Meaning of Life in Secondary Abstainers from Alcohol (Abstain From Alcohol and Meaning of Life)

Mamić, Marin; Gretzer, Tomislav; Zirdum, Ivanka; Vidić, Hrvoje; Tomić, Anamarija; Mikšić, Štefica; Mamić, Ivana; Jovanović, Tihomir; Jelinčić, Ivana; Degmečić, Dunja; ...

Source / Izvornik: **Archives of Psychiatry Research, 2024, 60, 99 - 107**

Journal article, Published version
Rad u časopisu, Objavljena verzija rada (izdavačev PDF)

https://doi.org/10.20471/june.2024.60.02.02

Permanent link / Trajna poveznica: https://urn.nsk.hr/urn:nbn:hr:184:406897

Original paper

Archives of Psychiatry Research 2024;60:099-108

DOI:10.20471/june.2024.60.02.02
Received April 23, 2022
Accepted after revision September 24, 2023

Meaning of Life in Secondary Abstainers from Alcohol (Abstain From Alcohol and Meaning of Life)

Marin Mamić[1,2,3], Tomislav Gretzer[1], Ivanka Zirdum[1], Hrvoje Vidić[1,2], Anamarija Tomić[3], Štefica Mikšić[3], Ivana Mamić[1,3], Tihomir Jovanović[2,3,4], IvanaJelinčić[2,3,5], Dunja Degmečić[2,5], Slavka Galić[6], Ivan Vukoja[1,2,7]

[1]General County Hospital Požega, Požega, Croatia, [2]Faculty of Medicine, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia, [3]Nursing Institute Professor Radivoje Radić, Faculty of Dental Medicine and Health, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia, [4]General Hospital Pakrac and Hospital of Croatian Veterans, Pakrac, Croatia, [5]University Hospital Centre Osijek, Osijek, Croatia, [6]University of Slavonski Brod, Slavonski Brod, Croatia, [7]Faculty of Medicine, University of Rijeka, Rijeka, Croatia

Key words

Alcohol abstinence; alcoholism; meaning in life

Abstract

Aim: Alcoholism is a major public health problem, and it has not yet been clarified which are the factors that influence the relapse of the disease. Aim of this research is to examine whether there is a connection between meaning of life in secondary abstainers from alcohol and variables (demographic, alcohol consumption and severity of addiction before abstinence) and to determine which variables are predictors of the meaning of life in secundary abstainers. **Subjects and methods:** The research was conducted in 2019 and 2020 at the County Hospital of Požega, at the Department of Neurology, Psychiatry and Clinical Psychology. 113 adults participated in this research who were diagnosed with alcohol addiction and are currently abstaining from alcohol. **Results:** Meaning of life in the examined addicts in abstinence is low positively related to the length of abstinence ($p = 0.030$), low negative with the number of hospitalizations due to alcohol addiction ($p = 0.013$), moderately negative with the severity of alcohol addiction before abstinence ($p < 0.001$) and moderately positive with financial status ($p < 0.001$). Hierarchical regression analysis showed that beeing unmerried ($p = 0.021$), financial status ($p < 0.001$) and severity of addiction ($p < 0.001$) are significant predictors of the meaning of life among abstainers from alcohol. **Conclusion:** It has been shown that alcoholism affects the meaning of life for alcohol addicts, and that it should be considered at the beginning and during the treatment of alcohol addicts.

Introduction

Alcoholism is a common psychiatric disorder that has devastating consequences for affected individuals, their families and society in general. It is one of the main public health problems in the world from the social and economic aspect [1,2]. The lifetime prevalence of alcoholism

Correspondence to:
Marin Mamić
Tome Matica 20, 34000 Požega, Croatia
Phone: +385 99 8243225
E-mail: marinmamic@hotmail.com

