



INCREASE IN ALCOHOL CONSUMPTION DURING THE COVID-19 LOCKDOWN: TRUTH OR FALSE?

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Introduction: The lives of most people around the world have changed since the onset of SARS-CoV-2 pandemic (SARS-CoV - severe acute respiratory syndrome corona virus). According to the WHO data, the first cases in Croatia were registered on February 26, in Bosnia and Herzegovina on March 5, and in Serbia on March 10, 2020. The assumption was that due to stress caused by imposed isolation, the alcohol consumption began to increase.

Methods: In order to obtain information on alcohol consumption in the period before and during Covid-19 lockdown, an online anonymous survey was conducted, in which a total of 930 persons participated: 542 from Croatia, 219 from Bosnia and Herzegovina, and 169 from Serbia.

Results: Among those who completed the survey were 659 women and 271 men, mostly between 20-45 years old, with higher or secondary education. Most were employed, living in urban areas with a larger population. The obtained results did not show the influence of lockdown on alcohol consumption. On the contrary, 20.21% of participants, who had previously consumed alcohol, answered that they stopped consuming during the lockdown. Only 0.43% of participants started consuming alcohol precisely because of isolation.

Conclusions: This research sheds new light on the daily practice of people during Covid-19 pandemic in the Western Balkans, known as a region where alcohol consumption is quite widespread.

Keywords: ALCOHOL CONSUMPTION, COVID-19, LOCKDOWN

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Introduction

The lives of most people in the world have suddenly significantly changed due to the emergence of the SARS-CoV-2 pandemic (SARS-CoV - severe acute respiratory syndrome coronavirus). Covid-19 is a contagious respiratory disease caused by a recently discovered coronavirus, from a large family of viruses that causes respiratory infections (1, 2).

The Covid-19 pandemic has suddenly and significantly changed the lives of the people around the globe. Since it has started in the Wuhan province, China, in the late 2019, the disease continues to expand all over the world, and strikes the Balkan region too. According to the World Health Organization (WHO), the first cases of the infection were recorded in Croatia on February 26, in Bosnia and Herzegovina on March 5,

and in Serbia on March 10, 2020. Just the day after, the disease spread all over the world and on March 11, 2020 the WHO declared a state of the pandemic. Data announced by WHO testified the rapid spread of the virus, along with many cases with confirmed infection and deaths worldwide (3, 4).

Most countries were overtaken and unprepared; people were frightened, angry, insecure, and mistrustful to national leaderships (4). Since none of the available therapies were appropriate for curing, a special attention was paid to various preventive measures in terms of combating the spread of the infection. Finally, the situation presented by the Covid-19 pandemic requires many countries worldwide to take extraordinary measures to protect health and well-being of the population. Therefore, many countries have implemented lockdown

measures. Croatia on March 19, Bosnia and Herzegovina on March 21 and Serbia on March 15. That put people into a difficult economic situation, accompanied by various adverse emotional reactions, behavioural changes, including excessive substance abuse (5). With the reduction in the number of infected persons, at the end of May and the beginning of June, the locking measures were relaxed. According to media reports, later published in the scientific literature, an increase in alcohol sales has been recorded during this period (6-9). A survey conducted in the UK found that more than a third of the 1555 people surveyed who reported drinking alcohol before locking said they stopped drinking or reduced frequency of drinking in the 2 weeks after starting the lock. About a fifth answered that they drank more often in the same period while half consumed about the same amount. However, 15% said they drank more than at the beginning of the lock. Of particular concern was the fact that almost one in five respondents answered that they have further increased the amount of alcohol they drank since the lockdown measures started (10). Since a similar situation persisted in Croatia and the surrounding countries (Bosnia and Herzegovina and Serbia), to test such claims a survey was conducted

Methods

Due to epidemiological measures, the study was organized online, using the Google Form platform. The link to the website of the online surveys was published on the website of the University Department of Health Studies of the University of Split: (<http://ozs.unist.hr/novosti/931-anketa-o-utjecaju-covid-19-pandemije-on-consumer-alcoholic-pizzas>). The link was shared via email, SMS and WhatsApp, Facebook or orally. In this survey study a total of 930 persons participated (659 women and 271 men): from Croatia (N=542), from Bosnia and Herzegovina (N=219), and from Serbia (N=169), mostly between 20-45 years old. Online self-registration questionnaire was distributed from the end of April to the beginning of June 2020, separately for each surveyed country (Croatia - group G I; between April 28 and May 28, Bosnia and Herzegovina

group G II; between April 30 and May 31 and Serbia group G III; between May 6 and June 3), in an individual duration of a maximum of 30 days.

