ORIGINAL ARTICLE

Health Related Quality of Life and Relative Attributes Among Substance Users

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Abstract

Introduction: Substance abuse is one of the most serious public health problems as it has wide spread prevalence and serious health consequences. Many people with substance abuse problems are avail to quit or can change their unhealthy behavior. The purpose of the study to assess the health related quality of life and relative attributes using HRQOLDA scale among the substance users.

Methods: This cross sectional study was conducted in department of community medicine of United Medical College from April 2019 to May 2020. A total of 235 substance users of different ages from 3 addiction rehabilitation centers in Dhaka irrespective of marital status, education, occupation, income, religion, housing types were selected following the define selection criteria. The research instrument was and interview and semi-structure questionnaire based on HRQOLDA scales.

Results: Mean age of the respondents was 32.29 ± 11.47 years and majority were within the age of 23-28 years (34%). educated were (95.1%), married (51.1%), monthly income <10000 taka (45.1%). In occupation, (89.3%) were employed, (79.6%) abuse ganja, (67.2%) started using drug by friend. Drug used per day 1-5 times (66.0%), restlessness developed when not using drug (62.1%). Majority (70.6%) used of illicit drug to feel better mentally in last 30 days. (57.9%) significant difference were showed in age (F=15.36, p=.000). Started using substance due to friend influence (t=6.435, p=.000) and family issues (t=5.749, p=.000) showed significant difference.

Conclusion: Health related quality of life among substance users were not satisfactory. Most of the substance users have problem in relation to socio-demographic characteristics to health-related quality of life in the domain of physical and mental health. Optimistic findings that the majority of respondents had an absolute belief that using drug reduce social activities and it is possible to quit drug for some people. Strong government legislation, awareness through mass media, family counseling, coordination by different law enforcing agencies can combat substance use and increase health related quality of life indicator in a good position in Bangladesh.

Key words: Drug, Substances, Health related quality of life scale.

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Introduction:

Substance abuse is recognized as an important public health and social problem in Bangladesh. The incidence of drug abuse has been increasing day by day in a developing country like Bangladesh. Drug addiction hampers the mental wellbeing of an individual as well as it causes lots of physical complication. In terms of geographical location, Bangladesh is situated in the central point of the world's biggest growing narcotics zone the golden crescent (Afganistan, Pakistan and Iran) and the golden triangle (Myanmar, Laos and Thailand)[1]. So the county has become a major transit point for drug dealers. The major illicit drugs available in Bangladesh are opium derivative (heroin, pethidine), cannabis (marijuana, ganja, chorosh, bhang, hashish), stimulant (yaba, cocaine) sleeping pills, cough syrup (phensidyl, Dexpotent etc.) and few others. The problem is increasing day by day and threating the nation[2,3]. About 230 million people or 5% of the world's adult population are estimated to have used an illegal drug use at least once in 2010. Alcohol and other substance use determine economic and social development and contribute to crime, instability, insecurity and they also cause major burden to society causing

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economic cost, health cost. Crime related cost and loses is productivity. Health related quality of life (HRQOL) is a useful indicator of overall health because it captures information on the physical and mental health status of individuals, and or the impact of health status on quality of life. HRQOL is usually assessed via multiple indicators of self-perceived health status and physical and emotional functioning. Together, these measures provide a comprehensive assessment of the burden of preventable diseases, injuries and disabilities[4,5]. Substance abuse affects all aspects of a person's life and creates problems in physical, psychological, environmental health and social relationship. In Bangladesh showed that the most common problems which contribute to a decreased HRQOL are the physical problems among the users[6]. All areas of life, work/ study, homework, marriage, finance and others as well as emotional and legal problems, are also common for both man and woman who use substance users. Substance users have less energy, disturbed sleep, are less able to perform daily activities and have reduced capacity for work[7]. Day by day our working age group is being destroyed by addiction. If proper steps are not taken, our country has many drug rehabilitation centers there is a lack of proper awareness among the people how to rehabilitate an addict and help make them independent and productive. To rehabilitate an addict and create a good health related quality of life, tis physical, psychological, environmental health and social relationships need to improve. This study aims to provide basic information about the effects of substance abuse and to identify what problems face the user and the harmful effects of substance abuse on their health related quality of life. This help to plan and provide effective treatment.

