

Izvirni znanstveni članek / Original scientific article

Quality of life of alcohol-dependent adults: a mixed-methods study Kakovost življenja odraslih, odvisnih od alkohola: raziskava mešanih metod

Klavdija Čuček Trifkovič^{1,*}, Blanka Kores Plesničar², Alenka Kobolt³, Margaret Denny⁴,
Suzanne Denieffe⁴, Leona Cilar¹

Key words: alcohol dependence; social support; focus groups; satisfaction

Ključne besede: odvisnost od alkohola; socialna podpora; fokusne skupine; zadovoljstvo

¹ University of Maribor, Faculty of Health Sciences, Žitna ulica 15, 2000, Maribor, Slovenia

² University Psychiatric Clinic Ljubljana, Studenc 48, 1000 Ljubljana, Slovenia

³ University of Ljubljana, Faculty of Education, Kardeljeva ploščad 16, 1000 Ljubljana, Slovenia

⁴ Waterford Institute of Technology, Slovenia, Faculty of Humanities, Waterford, Ireland

* Corresponding author /
Korespondenčni avtor:
klavdija.cucek@um.si

ABSTRACT

Introduction: Alcohol dependence is the most prevalent addiction disorder that develops gradually as an interplay of individual and social factors. It impacts the quality of life of affected individuals. The purpose of this study was to examine the quality of life of alcohol-dependent people at different stages of treatment compared to individuals without alcohol dependence.

Methods: A mixed-methods study was conducted. First, a cross-sectional study ($n = 502$) was conducted using a validated Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q). Focus groups for subjective quality of life assessment were also conducted. Data were analysed using descriptive and inference methods (Mann Whitney U Test) with the SPSS, version 20 programme.

Results: Non-dependent participants are significantly more satisfied with each of the quality of life component than alcohol-dependent participants. Differences were demonstrated in a sense of well-being and leisure-time activities. Differences between alcohol-dependent and non-dependent participants were seen in the domains of physical health, work satisfaction and social relationships.

Discussion and conclusion: Alcohol-dependent participants reported a lower quality of life than non-alcohol dependent participants as alcohol dependents confront numerous problems associated with their dependence. There is a need for further research in the field of alcohol dependence in relation to the quality of life.

IZVLEČEK

Uvod: Odvisnost od alkohola je najbolj razširjena motnja odvisnosti, ki se razvija postopoma kot posledica medsebojno povezanih individualnih in družbenih dejavnikov. Vpliva na kakovost življenja prizadetih posameznikov. Namen raziskave je bil preučiti kakovost življenja oseb, odvisnih od alkohola, na različnih stopnjah zdravljenja v primerjavi s posamezniki brez odvisnosti od alkohola.

Metode: Izvedena je bila študija mešanih metod. Najprej je bila opravljena presečna raziskava ($n = 502$) s pomočjo validiranega vprašalnika o zadovoljstvu z življenjem (Q-LES-Q). Osnovane so bile tudi fokusne skupine za subjektivno oceno kakovosti življenja. Podatki so bili analizirani z opisno in inferenčno statistiko (Mann Whitney U Test) s pomočjo programa SPSS, verzija 20.

Rezultati: Udeleženci, ki niso odvisni od alkohola, so bistveno bolj zadovoljni z vsako izmed komponent kakovosti življenja kot tisti, ki so odvisni od alkohola. Razlike so se pokazale v počutju in v prostočasnih dejavnostih, pa tudi na področju fizičnega zdravja, zadovoljstva pri delu in družbenih odnosov.

Diskusija in zaključek: Udeleženci, odvisni od alkohola, poročajo o slabšem zadovoljstvu z življenjem kot udeleženci, ki niso odvisni od alkohola. Soočajo se namreč s številnimi težavami, povezanimi z odvisnostjo. Obstaja potreba po nadaljnjem raziskovanju odvisnosti od alkohola v povezavi s kakovostjo življenja.



Received / Prejeto: 3. 7. 2019
Accepted / Sprejeto: 20. 6. 2020

<https://doi.org/10.14528/snr.2020.54.3.2985>

Introduction

Quality of life has recently received much attention as a dimension that influences individuals' well-being and their satisfaction with life (Srivastava & Bhatia, 2013; Daepfen, et al., 2014). World Health Organization (WHO) defines Quality of Life as an individual's perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns. It is a broad-ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment (WHO, 2019).

Personal satisfaction is related to subjective feelings in several domains of the quality of life including physical health, social relationships, work and the ability to function in daily life. The current global economic, environmental, energy and demographic crises contribute to a reduced quality of life, particularly of vulnerable groups, which includes people with addiction disorders and mental health problems. Individuals with alcohol dependence have a higher risk of social exclusion (Sheeraz, et al., 2019). With no end yet in sight to the global economic and financial crisis, the situation of the above-mentioned vulnerable groups may be expected to worsen, resulting in a reduced quality of life. Alcohol dependence is a disorder, defined by the World Health Organization (WHO, 1951) in 1951 as a pattern of excessive drinking, reaching a level where the person shows significant psychological consequences that place them at an increased risk for physical and mental health problems, poor social relationships and social and economic difficulties.

