

## PUBLIC HEALTH MANAGEMENT IN A CRISIS SITUATION: ALCOHOL CONSUMPTION IN TERMS OF SOCIO-ECONOMIC STATUS

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**Abstract:** In order to strengthen public health management, the main aim of the study was to identify possible changes in alcohol consumption during the health crisis, classified according to the socio-economic status of the Slovak population. The research sample consisted of 506 respondents (33% males and 67% females), and data were collected through an online questionnaire distributed from 29<sup>th</sup> of April 2020 to 1<sup>st</sup> July 2020. A cross-tabulation showed that alcohol consumption did not change in about half of the respondents, while the majority of the remaining respondents reported a decrease in alcohol consumption compared to those who reported an increase. Females were more stable in their drinking than males. Correspondence analysis showed that high-income males (2500 to 2999 EUR) were more likely to drink excessively. Conversely, high-income females reported much less alcohol consumption. Health care professionals should pay increased attention to alcohol consumption in vulnerable groups at risk of developing an addiction. The findings of this study provide valuable information for improving public policy management and for effective decision-making in public health.

**Key words:** public health management, decision-making, substance use, alcohol consumption, socio-economic status, income, gender, health crisis, Slovakia

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### Introduction

Management is ubiquitous; its importance is shown, especially in difficult situations. Regardless of the sector, there is management that should lead processes to success, including success in the health care sector. In many countries, the incidence of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) has resulted in hitherto unknown conditions in people's lives (Lumayag et al., 2020; Rebhun, 2021). Sudden changes are the most significant aspects of the coronavirus disease 2019 (COVID-19) pandemic, which may have been reflected in various dimensions of public life (Vorobeveva and Dana, 2021; Privara and Rievajová, 2021; Srinok and Zandi, 2021). The economic recession, limitations in education and opportunities, job loss, unknown disease and risky behaviour, such as alcohol consumption, should be taken into account (Calina et al., 2021). Thus, the COVID-19 pandemic represents a mass

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trauma, which can be translated into health consequences, changes in health behaviour and addictive problems. These facts underline the need for effective management of the pandemic and its consequences.

With a focus on cross-sectional evidence, a decrease in alcohol consumption during the first months of the COVID-19 pandemic was evident in most European countries, with the exception of Ireland and the United Kingdom (UK) (Kilian et al., 2021). In all of the analysed European countries, alcohol consumption did not change in about half of the respondents, while most of the remaining respondents reported a decrease compared to those who reported an increase (Manthey et al., 2021). Changing patterns of alcohol consumption have also been highlighted in other studies (Calina et al., 2021).

Income appears to be a significant aspect regarding the characteristics of individuals related to alcohol consumption. It is an income that plays an important role in the lives of individuals (Diekmann and Fröhlich, 2020; Eröss et al., 2020; Zhulega et al., 2019), and people seek to overcome various socio-economic situations in terms of their present or future income (Kabir et al., 2021). Regarding the analysed issue, Martínez-Cao et al. (2021) found that having an income higher than 1999 EUR compared to no income was linked to alcohol use as a coping strategy, especially for males. Thus, an upper-middle-income group increased the risk for alcohol consumption, as evidenced by Neill et al. (2020), who revealed in their Australian study that heavier pre-pandemic drinking, middle age, and average or higher income, and proximal factors, including job loss, eating more, changes to sleep as well as stress and depression, were all associated with increased drinking in the COVID-19 pandemic environment. Valente et al. (2021) also agreed with this fact, as they found that male gender and higher income were positively associated with an increased frequency of heavy episodic drinking among drinkers in Latin America and Caribbean countries during the COVID-19 pandemic. Similar findings were revealed by Mougharbel et al. (2021), who confirmed that high-income groups were associated with higher odds of binge drinking, increased drinking and mental distress. However, the findings remain unclear when considering the drinking patterns, age, gender and other individual characteristics of drinkers. Garnett et al. (2021), in their study based on UK, revealed that drinking less was independently associated with being younger, male, low income, having COVID-19, stress from COVID-19, adhering to COVID-19 protective behaviours and not being a key worker in the pandemic. Regarding the opposite drinking patterns, the authors found that drinking more was independently associated with being younger, female, post-16 qualifications, high income, stress from COVID-19, financial stress and anxiety. Also, Na et al. (2021) confirmed that higher household income before the pandemic was associated with a lower risk of alcohol use disorder in military veterans. Following this evidence, Tutzer et al. (2021) emphasized that low-income and unemployed individuals were significantly more often affected by psychological distress, loneliness and boredom. Simultaneously, they have consumed alcohol

significantly more often since the outbreak of the COVID-19 pandemic in order to feel better.