Methods:

This was a cross sectional study conducted in the Department of Community Medicine, United Medical College, Dhaka, Bangladesh from April 2019 to May 2020. Study population was substance user attending the central treatment center, Tejgaon, Dhaka, Sheba and Lighthouse Rehabilitation Center, Uttara, Dhaka. Respondent was selected purposively. Data was collected by face-to-face interview using semi-structured questionnaire using HRQOLDA scale. Collected data was checked, edited, coded and recoded for quality management. Descriptive statistics and inferential statistics including t-test and one-way ANOVA test was done through SPSS Version 20.

Result:

Among the respondents 34% were in the age group 23-28 years, 17% were in the age group 16-22 years, 23% were within the age group 29-36 years and 25% were within the age group >37 years. The mean age was found 32.29 ± 11.74 years. Most of the respondents were Islam religion 86.4%. 21.3% completed primary education level, 4.7% can sign only, 11.5% completed JSC, 17.4% completed SSC, 19.1% completed HSC, 25.8% completed graduation and above. 51.1% were married, 45.1% were single and 3.8% were separated or divorced. More than one third of the respondents 45.1% earned monthly less than 10,000 Tk. 31.9% earned monthly 10001-20000 TK. Among the respondents 30.2% were day labor, 27.2% were businessman, 12.8% were service holder, 10.6% were unemployed, 13.6% were student, 5.5% were from other profession.

Table-I

Socio-demographic characteristics of the respondents.

Socio-demographic characteristics	Frequency (f)	Percentage (%)
Age group (years)		
16-22	40	17
23-28	82	34
29-36	54	23
>37	59	25
Mean ± SD; Range (min, max)	32.29 ± 11.47 (16-60)	
Religion		
Islam	203	86.4
Hindu	32	13.6
Education status		
Can sign only	11	4.7
Primary	50	21.3
J.S.C.	27	11.5
S.S.C.	41	17.4
H.S.C	45	19.1
Graduate or above	61	25.8
Occupational status		
Unemployed	25	10.6
Service holder	30	12.8
Day labor	71	30.2
Business	64	27.2
Student	32	13.6
others	13	5.5
Marital status		
Married	120	51.1
Single	106	45.1
Separated / divorce	9	3.8
Monthly income		
Less than 10000 Tk.	106	45.1
10001 to 20000 Tk.	75	31.9
20000 to 30000 Tk.	20	8.5
30001 to 40000 Tk.	15	6.4
More than 40000 Tk.	19	8.1
Total	235	100.0

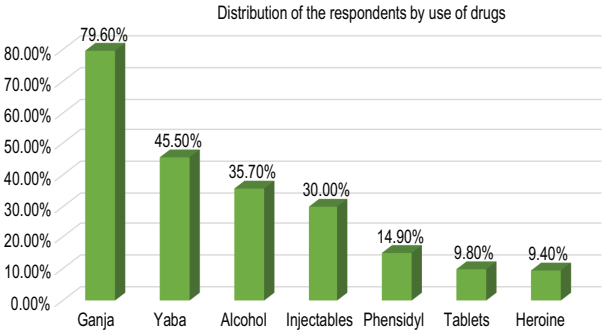

Figure-1: *Distribution of the respondents by use of drugs.*

The bar diagram showing majority of the respondents use ganja 79.6% followed by Yaba 45.5 %, alcohol 35.7%, injectable drug (Morphine, Pathedine) 30.0 %, Phensidyl 14.9 %, Tablet 9.8 % and rest heroine 9.4%.

