Traumatic Brain Injury Survivors, Life Satisfaction and Akohol Use Disorder

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Background

According to the Center for Disease Control and Prevention, each year TBIs account for approximately 2.2 million emergency room visits, 280,000 hospitalizations, and 50,000 deaths. In West Virginia, there are 22,000 new traumatic brain injury cases every year.

The Traumatic Brain Injury (TBI) program at the West Virginia University Center for Excellence in Disabilities (WVU CED) works with individuals with TBI, their family members, caregivers, and service providers to provide resource coordination, training and technical assistance. Program staff noticed that substance use was impacting many individuals served by the WVU CED through the program. A review of the existing literature concerning alcohol use, life satisfaction, and TBI is emerging, thus, our understanding of the association among these factors is limited.

Objectives

The purpose of this study was to examine the associations between an individual's propensity for alcohol use disorder, the nature of the initiating traumatic brain injury event (i.e., duration of unconsciousness) and perceived life satisfaction among TBI survivors who receive services through a rural UCEDD in 2016.

Methods

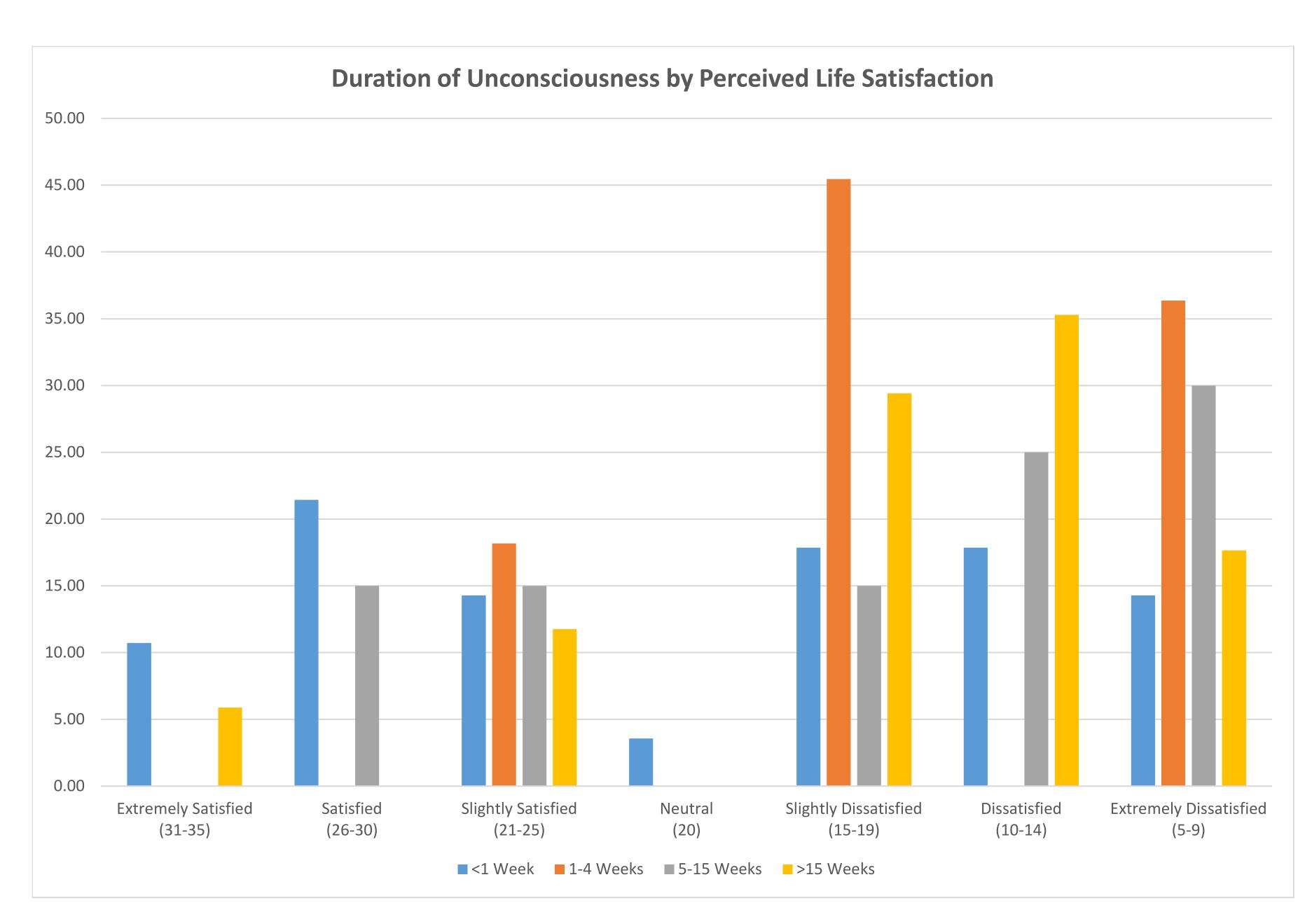
- CED TBI resource coordinators met with adults enrolled in the program to collect Satisfaction with Life Scale and the Michigan Alcohol Screening Test (MAST) data.
- Consumer demographic data and information on duration of unconsciousness were extracted from client records and compared to other study variables.