(alcohol dependence and alcohol abuse) is 30 % in alcohol addicts, while the heritability of alcoholism reaches up to 50 % [3,4]. Addictive disorders are chronic and often relapsing. Estimates from clinical treatment studies suggest that at least 60 % treated alcohol addicts start drinking again 6 months after the start of abstinence, and more than 75 % of individuals relapse within 1 year of completing treatment [5-8]. According to data in the Republic of Croatia, only about 8 % of the population have never tasted alcohol in their life, and are therefore called primary abstainers, while alcohol addicts who abstain after treatment are called secondary abstainers [9]. Throughout history, people have strived to find meaning of life (ML). At some point, every individual has wondered about the purpose and meaning of his life. People with a greater sense of purpose tend to show better emotional well-being and physical health, show a lower risk of cognitive decline later in life, while some studies have shown that greater meaning in life affects longevity [10-13]. But just defining ML cannot be reduced to one universal sentence, because ML differs from person to person, and can also depend on different life situations and periods of life [14]. Frankl believes that ML and its functions are very important in human life, and that the pursuit of meaning is the primary motivational driver of human behavior [15]. He also believes that for everyone, in every situation, there is an objective meaning which, however, does not depend on the individual, but exists outside of him. The individual discovers it through life, more or less successfully. He also believes that the lack of meaning in life causes the experience of an existential vacuum or a sense of meaninglessness that occurs when there is no personal fulfillment, that is, when there is a lack of meaning, which implies a state of boredom, emptiness and apathy [16].

Zika and Chamberlain state that ML can be defined as the realization of order, harmony and purpose in personal existence, the pursuit of worthwhile goals, their realization and the accompanying feeling of fulfillment [10]. The subjective experience of the ML is related to both psychological and physical well-being and health, while in contrast, the feeling of meaninglessness is related to various problems and diseases. Feelings of meaninglessness and hopelessness can lead to behaviors and habits that can easily reduce boredom. Such behaviors are primarily different addictions [17]. The connection of ML with alcohol addiction has not been the subject of much research, and ML in abstinence and the relationship between the severity of addiction before abstinence and ML later in abstinence have been investigated even less. It has been shown that the development of various addictions is related to a lack of meaning in life and to alcohol addiction, while the ML (defined as the pursuit of intrinsically valuable goals) is inversely related to harmful drinking [17-19]. Alcohol consumption in an individual's life experiences has it's peak in a certain period of life, after which generally declines, which is attributed to the assumption of roles and responsibilities that come in adulthood, which are incompatible with excessive alcohol consumption [20-22]. Roles primarily mean marriage, parenthood, cohabitation, and employment, which enable the formation of identity, and which in turn participate in creating ML [23]. It has also been shown that people who do not consume alcohol perceive their life to be significantly more meaningful than alcohol addicts [18,24].

Previous research has also confirmed Frankl's theory of ML and it's connection with addictive behaviors. They showed that the experience of ML plays an important role in the prevention of addiction, and they confirm the empirical evidence of the correctness of Frankl's conceptualization of the relationship between ML, the existential vacuum and its influence on addictive behaviors [19]. The aforementioned theory deals with the formation of ML and it's possible influence on the emergence of various addictions. But it is important to understand what this relationship is like in the opposite direction so that it is easier to help addicts on their way to recovery from alcohol.

The aims of this research were to examine whether there is a connection between meaning of life of those abstaining from alcohol, demographic variables, variables related to alcohol consumption and the severity of addiction before abstinence and to determine which variables are predictors of meaning of life of alcohol addicts who are in abstinence.

Subjects and Methods

This research was conducted in 2019 and 2020 at the County Hospital of Požega, at the Department of Neurology, Psychiatry and Clinical Psychology. The 113 respondents who were diagnosed with alcohol dependence took part in the research, The average age of the participants was 50.61 years (SD = 11.946, range from 24 to 74 years). The length of the respondent's abstinence is from a minimum of 10 days to over 10 years. The criterion for inclusion in the research was that they had been diagnosed with alcohol addiction and that they had abstained from alcohol for at least 10 days at the time when this research started.