Epidemiology of alcohol dependence

Alcohol use prevalence varies across countries. However, mean lifetime prevalence of alcohol use is 80 %, ranging from 3.8 % to 97.1 %. Moreover, the risk of alcohol use disorder onset begins in adolescence and is often developed by the age of 18 (Glantz, et al., 2020). Roberts and colleagues (2020) explored the feasibility of hospital discharge data across countries in Europe to estimate alcohol dependence prevalence. There is a weak correlation between hospital discharges due to any condition from the F10 diagnostic category and alcohol dependence prevalence. Prevalence of alcohol dependence in Slovenia is 6.2 %. Alcohol dependence is more common in adult men than women, although alcohol misuse has been increasing in women and young individuals (Wall & Quadara, 2014; Lee, et al., 2020). Statistical data provided by the World Health Organization (WHO, 2014b) show that in Slovenia there are more men (10.5 %) dependent on alcohol than women (2 %). Increasing alcohol consumption

in women is the result of economic development and changing gender roles (Wilsnack, et al., 2013; Bratberg, et al., 2016). In the European Union, the highest rates of excessive drinking are seen in the younger population (WHO, 2014a). Heavy episodic drinking (at least once a week is 60 g of pure alcohol or five or more drinks on one occasion) is reported by over one fifth of Europeans aged 15 years and over (WHO, 2014b). Although alcohol use declines with age (Grundstrom, et al., 2012), studies have shown that alcohol consumption is higher in older adult population (León-Munoz, et al., 2015; Emiliussen, et al., 2017). WHO (2014a) states that alcohol consumption is generally more frequent in older people than in other age groups. Furthermore, older people are less able to cope with a similar level of alcohol intake because of age-related changes in their body composition (Arndt & Schultz, 2016).

In some European countries, alcohol consumption has recently been decreasing (e.g. Spain, France) (Ministry of Health, 2016). Slovenia is among European countries with the highest per capita alcohol consumption at between 10 to 13 litres of pure recorded and unrecorded alcohol (Ministry of Health 2015; WHO, 2011, 2018). The research (WHO, 2014b) has shown an average of 11.6 litres of pure recorded alcohol per capita, which represents a decrease in alcohol consumption. Furthermore, unrecorded alcohol use is widespread and estimated by some experts to reach an additional 5 litres of pure alcohol per capita (Hovnik Keršmanc, et al., 2012), although the research published by the WHO (2014a) has shown an unrecorded alcohol consumption of 1 litre per capita and an increase in the following years to 1.8 litre per capita (WHO, 2018). In 2011-2017, 6072 deaths (per two million population) from alcohol-related causes were recorded in Slovenia (National Institute of Public Health, 2017, 2018). The economic cost of alcohol-related work absenteeism was 3.64 million euros (National Institute of Public Health, 2014), which represents a substantial burden for Slovenia. Alcohol misuse is a factor in more than one in three road traffic accidents (Stojiljković, 2012; Javna agencija RS za varnost prometa, 2018), and about half of all criminal offenses are committed under the influence of alcohol (Galbicsek, 2019).

Quality of life

The quality of life is defined as "the quality of the social and physical environment in which people pursue the gratification of their wants or needs" (Power, 2020, p. 3). According to Brodani and Kovacova (2019), the quality of life represents a positive interaction between various forms of social structure and personal satisfaction. Measuring the quality of life presents a considerable challenge because measuring objective factors is more straightforward than estimating

subjective indicators of personal satisfaction, which are inherently unreliable (Križman, 2012). Many studies (Kaplan, et al., 2012; Mathiesen, et al., 2012; Kim & Kim, 2015) have been conducted measuring the quality of life of alcohol dependent individuals, however, they were conducted among the general population, whilst other studies (Kaplan, et al., 2012; Martinez, et al., 2014; Ortolá, et al., 2016) were conducted among older adults. Studies have shown that the presence or severity of psychiatric comorbidities is associated with a lower quality of life in individuals with alcohol misuse disorders, and that the quality of life of these individuals is markedly lower compared to those without alcohol dependence (Connor, et al., 2006; Bobes-Bascaran, et al., 2015; Pasareanu, et al., 2015). It also seems that there may be differences in the quality of life that are gender influenced (Stein, et al., 2016). However, there are limited studies comparing treated alcohol-dependent individuals and non-dependent individuals, with only one such study conducted in the past (Connor, et al., 2006). It seems that there is no association between the duration of abstinence and the quality of life (Connor, et al., 2006). Although a study conducted in Spain (Ortolá, et al., 2016) showed that alcohol consumption is somehow correlated with the quality of life, there has not been enough research done to validate this statement, particularly regarding the issues from a qualitative perspective.

Aims and objectives

The aim of this study was to examine the dimensions of the quality of life in alcohol-dependent and non-alcohol dependent individuals at different stages of psychosocial treatment compared to individuals without alcohol dependence. The research question was as follows:

– What is the difference in the perception of the quality of life between alcohol-dependent and non-alcohol dependent individuals?

The following hypothesis was tested:

H1: The greatest reduction in the quality of life by participants will be reported before treatment.

