly. This review can also be a data source for writing essays, research papers, and other scientific studies.

<sup>&</sup>lt;sup>1</sup> https://www.ukrstat.gov.ua

<sup>&</sup>lt;sup>2</sup> portal.phc.org.ua/uk/who materials/single/112/



# **METHODOLOGY**

The mobile phone survey aims to investigate the risk factors associated with NCDs among the adult population of Ukraine.

The survey was conducted between October and November 2023 by Computer-Assisted Telephone Interviewing (CATI) method with residents of Ukraine aged 18 and older in all regions of Ukraine, except for those temporarily occupied<sup>3</sup>.

The study is representative of the population, stratified by gender and age, according to data from the State Statistics Service as of 1 January 2022<sup>4</sup>.

#### Sample size

A random sample of mobile phone numbers was generated using random digit dialing, and 2,401 adult respondents were included in the final sample. The mobile phone numbers were generated proportionally to the providers to ensure that the sample was not biased towards any particular provider.

The sample was evenly distributed and stratified by gender and three age categories: 18-29 years, 30-44 years, and 45+ years.

#### Survey method

CATI is a data collection method based on conducting surveys through telephone conversations, using computer systems to control the process and collect information effectively.



<sup>4</sup> https://www.ukrstat.gov.ua





# KEY FINDINGS

The 2023 mobile NCDs survey in Ukraine, conducted by the PHC with the support of the CDC, addressed risk factors such as poor physical activity, alcohol consumption, high blood pressure, and an unhealthy diet (insufficient consumption of fruits, vegetables, excessive salt, and sugar). Respondents were also asked about food purchasing practices and their health status.

Survey results as to **SELF-ASSESSMENT OF HEALTH** demonstrate the following:



Fig.1. Self-assessment of health status among the adult population of Ukraine by age

Only 6.8% of respondents characterized their health as "excellent," which is higher among men (8.5% vs. 5.1%). The largest number of respondents (34.0%) assessed their health as "somewhat good," and 45.8% of respondents assessed their health as average. A smaller share of respondents assessed their health as somewhat poor (7.2%) and poor (6.2%).

The data can generally reflect the population's overall health status and differences in health self-assessment between men and women. It is important to keep in mind that *self-assessed health is subjective and depends on personal expectations and socio-cultural factors.* 



#### **ALCOHOL CONSUMPTION**

According to the WHO, there is no safe dose of alcohol. Alcohol or alcoholic beverages contain ethanol, a psychoactive and toxic substance that can cause addiction. 1 standard dose is 350 ml of beer, 150 ml of wine, 50 ml of spirits (vodka, tincture, etc.).

According to the data, 72% of the total population has consumed alcohol in the past year, with 77.8% of men and 66.3% of women. Interestingly, 28% of the population did not drink alcohol in the past 12 months, with a higher proportion of women (33.7%) compared to men (22.2%).



Fig.2. Percentage of the population aged 18 years and older, disaggregated by gender, who consumed at least one standard alcoholic beverage in the last 12 months

Among those who drank alcohol, only 2.8% did so daily, with men (4.7%) drinking significantly more often than women (0.6%). The most common frequency among men was drinking alcohol 1-2 days per week (33.1%).

Alcohol consumption is quite widespread among the population of Ukraine. Active alcohol consumption (the rate of alcohol consumption in the last 30 days) is 48.8% (Figure 3). The consumption rate is higher among men (59.9%) than women (37.9%).

Men tend to consume more alcohol than women and more often consume it in large quantities. Men also have a higher proportion of those who drink alcohol 3-6 days per week (6.6%) and 1-2 days per week (33.1%)



Fig.3. Active alcohol consumption among the adult population of Ukraine and by gender



compared to women (2.3% and 13%, respectively). This trend is consistent across all age groups. Women have a higher percentage in the categories of less frequent alcohol consumption (1-3 days per month and less than once a month).

After the full-scale invasion on 24 February 2022, 10.4% of the population increased their alcohol consumption, including 13.8% of men and 6.3% of women; 42.5% of respondents decreased the amount of alcohol they drink, with the highest share among women (45.8%).