The criteria for exclusion were: the age of the subjects less than 18 years and abstinence less than 10 days. The research was approved by the Ethics Committee of the County Hospital of Požega (Reg. number: 02-7/57-3/3/3P-2019) and all subjects signed consent for this research. The instruments of this research were: The Meaning of Life Scale, MAST scale of alcohol dependence and adjusted demographic questionnaire.

The demographic questionnaire consisted out of two parts. The first part consisted of questions related to: sex, age, employment and financial status. The second part of the questionnaire consisted out of questions related to alcoholism: the length of abstinence, the number of hospitalizations and the length of alcohol consumption before abstinence.

Meaning of life scale consists of twenty-three items that examine the emotional point of view of meaning and the cognitive aspect of meaning in life. On a five-point Likert-type scale, the participants assess to what extent the contents mentioned in the statements apply to them. The total score is calculated as the sum of assessments on all statements. In doing so, ten statements are scored in reverse. A higher score indicates a greater meaning in the life of the participant, and the scores range from 23 to 115. The reliability (Cronbach's alpha) is 0.892 [25].

The Michigan Alcohol Screening Test (MAST) consists of twenty-four items that measure the severity of alcohol dependence and the behavior associated with alcohol dependence. The questions are answered by circling the answers "yes" and "no". Questions answered with "yes" are scored with one point, while four questions where the answer is "no" are scored in reverse (questions 1, 4, 6 and 7) and are also scored with one point. Raw scores range from 0 to 24 with higher scores indicative of more problematic alcohol use. Scoring can also be done categorically, where from 0 to 4 points means that alcoholism is not present, from 5 to 6 points that there is a possibility of alcoholism, and 7 or more points means alcohol addiction. The reliability (Cronbach alpha) is 0.84 [26].

Descriptive statistical methods were used to describe the frequency distribution of the investigated variables. Mean values are expressed as arithmetic mean, minimum and maximum values and standard deviation. Pearson's correlation was used to calculate the relationship between ML, age and severity of addiction, Spearman's correlation was used to calculate the relationship between ML, assessment of financial status and variables related to alcoholism and alcohol treatment, while the relationship between ML and sex was calculated using Point-biserial correlation. Hierarchical regression analysis was used to determine predictors of meaning in life. The Kolmogorov-Smirnov test was used to test the normality of the distribution. The value $p < 0.05$ was taken as the level of statistical significance. The statistical package IBM SPSS 25 was used for processing.

Results

The study included 113 patients, 87 of them were male (77 %) and 26 were female (23 %), 60 participants (53 %) are married, 47 (42 %) are employed and 57 particpants (50 %) evaluated their financial status as"mediocre". Mean of age is M = 50,6 years (range, 24 - 74). (Table 1.)

Table 1. Distribution of the socio-demographic variables, and variables related to alchololism (N = 113)

		N (%)
Sex	Male	87 (77)
	Female	26 (23)
Marital status	Married – domestic partnership	60 (53.1)
	Divorced	33 (29.2)
	Live alone/never married	20 (17.7)
	Widower	0
Employment	Employed	47 (41.6)
	Unemployed	26 (23)
	Retired	37 (32.7)
	On college	3 (2.7)
Assessment of financial status	Really bad	11 (9.7)
	Bad	29 (25.7)
	Medium	57 (50.4)
	Good	14 (12.4)
	Great	2 (1.8)
	M (min – max)	SD|
Age	50.61 (24 – 74)	11.946

M = mean; SD = standard deviation; min = minimal value; max = maximal value

Table 2. Distribution of variables related to alcoholism and descriptive statistics of alcohol dependence and the meaning of life (N = 113)

		N (%)
Length of alcohol consumption before abstinence	Less then 10 years	53 (46,9)
	11 – 20 years	36 (31,9)
	21 – 30 years	17 (15)
	31 years or more	7 (6,2)
Duration of current abstinence	Less then 1 mounth	50 (44,2)
	More then 1 mounth – up to 1 year	31 (27,4)
	More then 1 year – up to 5 years	22 (19,5)
	More then 5 years - up to 10 years	6 (5,3)
	10 years and more	4 (3,5)
	M (min – max)	SD
Age	50.61 (24 – 74)	11.946
Michigan Alcoholism Screening Test (MAST)	13.82 (4 – 21)	3.881
Meaning of life	72.77 (27 – 115)	20.07