Methods

A mixed methods study was performed to collect both quantitative and qualitative data on the quality of life of alcohol-dependent individuals in comparison to non-dependent individuals. The research used a cross-sectional design with four sample groups. A survey was used to establish the difference in the quality of life at three stages of treatment (Pre-During-Post) between those who were alcohol-dependent and those who were not, using the Q-LES-Q instrument. The focus groups were used to explore the views and perspectives of alcohol-dependent and non-dependent participants about the factors that had

influenced their quality of life. The study followed a two-phase design: 1) a cross-sectional study and 2) focus groups interviews.

Description of the research instrument

Participants' quality of life was assessed using the Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q) (Endicott, 2000). The questionnaire was developed to measure the degree of enjoyment and satisfaction in different areas of life (physical health, mood, work, leisure-time activities, and social relationships) in the early nineties in the USA. The long version of the Q-LES-Q questionnaire used in this study consists of 93 questions and takes about 20 minutes to complete. Responses to questions are recorded on a 5-point Likert scale, using the categories "never", "rarely", "sometimes", "often", and "always". Scores are expressed as percentages of the total score for each quality of life factor. Higher values correspond to a higher satisfaction with life and thus a better quality of life but do not represent normative values for the quality of life. The Q-LES-Q questionnaire is most commonly used for self-evaluation in patients with mental disorders (Demyttenaere, et al., 2008). The questionnaire had previously been reported to have an internal consistency coefficient (Cronbach's alpha) of 0.90 (Ritsner, et al., 2005). Internal consistency coefficients for specific domains in the present study were physical health (0.930); work (0.937); leisure-time activities (0.894); and overall well-being (0.880). In 2000, the Q-LES-Q questionnaire was translated into several languages, including Slovenian.

Description of the sample

The research sample consisted of 502 participants aged between 20 and 64 years, the average age was 42 ($s = 9.3$) years. The average years spent in education was 10.91 years. Participants were divided between a study group with alcohol dependence ($n = 359$) and a control group without alcohol dependence ($n = 143$). The study group participants were subdivided into three categories according to the stage of treatment for alcohol dependence: pre-treatment, within-treatment and post-treatment. Alcohol-dependent pre-treatment participants were recruited at first attendance at a psychiatric hospital, within-treatment participants were recruited from psychiatric hospitals where they were undergoing outpatient treatment for alcohol dependence and post-treatment participants were recruited from the out-patient groups that they attended following a completion of treatment for alcohol dependence, so an available sampling technique. A control group was recruited: these were adults who identified themselves as not having any problems with alcohol dependence, using a snowball sampling technique. The intervention and control groups were matched by gender, age and education.

Table 1: *Participants by gender*

Tabela 1: *Udeleženci po spolu*

<i>Gender / Spol</i>	<i>Group / Skupina</i>	<i>Quantitative sample / Kvantitativni vzorec</i>		<i>Qualitative sample / Kvalitativni vzorec</i>	
		<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
Female	Pre-treatment	39	7.8	1	5.0
	Within-treatment	23	4.6	1	5.0
	Post-treatment	39	7.8	1	5.0
	Controls	38	7.6	2	10.0
Male	Pre-treatment	104	20.7	4	20.0
	Within-treatment	50	9.9	4	20.0
	Post-treatment	104	20.7	4	20.0
	Controls	105	20.9	3	15.0
Total		502	100.0	20	100.0

Legend / Legenda: n – number / število; % – percentage / odstotek

Overall, the sample consisted of 72.3 % men and 27.7 % women. The within-treatment group contained the largest proportion of women; almost one third of participants in this group were female (Table 1).

The qualitative sample consisted of four groups of five participants ($n = 20$), following the same inclusion criteria as the quantitative study (pre-treatment, within-treatment and post-treatment group and the control group without alcohol dependence). Three focus groups ($n = 15$) were held with the study sample, each group included one female and four male participants. The group without alcohol dependence ($n = 5$) included two females and three male participants.

Description of the research procedure and data analysis

The study was approved by the Slovenian National Medical Ethics Committee in 2014. The research permission was obtained from the management of each psychiatric institution. All respondents participated in the survey on a voluntary basis. Focus group participants received an information sheet on the study and provided informed consent prior to participating in the focus groups.

The authors obtained permission from the author to use the questionnaire for data collection in the Slovenian context. Quantitative analysis of the data was performed in the SPSS version 20.0 (SPSS Inc., Chicago, IL, USA). Data was presented as Mean (\bar{x}) and Standard deviation (s) for all variables. Furthermore, the non-parametric Mann-Whitney U test was used in order to compare the probability value (p) of less than 0.05 and was chosen as a statistically significant level.

Qualitative data were collected using focus group interviews. Four interviews were conducted (control group – healthy individuals, and alcohol-dependent participants before, during and post-treatment). Prior to forming focus groups, we obtained consent from the institution, the National Medical Ethics Committee

and the participants. Participation was anonymous and on a volunteer basis. The focus groups participated for approximately 90 minutes. The data were analysed using content analysis. A list of categories was derived that were based on the concepts studied in the quantitative part of the study. As part of the content analysis the number of individual occurrences for each domain in focus group interviews was recorded. Specific paraphrasing techniques were used, including discarding non-recurrent and uninformative information, generalising from specific terms to more abstract categories and grouping related occurrences into broader categories.