Statistical analysis

Descriptive statistics and differences between the samples and groups were tested by using GraphPad Prism version 8.0.0 for Mac (GraphPad Software, San Diego, CA, USA). Distribution normality was determined using Kolmogorov-Smirnov test. The statistical analysis performed using nonparametric tests because the distribution differed from a normal distribution. The differences between the study parameters groups were measured using the Mann-Whitney U test. Differences and relationships were statistically significant at P-value <0.05.

Results

The results of this study showed that only 2.3% of the total number of participants were infected or had symptoms of Covid-19 infection, while only 5.8% of their family members were infected or had symptoms of infection. Sociodemographic characteristics are summarized in Table 1. Most of the participants were female (70.86%), aged between 20-55 years (86.67%), and lived in place over 200.000 habitants. Education level in most of them (33.66%) was master's degree and most of them (52.9%) were single. The majority of participants (33.66%) had a university education (master's degree), and the majority (52.9%) were single. The survey was initiated by university professors. Since all contacts were required to forward the link to the survey to their contacts, there was a higher proportion of the participants with higher education, therefore, the results could not be applicable to the general population.

Considering cohabitation, the biggest change during the lockdown concerned to the single life and living in a shared household. During the lockdown, the number of persons living alone decreased by 28.67% while at the same time the number of those living in a joint household increased by 18.67% (Table 2). Overall, before and during the lockdown, there was no statistically significant difference: U=17; p=0.9362.

At the same time, during the lockdown, 18.23% of respondents lost their jobs, while five times more of them started to work from home (Table 2). Among the total number of employed respondents, only 3.57% before the lockdown worked from home, while 22.29% worked from home during the lockdown. Among the total number of employments there was no statistically significant difference: U=28; p=0.3676.

Answers to questions regarding alcohol consumption are shown in Figure 1 (Table 3). Extremely small number of participants (0.43%) reported to have started alcohol consumption during the lockdown, while 20.21% reported to have stopped drinking during the isolation. Life without alcohol during the lockdown was unthinkable for fewer participants (7.95%) than before the lockdown (9.14%).

Figure 1. shows the results of the answer on amount of alcohol consumed on a weekly basis before and during quarantine (beer 0,5 L, wine 0,2 L, liqueurs and spirits 0,03 L). According to the concentration of alcohol, 4 categories of alcoholic beverages were classified: beer, wine, liqueurs and spirits. The category of liqueurs has been added because liqueurs in the classification of alcoholic beverages, regarding ethanol content, belong to medium-strength beverages, between wine and spirits. The results showed an increase of respondents who denied taking beer, wine, liqueur, and spirit by 30.5%, 55.28%, 29.41%, and 46.76%, respectively. The next notable difference between participants who drank occasionally and apparently stopped consuming alcoholic beverages during the lockdown, was the number of occasional consumers decreased during the lockdown (Figure 1): 27.9%, 33.89%, 35.14% and 40.6% for beer, wine, liqueurs, and spirits, respectively.

Average alcohol consumption per week, expressed in euros, for the purchase of alcoholic beverages before and during the lockdown showed an increase by 18% in the number of respondents who spent between 0-5 euros per week during the lockdown, while at the same time, the number of respondents who spent more euros a week have decreased

(Figure 2). The number of respondents who spent between 6-10 euros decreased by 44.74%, 11-20 euros by 38.57%, 21-30 euros by 45.45%, while the number of those who spent between 31-50 euros decreased by 89.47%.

Most participants answered that lockdown, in terms of alcohol consumption, did not affect them personally (Table 4, Figure 3). Only 6.66% of them considered that lockdown had a significant

impact, while 1.93% considered that it had a very significant impact (Table 4). They had a feeling that lockdown period led to the increase of alcohol consumption in people close to them (11.83%) or people in general (24.95%).

Discussion

In order to obtain information on alcohol consumption in the period before and during Covid-19 lockdown,

an online anonymous survey was conducted, in which a total of 930 persons from Croatia, Bosnia and Herzegovina and Serbia participated. The results of our study are significantly different from previously reported ones (6-9). Namely, reduced alcohol consumption during the lockdown has been observed, opposite to expectations based on results shown by many researchers (10, 11) as well as by some informal sources, as newspapers and public information.

