

# The impact of wartime factors on harmful habits among the adult population depending on their psycho-emotional state

Nataliia Y. Horban, Oleksandr Gh. Lutsenko, Liudmyla M. Slobodchenko, Oles V. Lapikura, Iryna V. Sliepakurova

STATE INSTITUTION «UKRAINIAN CENTER OF MATERNITY AND CHILDHOOD OF THE NATIONAL ACADEMY OF MEDICAL SCIENCES OF UKRAINE», KYIV, UKRAINE

## ABSTRACT

**Aim:** To analyse patterns of alcohol and tobacco consumption among adult Ukrainians, including variations based on their psycho-emotional state, using an anonymous survey conducted during martial law.

**Materials and Methods:** The study employed an online survey based on the "Study of Eating Behaviour and Health Status of the Ukrainian Population" questionnaire. The final sample comprised 1,101 adult Ukrainian respondents: 212 (19,3%) men and 889 (80,7%) women, with a mean age of  $36 \pm 13$  years. Participants were divided into Group I ( $n = 400$ ; 36,3%) – adults with probable PTSD, and Group II ( $n = 701$ ; 63,7%) – without signs of probable PTSD.

**Results:** The study revealed a high prevalence of harmful habits among adults (nearly 80,0% consumed alcohol and 30,0% smoked). Respondents with probable PTSD symptoms were 2.5 times more likely to report increased alcohol consumption (34,0% vs. 13,5%;  $p < 0,001$ ) and 1.5 times more likely to report increased smoking (65,0% vs. 45,0%;  $p = 0,009$ ) compared with those without such symptoms. Only 7,0% of alcohol consumers and 32,4% of regular smokers who had visited a doctor in the past year reported receiving advice to quit these habits.

**Conclusions:** The onset of the full-scale war in Ukraine has negatively affected adult lifestyles, notably increasing alcohol and tobacco use. Most respondents with harmful habits reported not receiving medical advice on reducing or quitting them.

**KEY WORDS:** alcohol, smoking, post-traumatic stress disorder

Wiad Lek. 2025;78(11):2362-2368. doi: 10.36740/WLek/214786 DOI

## INTRODUCTION

The full-scale invasion of Ukraine by the terrorist state has become a global stressor for Ukrainians, introducing tangible risks of a technological, environmental, psychological, political, and military nature. These factors have triggered adverse changes in people's health, including its psychological components.

According to Ukraine's electronic healthcare system, the number of post-traumatic stress disorder (PTSD) cases in 2023 increased nearly fourfold compared with 2021. In the first two months of 2024 alone, 3292 cases were recorded—almost equalling the total for 2021 (3167) [1]. Harmful habits such as alcohol consumption and smoking remain highly prevalent and have severe socio-medical consequences [2–5]. Alcohol use contributes to over 200 diseases and injuries and accounts for approximately 5% of the global disease burden; among individuals under 40 years, 13,5% of deaths are alcohol-related. In Ukraine, per capita alcohol consumption

among those aged  $\geq 15$  years is 8,6 liters annually [6–8]. A WHO-supported survey conducted in December 2023 showed that 77,4% of adults had consumed alcohol in the past year, 50,8% drank at least monthly, and the highest prevalence (86,3%) was observed among respondents aged  $\leq 29$  years [9].

Tobacco use is among the most harmful lifestyle factors, linked to chronic diseases and premature mortality [10–20]. According to WHO, tobacco kills about 50% of its users, causing over 8 million deaths annually, including 1,3 million from second-hand smoke; in 2020, 22,3% of the global population used tobacco [19]. A national survey conducted in April 2023, "The Use of Tobacco and Nicotine Products in Ukraine," found that 27,4% of adults were current users, including 23,0% daily and 6,8% occasional users [20, 21].

Given the above data, it is evident that a pressing issue in Ukraine today is the analysis of the impact of wartime factors on lifestyle and health.

## AIM

To analyze the characteristics of alcohol and tobacco consumption among adult Ukrainians, including the influence of their psycho-emotional state, through an anonymous survey conducted during martial law.