M = mean; SD = standard deviation; min = minimal value; max = maximal value

The main characteristics of the participants in the sample are shown in Table 2. Of the total number of participants, 53 of them (46.9 %) consumed alcohol less than 10 years before abstinence and 50 participants (44.2 %) abstained from alcohol for less than 1 month. Mean of Michigan Alcoholism Screening Test was M = 13.82 (range, 4 – 21), and meaning of life M = 72.77 (range, 27 – 115) (Table 2).

Pearson, Spearman and Point-biserial correlations were used in order to determine which variables related to alcoholism and life satisfaction are related to ML of alcohol addicts in abstinence, In Table 2, it can be seen that there is a low positive correlation of ML in the examined addicts in abstinence with the length of abstinence ($p = 0.030$). And there is also a significant low negative association between ML and the number of hospitalizations due to alcohol dependence ($p = 0.013$), moderate negative association with the severity of alcohol dependence before abstinence ($p < 0.001$) and a moderate positive association with financial status ($p < 0.001$). That is, the longer the abstinence and the fewer hospitalizations, the better is the perception of the ML (Table 3.).

Hierarchical regression analysis was performed to determine which variables, related to the person and alcoholism, are predictors of ML in the examined alcohol addicts in abstinence, a. In the first step, the variables age, sex, marital status, employment, finances, length of alcoholism before abstinence,duration of current abstinence and number of hospital admissions were entered. It can be seen from Table 4 that this group of variables significantly explains a total of 33 % ($AR^2 = 0.330$) ($p < 0.001$) of the variance in ML among the examined alcohol addicts, and that significant predictors of ML are life outside of marriage ($p = 0.010$) and financial status ($p < 0.001$). An insight into the β-coefficient shows that the marital status of unmarried respondents is a significant negative predictor of ML compared to the reference variable of those who are married, and that financial status contributes positively to the perception of ML among participants. Because marital status and employment status include different modalities, dummy variables were created with one modality used as the reference (Table 4.).

In the second step of the regression analysis, variables related to alcoholism were added (length of abstinence, duration of alcohol consumption before abstinence, hospital admissions and severity of addiction). The predictor variables in this step contribute to the explanation of ML ($p < 0.001$) and explain 40,3 % (AR2 = 0.403) the variance of ML. In this step, the variables of financial status ($p < 0.001$), marital status ($p = 0.021$) and the variable of severity of addiction ($p < 0.001$) are still significant. An insight into the β-coefficient shows that the severity of

Table 3. Correlation between the meaning of life and questions related to alcoholism and life satisfaction (N = 113)

		1.	2.	3.	4.	5.	6.	7.	8.
1. Meaning of life	r	1							
	p	-							
	N	113							
2. Age	r	0.001	1						
	p	0.987	-						
	N	113	113						
3. Sex	r	-0.115	-0.210*	1					
	p	0.225	0.025	-					
	N	113	113	113					
4. Financial status	rho	0.552**	-0.021	-0.178	1				
	p	< 0.001	0.826	0.059	-				
	N	113	113	113	113				
5. Alcohol before abstinence	Rho	-0.077	0.516**	-0.159	-0.086	1			
	p	0.416	< 0.001	0.092	0.366	-			
	N	113	113	113	113	113			
6. Lenght of abstinence	rho	0.205*	0.274**	-0.086	0.233*	0.113	1		
	p	0.030	0.003	0.365	0.013	0.232	-		
	N	113	113	113	113	113	113		
7. Hospital admissions	Rho	-0.234*	0.123	0.055	-0.396**	0.293**	-0.228*	1	
	p	0.013	0.195	0.564	< 0,001	0,002	0,015	-	
	N	113	113	113	113	113	113	113	
8. Severity of addiction (MAST)	R	-0.482**	0.123	0.018	-0.360**	0.122	-0.126	0.326**	1
	p	< 0.001	0.193	0.853	< 0.001	0.197	0.185	< 0.001	-
	N	113	113	113	113	113	113	113	113

r = correlation coefficient; rho = Spearman's rank correlation coefficient; *P < 0,01; **P < 0,05

