Quality of Life (QOL) of Patients Diagnosed with Alcohol Dependence Syndrome Presenting to a Tertiary Care Centre

Kunwar D, Risal A

Department of psychiatry,

Kathmandu University School of Medical Sciences,

Dhulikhel Hospital, Kathmandu University Hospital,

Dhulikhel, Kavre, Nepal.

Corresponding Author

Dipak Kunwar

Department of psychiatry,

Kathmandu University School of Medical Sciences,

Dhulikhel Hospital, Kathmandu University Hospital,

Dhulikhel, Kavre, Nepal.

E-mail: dmskunwar@gmail.com

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ABSTRACT

Background

Among many factors behind the declined health, alcohol dependence plays a crucial role. It has been a significant problem in many countries and around the world.

Objective

To find out the detrimental quality of life of people dependent on alcohol.

Method

This was a hospital based cross-sectional study conducted within six months. The study participants were both male and female alcohol dependents taking treatment in de-addiction centers of Kathmandu University School of Medical Sciences. The mean (± SD) of the total and domain specific quality of life score were calculated. Bivariate analysis was done by comparing mean by using independent sample t test.

Result

The total sample comprised of 300, out of them 85.3% were males and remaining 14.7% were females. Among them 63.3% were using alcohol for more than 22 years, 40% were dependent on alcohol for 13 years and above, and 59.3% were using other substance. In terms of association, variables sex, education and demography were found to be statistically significant.

Conclusion

This study highlights the impact of alcohol on individuals' quality of life. Contrary to some previous research, this study did not find significant relationships between age, marital status, comorbidities, and duration of alcohol use with quality of life. Holistic approach could lead to better outcomes for individuals with alcohol dependence syndrome.

KEY WORDS

Alcohol dependence, Quality of life, Tertiary care center

INTRODUCTION

Alcohol dependence has a significant impact on health. In recent times, alcohol dependence has become a huge social problem in most of the countries in the world.[1] Alcohol abuse and dependence are estimated to affect nearly 12% of adults in the United States, morbidity and mortality studies have shown that 1.5% of all deaths and 6% of all years lost to disability are attributable to alcohol.[2,3] In a neighboring country India, about 20% of all disability-adjusted life years are lost due to poor health status of the people, nutritional deficiencies, and widely prevalent alcohol abuse.[4] for a person dependent on alcohol, impaired Quality of life (QoL) is what generally motivates them to seek help.[5]

QoL is an important parameter that provides an insight into how a condition impacts life of those affected.[1] World Health Organization defined quality of life as "an individual's perception of their position in life, and in the context of culture and value systems in which they live, and also in relation to their goals, expectations, standards, and concerns.6 Studies on alcohol-dependent patients have found QoL is considerably decreased.[7-10] QoL of alcohol-dependent subjects was reduced compared with that of a normative healthy population.[9,11]

In Nepal, alcohol use accepted in many ethnic groups, and in fact it is also used in rituals. The consumption has been increasing over the years across all ethnicities and age groups.[12] Nepal has a high alcohol abstinence rate but those who drink consume almost five times more alcohol compared to the global average WHO.[13]

Many studies have been conducted around the world showing detrimental quality of life of people dependent on alcohol, no studies have been carried out in Nepal, this study will be helpful to fill this gap.

METHODS

Hospital based cross-sectional study was conducted at Dhulikhel Hospital, Kathmandu University Hospital from 12 July 2024 to December 2024, after approval from Institutional Review Committee (IRC) Kathmandu University School of Medical Sciences (KUSMS), (IRC-KUSMS, Approval No: 140/23).

The study participants were alcohol dependents taking treatment in de-addiction centers of KUSMS. This included male and female patients. Patients with any withdrawal symptoms, uncooperative patients, and seriously ill patients were excluded from the study. Written and informed consent was obtained in the prescribed form / format from all the participants for the study after explanation of details of the study with maintaining strict privacy and confidentiality. A detailed information regarding age, gender, year of enrollment, family income, address, marital status, family type, religion has been taken from predesigned sociodemographic proforma and WHO-QOL-8 scale Nepali version has been applied to assess quality of life. The scale has been translated and culturally adapted for use among the Nepali population, it has an acceptable internal consistency (Cronbach's alpha 0.74).[14]

The very first item can be used as a G factor and indicator of a person's subjective rating of their overall QOL.[15] Each item of the WHOQoL-8 is rated on five-point scale, scored from 1 (worst) to 5 (best); the sum score has a potential range from 5 to 40. Higher scores indicate better QoL. The WHOQoL-8 items explore a person's satisfaction with four domains of life: Overall QoL (Global), Physical health, Psychosocial, and Environmental domains. The very first item can be used as a G factor and indicator of a person's subjective rating of their overall QoL.