Results

Cross-sectional study

When comparing the quality of life factors between the alcohol and non-alcohol dependent samples it can be seen that the alcohol dependence group was the lowest for the physical health factor and the highest for work satisfaction, whereas participants without alcohol dependence were the lowest for work satisfaction and the highest for leisure-time activities (Table 2).

There was a statistically significant difference in subjective feelings ($p = 0.008$) with participants without alcohol dependence reporting significantly higher satisfaction than those with alcohol dependence as depicted in Table 2. Similarly, there was also a significant difference in leisure-time activities ($p = 0.001$) (Table 3). Differences were also observed for other quality of life items with participants without alcohol dependence reporting greater satisfaction.

There were no statistically significant differences in the quality of life items between the pre-treatment, within-treatment and post-treatment groups.

When examining differences in the quality of life in participants with and without alcohol dependence by gender, age and education, the differences in the quality of life were most apparent between

Table 2: Quality of life factors between dependent and non-dependent groups
Tabela 2: Dejavniki kakovosti življenja med odvisnimi in neodvisnimi skupinami

Quality of life Factors / Dejavniki kakovosti življenja	Group / Skupina	n	\bar{x} (s)	U / p
Physical Health	Alcohol dependent	357	63.1 (13.0)	23388.000 / 0.143
	Non-alcohol dependent	143	65.5 (12.6)	
Subjective Feelings	Alcohol dependent	356	72.9 (14.8)	21593.000 / 0.008
	Non-alcohol dependent	143	76.9 (13.1)	
Work	Alcohol dependent	231	80.5 (15.4)	11339.000 / 0.585
	Non-alcohol dependent	102	81.2 (11.2)	
Leisure Time Activities	Alcohol dependent	324	71.1 (15.3)	17786.000 / 0.001
	Non-alcohol dependent	136	76.0 (13.7)	
Social Relationships	Alcohol dependent	355	70.4 (13.7)	22594.000 / 0.071
	Non-alcohol dependent	142	72.9 (11.6)	

Legend / Legenda: n – number / število; \bar{x} – mean / povprečje; s – standard deviation / standardni odklon; U – Mann-Whitney test value / vrednost Mann-Whitney testa; p – statistical significance / statistična značilnost

participants of different gender (Table 3). Alcohol-dependent women had significantly lower scores for the quality of life items, including physical health ($p = 0.001$), overall sense of well-being ($p = 0.006$), and subjective feelings ($p < 0.001$) and leisure-time activities ($p = 0.046$). Among participants without alcohol dependence there were no significant differences according to gender. Younger participants generally reported higher satisfaction with the quality of life items than older participants, but only leisure-time activities in non-dependent participants reached statistical significance ($p = 0.029$). There were also differences in satisfaction with the quality of life items according to education. Higher education levels

of alcohol-dependent participants was associated with higher satisfaction with physical health ($p = 0.001$), overall sense of well-being ($p = 0.006$), and leisure-time activities ($p = 0.009$). In contrast, for non-dependent participants a significant difference according to education was seen only in the physical health category ($p = 0.010$) with higher education being associated with better physical health.

Focus Groups

Focus group participants were asked to rate their quality of life on the scale from 1 to 10, with 1 being the

Table 3: Statistically significant differences between dependent and non-dependent groups (gender, age and education)
Tabela 3: Statistično pomembne razlike med odvisnimi in neodvisnimi skupinami (spol, starost in izobrazba)

Variables / Spremenljivke	Test	Physical health / Fizično zdravje	Subjective feelings / Občutki	Work / Delo	Leisure time activities / Dejavnosti v prostem času	Social relationships / Socialni odnosi	
Gender	Dependent alcohol group	Z	-3.410	-3.825	-0.544	-1.998	-1.217
		p-value	0.001	0.000	0.587	0.046	0.223
Non-dependent alcohol group		Z	-0.821	-1.724	-0.243	-1.525	-1.182
		p-value	0.412	0.085	0.808	0.127	0.237
Age	Dependent alcohol group	Z	-0.074	0.042	0.008	0.038	-0.116
		p-value	0.164	0.431	0.898	0.494	0.029
Non-dependent alcohol group		Z	-0.234	-0.059	0.108	-0.047	0.014
		p-value	0.005	0.487	0.282	0.590	0.869
Education	Dependent alcohol group	Z	-2.620	-2.021	-1.459	-2.125	-0.701
		p-value	0.009	0.043	0.145	0.034	0.483
Non-dependent alcohol group		Z	-2.563	-1.739	-0.010	-1.465	-1.906
		p-value	0.010	0.082	0.992	0.143	0.057

Legend / Legenda: Z – Z-score / Z-vrednost; p – statistical significance / statistična značilnost

lowest quality of life and 10 the highest. The average score among alcohol-dependent participants was 7.

a) Quality of life factors identified by the alcohol-dependent participants before treatment