Table 4. Summary of the first step of the regression analysis (N = 113)

	β	t	p	AR^2
Age	-0.025	-0.238	0.812	0,330
Sex	0.018	0.211	0.833	
Marital status=never married	-0.255	-2.636	0.010*	
Marital status=divorced	-0.173	-1.893	0.061	
Finances	0.444	4.456	< 0.001**	
Employment=unemployed	-0.095	-0.936	0.351	
Employment=retired	-0.040	-0.386	0.700	
Employment=in college	0.129	1.479	0.142	

β = standardized (regression) coefficients; t = coefficient divided by the standard error; AR^2 = coefficient of determination; *P < 0,01; **P < 0,05

Table 5. Summary of the second step of the regression analysis (N = 113)

	β	t	p	AR^2
Age	0.002	0.015	0.988	0.403
Sex	-0.005	-0.062	0.951	
Marital status=never married	-0.223	-2.346	0.021*	
Marital status=divorced	-0.123	-1.361	0.177	
Finances	0.378	3.812	< 0.001**	
Employment=unemployed	-0.071	-0.720	0.473	
Employment=retired	-0.079	-0.743	0.459	
Employment=in college	0.165	1.979	0.051	
Lenght of abstinence	0.113	1.297	0.198	
Alcohol before abstinence	-0.003	-0.036	0.971	
Hospital admissions	0.128	1.409	0.162	
Severity of addiction (MAST)	-0.313	-3.784	< 0.001**	

β = standardized (regression) coefficients; t = coefficient divided by the standard error; AR^2 = coefficient of determination; *P < 0.01; **P < 0.05

alcohol addiction negatively contributes to ML of the examined alcohol addicts in abstinence. The total coefficient of determination AR2 = 0.406, shows that 40.6 % of the changes in the quality of life are explained by the included variables (p < 0.001) (Table 5.).

Discussion

The aim of this research was to examine the existence of a connection between the perception of ML of alcohol abstainers, demographic variables and variables related to alcohol consumption, life satisfaction and the severity of addiction before abstinence, as well as to examine which variables are predictors of the perception of ML of addicts in abstinence.

Regarding the demographic variables, it was shown that the financial status of the participants is related to ML, i.e. the better the financial status, the greater ML. Research on this topic has not been conducted with alcohol addicts. Since with correlations it is not possible to determine what is the cause of what, the relationship between these two variables can be reversed, that is, the greater ML, the better the financial status of the participant. Such results would be in line with research conducted on the general population, which showed that people who have purpose and meaning in their lives can be more focused on their professional goals [13]. Looking at it this way, people who have meaning in their lives will strive for professional success, which could ultimately result in increased personal income.

Regarding the variables related to alcoholism, it was shown that ML is related to the length of abstinence, the number of hospital admissions due to alcohol addiction and the severity of alcohol addiction before abstinence. The results indicate that the longer the abstinence, the fewer are the hospital admissions; the lower the level of alcohol dependence before abstinence, the greater ML in abstinence. In summary, it could be said that the more impaired life is by alcohol during addiction, the lower ML later in abstinence. However, stopping the consumption of alcohol alone does not lead to immediate improvement of the impaired aspects of the life and condition of the abstainer, but recovery occurs gradually and it takes longer due to greater damage. So it is possible that the time nesessary to find new life goals, and therefore to change the perception of ML, will be longer for addicts who had a more damaged life with alcohol due to their alcoholism. It would certainly be good to check these results by researching ML among abstinents about alcohol over a longer period of time. The results of our research confirm the results of Copeland and associates [23]. However, in the same study, it was also shown that the search for ML is associated with greater dependence on alcohol. The search for ML can be observed through the exploration of personal identity, involvement in various activities, hobbies, the search for a profession and the spiritual search of a person.