Table 1.
Sociodemographic data of participants, according to the examined groups (Group I - Croatia, Group II - Bosnia and Herzegovina and Group III - Serbia) and in total.

Parameters		Group I	Group II	Group III	Total
N		542	219	169	930
Sex	Female	370	165	124	659
	Male	172	54	45	271
Age	<19	24	11	0	35
	20-25	123	154	26	303
	26-35	135	24	65	224
	36-45	88	13	48	149
	46-55	103	10	17	130
	56-65	58	7	10	75
	>65	11	0	3	14
Place of residence (size)	<1.000	31	5	4	40
	1.001-5.000	47	40	6	93
	5.001-15.000	56	28	12	96
	15.001-50.000	75	44	35	154
	50.001-100.000	65	23	6	94
	100.001-200.000	133	21	7	161
	> 200.000	135	58	99	292
Education	primary school	5	0	0	5
	secondary education	149	94	29	272
	undergraduate study (BsC)	79	61	32	172
	graduate study (Master)	203	42	68	313
	postgraduate study (PhD)	105	20	38	163
	none of the above	1	2	2	5
Marital status	single	246	174	72	492
	married	236	37	59	332
	partner community	34	4	23	61
	divorced	19	2	13	34
	widow/widower	7	2	2	11

Table 2. Lifestyle before and during Covid-19 lockdown, according to the examined groups (Group I - Croatia, Group II - Bosnia and Herzegovina and Group III - Serbia) and in total.

Parameters	Before lockdown				During lockdown				
	Group I	Group II	Group III	Total	Group I	Group II	Group III	Total	
Who do you live with	single	80	25	38	143	59	10	33	102
	with a partner	102	15	47	164	102	13	45	160
	with children	27	2	9	38	30	3	9	42
	with a partner and children	143	20	37	200	140	21	37	198
	in a multi-adult household	152	138	26	316	183	160	32	375
	other	38	19	12	69	28	12	13	53
Employments	pupil	9	1	1	11	9	1	1	11
	student	129	150	19	298	127	148	18	293
	employed	354	55	123	532	297	43	95	435
	unemployed	13	8	16	37	20	16	19	55
	employed (work from home)	15	1	3	19	63	8	26	97
	I lost my job	1	0	1	2	1	0	2	3
	pensioner	16	1	5	22	16	1	5	22
	other	5	3	1	9	9	2	3	14

Given that the study included respondents from different parts of three neighbouring countries, we believe that their answers are valuable for assessing the impact of lockdown on alcohol consumption. Of the total respondents, 15.7% stated that they had never consumed alcohol before the lockdown, 50.2% had consumed occasionally, 11.4% once a week, 9.68% few times a week, 6.56% at least once a month, 3.55% few times a month, and just 2.9% consumed alco-

hol daily. Considering the question about four types of alcohol beverages along with its proposed various amount (beer, wine, liqueurs and spirits), for the period before and during the lockdown, the larger difference in responses was observed for the answer not consume. Of the total number, more respondents stated that they did not consume alcoholic beverages during the lockdown compared to that number before the lockdown (between 29% and 55%) (Figure 1).

The results, individually for each investigated country, show that the largest changes in alcohol consumption before and during the lockdown were observed for the population of Bosnia and Herzegovina, while the smallest changes were observed for the population of Serbia (no explanation available). A larger number of respondents did not consume alcohol during the lockdown compared to the pre-lockdown period and responded with not consume: for beer 12.18, 16.44 and

Table 3. The effect of Covid-19 lockdown on alcohol consumption, according to the examined groups (Group I - Croatia, Group II - Bosnia and Herzegovina and Group III - Serbia) and in total.

Parameters		Group I	Group II	Group III	Total (%)
Do you belong to those who started drinking alcohol beverages during lockdown?	Yes	3 (0.55%)	0 (0%)	1 (0.59%)	4 (0.43%)
	No	539 (99.45%)	219 (100%)	168 (99.41%)	926 (99.57%)
Are you among those who quitted drinking during the lockdown?	Yes	102 (18.82%)	57 (26.03%)	29 (17.16%)	188 (20.21%)
	No	440 (81.18%)	162 (73.97%)	140 (82.84%)	742 (79.79%)
Could you imagine a life without alcohol before lockdown?	Yes	492 (90.77%)	200 (91.32%)	153 (90.53%)	845 (90.86%)
	No	50 (9.23%)	19 (8.68%)	16 (9.47%)	85 (9.14%)
Could you imagine living without alcohol during lockdown?	Yes	500 (92.25%)	197 (89.95%)	159 (94.08%)	856 (92.05%)
	No	42 (7.75%)	22 (10.05%)	10 (5.92%)	74 (7.95%)