An analysis of focus group interviews comparing the frequency of usage of pre-defined categories by participants identified that alcohol-dependent participants before treatment assigned the greatest importance to the following quality of life factors: leisure-time activities (taking holidays, sports activities, relaxation), home and family relations (having an understanding family and partner, loving relationships, contact with children, caring for children), for example 'I can rely most on my partner and both my sisters, who always gave me the help I needed, but I have two good friends, if I need help even at any hour at night'. Financial well-being and material living standard (having enough to get by, absence of financial difficulties and not having to depend on social support, salary income), a peaceful and relaxed life (living a peaceful, relaxed life), satisfaction with life (feelings of satisfaction with life) and an adequate diet (a healthy and adequate diet) were also identified as important factors.

b) Quality of life factors identified by the alcohol-dependent participants within treatment

Regarding the quality of life alcohol-dependent participants within treatment rated leisure-time activities, home and good family relations, financial well-being and material living standard, a peaceful and relaxed life, satisfaction with life, an adequate diet and happiness as the most important factors. On average, they rated their quality of life with a score of 5.3, on the scale from 1 to 10.

c) Quality of life factors identified by the alcohol-dependent participants after treatment

Alcohol-dependent participants after treatment emphasised the importance of health and being free from alcohol dependence, home and good family relations, financial well-being and material living standard, a peaceful and relaxed life, suitable work environment and adequate diet. Quality of life factors were regarded as being unique to an individual ('That you're happy with your life, not that someone has some norms about the quality of life..., I think the quality of life depends on each individual). The participants emphasized the value of a stress-free life, being healthy and maintaining good nutrition. Work was also valued as providing satisfaction with the quality of life and recognising the need to be loved, with some seeking spiritual assistance to improve their quality of life. Similarly to the other focus groups, this

group discussed the importance of social support from family and friends. Those who lacked such support recognized the need for self-sufficiency in coping 'I'm used to solve things for myself' while acknowledging 'but I know it's easier if you can share a part of the load'. The need to access professional support was raised and how it could have been sought earlier.

On the scale from 1 to 10, they rated their quality of life with an average score of 9.4. In the group without alcohol dependence, health and independence, home and good family relations, financial well-being and material living standard, as well as suitable work environment were emphasised as the most important factors for the quality of life. On the scale from 1 to 10, non-dependent participants rated their quality of life with an average score of 8.6.

Discussion

Alcohol dependence is a chronic mental disorder that develops over a number of years, or even decades (WHO, 2014a). During this period various problems emerge in biopsychosocial, spheres of individuals' lives and their significant others. This study has shown that those with alcohol dependence have a reduced quality of life that affects both, the individuals concerned and their significant others, supporting the findings by Križman (2012) and Ortolá and colleagues (2016). A study reported an association of dependence with the health-related quality of life; one study found that alcohol dependence affects the overall health-related quality of life and the specific domains of general health, physical and mental health, general and social functioning, activities of daily living, as well as pain and sleep (Levola, et al., 2014). This study concluded that for several of these domains, including general health, physical and mental health, and general and social functioning, as well as for overall health-related quality of life, alcohol dependence was the main underlying cause of impairment. In this study from both the qualitative and quantitative findings, health-related quality of life was significantly improved by treatment interventions, and in several, albeit not all instances, these improvements were facilitated by abstaining from or reducing alcohol intake. However, when comparing the alcohol and non-alcohol dependent groups, there was no difference in the overall quality of life. Instead, these differences only showed in some quality of life domains, including the domain of subjective feelings and satisfaction with leisure time activities. It was also clear in this study that alcohol dependent women had significantly lower scores in a range of domains compared to women without alcohol dependence.

Although recent research on the adequacy of various quality of life measures is inconclusive on whether alcohol dependence is associated with a clinically relevant decrease in the quality of life, it does suggest

that alcohol-dependent individuals have a lower quality of life in specific domains (Čuček Trifkovič, 2008; Laudet, 2011). This study supports this view as participants in the alcohol dependent group showed that alcohol-dependent individuals have a reduced quality of life in specific domains, but not the overall quality of life. No significant differences were found between alcohol-dependent participants before treatment, within-treatment and post-treatment. The hypothesis that the greatest reduction in the quality of life would be reported by participants before treatment, which would, in turn, motivate them to seek treatment for alcohol dependence, was not confirmed.

Qualitative results showed that there are differences between study groups in subjective evaluations of the quality of life. Alcohol-dependent participants were more likely to emphasize leisure-time activities, good family relations and material well-being before treatment. Health and being free from alcohol dependence were not seen as important factors for the quality of life. The latter was most frequently mentioned by participants in the post-treatment stage, who have already experienced the challenges of treatment for alcohol abuse and problems associated with it. For these participants, health was of the greatest importance. This determinant of the quality of life was also frequently mentioned by participants within-treatment. Generally, the highest satisfaction with the quality of life was reported by participants post-treatment, and the lowest by participants within-treatment.

A key limitation of this study is the cross-sectional design because it is not possible to infer any causal relationships, however this may be mitigated as one of the main strengths of this study is that it combined qualitative and quantitative data collection tools. The use of a psychometrically validated tool also adds cogency to the results of this study. Although some characteristics were controlled in both groups, significant associations between groups were difficult to interpret. Additionally, interviewer bias and social acceptability factors could be identified as other co-founders. The sampling and observation timings are another limitation, thus the generalisability or transferability of the findings cannot be guaranteed. Future studies could include a longitudinal design combined with focus groups and also assess comorbid conditions.