The above-mentioned findings were the greatest motivation for conducting this study and examining the role of socio-economic status and gender aspects in alcohol consumption during the COVID-19 pandemic in Slovakia. Thus, this study focuses on changes in alcohol-related behaviour during the lockdown, taking into account, in particular, the various income categories, but also the gender characteristics of individuals. The study helps to reveal the most vulnerable income categories of Slovak respondents in terms of the possible alcohol addiction due to restrictions on public and private life. In this way, a research gap in Slovakia was filled. The findings can provide a basis for public health management in times of health crisis, especially from an addictology perspective. In order not to aggravate the situation and make effective decisions, policymakers should know the critical points to focus on in their governance.

## **Materials and Methods**

### ***Aim and Research Question***

In order to strengthen public health management, the main aim of this study was to identify possible changes in alcohol consumption during the health crisis, classified according to the socio-economic status of the Slovak population. With regard to this aim, the following research question was formulated:

-RQ1: What are the changes in alcohol consumption in different income categories of the Slovak population during the COVID-19 pandemic?

### ***Data and Research Sample***

Data were collected using an online questionnaire under collaboration between epidemiologists from various research organizations in Europe. The purpose of this effort was to examine the use of addictive substances (tobacco, alcohol, cannabis and other illegal drugs) during the COVID-19 pandemic in Europe. This study includes data only for Slovakia, which were collected during the lockdown, which started in the second week of March 2020. Specifically, data for Slovakia were collected between 29<sup>th</sup> of April 2020 and 1<sup>st</sup> of July 2020.

Respondents were asked to choose the response that best reflected their situation, including socio-demographic information (gender, age and education). Changes in drinking during the COVID-19 lockdown were measured using the following questions:

-Did you drink alcohol less or more often in the past month?

-Did the amount of alcohol you usually drink on each drinking occasion change in the past month?

-Did the frequency of drinking occasions where you drank a high amount of alcohol (i.e., six or more drinks) change in the past month?

All three questions could be answered by the Likert scale calibrated as follows: 1 - much less, 2 - slightly less, 3 - no change, 4 - slightly more and 5 - much more.

Socio-economic status was measured using the question:

-What was your monthly net household income before the outbreak of SARS-CoV-2?

This question could be responded as follows: I do not know, 499 EUR or less, 500 to 999 EUR, 1000 to 1499 EUR, 1500 to 1999 EUR, 2000 to 2499 EUR, 2500 to 2999 EUR, 3000 to 3499 EUR, 3500 to 3999 EUR, 4000 to 4499 EUR, 4500 EUR or more. Respondents who chose “I do not know” were not included in the total research sample.

The total research sample included 506 Slovak respondents aged 18 years and over, of which 167 were males, and 339 were females (33% males and 67% females). At this point, it should be noted that 11 observations were excluded, as the level of education of these respondents was lower than high school. Finally, 495 observations were included in the analytical procedure. The average age of the respondents was 34 years, while most of the observations ranged between 22 and 26 years. Moreover, the age distribution of observations by gender was similar. The majority of respondents included in this study belonged to the middle class. The average monthly income in Slovakia was 1086 EUR. Observations with a frequency higher than 5% for the monthly net income of households were used in the analysis. Thus the net income interval ranged from 499 or less to 2999 EUR.

#### ***Statistical Analysis***

In order to meet the main aim of the study, a cross-tabulation for categorical data was provided in the first step. This analysis was chosen to examine the possible link within the study variables that is not readily evident. Two dimensions, which record the frequency of respondents with specific characteristics related to pre-pandemic income and alcohol consumption, were included in pivot tables with respect to gender classification. This helped to obtain information on changes in drinking in individual income categories during the COVID-19 pandemic.