As it is a matter of connection, the relationship of these variables cannot be ruled out and the results could indicate that the absence of meaning in life or the search

for it can lead a person to a feeling of emptiness, i.e. that there is nothing to complete one's life, which can lead to a feeling of boredom, which in turn leads to greater consumption of alcohol, but also of other addictive substances, i.e. such results could confirm Frankl's theory of the origin of addiction [16].

It has also been shown that the longer the abstinence, the greater ML. No research on this topic was found. These results are very important from the point of view of helping alcoholics recover. Probably the reasons for this are recovery in all areas of a person's functioning, improvement of the quality of life, recovery of marital and social life, and thus the former addict finds new goals in life, thereby increasing ML [27].

In the first step of the regression analysis, the results showed that financial status is a positive predictor, while being unmerried is a negative predictor of ML in people abstaining from alcohol.

There is no reaserch about financial status among abstainers from alcohol. The reasons for such results could be sought in the relationship between the constructs of quality of life and ML. Thus, in the research of Lee and associates it was shown that financial status is a significant predictor of the quality of life of alcohol addicts, while the research of Bruno Figueiredo Damásio and associates showed that the quality of life is a significant predictor of ML (it should be noted that the mentioned research was conducted on the general population) [28,29]. It is possible that due to the mentioned connection, the financial status of the quality of life has an impact on ML for those who abstain from alcohol. A better financial status could also imply that abstainers have employment, which according to Frankl is one of the main sources of meaning in life [14].

However, this assumption should be investigated more detailed in some future research in order to gain more insight on how these mentioned constructs are related to each other.

As for marital status, it is known that alcoholism disrupts marital relationships and often leads to the divorce as well as that alcohol addicts do not get married compared to the general population [30]. Research has shown that alcohol consumption is lower in married alcohol addicts, and married addicts have different life expectations, values, and a different social environment [31]. It is possible that one of the reasons for this result can be found in the theory of role incompatibility, according to which new roles in life and the responsibility that comes with marriage are in direct conflict with harmful alcohol consumption [32]. By entering into marriage, the new roles of parenthood and cohabitation lead to the formation of identity, which creates the prerequisites for ML [33,34]. On the other hand, people who are addicted to alcohol by not getting married do not have this kind of role that will give some people meaning in life and, on the other hand, maybe reduce alcohol consumption. Also possible reasons for the lower level of meaning in life among alcoholics who are not married are the lack of family support in abstinence, which is essential in recovery. Research has shown that the lack of a close partner negatively affects on the quality of life of abstainers [27,35].

In the second step of the regression analysis we added the variables that refers to alcoholism. It was shown that financial status and marital status are still significant predictors, and the level of alcohol dependence before abstinence is also a significant predictor of the abstinent's sense of life about alcohol.

The influence of the severity of addiction on ML of treated alcohol addicts was not the subject of many studies, those that were conducted deal with the influence of ML on the severity of addiction. The results of this research suggest that alcohol addiction negatively affects ML. Frankl believed that the lack of meaning leads to the experience of an existential vacuum, which leads to addiction [16]. But according to our results, it is possible that this connection is much more complex, and that it could be mutual. Alcoholism destroys all aspects of life and all areas of a person's functioning [36]. During addiction, as mentioned earlier, there is job loss, divorce, chronic diseases and other adversities that come with long-term addiction. Earlier it was said that Frankl claimed that work is one of the main sources of meaning in life. Baumeister also claimed that people find ML in different domains of life such as family, religion, work, etc. [37]. If the mentioned factors are important for the formation of ML, it follows that their lack will lead to the loss of ML. It is possible that this is a way of influencing the severity of addiction on ML of an alcohol addict. However, the results of this research do not provide insight into the meaning of life before alcoholism and at the beginning of drinking. There is still a possibility that the addiction developed in people with a lower meaning of life and that the more severe the addiction developed, the lower the meaning of life gets.Such results opened up additional questions that should be checked in future research. It can be concluded that alcoholism impairs the experience „meaning of life". During abstinence, it is important to help alcoholics to recognize and develop significant aspects of their lives. This may be particularly relevant to clinical populations in which addictive behavior is common (eg, low socioeconomic communities, drug addiction clinics, forensic clients in the justice system), or popula-

tions in which there is a propensity for boredom (eg, those with severe mental illness, or unemployed) [19].