Conclusion

It has been argued that it is vitally important to assess the effect of alcohol misuse disorders on an individual's overall well-being, especially since alcohol abuse can be considered a chronic condition. The management of alcohol misuse disorders should have as its goal a broad definition of what constitutes a recovery model, which includes both abstinence and improved

quality of life and biopsychosocial functioning, as well as the capacity to function independently in society in their own treatment planning and outcome assessment. Views on the quality of life differ because of individuals' perceptions, values and wishes. There are also differences in the quality of life between adults who are dependent on alcohol and those who are not. This study examined the quality of life in alcohol-dependent adults compared to those who are not alcohol-dependent and found that there are statistically significant differences between the two groups in the quality of life. There are also differences in objective and subjective views of their quality of life. There were differences in the domains of physical health and well-being, work satisfaction, leisure-time activities and social relationships. This study contributes to the knowledge based on the quality of life of alcohol dependent individuals and the way this quality of life can be impacted on. Health professionals need to consider and include the quality of life as an assessment domain from a bio-psycho-social perspective and investigate how this can be maintained and improved.

Conflict of interest / Nasprotje interesov

The authors declare that no conflicts of interest exist. / Avtorji izjavljajo, da ni nasprotja interesov.

Funding / Financiranje

The study received no funding. / Raziskava ni bila finančno podprta.

Ethical approval / Etika raziskovanja

The study was approved by the Slovenian National Medical Ethics Committee (No. 26 / 06 / 09). / Pridobljeno je bilo etično dovoljenje za izvedbo raziskave pri Komisiji Republike Slovenije za medicinsko etiko (Št. 26 / 06 / 09).

Author contributions / Prispevek avtorjev

The first, second and third authors designed the study, interpreted the data and prepared the first draft. The fourth and fifth authors prepared the article in English. The last author helped with statistical data analysis, coordinated the writing of the article and contributed to the final version of the article. / Prva, druga in tretja avtorica so načrtovale raziskavo, interpretirale podatke in pripravile osnutek članka. Četrta in peta avtorica sta pomagali pri pripravi članka v angleškem jeziku. Zadnja avtorica je pomagala pri statistični analizi podatkov, koordinirala pisanje in končno ureditev članka.

Literature

Arndt, S. & Schultz, S.K., 2016. Epidemiology and demography of alcohol and the older person. In: M. Bengtsson, ed. *How to plan and perform a qualitative study using content analysis*. *Nursing Plus Open*, 2, pp. 8–14.

<https://doi.org/10.1016/j.npls.2016.01.001>

Bobes-Bascaran, T., Bascaran, T., Garcia-Portilla, P. & Bobes, J., 2015. Clinical assessment of alcohol use disorders. In: N. el-Guebaly, G. Carra & M. Galander, eds. *Textbook of addiction treatment: international perspectives*. Milan: Springer-Verlag Italy.

https://doi.org/10.1007/978-88-470-5322-9_131

Bratberg, G.H., Wilsnack, S.C., Wilsnack, R., Haugland, S.H., Krokstad, S., Sund, E.R., et al., 2016. Gender differences and gender convergence in alcohol use over the past three decades (1984–2008), the HUNT Study, Norway. *BMC Public Health*, 16, art. ID 723, pp. 1–22.

<https://doi.org/10.1186/s12889-016-3384-3>

PMid:27492155; PMCID:PMC4974746

Brodani, J. & Kovacova, N., 2019. The interaction of physical activity, joy of movement and quality of life of high school students at different ages. *Physical Activity Review*, 7, pp. 134–142.

<https://doi.org/10.16926/par.2019.07.16>

Connor, J.P., Saunders, J.B. & Feeney, G.F.X., 2006. Quality of life in substance use disorders. In: H. Katschnig, H. Freeman & N. Sartorius, eds. *Quality of life in mental disorders*. 2nd ed. Chichester: John Wiley & Sons.

Čuček Trifkovič, K., 2008. *Zadovoljstvo z življenjem in odvisnost od alkohola: magistrsko delo*. Ljubljana: Univerza v Ljubljani, Pedagoška fakulteta.

Daepfen, J.B., Faouzi, M., Sanchez, N., Rahhali, N., Bineau, S. & Bertholet, N., 2014. Quality of life depends on the drinking pattern in alcohol-dependent patients. *Alcohol*, 49(4), pp. 457–465.

<https://doi.org/10.1093/alcalc/agu027>

PMid:24863264

Demyttenaere, K., Andersen, H.F. & Reines, E.H., 2008. Impact of escitalopram treatment on quality of life enjoyment and satisfaction questionnaire scores in major depressive disorder and generalized anxiety disorder. *International Clinical Psychopharmacology*, 23(5), pp. 276–286.

<https://doi.org/10.1097/YIC.0b013e328303ac5f>

PMid:18703937

Emiliussen, J., Andersen, K. & Nielsen, A., 2017. Why do some older adults start drinking excessively late in life: results from an interpretative phenomenological study. *Scandinavian Journal of Caring Sciences*, 31(4), pp. 974–983.

<https://doi.org/10.1111/scs.12421>

PMid:28382628

Endicott, J., 2000. Quality of life enjoyment & satisfaction questionnaire (Q-LES-Q). In: S.J. Rush, ed. *Quality of Life Measures*. Washington: American Psychiatric Association.