Fig.4. The impact of a full-scale invasion on alcohol consumption

At the same time, the general trend of alcohol consumption in Ukraine reflects that the majority of respondents remain at the same level of consumption after the beginning of the full-scale invasion (47.1%).

Among active drinkers (last 30 days), the average number of days when 4 or more standard<sup>5</sup> drinks were consumed was 1.7 for all, 2.4 for men, and 0.6 for women.

These data indicate significant differences in alcohol consumption between sexes and age groups, with higher rates of consumption among men and young people. The frequency of consumption also varies, with higher rates of regular consumption among men.

To reduce the burden of NCDs caused, among other things, by alcohol consumption, WHO has adopted a list of cost-effective solutions.



Fig.5. Alcohol consumption among the adult population of Ukraine aged 18+ after the full-scale invasion on February 24, 2022

<sup>&</sup>lt;sup>5</sup> One standard alcoholic beverage, or one standard dose of alcohol, is 350 ml of beer, 150 ml of wine, 50 ml of spirits (vodka, infused alcohol, etc.)



This list contains several recommendations for addressing NCDs in accordance with the Global Action Plan<sup>6</sup> for the Prevention and Control of Non-Communicable Diseases (NCDs) 2013–2020 (NCD-GAP). Comprehensive packages of interventions that include fiscal measures, regulations, and health promotion activities have proven to be most effective in reducing harmful alcohol consumption.

Some of these measures relate to work at the regional level and involve monitoring the implementation of existing laws, primarily those related to:

- alcohol advertising and control over the circulation of illegal alcohol products;
- introducing restrictions on the sale of alcohol at night and reducing the hours of sale;
- prevention of alcohol consumption by primary health care workers and provision of assistance to people with alcohol dependence by strengthening the effectiveness of specialized clinics and addiction treatment centers;
- conducting information campaigns to improve knowledge and raise public awareness of the harmful effects of alcohol on the health of different age groups;
- support programs to reduce harmful alcohol use among the general population and prevent alcohol use among young people.

Interventions should be aimed at reducing the harmful effects of alcohol on public health because there is no safe dose of alcohol, as it is simply impossible to determine a dose that can be recommended for any adult. The susceptibility, tolerance to alcohol, and genetic predisposition to develop addictions are very different for each individual.

Recommendations to help reduce or eliminate alcohol consumption:

- take a break from drinking alcohol. Abstain from drinking for a week or a month and see how you
  feel physically and emotionally. Taking a break can be a good way to start drinking less. If you find
  it challenging to take a break, you can start by choosing two or three days a week when you should
  not drink alcohol;
- avoid "triggers". Analyze what makes you want to drink. If certain people or places make you want to drink, try to avoid them or practice ways to refuse politely;
- keep your home free of alcoholic beverages. Keep less or no alcohol at home. It has been proven that the more alcohol we buy, the more likely we are to drink it earlier than we intended;

https://zakon.rada.gov.ua/laws/show/530-2018-%D1%80#Text



- deal with stress in a healthy way. Alcohol abuse is often a misguided attempt to cope with stress.
   Find healthier ways, such as walking outdoors, exercising, meditation, or other relaxation techniques;
- Drink soft (alcohol-free) drinks. This is a good alternative because they taste the same or similar. In addition, the range of such products is very diverse.

#### **PHYSICAL ACTIVITY**

The WHO defines physical activity as any movement of the human body that is accomplished through the work of skeletal muscles and requires additional energy consumption. For adults aged 18-64, the WHO recommends at least 150-300 minutes of moderate aerobic exercise or 75-150 minutes of vigorous aerobic exercise per week<sup>7</sup>.

According to the survey, the overall percentage of sufficiently physically active Ukrainians is 83.4%. 70.7% of adult Ukrainians are mostly physically active during work, and this percentage increases with age.