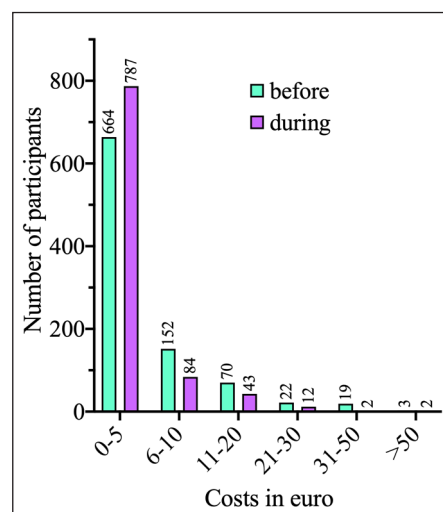
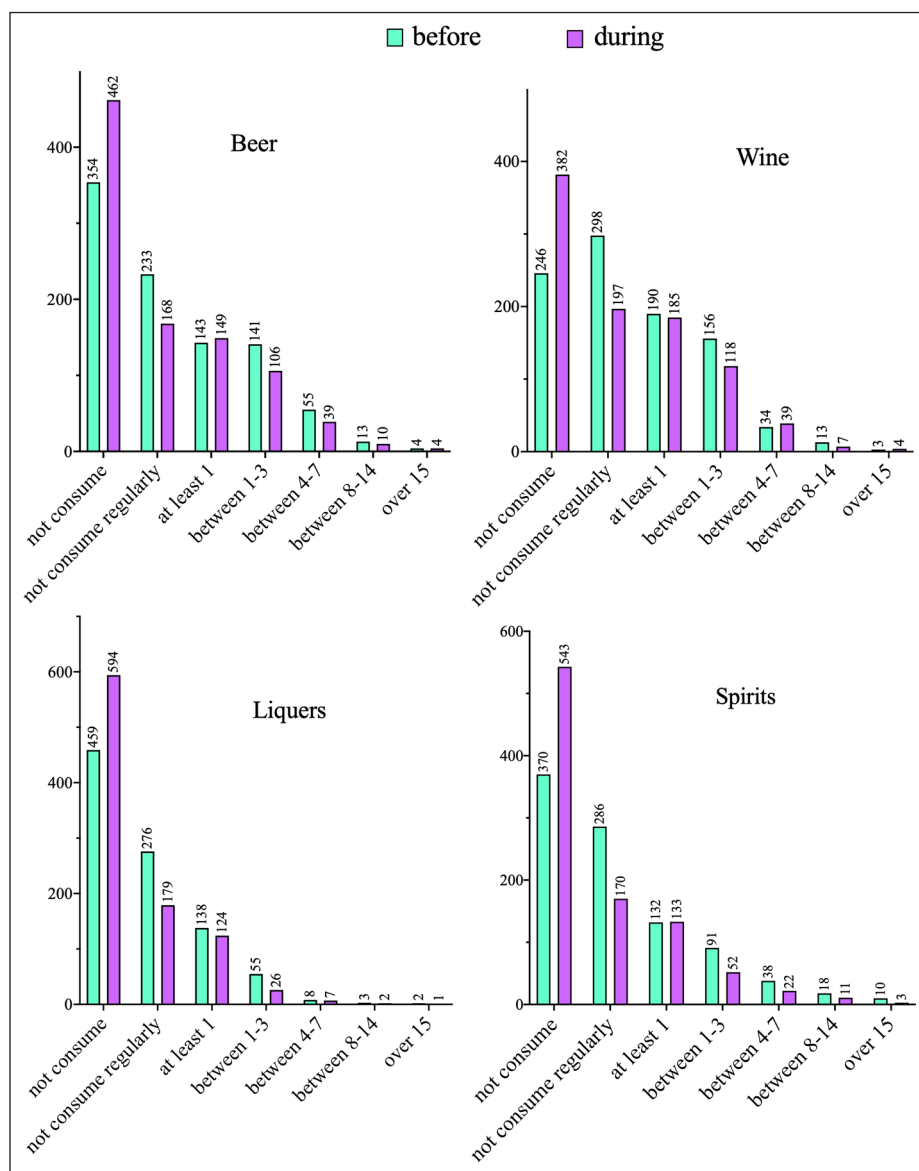


Figure 2. Weekly spending money (Euro) on alcoholic beverages shopping - before and during lockdown. No statistically significant difference was observed $U=14$; $p=0.5755$.

experience of consuming alcoholic beverages perhaps only outside the home, in bars, restaurants etc., but not with consumption at home. The results of our study showed that lockdown was not a trigger to initiate alcohol consumption, in all subjects. At the time of lockdown, most of those who stopped drinking were from Bosnia and Herzegovina (26.03%), but at the same time, there were slightly more among those who could not imagine life without alcohol (Table 3).