Freeman, T., 2006. 'Best practice' in focus group research: making sense of different views. *Journal of Advanced Nursing*, 56(5), pp. 491–497.

<https://doi.org/10.1111/j.1365-2648.2006.04043.x>

PMid:17078825

Galbicsek, C., 2019. *Alcohol related crimes: alcohol rehab guide*. Available at: <https://www.alcoholrehabguide.org/alcohol/crimes/> [16. 4. 2020].

Glantz, M.D., Bharat, C., Degenhardt, L., Sampson, N.A., Scott, K.M., Lim, C.C.W., et al., 2020. The epidemiology of alcohol use disorders cross-nationally: findings from the World Mental Health Surveys. *Addictive Behaviors*, 102, art. ID 106381, pp. 106–128.

<https://doi.org/10.1016/j.addbeh.2020.106381>

PMid:32209298

Grundstrom, A.C., Guse, C.E. & Layde, P.M., 2012. Risk factors for falls and fall-related injuries in adults 85 years of age and older. *Archives of Gerontology and Geriatrics*, 54(3), pp. 421–428.

<https://doi.org/10.1016/j.archger.2011.06.008>

PMid:21862143; PMCID:PMC3236252

Hovnik Keršmanc, M., Kastelic, A. & Zorec Karlovšek, M., 2012. *Alkohol*. Available at: <https://med.over.net/clanek/alkohol/> [12. 2. 2020].

Javna agencija RS za varnost prometa, 2018. *Alkohol in neprilagojena hitrost še vedno glavna vzroka najhujših prometnih nesreč*. Available at: <https://www.avp-rs.si/alkohol-in-neprilagojena-hitrost-se-vedno-glavna-vzroka-najhujših-prometnih-nesrec/> [16. 4. 2020].

Kaplan, M.S., Huguette, N., Feeny, D., McFarland, B.H., Caetano, R., Bernier, J., et al., 2012. Alcohol use patterns and trajectories of health-related quality of life in middle-aged and older adults: a 14-year population-based study. *Journal of Studies on Alcohol and Drugs*, 73(4), pp. 581–590.

<https://doi.org/10.15288/jsad.2012.73.581>

PMid:22630796; PMCID:PMC3364324

Kim, K. & Kim, J.S., 2015. The association between alcohol consumption patterns and health-related quality of life in a nationally representative sample of South Korean adults. *PLoS One*, 10(3), art. ID e0119245.

<https://doi.org/10.1371/journal.pone.0119245>

PMid:25786249; PMCID:PMC4365041

Križman, I., 2012. Uvodna beseda. In: B. Vrabič Kek, ed. *Kakovost življenja*. Ljubljana: Statistični urad Republike Slovenije, p. 3.

Laudet, A.B., 2011. The case for considering quality of life in addiction research and clinical practice. *Addiction Science & Clinical Practice*, 6(1), pp. 44–55.

Lee, Y.H., Chang, Y.C., Liu, C.T. & Shelley, M., 2020. Correlates of alcohol consumption and alcohol dependence among older adults in contemporary China: results from the Chinese longitudinal healthy longevity survey. *Journal of Ethnicity in Substance Abuse*, 19(1), pp. 70–85.

<https://doi.org/10.1080/15332640.2018.1456388>

PMid:30040585

León-Munoz, L.M., Galan, I., Donado-Campos, J., Sanchez-Alonso, F., Lopez-Garcia, E., Valencia-Martin, J.L., et al., 2015. Patterns of alcohol consumption in the older population of Spain, 2008–2010. *Journal of the Academy of Nutrition and Dietetics*, 115, pp. 213–224.

<https://doi.org/10.1080/15332640.2018.1456388>

PMid:30040585

Levola, J., Aalto, M., Holopainen, A., Cieza, A. & Pitkänen, T., 2014. Health-related quality of life in alcohol dependence: a systematic literature review with a specific focus on the role of depression and other psychopathology. *Nordic Journal of Psychiatry*, 68(6), pp. 369–384.

<https://doi.org/10.3109/08039488.2013.852242>

PMid:24228776

Martinez, P., Lien, L., Landheim, A., Kowal, P. & Clausen, T., 2014. Quality of life and social engagement of alcohol abstainers and users among older adults in South Africa. *BMC Public Health*, 14, pp. 1–8.

<https://doi.org/10.1186/1471-2458-14-316>

PMid:24708736; PMCid:PMC4234309

Mathiesen, E.F., Nome, S., Eisemann, M. & Richter, J., 2012. Drinking patterns, psychological distress and quality of life in a Norwegian general population-based sample. *Quality of Life Research*, 21, pp. 1527–1536.

<https://doi.org/10.1007/s11136-011-0080-8>

PMid:22219172

National Institute of Public Health, 2014. *Alkohol v Sloveniji*. Ljubljana: Nacionalni inštitut za javno zdravje.

National Institute of Public Health, 2017. *Zdravstveni statistični letopis Slovenije 2017*. Ljubljana: Nacionalni inštitut za javno zdravje. Available at: <https://www.nijz.si/sl/publikacije/zdravstveni-statisticni-letopis-slovenije-2017> [12. 2. 2019].