## MATERIALS AND METHODS

The study used a secure online survey based on the questionnaire "Study of Dietary Behaviour and Health Status of the Ukrainian Population" [22]. The questionnaire, information sheet, and consent form were approved by the Institute's Bioethics Committee (Protocol No. 13, 27 Oct 2021). Following the full-scale invasion on 24 Feb 2022, additional questions on wartime impact, alcohol, and tobacco use were incorporated and approved by the Academic Council (Protocol No. 7, 3 Aug 2022).

Respondents received an information sheet explaining the study and provided online informed consent. Participation was voluntary, with withdrawal permitted at any stage. The survey was conducted from December 2022 to January 2024 among Ukrainian adults ( $\geq 18$  years) using snowball sampling. Data collection and database formation followed international Good Epidemiological Practice standards.

The final sample included 1,101 adults (212 [19,3%] men and 889 [80,7%] women; mean age  $36 \pm 13$  years). The age distribution was as follows: 18–30 years – 37,4%; 31–40 – 30,0%; 41–50 – 18,7%; 51–60 – 8,3%; 61–70 – 4,5%; and  $>70$  – 1,1%. Responses to questions about alcohol and tobacco/nicotine consumption, including changes since the onset of the full-scale invasion, were used to assess harmful habits.

To explore possible associations between alcohol/tobacco consumption and changes in psycho-emotional states during the full-scale invasion, respondents completed a block of questions from the Unified Clinical Protocol for Primary, Secondary, and Tertiary Medical Care "Reaction to Severe Stress and Adaptation Disorders. Post-Traumatic Stress Disorder" [23]. The block included seven binary ("yes"/"no") questions;  $\geq 4$  positive responses indicated probable PTSD. The internal consistency index (Cronbach's alpha) for this block of questions in the studied sample was 0,625.

Participants were divided into two groups: Group I – 400 (36,3%) adults with probable PTSD, and Group II – 701 (63,7%) without. Harmful habits were assessed via self-reported alcohol and tobacco use; only valid responses were analyzed.

Statistical data analysis was performed using IBM SPSS Statistics v. 27.0 (Armonk, NY, IBM Corp., USA). Quantitative data were presented as mean  $\pm$  standard

deviation, and qualitative parameters as absolute and relative (%) frequencies. The Student's *t*-test was used to compare quantitative data between two independent samples. Qualitative parameters between two independent groups were compared using the  $\chi^2$  test (with subsequent z-test for subcategory frequency comparison) or Fisher's exact test (for binary parameters). A *p*-value  $< 0,05$  was considered statistically significant.

## ETHICS

The study was conducted in accordance with the standards outlined in the Helsinki Declaration of the World Medical Association «Ethical Principles for Medical Research Involving Human Subjects». Informed consent to participate in the survey was obtained from all participants before the study began. No violations of ethical and deontological principles regarding the respondents, staff involved at any stage of the study, institutional regulations, or current Ukrainian legislation were identified.

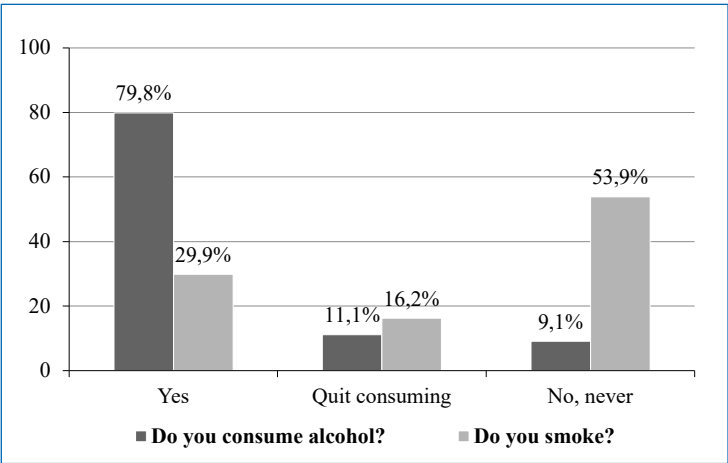
## FRAMEWORK

The study was conducted within the framework of the research project "Studying the Impact of Armed Aggression by the Russian Federation on the Health of Children and Women in Ukraine" (state registration No. 0124U000209; research implementation period: 2024–2025) at the Department of Medical and Psychosocial Problems of Family and School-Age Children's Health, State Institution "Ukrainian Center of Maternity and Childhood of the National Academy of Medical Sciences of Ukraine".