Overall, 21.2% of respondents have the highest percentage of responses for transport-related physical activity (TRPA). This means they spend more time doing physical activity on their way to work, school, the store, or the market. This activity can include walking, cycling, and public transport, where people can walk or stand.

The highest total physical activity level is observed in the 18-29 age group (88.5%).

Young people aged 18-29 have the highest level of aerobic activity - more than 150 minutes per week (64.6%), which aligns with WHO recommendations. Regarding the difference in physical activity between men and women, the data show that men are generally more active. For example, 42.3% of men do at least 150 minutes of aerobic physical activity per week, compared to 34.4% of women.

With age, there is a tendency to increase physical activity, associated with physical activity while moving around or performing a specific type of activity. However, if this activity directly involves physical activity, such as going to the gym or running, then there is a decrease in physical activity with age.

<sup>&</sup>lt;sup>7</sup> iris.who.int/bitstream/handle/10665/44399/9789241599979-ukr.pdf?sequence=25





Fig.6. Indicators of physical activity among the adult population of Ukraine by age

These data indicate a high level of physical activity among Ukraine's adult population, especially in younger age groups. However, inactivity in certain age groups remains a problem that requires further analysis and the development of programs to raise awareness of the importance of regular physical activity for maintaining overall health and reducing the risk of NCDs.



Fig.7. Prevalence of insufficient physical activity among respondents

For example, the level of physical activity of about 16.6% of the population does not meet WHO recommendations, which may raise specific concerns about their health.

Analyzing the data by gender, it was found that the percentage of insufficient physical activity among men and women is almost the same: 16.6% (Fig. 7). This indicates a problem for both sexes that requires attention and possible corrective measures.

You can gradually increase the time spent on physical activities to 300 minutes per week for greater health benefits. In addition to moderate physical activity, you can exercise vigorously for at least 75 minutes weekly, gradually increasing to 150 minutes weekly.

Or, you can combine moderate and vigorous physical activity

with strength training exercises at least 2 days a week, such as gymnastics, yoga, pilates, etc. Moderate physical activity is safe for most people. However, it is imperative to recommend that people consult a doctor about the types and amount of individual activity.



#### DIET

A healthy diet is essential for overall health and well-being. The WHO recommends consuming at least 400 grams of fruits and vegetables daily<sup>8</sup>. **Five servings** of a variety of fruits and vegetables each day are ideal. One serving should weigh about 80 grams. The optimal amount was found to be two servings of fruits and three servings of vegetables per day.

#### Fruit and vegetable consumption



Fig.8. Percentage of Ukrainian adult population consuming less than the WHO-recommended five servings of fruits and vegetables per day, by gender

The survey results show that respondents do not include fruits and vegetables in their daily diet. In general, 87.9% of the population (Figure 8) consume less than five servings of fruits and vegetables daily, and 0.2% do not eat fruits and vegetables at all. This indicates that most of the population's fruit and vegetable consumption does not meet WHO recommendations.

Regarding seasonal changes in fruit and vegetable consumption, about 80.2% of the population indicate that their consumption varies depending on the season. This may be due to the availability and seasonality of some fruits and vegetables, which may be more affordable and attractive at different times of the year.

<sup>&</sup>lt;sup>8</sup> Healthy diet (who.int)



After the full-scale invasion on 24 February 2022 in Ukraine, the overall consumption of fruits and vegetables in a comprehensive manner has hardly changed; most people have not changed their fruit and vegetable consumption habits since the invasion, although some people have reduced their consumption.



Fig.9. Impact of the full-scale invasion on fruit and vegetable consumption among Ukrainian adult population

Comparing the consumption of fruits and vegetables after the beginning of the full-scale invasion, there is a more vivid tendency to reduce the consumption of fruits than vegetables (23% vs. 16.1%).





Fig.10. Average fruit consumption in days and servings among Ukrainian adult population by age group The data on fruit consumption show that respondents consume fruits an average of 4.85 days per week.

The average number of servings of fruits consumed daily is 1.5 (most respondents consume less than two servings daily).