National Institute of Public Health, 2018. *Zdravstveni statistični letopis 2018*. Ljubljana: Nacionalni inštitut za javno zdravje. Available at: <https://www.nijz.si/sl/publikacije/zdravstveni-statisticni-letopis-2018> [16. 4. 2020].

Ortolá, R., García-Esquinas, E., Galána, I. & Rodríguez-Artalejo, F., 2016. Patterns of alcohol consumption and health-related quality of life in older adults. *Drug Alcohol Depend*, 159, pp. 166–173.

<https://doi.org/10.1016/j.drugalcdep.2015.12.012>

PMid:26748410

Pasareanu, A.R., Opsal, A., Vederhus, J.K., Kristensen, Ø. & Clausen, T., 2015. Quality of life improved following in-patient substance use disorder treatment. *Health and Quality of Life Outcomes*, 13, art. ID 35.

<https://doi.org/10.1186/s12955-015-0231-7>

PMid:25889576; PMCid:PMC4364507

Power, T.M., 2020. *The economic value of the quality of life*. London: Routledge.

<https://doi.org/10.4324/9780429310256>

Ritsner, M., Kurs, R., Gibel, A., Ratner, Y. & Endicott, J., 2005. Validity of an abbreviated quality of life enjoyment and satisfaction questionnaire (Q-LES-Q-18) for schizophrenia, schizoaffective, and mood disorder patients. *Quality of Life Research*, 14(7), pp. 1693–1703.

<https://doi.org/10.1007/s11136-005-2816-9>

PMid:16119181

Roberts, E., Clark, G., Hotopf, M. & Drummond, C., 2020. Estimating the prevalence of alcohol dependence in Europe using routine hospital discharge data: an ecological study. *Alcohol and Alcoholism*, 55(1), pp. 96–103.

<https://doi.org/10.1093/alcalc/agz079>

PMid:31603459

Sheeraz, A.R., Muhammad, O.A. & Muhammad, A.S., 2019. Social determinants of Health and Alcohol consumption in the UK. *Epidemiology Biostatistics and Public Health*, 16(3). Available at: <https://ebph.it/issue/view/817> [12. 4. 2020].

Srivastava, S. & Bhatia, M.S., 2013. Quality of life as an outcome measure in the treatment of alcohol dependence. *Industrial Psychiatry Journal*, 22(1), pp. 41–46.

<https://doi.org/10.4103/0972-6748.123617>

PMid:24459373; PMCid:PMC3895312

Stojiljković, G., 2012. *Milijon Slovencev prizadetih zaradi alkohola*. Available at: <https://siol.net/siol-plus/milijon-slovencev-prizadetih-zaradi-alkohola-27971> [13. 2. 2020].

Stein, M.D., Risi, M.M., Flori, J.N., Conti, M.T., Anderson, B.J. & Bailey, G.L., 2016. Gender differences in the life concerns of persons seeking alcohol detoxification. *The Journal of Substance Abuse Treatment*, 63, pp. 34–38.

<https://doi.org/10.1016/j.jsat.2015.12.005>

PMid:26810131; PMCid:PMC4775280

Wall, L. & Quadara, A., 2014. Under the influence: considering the role of alcohol and sexual assault in social contexts. *Australian Institute of Family Studies*, 18, p. 22.

Wilsnack, S.C., Wilsnack, R.W. & Wolfgang Kantor, L., 2013. Focus on: women and the costs of alcohol use. *Alcohol Research: Current Reviews*, 35(2), pp. 219–228.

World Health Organization (WHO), 1951. *Expert Committee on Mental Health: report on the first session of the alcoholism subcommittee*. Geneva: World Health Organization.

World Health Organization (WHO), 2011. *Estimating the economic burden of alcohol in Slovenia*. Available at: <http://www.euro.who.int/en/countries/slovenia/news/news/2011/11/estimating-the-economic-burden-of-alcohol-in-slovenia> [20. 2. 2020].

World Health Organization (WHO), 2014a. *Global status report on alcohol and health 2014*. Available at: http://apps.who.int/iris/bitstream/10665/112736/1/9789240692763_eng.pdf [9. 4. 2020].

World Health Organization (WHO), 2014b. *Country profiles 2014*. Available at: http://www.who.int/substance_abuse/publications/global_alcohol_report/profiles/svn.pdf?ua=1 [8. 2. 2020].

World Health Organization (WHO), 2018. *Global status report on alcohol and health 2018*. Available at: <https://apps.who.int/iris/bitstream/handle/10665/274603/9789241565639-eng.pdf?ua=1> [15. 4. 2020]

World Health Organization (WHO), 2019. *WHOQOL: Measuring Quality of Life*. Available at: <https://www.who.int/healthinfo/survey/whoqol-qualityoflife/en/> [8. 4. 2019].

Cite as / Citirajte kot:

Čuček Trifkovič, K., Kores Plesničar, B., Kobolt, A., Denny, M., Denieffé, S. & Cilar, L., 2020. Quality of life of alcohol-dependent adults: a mixed-methods study. *Obzornik zdravstvene nege*, 54(3), 204–213. <https://doi.org/10.14528/snr.2020.54.3.2985>