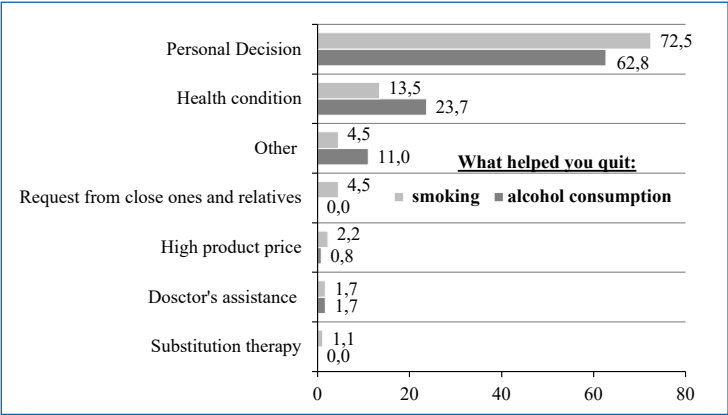
## RESULTS

The study groups were comparable by gender (women: 80,0% vs. 81,2%; *p* = 0,636), marital status (married: 62,2% vs. 60,4%; *p* = 0,692), and education level (higher education: 75,1% vs. 75,6%; *p* = 0,858). Additionally, respondents from Group I were slightly but not meaningfully older than those from Group II ( $38 \pm 13$  vs.  $36 \pm 13$  years, respectively; *p* = 0,022).

The study revealed that the majority of respondents (79,8%) consume alcohol. Among the 1101 surveyed adults, 242 (22,0%) reported drinking alcohol a few times per year, 287 (26,1%) 1–2 times per month, 195 (17,7%) 3–4 times per month, 135 (12,3%) 2–3 times per week, and 20 (1,8%) daily. A total of 100 respondents (9,1%) reported never consuming alcohol, while 122 (11,1%) had quit drinking. Among those who quit (*n* = 122), 74 (60,7%) made the decision independently,



**Fig. 1.** The distribution (%) of respondents' answers regarding alcohol consumption and tobacco/nicotine product use after combining response options (n=1101)  
*Picture taken by the authors*



**Fig. 2.** The distribution of respondents' answers regarding reasons that helped quit harmful habits (alcohol consumption and smoking)  
*Picture taken by the authors*

28 (23,0%) quit due to health deterioration, a few (7 [5,7%]) cited high alcohol prices or support from a healthcare provider as their reason, and 13 (10,6%) were undecided about the reasons for quitting.

Analysis of another harmful habit—smoking—showed that nearly one-third of the adult Ukrainian cohort (1,101 individuals) smoked tobacco-containing cigarettes: 329 respondents (29,9%). Among the smokers, 58 (5,3%) smoked but not daily, 53 (4,8%) consumed 1–7 cigarettes per day, 57 (5,2%) 8–20 cigarettes per day, and 22 (2,0%) smoked more than one pack per day. Additionally, 139 respondents (12,6%) reported using electronic cigarettes or similar devices. Half of the respondents (593 individuals, 53,9%) stated they had never smoked, while 179 (16,2%) reported quitting smoking (Fig. 1).

It was established that among the 879 individuals who consumed alcohol, only 116 (13,2%) had attempted to quit within the past 12 months. Among respondents who visited a doctor during the last year, only 49 (5,6%) reported receiving advice to reduce or stop drinking alcohol, while 155 (17,8%) indicated that they had not visited a doctor during this period.