The mean (± SD) of the total and domain specific QOL score were calculated. Bivariate analysis was done by comparing mean by using independent sample t test. The Statistical Package for Social Science software (IBM SPSS Statistics 21, Chicago, USA) was used for analysis.

RESULTS

The total sample comprised of 300, out of them 85.3% males and 14.7% were females. Hindus (80.3%) were most numerous and most of them were married (75.3%). The majority of them had formal education (76%) and were from urban area (70%). Similarly, 40% of the respondents had comorbidities. The above-mentioned findings are described in table 1.

Table 1. Socio-demographic characteristics (n = 300)

Characteristics		Frequency (n)	Percentage (%)
Age	Up to 43	166	55.3
	43 and above	134	44.7
Sex	Male	256	85.3
	Female	44	14.7
Marital Status	Single	74	24.7
	Married	226	75.3
Religion	Hindu	241	80.3
	Non-Hindu	59	19.7
Education	No formal	72	24.0
	Formal	228	76.0
Demography	Rural	126	42.0
	Urban	174	58.0
Comorbidities	No	180	60.0
	Yes	120	40.0

Table 2 describes the years of alcohol use and dependence along with other substance use. In our study, among 300 participants, majority of the respondents i.e., 63.3% were using the alcohol for 22 years and above whereas remaining were using it for up to 22 years. It was revealed that 60%

of the respondents were found to be dependent up to 13 years followed by those who were dependent for 13 years and above.

Table 2. Alcohol related variables (n = 300)

	Variables	Frequency	Percentage (%)
Years of Alcohol use	Up to 22 years	110	36.7
	22 years and above	190	63.3
Years of dependence	Up to 13 years	180	60.0
	13 years and above	120	40.0
Other substance use	No	122	40.7
	Yes	178	59.3

Moreover, out of total participants, 59.3% comprised of those group who were using other substance and 40.7% replied that they were not using other substance.

Among all participants the association between WHOQOL-8 domains and multiple variables were assessed, which are described in table 3. Our study found that age was not statistically significantly associated. However, sex was found to be significantly associated with all the domains of quality of life, at the same time marital status and religion were came up with statistically not significant values.

Three out of five domains of quality of life were statistically significantly associated with education which were total quality of life, subjective well-being (Global) and psychosocial well-being whose p-values were 0.04, 0.05 and 0.003 respectively. Similarly, demography was another factor which was also statistically significant in terms of

Table 3. Association of different variables with WHOQOL-8 Domains (n = 300)

Variables		Total quality of life	Subjective well-being (Global)	Physical well-being	Psychosocial well-being	Environmental circumstances
Age	Upto 43	20.71±6.8	5.04±1.7	4.9±2.0	5.5±2.0	5.2±1.9
	43 and above	20.69±7.1	5.01±1.6	5.1±2.1	5.5±2.1	5.02±2.0
	p-value	0.97	0.89	0.43	0.92	0.41
Sex	Male	17.91±6.5	5.1±1.7	5.1±2.0	5.6±2.0	5.2±1.9
	Female	21.18±7.3	4.4±1.5	4.2±2.0	4.7±2.0	4.5±1.6
	p-value	**0.004***	**0.01***	**0.009***	**0.005***	**0.02***
Marital Status	Single	20.87±7.0	4.8±1.6	4.7±2.1	5.6±2.1	5.0±1.9
	Married	20.20±6.7	5.1±1.7	5.1±2.0	5.4±2.0	5.1±1.9
	p-value	0.47	0.20	0.16	0.55	0.61
Religion	Hindu	20.75±6.8	5.0±1.6	5.0±2.0	5.5±2.0	5.1±1.9
	Non Hindu	20.50±7.5	4.9±1.7	5.0±2.1	5.1±1.9	5.1±2.9
	p - value	0.80	0.81	0.98	0.47	0.91
Education	No formal	19.29±6.4	4.6±1.4	4.7±1.9	4.9±2.0	4.9±1.8
	Formal	21.15±7.0	5.1±1.7	5.0±2.1	5.7±2.0	5.1±1.9
	p-value	**0.04***	**0.05***	**0.27**	**0.003***	**0.28**
Demography	rural	19.09±7.1	4.6±1.8	4.5±2.1	5.0±2.0	4.7±1.9
	urban	21,87±6.5	5.2±1.5	5.3±2.0	5.8±1.9	5.4±1.9
	p-value	**0.001***	**0.003**	**0.003**	**0.001**	**0.004**
Comorbidities	NO	21.02±6.7	5.0±1.6	5.1±2.1	5.6±1.9	5.1±1.8
	Yes	20.23±7.3	4.9±1.7	4.8±2.0	5.2±1.9	5.0±1.6
	p-value	0.97	0.65	0.38	0.09	0.67
Years of Alcohol use	Up to 22	21.23±6.7	4.8±1.7	4.7±2.1	5.2±2.1	4.9±2.0
	22 and above	19.80±7.2	5.1±1.6	5.1±2.0	5.6±2.9	5.2±2.1
	p-value	0.08	0.89	0.13	0.08	0.21
Years of dependence	Up to 13	20.96±6.8	5.0±1.7	5.0±2.1	5.6±1.9	5.1±1.8
	13 and above	20.31±7.1	4.9±1.7	4.9±2.0	5.3±2.9	5.0±2.0
	p-value	0.43	0.51	0.67	0.16	0.66
Other substance use	No	20.68±6.3	4.9±1.6	5.0±2.0	5.5±1.8	5.0±1.8
	Yes	20.71±6.7	5.0±1.7	4.9±2.1	5.5±2.1	5.1±2.0
	p-value	0.97	0.69	0.68	0.96	0.83