Most of our participants were between 20- and 45-year-old. Of all participants 31.5% were students, who more often visit bars and night clubs, hence the type of alcohol beverage was more appropriate for such younger population. They stated that as a reason for consuming alcohol were night outs (16.34%), events (16.13%) and friends (13.55%). Thus, the decrease alcohol consumption may be explained by reduced possibility to move outside their homes during the lockdown. According to informal sources, reduced alcohol consumption has been noted in the UK during the lockdown, along with enhancement of alcohol purchase and reduced consumption in restaurants and bars.

From the total participants, 71.72% stated that sadness has never been the cause of alcohol consumption during

Figure 1. Quantities of alcohol consumption before and during lockdown: beer 0.5 L; wine 0.2 L glass; liqueurs and spirits per 1 drink (0.03 L), per a week. The answer “don’t consume regularly” means that without regularity, in some weeks respondents drink and in some do not drink.

3.55%, for wine 13.28, 25.11 and 5.33%, for liqueurs 13.84, 21 and 8.28% and for spirits 20.11, 22.37 and 8.88% respectively from Croatia, Bosnia and Herzegovina and Serbia. This result may be due to the emergence of an extremely new and different situation compared to the previous way of life. Most of the respondents have the same abode before and during the lockdown.

Just 8% of them changed their place of residence. Many failed to cope with the new situation. When asked how they purchased alcohol beverages, most of them responded that they did it personally

(33.22%) or through a family member (8.9%). Only 1.9% of responders purchased alcohol beverage through online shop.

Reduced alcohol consumption has been noted in some new research. According to one, drinking habits have changed in UK during the lockdown. 21% adults, who used to drink alcohol, drank more often, while 35% have reduced or stopped drinking (11). Another study, comprising Italy population, showed reduced alcohol consumption in 36.8% respondents and its increase in 10.1% during the lockdown (12). They explained their results as a possible association with the

Table 4.
 Answers to the question: Has alcohol consumption before (A) and during lockdown had influence on: you (B) or on your family member or people close to you (C), cause and results of Mann-Whitney U test.

Parameters		before lockdown			during lockdown						Mann-Whitney U Test	
		A		G III	B			C			A vs B	A vs C
		G I	G II		G I	G II	G III	G I	G II	G III		
drunkenness	never	274	120	82	468	189	142	460	190	129	U=86.5 p=0.2891	U=86.5 p=0.2891
	almost never	106	33	28	36	4	6	39	11	12		
	sometimes	134	54	52	33	16	18	43	11	24		
	often	30	8	12	7	5	2	2	4	4		
	always	0	5	0	0	5	1	0	3	1		
fury	never	493	203	144	530	214	163	521	207	154	U=100 p=0.6170	U=111.5 p=0.9840
	almost never	41	12	20	9	2	6	16	7	10		
	sometimes	10	3	5	3	2	0	5	3	5		
	often	0	0	0	1	0	0	0	0	1		
	always	0	1	0	0	1	0	0	2	0		
anger	never	496	199	144	529	213	164	516	207	155	U=101 p=0.6455	U=110 p=0.9362
	almost never	37	14	20	9	3	5	15	6	7		
	sometimes	10	5	7	3	2	0	11	4	6		
	often	0	0	0	1	0	1	0	0	1		
	always	0	1	0	0	1	0	0	2	0		
aggression	never	502	205	151	534	213	164	523	208	155	U=100.5 p=0.6312	U=107 p=0.8337
	almost never	27	10	14	4	3	5	15	5	15		
	sometimes	13	2	4	2	2	0	3	4	3		
	often	0	1	0	1	0	0	1	0	1		
	always	0	1	0	1	1	0	0	2	0		
worse behavior towards children	never*	522	215	163	536	216	165	522	210	156	U=111 p=0.9681	U=86 p=0.2801
	almost never	19	3	5	5	1	5	13	2	8		
	sometimes	0	0	2	1	1	0	6	4	4		
	often	0	0	0	0	0	0	1	1	1		
	always	0	1	0	0	1	0	0	2	0		
worse behavior towards partner	never*	501	205	143	528	216	165	519	208	153	U=101 p=0.6455	U=106.5 p=0.8181
	almost never	28	10	21	7	1	5	14	4	10		
	sometimes	12	3	4	5	1	0	8	3	5		
	often	0	0	0	2	0	0	1	2	1		
	always	0	1	0	0	1	0	0	2	0		
worse behavior towards others	never	489	201	142	529	213	165	522	208	156	U=96.5 p=0.5222	U=112.5 p=0.9840
	almost never	35	14	18	9	3	4	13	4	8		
	sometimes	18	3	9	4	2	0	6	3	4		
	often	0	0	0	0	0	0	1	2	1		
	always	0	1	0	0	1	0	0	2	0		