Acknowledgments

None.

Conflict of interest

None to declare.

Funding Sources

None.

References

1. World Health Organization (WHO). Problems related to alcohol consumption. [Internet]. Geneva (CH): Report of a WHO expert committee Geneva; 1980 [updated 2021; cited 2023 Mar 27]. Available from: http://apps.who.int/iris/bitstream/handle/10665/41406/WHO_TRS_650.pdf?sequence=1&isAllowed=y
2. World Health Organization (WHO). Public health aspects of alcohol availability. [Internet]. Geneva (CH): Report on working meeting held in Geneva; 1982 [updated 2021; cited 2023 Mar 27]. Available from: https://apps.who.int/iris/bitstream/handle/10665/41406/WHO_TRS_650_rus.pdf?sequence=3&isAllowed=y
3. Hasin DS, Stinson FS, Ogburn E, Grant BF. Prevalence, correlates, disability, and comorbidity of DSM-IV alcohol abuse and dependence in the United States: results from the national epidemiologic survey on alcohol and related conditions. Arch Gen Psychiatry. 2007;64:7:830-42.
4. Goldman D, Oroszi G, Ducci F. The genetics of addictions: uncovering the genes. Nat Rev Genet. 2005;6:521-32.
5. Menon J, Kandasamy A. Relapse prevention. Indian J Psychiatry. 2018;60:S473-8.
6. Nguyen LC, Durazzo TC, Dwyer CL, Rauch AA, Humphreys K, Williams LM, et al. Predicting relapse after alcohol use disorder treatment in a high-risk cohort: The roles of anhedonia and smoking. J Psychiatr Res. 2020;126:1-7.
7. Durazzo TC, Meyerhoff DJ. Psychiatric, demographic, and brain morphological predictors of relapse after treatment for an alcohol use disorder. Alcohol Clin Exp Res. 2017;41:107-16.
8. Paliwal P, Hyman SM, Sinha R. Craving predicts time to cocaine relapse: further validation of the now and brief versions of the cocaine craving questionnaire. Drug Alcohol Depend. 2008;93:252-9.
9. Hotujac Lj, Begić D, Folnegović Šmale V. Psihijatrija. Zagreb (HR): Medicinska naklada; 2006.
10. Zika S, Chamberlain K. On the relation between meaning in life and psychological well-being. Br J Psychol. 1992;83:133-45.
11. Scheier MF, Wrosch C, Baum A, Cohen S, Martire LM, Matthews KA, et al. The life engagement test: assessing purpose in life. J Behav Med. 2006;29:291-8.
12. Boyle PA, Buchman AS, Barnes LL, Bennett DA. Effect of a purpose in life on risk of incident Alzheimer disease and mild cognitive impairment in community-dwelling older persons. Arch Gen Psychiatry. 2010;67:304-10.
13. Hill PL, Turiano NA. Purpose in life as a predictor of mortality across adulthood. Psychol Sci. 2014;25:1482-6.
14. Frankl VE. Man's Search for Meaning. Zagreb (HR): Planetopija; 2010.
15. Frankl VE. Nečujan vapaj za smislom. Zagreb (HR): Naprijed; 1987.
16. Frankl VE. Zašto se niste ubili? Uvod u logoterapiju. Zagreb (HR): Provincijalat franjevaca trećoredaca; 1997.
17. Bupić J, Bogović Dijaković A. Meaning in life and personality traits in adult alcoholics. Arch Psychiatry Res. 2019;55:39-48.
18. Waisberg JL, Porter JE. Purpose in life and outcome of treatment for alcohol dependence. Br J Clin Psychol. 1994;33(1):49-63.
19. Csabonyi M, Phillips LJ. Meaning in life and substance use. J Humanistic Psychol. 2017;60:1-17.
20. Karataş Z, Uzun K, Tagay Ö. Relationships between the life satisfaction, meaning in life, hope and covid-19 fear for Turkish adults during the covid-19 outbreak. Front Psychol. 2021;12:633384.
21. Staff J, Schulenberg JE, Maslowsky J, Bachman JG, O'Malley PM, Maggs J, et al. Substance use changes and social role transitions: Proximal developmental effects on ongoing trajectories from late adolescence through early adulthood. Dev Psychopathol. 2010;22:917-32.
22. Staff J, Greene K, Maggs JL, Schoon, I. Family transitions and changes in drinking from adolescence through mid-life. Addiction. 2014;109:227-36.
23. Copeland A, Jones A, Field M. The association between meaning in life and harmful drinking is mediated by individual differences in self-control and alcohol value. Addict Behav Rep. 2020;11:100258.
24. Brown JM, Ashcroft FG, Miller WR. Purpose inlife among alcoholics: a comparison of the threeethnic groups. Alcohol Treat Q. 1998;16:1-11.
25. Vulić-Prtorić A, Bubalo J. Skala smisla života - SSŽ. In: Ćubela- Adorić, ed. Zbirka psihologijskih skala i upitnika - Svezak 3. Zadar (HR): Sveučilište u Zadru; 2006. p. 49-55.
26. Ross HE, Gavin DR, Skinner HA. Diagnostic validity of the MAST and the alcohol dependence scale in the assessment of DSM-III alcohol disorders. J Stud Alcohol. 1990;51:506-13.
27. Vederhus JK, Birkeland B, Clausen T. Perceived quality of life, 6 months after detoxification: Is abstinence a modifying factor?. Qual Life Res. 2016;25:2315-22.
28. Lee SB, Chung S, Seo JS, Jung WM, Park IH. Socioeconomic resources and quality of life in alcohol use disorder patients: the mediating effects of social support and depression. Subst Abuse Treat Prev Policy. 2020;15:13.
29. Damasio B, de Melo RLP, Silva JP. Meaning in life, psychological well-being and quality of life in teachers. Paidéia. 2013;23:73-82.
30. Waldron M, Heath AC, Lynskey MT, Bucholz KK, Madden PA, Martin NG. Alcoholic marriage: later start, sooner end. Alcohol Clin Exp Res. 2010;35:632-42.