Subsequently, a correspondence analysis was selected for the graphical presentation of the cross-tabulations. It is an exploratory technique designed to analyse the data in a pivot table and measure the correspondence between its rows and columns in order to reduce dimensionality. Correspondence analysis allows to study the relationships between two categorical variables (socio-economic status and alcohol consumption) and is useful in cases where a graphical output is clearer than a numeric one. The outputs of the correspondence analysis are similar to the results of factor analysis. The output of the correspondence analysis is a two-dimensional graph, also called a correspondence map. The first dimension of the correspondence analysis consisted of the net monthly household income in individual categories. The second dimension was a response to the question: Did the frequency of drinking occasions where you drank a high amount of alcohol (i.e., six or more drinks) change in the past month? As before, the correspondence analysis respected gender classification.

The analytical processing was conducted using SPSS v. 19 (IBM, Inc., Armonk, NY, U.S.).

**Results**

The cross-tabulation of information on the income categories of respondents in the pre-pandemic period and changes in the frequency of drinking during the lockdown is provided in Table 1. Data are presented as percentages, and the highest values are shaded, while the lowest values are not.

**Table 1. Income and frequency of drinking**

		<b>Did you drink alcohol less or more often in the past month?</b>				
		<b>much less</b>	<b>slightly less</b>	<b>no change</b>	<b>slightly more</b>	<b>much more</b>
<b>Males</b>						
<b>What was your monthly net household income before the outbreak of SARS-CoV-2? (EUR)</b>	499 or less	22%	22%	33%	0%	22%
	500 to 999	27%	9%	36%	14%	14%
	1000 to 1500 to	24%	0%	48%	20%	8%
	2000 to	36%	10%	36%	10%	10%
	2500 to	11%	21%	37%	26%	5%
		20%	20%	60%	0%	0%
<b>Females</b>						
<b>What was your monthly net household income before the outbreak of SARS-CoV-2? (EUR)</b>	499 or less	33%	13%	20%	33%	0%
	500 to 999	20%	7%	65%	6%	2%
	1000 to 1500 to	13%	16%	59%	12%	0%
	2000 to	22%	10%	59%	8%	0%
	2500 to	15%	4%	69%	8%	4%
		24%	24%	41%	12%	0%

**Note:** The higher value, the darker the shade of the cells.

Based on the results in Table 1, it can be noted that most of the observations for females and males were identified in the column “no change”. The percentage of unchanged drinking was more or less significantly higher for females compared to males. Thus, it can be concluded that, in terms of frequency of alcohol consumption, females were more stable than males during the COVID-19 lockdown.

It is also possible to observe certain variations in alcohol consumption during the lockdown. In the first place, a significant reduction in the frequency of drinking was found in males with a household income of 500 to 999, 1000 to 1499 and 1500 to 1999 EUR per month. For females, a significant reduction in drinking frequency was identified in income categories, such as 499 EUR or less and 2500 to 2999 EUR. A decent decrease in the frequency of drinking was revealed in females who lived in households with 1500 to 1999 EUR per month.

On the other hand, in the case of an increased frequency of drinking, males with an income of 499 EUR or less were prone to drink much more often in the lockdown period than before. Also, males in income categories of 1000 to 1499 and 2000 to 2499 EUR drank slightly more often during the lockdown. It is also clear that females

in the low-income category (499 EUR or less) reported drinking slightly more often during the lockdown than before. Also, a significant proportion of females with a monthly income of 1000 to 1499 and 2500 to 2999 EUR drank alcohol slightly more frequently than before.

The following Table 2 presents the cross-tabulation of information on the income categories of respondents in the pre-pandemic period and the changes in the amount of alcohol consumed on each drinking occasion during the lockdown.

**Table 2. Income and amount of alcohol on drinking occasion**

		Did the amount of alcohol you usually drink on each drinking occasion change in the past				
		much less	slightly less	no change	slightly more	much more
<b>Males</b>						
<b>What was your monthly net household income before the outbreak of SARS-CoV-2? (EUR)</b>	499 or less	25%	0%	50%	0%	25%
	500 to 999	14%	18%	36%	23%	9%
	1000 to 1499	24%	4%	52%	16%	4%
	1500 to 1999	32%	7%	52%	7%	3%
	2000 to 2499	11%	26%	37%	26%	0%
	2500 to 2999	20%	20%	60%	0%	0%
<b>Females</b>						
<b>What was your monthly net household income before the outbreak of SARS-CoV-2? (EUR)</b>	499 or less	20%	7%	40%	27%	7%
	500 to 999	16%	7%	73%	2%	2%
	1000 to 1499	10%	15%	64%	12%	0%
	1500 to 1999	12%	10%	74%	4%	0%
	2000 to 2499	4%	0%	89%	8%	0%
	2500 to 2999	28%	11%	56%	0%	6%

**Note:** The higher value, the darker the shade of the cells.

Table 2 shows similar findings as in the previously investigated cases. Again, most of the observations for females and males were found in the column “no change”. Even in this case, the percentage of unchanged alcohol consumption during the lockdown was significantly higher in females than in males, suggesting a more stable amount of alcohol drunk on drinking occasions for females.