Of the 179 respondents who quit smoking within the previous 12 months, the most frequently cited reason was a self-motivated decision, reported by

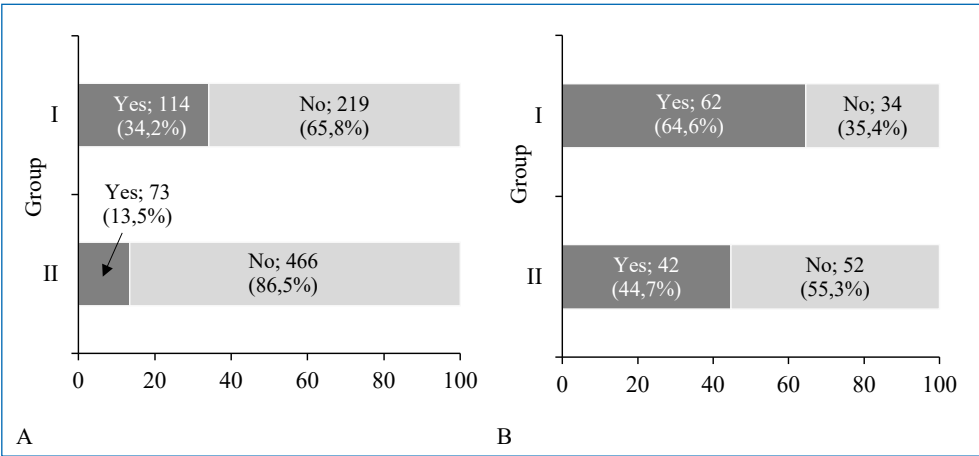
129 individuals (72,5%). For 24 respondents (13,5%), health concerns served as the primary motivation. In rare cases, respondents quit smoking at the request of relatives, due to the high cost of cigarettes, with the help of a healthcare provider, or through replacement therapy. Eight individuals (4,5%) were undecided about their reason for quitting.

For further analysis of smoking cessation attempts, individuals who used electronic cigarettes or smoked infrequently (n=197) were excluded. Among the remaining 132 regular cigarette smokers, only 26 (19,7%) had attempted to quit this harmful habit within the past year. The number of respondents who regularly smoked cigarettes, visited a doctor within the past 12 months, and received advice to quit smoking was 24 (18,2%).

A descriptive analysis of the identified reasons that helped adult Ukrainians quit harmful habits is presented in Fig. 2.

A specific block of questions focused on possible relationships between wartime factors, lifestyle features (harmful habits), and the psycho-emotional state of Ukrainians.

It was found that since the beginning of the war, every fifth respondent reported increased alcohol consumption, i.e. 187 individuals (21,4%), while 685 (78,6%) indicated no changes. Among cigarette smokers, every



**Fig. 3.** The distribution of respondents (available data) by answers to the question «Have you started consuming more alcohol due to the onset of military actions?» ( $p<0,001$ ) (A). The distribution of respondents (available data) by answers to the question «Have you started smoking more due to the onset of military actions?» ( $p=0,009$ ) (B). Group I – the signs of probable PTSD; Group II – no probable signs of PTSD  
*Picture taken by the authors*

**Table 1.** The distribution of responses to questions on alcohol consumption depending on the psycho-emotional state of respondents

Questions and responses		PTSD		p
		Group I (Yes)	Group II (No)	
Do you consume alcohol?	Yes, n/N (%) <sup>z</sup>	336/400 (84.0)	543/701 (77.4)	0.033
	Stopped drinking alcohol, n/N (%)	36/400 (9.0)	86/701 (12.3)	
	No, never, n/N (%)	28/400 (7.0)	72/701 (10.3)	
Have you tried to quit alcohol consumption within the past 12 months	Yes, n/N (%)	64/336 (19.0)	52/543 (9.6)	<0.001
	No, n/N (%)	272/336 (81.0)	491/543 (90.4)	
Have you been advised to reduce or stop alcohol consumption during a medical visit in the past 12 months	Yes, n/N (%) <sup>z</sup>	26/336 (7.7)	23/543 (4.2)	<0.001
	No, n/N (%) <sup>z</sup>	223/336 (66.4)	428/543 (78.8)	
	Have not visited a doctor in the past 12 months, n/N (%) <sup>z</sup>	87/336 (25.9)	92/543 (17.0)	
	Yes, n/N* (%)	26/249 (10.4)	23/451 (5.1)	