31. Jang BJ, Schuler MS, Evans-Polce RJ, Patrick ME. Marital status as a partial mediator of the associations between young adult substance use and subsequent substance use disorder: application of causal inference methods. J Stud Alcohol Drugs. 2018;79:567-77.
32. Yamaguchi K, Kandel DB. Dynamic relationships between premarital cohabitation and illicit drug use: an event-history analysis of role selection and role socialization. Am Sociol Rev. 1985;50:530-46.
33. Piotrowski K, Brzezińska AI, Pietrzak J. Four statuses of adulthood: adult roles, psychosocial maturity and identity formation in emerging adulthood. Health Psychol Rep. 2013;1:52-62.
34. Negru-Subtirica O, Pop EI, Luyckx K, Dezutter J, Steger MF. The meaningful identity: a longitudinal look at the interplay between identity and meaning in life in adolescence. Dev Psychol. 2016;52:19261936.
35. Beattie M. Codependent no more: How to stop controlling others and start caring for yourself. New York (US): Spiegel & Grau; 2022.
36. Myrtveit SM, Askeland KG, Knudsen AK, Knapstad M, Olsen R, Nedregård, et al. Risky drinking among Norwegian Students: Associations with Participation in the Introductory Week, Academic Performance and Alcohol-related Attitudes. Nordisk Alkohol Nark. 2016;33:361-80.
37. Baumeister RF. Meanings of Life. New York (US): Guilford Press; 1991.