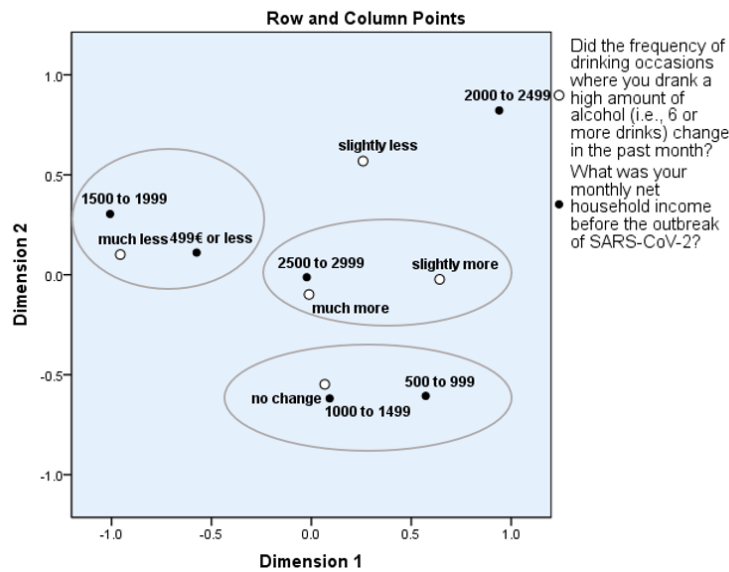
With a focus on changes in the amount of alcohol consumed on drinking occasions, males with an income of 500 to 999, 2000 to 2499 and 2500 to 2999 EUR reported slightly lower alcohol quantity, and males with an income of 499 EUR or less, 1000 to 1499, 1500 to 1999 and 2500 to 2999 EUR consumed much lower doses of alcohol on each drinking occasions during the COVID-19 lockdown. A decrease in alcohol consumption on drinking occasions was found in females who lived in households with a monthly income of 499 EUR or less and 2500 to 2999 EUR. Also, females in the income category of 1000 to 1499 EUR drank lower doses of alcohol during the lockdown.

On the other hand, a significant increase in alcohol consumption on drinking occasions was found in low-income males (499 EUR or less). A slightly higher amount of alcohol was reported by males with an income of 500 to 999, 1000 to 1499 and 2000 to 2499 EUR. Females in the low-income category consumed a slightly higher amount of alcohol than usual in 27% of the analysed cases and a much higher amount of alcohol in 7% of the analysed cases. Slightly higher alcohol doses were also reported by females with an income of 1000 to 1499 and 2000 to 2499 EUR.

After seeing the above-mentioned facts about changes in alcohol consumption patterns during the COVID-19 lockdown, the question remains whether there is any relationship between pre-pandemic income and the frequency of drinking occasions where respondents drank a high amount of alcohol (i.e., six or more drinks) during the lockdown. For this purpose, a correspondence analysis was carried out in order to identify the most vulnerable income categories of respondents in terms of the possible alcohol addiction due to restrictions on public and private life. The correspondence analysis is a statistical technique that provides a graphical representation of cross-tabulations. In the following correspondence maps, the first dimension included the net monthly household income in individual categories, and the second dimension was a response to the question: Did the frequency of drinking occasions where you drank a high amount of alcohol (i.e., six or more drinks) change in the past month?

The correspondence map, shown in Figure 1, clearly defines three clusters of combinations of drinking occasions where male respondents drank a high amount of alcohol and their pre-pandemic income. First, it is possible to observe the correspondence between the much less frequent drinking occasions where males drank a high amount of alcohol and a net monthly household income of 499 EUR and less, and 1500 to 1999 EUR. The second cluster is formed by slightly more and much more frequent drinking occasions with a high amount of alcohol and a pre-pandemic income of 2500 and 2999 EUR. Finally, no change in the frequency of drinking occasions where male respondents drank a high amount of alcohol is concentrated around income categories, such as 500 to 999 and 1000 to 1499 EUR.