*The answer "never" also includes the answers of people who are single as well as those who do not have children.

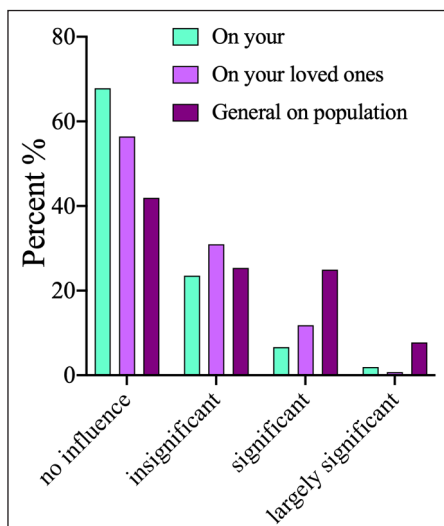


Figure 3. A graphical display of answers to questions about the impact of lockdown on alcohol consumption: On - What was the impact of lockdown on your alcohol consumption? On your loved ones - To your knowledge, what has been the impact of lockdown on the consumption of alcohol for your loved ones? And General on population - To your knowledge, general in the population, what has been the impact of lockdown on the consumption of alcoholic beverages?

the pre-lockdown period, nor for 82.8% redundant during the lockdown. Only 11.8% of participants answered whether they consumed alcohol with a meal in the pre-lockdown period. During the lockdown, that percentage has insigni-

ficantly risen to 14.74%. The research conducted on Chinese population sample, from Hubei province, showed that people during pandemic suffered from lack of direct contact, anxiety, depression, and they consumed alcohol beverage (13). According to their results, young people aged 21-40 were more vulnerable, and 29.1% of participants, out of a total of 1074, had signs of excessive drinking. Our results were different, only 2.90% of respondents consumed alcohol every day and 9.69% several times a week.

Due to difficulties with the procurement, drug addicts may experience withdrawal symptoms, while other addictions, such as alcoholism or smoking may have more severe manifestation (14). Reduced alcohol consumption, besides in the UK and Italy, has been noted in India (11, 12, 15). According to research conducted in India, a sharp increase in the number of patients admitted to the emergency department with alcohol abstinence syndromes (delirium, seizures, and hallucinations) during the lockdown has been recorded, and they linked this observation to a lack of money to buy alcohol during the lockdown (16). The lockdown situation can be particularly serious for women and children who are victims of domestic violence. Unlike some other studies,

subjects from our study showed no negative effects for almost any of the parameters examined (13). On the contrary, during the lockdown, they less consumed alcohol and it has been reflected in a reduced number of negative effects on drunkenness, anger, fury, bad behaviour towards partner, children, or loved ones due to alcohol consumption (Table 5). No statistically significant difference, according to the Mann-Whitney U Test, was observed.

Study by Đogaš at all, conducted on Croatian population, showed that 19.1% respondent did not consumed alcohol before the lockdown, moreover this percentage raised to 32.1% during the lockdown (17). They also found an increase in the percentage of those respondents who consumed more alcohol per week. In our study, the percentage of respondents who did not consume alcohol increased from 38.4% to 53.25%. An increase in the percentage of respondents who consumed larger amounts has not been detected or was negligible.

Conclusion

In conclusion, there was no increase, but rather a decrease, in alcohol consumption in the observed period for all three analysed countries (Croatia,

Table 5. Answers regarding the perception of the impact of lockdown on alcohol consumption, according to the examined groups (Group I - Croatia, Group II - Bosnia and Herzegovina and Group III - Serbia) and in total.