Note: \* – among healthcare providers' visitors; z – statistically significant difference by z-test ( $p<0,05$ )

Source: compiled by the authors of this study

**Table 2.** The distribution of responses to questions on tobacco and nicotine product use depending on the psycho-emotional state of respondents, n (%)

Questions and responses		PTSD		p
		Group I (Yes)	Group II (No)	
Do you smoke?	Yes, n/N (%) <sup>z</sup>	147/400 (36.7)	182/701 (26.0)	<0.001
	Stopped smoking, n/N (%)	67/400 (16.8)	112/701 (16.0)	
	No, never, n/N (%) <sup>z</sup>	186/400 (46.5)	407/701 (58.0)	
Have you tried to quit smoking within the past 12 months?	Yes, n/N* (%)	14 (21.5)	12 (17.9)	0.665
	No, n/N* (%)	51 (78.5)	55 (82.1)	
Have you been advised to quit smoking during any medical visit in the past 12 months?	Yes, n/N* (%)	14 (40.0)	10 (25.6)	0.220
	No, n/N* (%)	21 (60.0)	29 (74.4)	

Note: \* – available data among regular smokers; z – statistically significant difference by z-test ( $p<0,05$ )

Source: compiled by the authors of this study

third person smoked more, i.e. 104 individuals (54,7%), while 86 (45,3%) made no changes to their smoking habits.

The next stage of the scientific study involved examining potential links between harmful habits and changes in the psycho-emotional state of adults during the full-scale invasion of Ukraine by the Russian Federation. Respondents were divided into two groups based on psycho-emotional state criteria: Group I – respondents with signs of PTSD ( $n = 400$ ); Group II – respondents without signs of PTSD ( $n = 701$ ).

The findings revealed that most adults, regardless of their psycho-emotional state, consumed alcohol, with a higher frequency in Group I compared to Group II (84,0% and 77,4%, respectively;  $p = 0,010$ ) (Table 1). Among consumers, attempts to quit alcohol during wartime were reported by 19,0% of those with PTSD symptoms compared to 9,6% of those without PTSD symptoms ( $p < 0,001$ ). Overall, fewer than 10,0% of respondents received recommendations from healthcare providers to reduce alcohol consumption (49 of 700 [7,0%] visitors), particularly 5,1% in Group II versus 10,4% in Group I ( $p = 0,013$ ) (Table 1).

The characteristics of respondents' use of tobacco and nicotine products depending on their psycho-emotional state are presented in Table 2. It was also found that among the surveyed Ukrainians, 36,7% of adults with PTSD symptoms and 26,0% of those without such symptoms smoked ( $p < 0,001$ ). Among regular smokers with available data, 21,5% and 17,9% had attempted to quit smoking within the last 12 months, respectively. Moreover, during visits to a doctor, 40,0% of respondents in Group I and 25,6% in Group II reported receiving advice to quit smoking (in total, 24 of 74 [32,4%] respondents), which was higher than the proportion of similar advice provided regarding alcohol consumption.

It was determined that, due to the onset of military actions, respondents with PTSD symptoms were twice as likely (34,2%) to report an increase in alcohol consumption compared to those without PTSD symptoms (13,5%) ( $p < 0,001$ ) (Fig. 3).

The beginning of military actions acted as a trigger for increased consumption of tobacco and nicotine products among the majority of individuals in Group I (64,6%) compared to 44,7% in Group II ( $p = 0,009$ ) (Fig. 3).