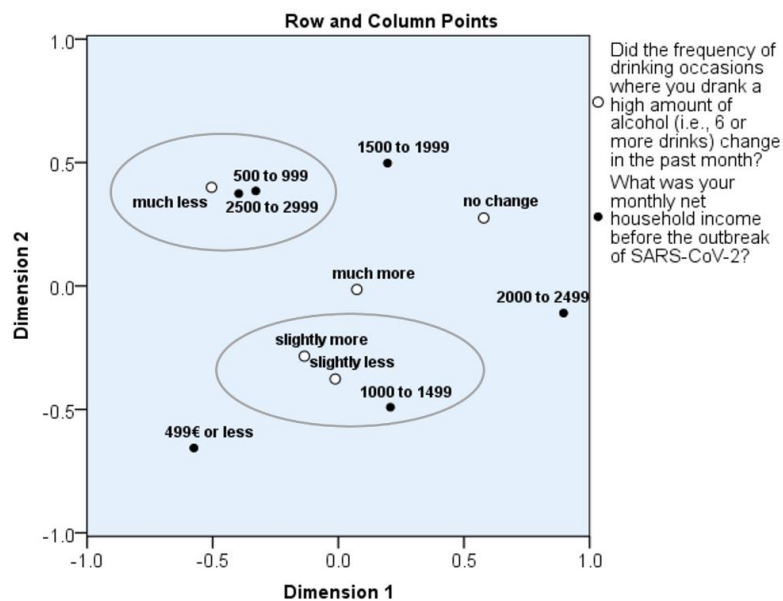


**Figure 1: Correspondence map for males – income and drinking occasions with a high amount of alcohol**

**Note:** Variances – Dimension 1 = 0.687; Dimension 2 = 0.189.

Figure 2 presents a correspondence map for females. As can be seen, two clusters are defined for combinations of drinking occasions where female respondents drank a high amount of alcohol and their pre-pandemic income. The first cluster is formed by much less frequent drinking occasions where females drank a high amount of alcohol and household income from opposite sides of the income spectrum, namely 500 to 999 and 2500 to 2999 EUR. The second cluster consists of slight changes in females' drinking. In this cluster, it is possible to observe a correspondence between slightly more and slightly less frequent drinking occasions with a high amount of alcohol and an income category of 1000 to 1499 EUR. No change in the frequency of drinking occasions where female respondents drank a high amount of alcohol is very weakly concentrated around income categories, such as 1500 to 1999 and 2000 to 2499 EUR.





**Figure 2: Correspondence map for females – income and drinking occasions with a high amount of alcohol**

**Note:** Variances – Dimension 1 = 0.601; Dimension 2 = 0.371.

## Discussion

In fact, COVID-19 and alcohol addiction are two pandemics that are on the verge of a collision and pose a serious threat to public health, and the provision of health care is particularly crucial at this time (Siim, 2021). The pandemic affected many areas, leading to adverse events in the lives of individuals that caused not only stress (Seňová and Antořová, 2014). Therefore, effective management is needed. For this purpose, it is necessary to know how alcohol consumption in different populations have changed and to identify vulnerable groups that require special attention. One possible path is identification based on socio-economic status, which was also provided by the presented study.

This study confirmed the fact that a certain group of people changed their alcohol-related behaviour during the lockdown, which is consistent with other studies (Calina et al., 2021; Steffen et al., 2021). In this context, the results can be compared with the results from the UK (Garnett et al., 2021), Poland (Sidor and Rzymiski, 2020), Australia (Stanton et al., 2020), Germany (Koopmann et al., 2020), Brazil (Malta et al., 2020) or China (Ahmed et al., 2020). As females indicated no change in many cases, they were more stable in alcohol consumption than males. This finding is consistent with other studies showing that males tend to change alcohol consumption and drink more than females (Ahmed et al., 2020; Szajnoga et al., 2021; Valente et al., 2021).