Parameters		Group I	Group II	Group III	Total
What has been the impact of lockdown on your alcohol consumption?	it had no influence	368	156	107	631
	insignificant	131	40	48	219
	significant	35	15	12	62 (6.66%)
	largely significant	8	8	2	18 (1.93%)
To your knowledge, what has been the impact of lockdown on the consumption of alcohol for your loved ones?	it had no influence	320	126	79	525
	insignificant	173	60	55	288
	significant	49	27	34	110 (11.83%)
	largely significant	0	6	1	7 (0.75%)
To your knowledge, general in the population, what has been the impact of lockdown on the consumption of alcoholic beverages?	I do not know	257	77	56	390
	insignificant	126	59	51	236
	significant	131	55	46	232 (24.95%)
	largely significant	28	28	16	72 (7.74%)

Bosnia and Herzegovina, and Serbia). We must note that the conclusion refers to the examined population and not to the total population. The disadvantage of the study is: the sample was not representative (data are not weighted to match a range of national demographic characteristics), the percentage of educated people in this study is higher than in the general population. Also, it should be noted that their existence usually was not endangered. Perhaps the results would be different if the lockdown persisted for a longer period, if the research was performed immediately after the lockdown, or if that research was done later, when all the negative impressions would have been considered. Clearly, there is no simple answer to these dilemmas. However, a little satisfaction remained, that besides infection, and negative impact on the economy and job losses, the examined period of lockdown did not have an impact in terms of more pronounced depression and anger or increased alcohol consumption.

An obvious misperception in one's surroundings is present with a conclusion: I don't drink more because of the lockdown, but others around me drink more. Does not this prove a generally wrong hypothesis and a distorted picture of everyone, including ourselves, and especially those who sometimes send such information to the public?

NOVČANA POTPORA/FUNDING

Nema/None

ETIČKO ODOBRENJE/ETHICAL APPROVAL

The study was conducted in accordance with the Declaration of Helsinki and was approved by the Ethics Committee at the University of Split, University Department of Health Studies (No. 001-01/20-01/0004).

SUKOB INTERESA/CONFLICT OF INTEREST

Autori su popunili *the Unified Competing Interest form* na www.icmje.org/coi_disclosure.pdf (dostupno na zahtjev) obrazac i izjavljuju: nemaju potporu niti jedne organizacije za objavljeni rad; nemaju financijsku potporu niti jedne organizacije koja bi mogla imati interes za objavu ovog rada u posljednje 3 godine; nemaju drugih veza ili aktivnosti koje bi mogle utjecati na objavljeni rad./ *All authors have completed the Unified Competing Interest form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organization for the submitted work; no financial rela-*

tionships with any organizations that might have an interest in the submitted work in the previous 3 years; no other relationships or activities that could appear to have influenced the submitted work.