## DISCUSSION

The present study analyzed the impact of wartime factors on the prevalence of harmful habits among the adult population of Ukraine and established a connection with changes in their psycho-emotional state. The

analysis revealed a high prevalence of these habits: nearly 80,0% of adult respondents consumed alcohol, and 30,0% smoked. These figures are alarming and generally consistent with the results of other national surveys conducted in Ukraine during the same period. Specifically, a WHO-supported sociological survey conducted in December 2023 found that 77,4% of Ukrainians had consumed alcohol in the past 12 months, which is almost identical to our findings (79,8%) [24]. A similar consistency was observed for smoking: our study identified 29,9% of respondents as smokers, while a sociological survey in April 2023 recorded 27,4% as current users of tobacco products [21]. This close alignment of results supports the representativeness of our sample and the validity of the data obtained.

The key and most revealing finding of our study is the direct correlation between probable symptoms of PTSD and the dynamics of substance use. It was established that respondents with probable PTSD symptoms not only had a higher prevalence of harmful habits (84,0% consumed alcohol and 36,7% smoked, compared to 77,4% and 26,0% in the group without PTSD symptoms, respectively) but were also significantly more likely to increase their consumption. Individuals with probable signs of PTSD were 2,5 times more likely to report an increase in alcohol consumption (34,2% vs. 13,5%) and nearly 1,5 times more likely to report an increase in smoking intensity (64,6% vs. 44,7%) compared to those without PTSD symptoms. These findings convincingly indicate that alcohol and tobacco are being used as maladaptive coping strategies for stress. The results correlate with numerous international studies demonstrating that individuals who have experienced traumatic events often turn to substance use as a form of self-medication to alleviate symptoms of anxiety, intrusive memories, and emotional numbness characteristic of PTSD [20, 21, 25].

Against the backdrop of a significant rise in diagnosed PTSD cases in Ukraine, which increased nearly fourfold in 2023 compared to 2021, our findings point to the formation of a dangerous trend. Attempts to "self-medicate" the manifestations of psychological trauma with alcohol and nicotine do not solve the underlying problem but rather deepen it, creating the risk of developing a dual diagnosis—the comorbidity of PTSD and chemical dependency. This, in turn, complicates the treatment of both conditions and significantly worsens the long-term health prognosis for the individual.

Particularly concerning is the fact that the healthcare system appears to be not optimally addressing this problem. Our study revealed that the vast majority of respondents with harmful habits had not received any medical recommendations to reduce or quit them. In

particular, only 7,0% of alcohol consumers who had visited a doctor received such advice, and only 32,4% of regular smokers were advised to quit. This indicates a significant gap in primary healthcare delivery and highlights the urgent need to implement screenings for substance use and brief interventions during routine medical visits, especially when working with patients living under conditions of chronic stress.

Certain limitations of our study should be acknowledged. First, the use of the “snowball sampling” method for respondent recruitment and the significant predominance of women in the sample (80,7%) may limit the applicability of the results to the entire adult population of Ukraine. Second, the diagnosis of probable PTSD symptoms was conducted using a screening questionnaire rather than a clinical interview, which is the gold standard. Nevertheless, the findings clearly illuminate a serious public health issue. They underscore the ur-

gent need for the development and implementation of comprehensive psychological support and stress prevention programs that offer healthy alternatives for coping with the consequences of trauma, as noted in our perspectives for future research. The integration of mental health and substance abuse services is critically important for overcoming the negative health consequences of the war on the nation.





## CONCLUSIONS

It can be stated that the onset of the full-scale military operation in Ukraine, as a traumatic stress factor, negatively affected the lifestyle of adults, particularly by increasing alcohol and tobacco consumption. At the same time, the majority of respondents with harmful habits did not receive medical recommendations to reduce or quit these behaviors.