association with the all domains of quality of life (p-value, 0.001, 0.003, 0.003, 0.001 and 0.004 respectively).

However, other remaining factors those statistically not significant in terms of association were co-morbidities, years of alcohol use, years of dependence and other substance use.

DISCUSSIONS

Very small number of researches have been conducted in Nepal patients with AUDs and probably this is the first study to conduct QOL among AUDs using WHO-QOL-8. Despite the fact that the QoL of alcohol dependents is the most important component to consider for the management of AUDs.

According to research, patients have a poor QoL at the start of treatment, which improves after treatment completion. Numerous studies have proven that after treatment, QoL scores improves.[16]

Participants in the current study were 43 years old on average, which is in line with another study from Nepal.[17]

Nepal is the Hindu dominated Country. Similar to the religious pattern of country's population our study revealed that majority of participants were Hindu (80.3%) similar findings 78.3%, Buddhist 15.7%; and Christian 14% were reported by Jhingan et al., however another study from Nepal observed that Buddhist 30.2%, followed by Hindu 26.4% and Christian 14%.[18,19]

Our study reveals that, unlike sex, education and demography other demographic factors age, marital status, religion, and the presence of comorbidities do not exhibit a substantial impact on the various dimensions of quality of life.

In our study no significant difference in the domains scores were observed between age, marital status, and religion, duration of alcohol use, other substance use and comorbidities. However, we found significant difference in the domain scores between genders. This is in line with studies by Lahmek et al. and Morgan et al. which found that the female gender had a negative relationship with QoL.[20,21]

In patients with substance disorder, with comorbid psychiatric disorders like schizophrenia and major depressive disorder, studies reveal that those with both disorders exhibited poorer QOL in domains of physical, psychological, and social health.[22] However this study could not establish such relations.

Compared to other domains of QoL, the psychological domain had the highest mean (SD) score in this study. This finding is in contrast to another study conducted in South India which assessed the association of alcohol use with QoL.[23]

This discrepancy in our findings could be attributed to variations in the study setting, characteristics of the study subjects, patients with severe addiction and ongoing inpatient detoxification and other psychological treatments like motivational interviewing.

This study found a significant association between education and most domains of QoL scores. As education increases, the QoL score increases significantly in overall quality of life, physical and psychological domains of QoL.

It is a cross-sectional one time evaluation study. Population sample in this study may not actually represent the general population. Inpatient patients tends to have a sample of more severe ADS patients who tend to have more suffering and poorer QOL. Contributing factors in alcohol use and quality of life such as cultural factors, stress, coping skills and personality traits and social factors were not assessed in the present study.

CONCLUSION

This study highlights the impact of alcohol on individuals' quality of life. Contrary to some previous research, this study did not find significant relationships between age, marital status, comorbidities, and duration of alcohol use with quality of life.

This study supports the view that alcohol-dependent individuals have a reduced quality of life in specific domains like subjective well-being, physical well-being, psychological well-being and environmental well-being but not the overall quality of life. The findings highlight the importance of addressing both the psychosocial and physical aspects of recovery from alcohol dependence. Holistic approach could lead to better outcomes for individuals with alcohol dependence syndrome. Future research should continue to explore the complex interactions between different components on quality of life.

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