Results

Ninety-three individuals participated in this study; 44.1% of the consumers were married and over half were male (55.9%). The average age of participants was 45 years (SD 17.6). The majority of participants scored within the 0-3 range on the MAST (55.9%; n = 52), 26.9% (n = 25) reported MAST scores of 4, a remaining 17.2% (n = 16) obtained a MAST score of 5 or greater. Information on the duration of unconsciousness was available for 76 participants. Slightly more than one-third (36.8%) were unconscious for less than one week, 14.5% were unconscious for 1-4 weeks, another 26.3% were unconscious for 5-15 weeks, and a remaining 22.4% participants were unconscious more than 15 weeks. Table 1 reveals the distribution of life satisfaction scores based on the duration of unconsciousness. Table 2 reveals the life satisfaction scores reported by MAST categories (0-3; 4; 5 or greater).

Table 1. Duration of Unconsciousness by Perceived Life Satisfaction

	Duration of Unconsciousness							
	< 1 Week		1-4 Weeks		5-15 Weeks		>15 Weeks	
Life Satisfaction	#	%	#	%	#	%	#	%
Extremely Satisfied (31-35)	3	10.7	0	0.0	0	0.0	1	5.9
Satisfied (26-30)	6	21.4	0	0.0	3	15.0	0	0.0
Slightly Satisfied (21-25)	4	14.3	2	18.2	3	15.0	2	11.8
Neutral (20)	1	3.6	0	0.0	0	0.0	0	0.0
Slightly Dissatisfied (15-19)	5	17.9	5	45.5	3	15.0	5	29.4
Dissatisfied (10-14)	5	17.9	0	0.0	5	25.0	6	35.3
Extremely Dissatisfied (5-9)	4	14.3	4	36.4	6	30.0	3	17.6





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able 2.	Extent of A	Alcoh	ol Use by Perceived Life Satisfaction

Н			Michigan Alcohol Screening Test Results							
		Life Satisfaction	No apparent problem (0-3)		Early to Middle Problem Drinker (4)		Problem Drinker (5 or more)		Average MAST Score	
Ш			#	%	#	%	#	%		
H		Extremely Satisfied (31-35)	6	11.5	0	0.0	0	0.0	0.0	
Ħ		Satisfied (26-30)	7	13.5	3	12.0	3	18.8	7.2	
	4	Slightly Satisfied (21-25)	6	11.5	5	20.0	2	12.5	6.5	
		Neutral (20)	0	0.0	1	4.0	0	0.0	8.0	
	$\hat{}$	Slightly Dissatisfied (15-19)	16	30.8	4	16.0	1	6.3	2.3	
		Dissatisfied (10-14)	9	17.3	7	28.0	3	18.8	5.4	
		Extremely Dissatisfied (5-9)	8	15.4	5	20.0	7	43.8	8.0	

Duration of unconsciousness and extent of alcohol use were negatively associated with perceived life satisfaction. Specifically, longer durations of unconscious were associated with lower perceived life satisfaction scores. Additionally, individuals who scored 5 or greater on the MAST indicating a greater issue with alcohol were more likely to perceive less life satisfaction.

Conclusions

While more work is needed on this subject, the individuals in this sample reported greater risk of alcohol use and lower life satisfaction with more severe characteristics of TBI. Opportunities to intervene with TBI survivors exist where effective programming would be needed to improve quality of life and prevent maladaptive coping mechanisms such as alcohol use and perhaps other substance use.

TBI survivors' excessive alcohol use may be adaptive in nature, a coping strategy, but in reality decreases satisfaction with life. Alcohol Use Disorder (AUD) is a "family illness" and affects their relationships with others, and impacts their lives in very negative ways. Problem identification is the first step in treating AUD. Once AUD is identified, our Resource Coordinators can provide appropriate treatment recommendations and can continue to identify Substance Use Disorders' (SUD) in this population.

References

http://www.cdc.gov/traumaticbraininjury/pdf/tbi_report_to_congress_epi_and_rehab_snapshot-a.pdf http://mountaineernewsservice.com/numbers-art-new-passion

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