LITERATURE

1. WHO Coronavirus disease (COVID-2019) situation report (Internet). (accessed 15.7.2020.). Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-coronaviruses>.
2. WHO Coronavirus disease (COVID-2019) situation report (Internet). (accessed 15.7.2020.). Available from: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200226-sitrep-37-covid-19.pdf?sfvrsn=2146841e_2.
3. WHO Coronavirus disease (COVID-2019) situation report (Internet). (accessed 15.7.2020.). Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>.
4. The Lancet Editorial. COVID-19: learning from experience. *Lancet* 2020; 395: 1011.
5. Dubey S, Biswas P, Ghosh R, Chatterjee S, Dubey MJ, Chatterjee S, et al. Psychosocial impact of COVID-19. *Diabetes Metab Syndrome* 2020; 14:779-88. doi.org/10.1016/j.dsx.2020.05.035.
6. Rehm J, Kilian C, Ferreira-Borges C, Jernigan D, Monteiro M, Parry CDH, et al. Alcohol use in times of the COVID 19: implications for monitoring and policy. *Drug Alcohol Rev* 2020; 39:301e4. doi.org/10.1111/dar.13074.
7. Reynolds J, Wilkinson C. Accessibility of essential alcohol in the time of COVID-19: casting light on the blind spots of licensing? *Drug Alcohol Rev* 2020; 39:305e8. doi.org/10.1111/dar.13076.
8. Hefler M, Gartner CE. The tobacco industry in the time of COVID-19: time to shut it down? *Tobac Contr* 2020; 29:245e6. doi: 10.1136/tobaccocontrol-2020-055807.
9. Finlay I, Gilmore I. Covid-19 and alcohol-a dangerous cocktail. *BMJ* 2020; 20: 369. m1987. doi.org/10.1136/bmj.m1987.
10. The Lancet Gastroenterology & Hepatology Drinking alone: COVID-19, lockdown, and alcohol-related harm. *Lancet Gastroenterol Hepatol* 2020; 5: 625. doi: 10.1016/S2468-1253(20)30159-X.
11. New Research Reveals How UK Drinking Habits Have Changed During Lockdown. (Internet). (accessed 15.7.2020.). Available from: <https://agilitypr.news/New-Research-Reveals-How-UK-Drinking-Hab-9570>.
12. Scarmozzino F and Visioli F. Covid-19 and the Subsequent Lockdown Modified Dietary Habits of Almost Half the Population in an Italian Sample. *Foods* 2020; 9: 675. doi.org/10.3390/foods9050675.
13. Ahmed MZ, Ahmed O, Aibao Z, Hanbin S, Siyu L, Ahmad A. Epidemic of COVID-19 in China and associated Psychological Problems. *Asian Journal of Psychiatry* 2020; 51: 102092. doi: 10.1016/j.ajp.2020.102092.
14. Vieta E, Perez V, Arango C. Psychiatry in the aftermath of COVID-19 La psiquiatría post-COVID-19. *Revista de Psiquiatría y Salud Mental* 2020; 13: 105-10. doi: 10.1016/j.rpsm.2020.04.004.
15. Total alcohol consumption dropped during lockdown. (Internet). (accessed 11.11.2020.). Available from: http://drinksretailingnews.co.uk/news/fullstory.php/aid/19833/Total_alcohol_consumption_dropped_during_lockdown.html.
16. Narasimha VL, Shukla L, Mukherjee D, Me non J, Huddar S, Panda UK, et al. Complicated Alcohol Withdrawal-An Unintended Consequence of COVID-19 Lockdown. *Alcohol and Alcoholism* 2020; 1-4. doi: 10.1093/alcalc/agaa042.
17. Đogaš Z, Lušić Kalcina L, Pavlinac Dodig I, Demirović S, Madirazza K, Valić M, et al. The effect of COVID-19 lockdown on lifestyle and mood in Croatian general population: a cross-sectional study. *Croat Med J* 2020; 61: 309-18. doi.org/10.3325/cmj.2020.61.309.

Sažetak

POVEĆANA KONZUMACIJA ALKOHOLA TIJEKOM COVID-19 IZOLACIJE: ISTINA ILI LAŽ?

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Uvod: Život većine ljudi širom svijeta promijenio se otkako je započela pandemija SARS-CoV-2 (SARS-CoV - teški akutni respiratorni korona virus sindrom). Prema podacima Svjetske zdravstvene organizacije (WHO), prvi registrirani slučajevi u Hrvatskoj bili su 26. veljače, Bosni i Hercegovini 5. ožujka, a u Srbiji 10. ožujka 2020. godine. Za pretpostaviti je kako je zbog stresa uzrokovano nametnutom izolacijom - konzumacija alkohola počela rasti.

Metode: Kako bi se dobile informacije o konzumaciji alkohola u razdoblju prije i tijekom Covid-19 izolacije, provedeno je online anonimno anketno istraživanje u kojem je sudjelovalo ukupno 930 osoba: 542 iz Hrvatske, 219 iz Bosne i Hercegovine i 169 iz Srbije.

Rezultati: Među onima koji su ispunili anketni upitnik bilo je 659 žena i 271 muškarac, uglavnom između 20-45 godina starosti, s visokim ili srednjim stupnjem obrazovanjem. Većina ispitanika je bila zaposlena, živjela je u urbanim sredinama s većim brojem stanovnika. Dobiveni rezultati u istraživanju nisu pokazali utjecaj izolacije na povećanje konzumacije alkohola. Upravo suprotno, 20,21% ispitanika, koji su prethodno konzumirali alkohol, odgovorili su kako su ga tijekom izolacije zbog pandemije bolesti Covid-19 prestali konzumirati. Samo 0,43% ispitanika počelo je konzumirati alkohol upravo zbog izolacije.

Zaključak: Ovo istraživanje daje novo svjetlo na svakodnevnu praksu ljudi tijekom Covid-19 pandemije u zemljama zapadnog Balkana, poznatom kao regiji u kojoj je konzumacija alkohola prilično raširena.

Ključne riječi: KONZUMACIJA ALKOHOLA, COVID-19, IZOLACIJA, SARS

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