30.7% of respondents reported a change in fruit consumption **after** 





Fig.11. Average fruit consumption in days and servings among Ukrainian adult population by gender



#### Vegetable consumption:

Respondents consume vegetables on average 5.3 days a week, and the average number of servings consumed daily is 1.3. This indicates that most respondents include vegetables in their diet.



Fig. 12. Average vegetable consumption in days and servings among Ukrainian adult population by gender

However, eating patterns have changed since the beginning of the full-scale invasion, with 16.1% of respondents stating that they consumed fewer vegetables, 76.5% staying at the same level of consumption, and only 7.4% of respondents increasing their consumption of vegetables.

Vegetables and fruits are known to be an essential part of a balanced diet.

A diet containing sufficient

plant-based foods can help lower blood pressure, reduce the risk of developing CVDs and certain types of cancer, and positively affect blood sugar levels.



Fig. 13. Average vegetable consumption in days and servings among Ukrainian adult population by age groups

Eating non-starchy fruits and vegetables, such as apples, pears, and green leafy vegetables, helps to reduce weight because their low gly-cemic load prevents blood sugar spikes, which decreases hunger.

To increase the population's consumption of fruits and vegetables, it is essential to conduct information campaigns that raise public awareness of the benefits of these types of food and the need to consume them.

The recommendations should be aimed at replacing (at least partially) confectionery with fruits and berries and encouraging the adoption of new eating habits, such as giving preference to vegetables and fruits in non-main meals.

An important initiative would be to disseminate information materials with recipes for simple dishes with increased vegetable and fruit content that could be easily mastered.



#### Water consumption:

On average, respondents consume about 4.1 glasses of water, about one liter of water, per day.

By age group, the total water consumption (Figure 14) decreases with increasing age (from 4.6 glasses of water among the 18-29 age group to 3.8 glasses (45+).

About 20% of daily liquid intake usually comes from food, and the rest from drinks. According to the recommendations of Mayoclinic specialists, the optimal amount of water consumed per day for men is about 3.7 liters of liquid, for women - about 2.7 liters<sup>9</sup>.







Fig.15. Average daily water consumption (glasses, about 250 ml)

A rational drinking regimen to maintain water balance and optimal hydration is essential to a healthy lifestyle.

To promote water consumption by the population, it is advisable to conduct information campaigns in support of healthy eating and water as a component of a healthy lifestyle, encourage the consumption of beverages that do not contain added sugar, and create initiatives that encourage people to drink water (e.g., creating apps that track the amount of water consumed, encouraging the consumption of water instead of fizzy drinks).

Maintaining water balance is a necessity. Drink enough

water unless there are contraindications. Even if you do not feel thirsty, try to drink water in small portions. If you have high blood pressure or other chronic conditions, be sure to consult your doctor about the recommended amount of fluid.

<sup>9</sup> https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/water/art-20044256#:~:text=About%2015.5%20cups%20(3.7%20liters,fluids%20a%20day%20for%20women



#### Salt consumption:

The average salt intake in Ukraine is about 6,435 grams per day, which exceeds the WHO recommended limit of less than 5 grams (1 teaspoon) per day<sup>10</sup>.



Fig.16. Average daily salt consumption

40.7% of all respondents always or often add salt or salty sauces to food before eating it or during cooking. Men (42.8%) tend to add salt more often than women (38.7%).

42.3% of respondents add less than 1 teaspoon of salt (about 5 grams) when cooking a "single" portion of a dish at home, 33.5% - 1 teaspoon, and 22.7% - more than 1 teaspoon. Women aged 18-29 most often add less than 1 teaspoon (48.5%) of salt, the same as 39.7% of men of the same age group.

5.6% of respondents eat high-salt foods daily, 11.1% eat high-salt foods 3-6 days a week, and 36.4% eat high-salt foods 1-2 days a week. Young adults (18-29 years old) are more likely to eat foods with high salt content 3-6 days a week (18.7%) compared to other age groups.

After the full-scale invasion on 24 February 2022 in Ukraine, respondents' overall salt consumption rate has hardly changed (83.5%). Only 2% of respondents increased their salt intake, but a much larger number (14.5%) decreased it.