Changes in drinking could be observed not only between the gender characteristics but also between the income categories of males and females. According to Beard et al. (2019), the socio-economic status is the strongest predictor of the frequency of alcohol consumption. This study also contributes to understanding the possible links between pre-pandemic income categories and the frequency of drinking occasions where individuals drank a high amount of alcohol. For this purpose, a correspondence analysis was carried out in order to identify the most vulnerable income categories of respondents in terms of the possible alcohol addiction due to restrictions on public and private life.

Based on the results, high-income males (2500 to 2999 EUR) were characterized by more frequent drinking occasions with a high amount of alcohol during the COVID-19 lockdown, while lower-middle-income males (500 to 999, and 1000 to 1499 EUR) did not show a change in drinking. During the pandemic, alcohol consumers with high income could drink more than usual because high-income drinkers have more drinking opportunities and occasions compared to low-income drinkers in this situation (Ally et al., 2016). In contrast, low-income males (499 EUR and less) were much less likely to participate in drinking occasions where they drank a high amount of alcohol. This is consistent with the findings revealed by Beard et al. (2019), who confirmed that the lowest occupational categories of social grade had fewer drinking occasions than those in the highest occupations. However, the results of this study indicated that the upper-middle-income category of Slovak males (1500 to 1999 EUR) could also be included in this drinking category. In terms of females, much less frequent drinking occasions with a high amount of alcohol during the COVID-19 lockdown were identified for income categories of 500 to 999 as well as 2500 to 2999 EUR. Accordingly, high-income females showed the opposite change in drinking as high-income males. This can be explained by the fact that females bear the burdens of increased childcare and housework during the lockdown, which could deprive them of drinking time and add duties and responsibility for running the household (Waddell et al., 2021). Interestingly, the lower-middle-income category of Slovak females (1000 to 1499 EUR) was characterized by changed alcohol-related behaviour, but the change indicated slightly less as well as slightly more frequent drinking occasions with a high amount of alcohol.

The findings of this study confirm the complexity of alcohol consumption among different population groups with varying levels of socio-economic status. This is evidenced by many other studies that reflect inconsistencies in the findings. The fact that average or higher income was associated with increased alcohol use during the COVID-19 pandemic was revealed in studies from Spain (Martínez-Cao et al., 2021), Australia (Neill et al., 2020), Latin America and the Caribbean (Valente et al., 2021), Canada (Mougharbel et al., 2021) and the UK (Garnett et al., 2021). In contrast, a higher income as a protective factor was found in veterans in the United States (Na et al., 2021) and in the general population from Austria (Tutzer et al., 2021). The complexity of the examined issue was also emphasized by Buja et al. (2019), who revealed in the younger generation that individuals with a higher weekly

income are at increased risk of alcohol use, while the level of their economic dissatisfaction was positively associated with alcohol consumption.

Therefore, further research is needed across different groups of the population in order to identify the problem in time, find successful strategies and respond to changes in situations that may affect public life. For instance, young adults were burdened by distance learning (Csikosova et al., 2012), people working abroad were affected by border restrictions (Cassidy, 2020), or foreign students and their personal networks were limited (Přívvara et al., 2020; Ganjour et al., 2020). All these vulnerable populations should be examined separately and in the context of their socio-economic status. On the other hand, the pandemic has led to progress in technological development, and this change should also be considered in the context of the effect on health (Seňová and Šebešćáková, 2020).

Finally, it should be emphasized that the COVID-19 pandemic is a critical situation, and effective management is needed to overcome it in many areas. The area of addictology is no exception (Bejkovský and Snopek, 2021; Petruželka et al., 2021). Based on this study, socio-economic inequalities should be incorporated into alcohol prevention strategies (Orosova et al., 2020; Orte et al., 2020). Last but not least, effective managerial skills at the national level will be needed to revitalize public health, also from the point of view of addictology.

### **Conclusion**

The presented study and its findings contribute to the COVID-19 issue from the perspective of the Slovak population and answer the following research question: “What are the changes in alcohol consumption in different income categories of the Slovak population during the COVID-19 pandemic?”. Following this question, the main aim of the study was to identify possible changes in alcohol consumption during the health crisis, classified according to the socio-economic status of the Slovak population. Achieving this aim provides valuable information to improve public health management decision-making. In every area of life in countries, public leaders and managers should make evidence-based decisions, and public health is no exception. Public health management should focus on critical points in order to implement successful interventions, especially in difficult times. The aim was met by cross-tabulation analysis and correspondence analysis.