## REFERENCES

1. Natsionalna sluzhba zdorovia Ukrainy. V ESOP protiahom ostannikh dvokh rokiv fiksuietsia znachne zbilshennia patsientiv zi vstanovlenym diahnozom PTSD. [The National Health Service of Ukraine. In the E-health system, a significant increase in patients diagnosed with PTSD has been recorded over the past two years]. 2024. <https://moz.gov.ua/uk/kilkist-pacientiv-zi-vstanovlenim-dianozom-ptsr-v-ukraini-zrostae-scho-treba-znati-pro-posttravmatichnij-stresovij-rozlad> [Accessed 12 September 2025] (Ukrainian)
2. GBD 2016 Alcohol Collaborators. Alcohol use and burden for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet*. 2018;22;392(10152):1015–1035. doi: 10.1016/S0140-6736(18)31310-2. DOI
3. Burton R, Sheron N. No level of alcohol consumption improves health. *Lancet*. 2018;392(10152):987–988. doi: 10.1016/S0140-6736(18)31571-X. DOI
4. Di Castelnuovo AF, Costanzo S, de Gaetano G. Alcohol and the global burden of disease. *Lancet*. 2019;393(10189):2389. doi: 10.1016/S0140-6736(19)30725-1. DOI
5. Russell AM, Ou TS, Bergman BG et al. Associations between heavy drinker’s alcohol-related social media exposures and personal beliefs and attitudes regarding alcohol treatment. *Addict Behav Rep*. 2022;15:100434. doi: 10.1016/j.abrep.2022.100434. DOI
6. World Health Organization. Alcohol. Geneva: WHO. 2024. <https://www.who.int/news-room/fact-sheets/detail/alcohol> [Accessed 15 September 2025]
7. World Health Organization. Global status report on alcohol and health. Geneva: WHO. 2018. <https://www.who.int/publications/i/item/9789241565639> [Accessed 15 September 2025]
8. World Health Organization. World health statistics 2023: monitoring health for the SDGs, Sustainable Development Goals. Geneva: WHO. 2023. <https://www.who.int/publications/i/item/9789240074323> [Accessed 18 September 2025]
9. World Health Organization. Alcohol consumption in Ukraine: behaviour and attitude. 2023. [https://www.who.int/docs/librariesprovider2/default-document-library/alcohol-consumption-ukraine-behaviour-attitude\\_en.pdf](https://www.who.int/docs/librariesprovider2/default-document-library/alcohol-consumption-ukraine-behaviour-attitude_en.pdf) [Accessed 20 September 2025]
10. Zaman R, Hankir A, Jemni M. Lifestyle Factors and Mental Health. *Psychiatr Danub*. 2019;31(3):217–220. [https://www.psychiatria-danubina.com/UserDocImages/pdf/dnb\\_vol31\\_noSuppl%203/dnb\\_vol31\\_noSuppl%203\\_217.pdf](https://www.psychiatria-danubina.com/UserDocImages/pdf/dnb_vol31_noSuppl%203/dnb_vol31_noSuppl%203_217.pdf) [Accessed 20 September 2025]
11. Young W, Karp S, Bialick P et al. Health, Secondhand Smoke Exposure, and Smoking Behavior Impacts of No-Smoking Policies in Public Housing, Colorado, 2014–2015. *Prev Chronic Dis*. 2016;13:E148. doi: 10.5888/pcd13.160008. DOI
12. Kanithi M, Junapudi S, Shah SI et al. Alterations of Mitochondrial Network by Cigarette Smoking and E-Cigarette Vaping. *Cells*. 2022;11(10):1688. doi: 10.3390/cells11101688. DOI
13. Purani H, Friedrichsen S, Allen AM. Sleep quality in cigarette smokers: Associations with smoking-related outcomes and exercise. *Addict Behav*. 2019;90:71–76. doi: 10.1016/j.addbeh.2018.10.023. DOI
14. AlRyalat SA, Kussad S, El Khatib O et al. Assessing the effect of nicotine dose in cigarette smoking on sleep quality. *Sleep Breath*. 2021;25(3):1319–1324. doi: 10.1007/s11325-020-02238-3. DOI
15. Rozen TD. Linking Cigarette Smoking/Tobacco Exposure and Cluster Headache: A Pathogenesis Theory. *Headache*. 2018;58(7):1096–1112. doi: 10.1111/head.13338. DOI