 $<sup>^{10}\</sup> https://www.phc.org.ua/news/zdorove-kharchuvannya-vooz-onovila-rekomendacii-schodo-vzhivannya-zhiriv-i-vuglevodivantu and the second second$ 



Excess salt in the diet increases the risk of CVDs and the functional load on the heart, blood vessels, and kidneys.

To reduce salt consumption, it is essential to promote the following healthy practices among the population:

- read food labels carefully, as they often contain large amounts of salt;
- when cooking homemade food for the whole family do not add salt at all so that each family member adds salt to the dishes according to their needs/taste;
- it would be a good idea to replace some of the salt added when cooking at home with spices and aromatic herbs, such as dill, parsley, pepper, basil, cumin, etc.;
- replace industrially produced sauces and salty snacks with alternative homemade dishes with reduced salt content.

Given that most of the salt in the diet comes from industrially produced foods, it would be advisable to approach manufacturers of all types of food products with a proposal to revise recipes and reduce the amount of salt in the final product.

#### Sugar consumption:

The WHO recommends limiting free sugars to less than 10% of total calories consumed daily, and reducing this to 5% may bring additional benefits. This is equivalent to about 25 grams (about 6 teaspoons) of sugar per day for an adult with a normal body mass index. The WHO also advises avoiding fizzy sugary drinks, as drinking water is the best liquid to consume<sup>11</sup>.



About 30.4% of all respondents consume high-sugar foods daily, 17.0% 3-6 days a week, and 30.5% 1-2 days a week.

The highest percentage of daily consumption is among the 45+ age group (30.8%) and the lowest among people aged 30-44 (29.5%).

52.8% of all respondents drink sugary drinks daily, including 31.5% of men and 29.3% of women (Figure 20).

Fig.18. Prevalence of daily consumption of high-sugar foods by different age groups

 $<sup>^{11} \</sup> https://www.phc.org.ua/news/zdorove-kharchuvannya-vooz-onovila-rekomendacii-schodo-vzhivannya-zhiriv-i-vuglevodivantu and the statement of the statem$ 



For example, a 350 ml bottle of lemonade contains 3 teaspoons of sugar, a sports drink contains 5 teaspoons of sugar, and cola contains 10 teaspoons of sugar<sup>12</sup>.

45+

Among all age groups, the highest percentage of daily consumptior of sugary drinks is observed among people aged 30-44 (50.6%) and the lowest among people aged 18-29 (43.6%).

Only 6% of respondents do not consume foods with high sugar content, and 15.7% do not consume sugary drinks.

The average sugar consumption per person per day is  $\geq$  45 grams, which is significantly higher than the WHO recommended norms.



Fig.19. Prevalence of daily consumption of sugary drinks by different age groups

Relatively high levels of sugar intake in the diet indicate negative eating patterns that include foods high in sugar and sugary drinks, which can affect metabolic processes and blood pressure and increase the risk of developing oral cavity diseases.

Reducing sugar consumption can have a significant positive impact on health, including reducing the risk of diabetes, obesity, and CVDs.



Fig.20. Consumption of high in sugar foods and sugary drinks by gender among Ukrainian adult population

 $<sup>^{12} \</sup> https://www.cdc.gov/healthy-weight-growth/rethink-your-drink/?CDC_AAref_Val=https://www.cdc.gov/healthyweight/healthy_eating/drinks.html$ 



To reduce sugar consumption, it is advisable to conduct information campaigns aimed at raising awareness among the population about the dangers of excessive sugar consumption (increases the risk of developing CVDs, pancreatic cancer, prostate and breast cancer, depression, and bronchial asthma), as well as to promote behavioral patterns aimed at reducing the share of sugar in the diet. Among the latter, we can recommend:

- gradual reduction of sugar consumption to slowly get used to new tastes and form healthier dietary patterns;
- replacement of desserts and confectionery containing sugar with berries, fruits, dried fruits and honey;
- replacement of sugary fizzy drinks with drinking water, which can be flavored with a little bit of fruit juice, a slice of lemon or orange, or aromatic herbs such as peppermint or lemon balm;
- adding drinking water to fruit and berry juices with a gradual increase in its content;
- giving attention to food product labels, as sugar is often included in unsweetened products such as sauces, marinades, canned vegetables, etc.