The main findings showed unchanged alcohol consumption in about half of the respondents, with the remaining respondents reporting a decrease in alcohol use more than an increase. In addition, males tended to change their drinking more than females. Thus, alcohol prevention programs should take gender aspects into account. The study also clarifies vulnerable income categories in terms of frequent drinking occasions where respondents drank a high amount of alcohol. In general, high-income males can be considered a risk group. These findings provide a valuable platform of evidence not only for Slovak public health leaders and experts but also for international ones. At this time, international cooperation in the field of health plays an important role and should be developed, as health benefits can be expected.

Health care professionals should pay increased attention to alcohol use in vulnerable groups at risk of developing an addiction.

The limitations of this study include the partially unbalanced nature of the research sample, as there was a higher proportion of females and younger respondents. Due to the use of an online survey, the sample of this research cannot be considered representative of the Slovak population, and the findings should be generalized with caution. However, this limitation need not be considered disruptive to the results and value of knowledge. The fact that the study included a smaller research sample examined in only one country represents another limitation.

With regard to these limitations, future research should cover a larger representative sample and should be performed on a sample of respondents from several countries. Future research should also focus on other unhealthy behaviours (tobacco use, illegal drug use, excessive use of sedatives) and other socio-economic factors. These factors would provide a more detailed view of changes in drinking with respect to socio-economic status.

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### ZARZĄDZANIE ZDROWIEM PUBLICZNYM W SYTUACJI KRYZYSOWEJ: KONSUMPCJA ALKOHOŁU W ZAKRESIE STANU SPOŁECZNO-GOSPODARCZEGO

**Streszczenie:** W celu wzmocnienia zarządzania zdrowiem publicznym, głównym celem badania była identyfikacja możliwych zmian w spożyciu alkoholu podczas kryzysu zdrowotnego, sklasyfikowanych według statusu społeczno-ekonomicznego ludności słowackiej. Próba badawcza składała się z 506 respondentów (33% mężczyzn i 67% kobiet), a dane zostały zebrane za pomocą ankiety internetowej rozprowadzanej od 29 kwietnia 2020 r. do 1 lipca 2020 r. Tabela krzyżowa wykazała, że spożycie alkoholu nie zmieniło się w około połowie badanych, podczas gdy większość pozostałych respondentów zgłosiła spadek spożycia alkoholu w porównaniu z tymi, którzy zgłosili wzrost. Kobiety były bardziej stabilne w picciu niż mężczyźni. Analiza korespondencji wykazała, że mężczyźni o wysokich dochodach (2500 do 2999 euro) częściej nadużywali alkoholu. Z drugiej strony kobiety o wysokich dochodach zgłaszały znacznie mniejsze spożycie alkoholu. Pracownicy służby zdrowia powinni zwracać większą uwagę na spożywanie alkoholu w grupach wrażliwych, zagrożonych uzależnieniem. Wyniki tego badania dostarczają cennych informacji na temat poprawy zarządzania polityką publiczną oraz skutecznego podejmowania decyzji w zakresie zdrowia publicznego.

**Słowa kluczowe:** zarządzanie zdrowiem publicznym, podejmowanie decyzji, używanie substancji, spożywanie alkoholu, status społeczno-ekonomiczny, dochód, płeć, kryzys zdrowotny, Słowacja



## 危机情况下的公共卫生管理：从社会经济状况来看的酒精消费

**摘要：** 为了加强公共卫生管理，本研究的主要目的是确定健康危机期间酒精消费的可能变化，并根据斯洛伐克人口的社会经济地位进行分类。研究样本包括 506 名受访者（33% 男性和 67% 女性），数据是通过 2020 年 4 月 29 日至 2020 年 7 月 1 日分发的在线问卷收集的。受访者，而其余受访者中的大多数报告称，与报告饮酒量增加的人相比，饮酒量有所减少。女性饮酒比男性更稳定。对应分析表明，高收入男性（2500 至 2999 欧元）更有可能酗酒。相反，高收入女性报告的饮酒量要少得多。卫生保健专业人员应更加关注有成瘾风险的弱势群体的酒精消费。本研究的结果为改进公共政策管理和有效的公共卫生决策提供了宝贵的信息

**关键词：** 公共卫生管理，决策，物质使用，酒精消费，社会经济地位，收入，性别，健康危机，斯洛伐克