16. Yuan S, Chen J, Ruan X et al. Smoking, alcohol consumption, and 24 gastrointestinal diseases: Mendelian randomization analysis. *Elife*. 2023;12:e84051. doi: 10.7554/eLife.84051. 
17. Bauer-Kemény C, Herth FJF. Smoking-toxic substances and immunological consequences. *Radiologie (Heidelb)*. 2022;62(9):731–737. doi: 10.1007/s00117-022-01006-6. 
18. Pamminger M, Mayr A. Cardiovascular consequences of smoking: Imaging overview. *Radiologie (Heidelb)*. 2022;62(9):763–771. doi: 10.1007/s00117-022-01027-1. 
19. World Health Organization. Tobacco. Geneva: WHO. 2023. <https://www.who.int/news-room/fact-sheets/detail/tobacco> [Accessed 22 September 2025]
20. UN News. Vo vremya chrezvychaynykh situatsiy uroven upotrebleniya tabaka vozrastaet – skol'ko ukraintsev kurit? [During emergencies, tobacco consumption increases – how many Ukrainians smoke?]. 2023. <https://news.un.org/ru/story/2023/05/1441547> [Accessed 24 September 2025]. (Russian)
21. Vzhivannia tiutunovykh ta nikotynovykh vyrobiv v Ukraini: rezultaty sotsiologichnoho opytuvannia sered dorosloho naselennia Ukrainy 18+. [Use of tobacco and nicotine products in Ukraine: results of a sociological survey among the adult population aged 18+]. 2023. <http://surl.li/sjjav> [Accessed 25 September 2025]. (Ukrainian)
22. Antypkin YuH, Horban NYe, Lutsenko OH et al. Anketa «Doslidzhennia kharchovoi povedinky ta stanu zdorov'ia naselennia Ukrainy». [Questionnaire “Study of eating behavior and health status of the population of Ukraine”]. 2021. <https://familyhealthtest.com.ua/anketa/> [Accessed 27 September 2025]. (Ukrainian)
23. Ministerstvo okhorony zdorov'ia Ukrainy. Unifikovanyi klinichniy protokol medychnoi dopomohy. Reaktsiia na vazhkyi stres ta rozlady adaptatsii. Posttravmatychnyi stresovyi rozlad. [Ministry of Health of Ukraine. Unified clinical protocol of medical care. Reaction to severe stress and adaptation disorders. Post-traumatic stress disorder]. 2016. [https://www.dec.gov.ua/wp-content/uploads/2019/11/2016\\_121\\_ykpm\\_d\\_ptsr.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/2016_121_ykpm_d_ptsr.pdf) [Accessed 29 September 2025]. (Ukrainian)
24. World Health Organization. Alcohol consumption in Ukraine - behaviour and attitude. Geneva: WHO. 2023. <https://www.who.int/ukraine/publications/m/item/alcohol-consumption-in-ukraine-key-findings> [Accessed 30 September 2025].
25. Hawn SE, Cusack SE, Amstadter AB. A systematic review of the self-medication hypothesis in the context of posttraumatic stress disorder and comorbid alcohol use. *J Trauma Stress*. 2020;33(5):699–708. doi: 10.1002/jts.22521. 

## CONFLICT OF INTEREST











The Authors declare no conflict of interest

## CORRESPONDING AUTHOR

**Oleksandr Gh. Lutsenko**

Ukrainian Center of Maternity and Childhood of the  
National Academy of Medical Sciences of Ukraine  
8 Platon Maiboroda St., 04050 Kyiv, Ukraine  
e-mail: lutsenko.nvh@gmail.com

## ORCID AND CONTRIBUTIONSHIP

Nataliia Y. Horban: 0000-0001-8175-6579     
Oleksandr Gh. Lutsenko: 0000-0002-6241-5258    
Liudmyla M. Slobodchenko: 0000-0002-6526-4942    
Oles V. Lapikura: 0000-0001-7629-2933    
Iryna V. Sliepakurova: 0009-0007-7345-0255 

 – Work concept and design,  – Data collection and analysis,  – Responsibility for statistical analysis,  – Writing the article,  – Critical review,  – Final approval of the article

**RECEIVED:** 28.05.2025

**ACCEPTED:** 26.10.2025