In addition, given that most of the sugar in the diet comes from industrially produced food products, it would be rational to approach manufacturers of all types of food products with a proposal to revise recipes and reduce the level of sugar in the final product.

The survey demonstrated that giving **ATTENTION TO FOOD LABELING** is essential for a healthy diet.

Approximately 23.9% of respondents always or often read food labeling before buying. There are similar trends among men (21.9%) and women (25.8%).

Younger people (18-29 years old) are more likely to read food labeling than older people.

42.3% of respondents buy foods with high sugar, fat, or salt content less or less often after reading the labeling. This purchasing behavior was reported by 39.5% of men and 44.7% of women.

After reading the labeling, 30.3% of respondents (men - 25.3%, women - 34.5%) refused to buy products with high sugar, fat, or salt content.

27.4% of respondents, 35.3% of men, and 20.8% of women noted that the sugar, fat, and salt content do not affect the purchase decision.



Different trends depend on age groups. Younger people are more likely to buy fewer healthy products, even after reading the labeling before buying, than older people.



Fig.19. Influence of sugar, fat and salt content on purchase decisions, % among Ukrainian adult population by age

#### **ARTERIAL HYPERTENSION**

Self-monitoring of blood pressure can be a valuable tool for the timely detection of hypertension. If you have persistently high readings or significant fluctuations in blood pressure, you should immediately consult a doctor. This will help the doctor to prescribe effective treatment promptly, which will keep blood pressure at an optimal level and reduce the risk of developing severe complications such as stroke and myocardial infarction. It also allows the doctor to adapt the treatment to the patient's health status and needs.

It is important to note that the state of health and self-assessment of health do not always accurately reflect the real state and regular medical examinations are vital in controlling hypertension.

76.8% of respondents have ever measured their blood pressure on their own, 85.1% of women and 68.4% of men reported this.

Almost all respondents (95.9%) had their blood pressure measured by doctors or healthcare workers, with the same rates among men (95.9%) and women (95.9%).

Among those whose blood pressure was measured by a doctor/healthcare worker, 52.7% were diagnosed with high blood pressure (hypertension) (55.1% of women and 50.3% of men).



21.1% of respondents who have been previously diagnosed with hypertension take their medication regularly, 23.5% take it occasionally, and 55.4% do not take blood pressure-lowering medications at all. It is noteworthy that women are more likely than men to follow doctor's recommendations for antihypertensive treatment.

Thus, only 14.7% of men take medications regularly (compared to 27.4% of women), and 64% of men do not receive any treatment at all (compared to 47% of women).

The latter may be related to men's more optimistic subjective assessment of their overall health, which was demonstrated at the beginning of the research.

Timely diagnosis of hypertension is a critical factor in preventing serious complications of the cardiovascular system and all organs and systems.



Figure 22. Frequency of taking prescribed antihypertensive drugs, % among the adult population of Ukraine by gender

Therefore, it is essential to inform the public about the need for regular blood pressure measurement, especially in the presence of risk factors (family history, overweight, insufficient physical activity, alcohol consumption, smoking).

It is advisable to create initiatives that positively remind, motivate, and explain the need for blood pressure monitoring (development of apps or paper materials).



*Lifestyle behaviors, including alcohol consumption, dietary habits, physical inactivity, etc., primarily drive the burden of NCDs in Ukraine.* 

The research results confirm that to reduce the level of NCDs in Ukraine, it is necessary to actively work on changing citizens' lifestyles. This includes reducing alcohol consumption, changing eating habits, increasing physical activity, etc. Developing and implementing effective healthcare programs that promote healthy habits among Ukrainians and reduce the prevalence of risk factors through comprehensive public health strategies is essential.

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