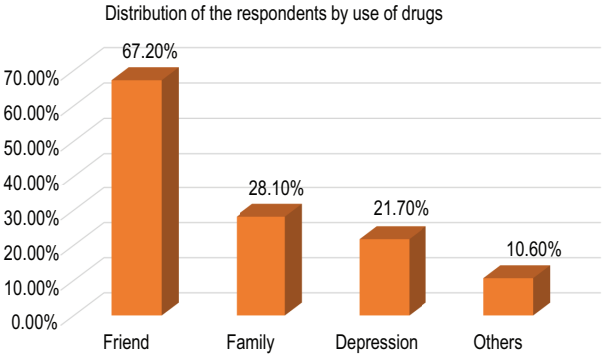

Figure-2: *Distribution of the respondents who started using drug by various causes.*

Bar diagram showing more than two third respondents 67.2% started using drug by friend followed by family issues 28.1%, depression 21.7% and rest 10.6% other causes.

Table-II

Distribution of the respondents by number of time of using drug per day

Number of time of usingdrug per day	Frequency	Percentage %
Less than 1 time	24	10.2
1 to 5 times	155	66.0
More than 5 times	56	23.8
Total	235	100.1

Majority of the respondents that mentioned that they used drug per day 1 to 5 times 66.0 %, followed by 10.2% used less than 1 time and 23.8% used more than 5 times.

Table-III

Distribution of the respondents by what happen when not using drug

What happen when not using drug	Frequency	Percentage %
Restlessness	146	62.1
Loss of temper	81	34.5
Insomnia	100	42.6
Other issues	69	29.4
Total	235	100.0

Majority of the respondent mentioned that they had restlessness when not used drugs 62.1% followed by 42.6% had insomnia, 34.5% had loss of temper, 29.4% had other issues.

Table-IV

Distribution of the respondents by by use of illicit drugs to feel better mentally in last 30 days

Use of illicit drug to feel better mentally in last 30 days	Frequency	Percentage %
15 times or more	84	35.7
8 to 14 times	4	1.7
3 to 7 times	48	20.4
1 to 2 times	30	12.8
Never	69	29.4
Total	235	100.0

Out of 235 respondents majority 166 (70.6%) used of illicit drug to feel better mentally in the last 30 days, out of which 12.4% respondents used of illicit drug 1 to 2 times, 20.4% used 3 to 7 times, 1.7% used 8 to 14 times and rest 35.7% used 15 times or more 29.4% mentioned that they were never used of illicit drug to feel better mentally in last 30 days.

Table-V

Distribution of the respondents by believe if drug use reduce social activities

Believe if drug use reduce social activities	Frequency	Percentage %
A little bit	5	2.1
A fair bit	32	13.6
Pretty much	62	26.4
Absolutely	136	57.9
Total	235	100.0

Out of 235 respondents majority respondents absolutely believe that if drug use reduces social activities 57.9%, 26.4%, mentioned pretty much, 13.6 % mentioned a fair bit and 2.1% mentioned a little bit.

Table VI showed that average score of health related quality of life were lower in age group 23-28 (66.378+/- 8.98) than other age groups. Persons within the age group 29-36 years (76.76+/-7.60) showed the highest score than the age group 16-22 years (73.1750+/- 4.39), age group 23-28(66.378+/8.98) age group more than 37 years (71.0169+/-11.99). Age (F=15.36, P=.000) showed the significant difference, (done by one way ANOVA test).

Table VII showed that average score of health related quality of life were lowest in respondents who started using substances due to family issues (65.5758±11.77) than friend influence (73.7342±7.708) and depression (70.000±10.905). Those who started due to friend influence (t=6.435, P=.000) and family issues (t=5.749, P=.000) showed significant difference. No significant difference was showed in those who started using substances due to depression (t=.894, P=.372); done by t test.

Table-VI

Relation between socio-demographic characteristics (Age) of the respondents with total mean score of health related quality of life (HRQOL) of drug abuse

Age (years)	N	Mean	SD	Test statistics
16-22 years	40	73.1750	4.39	
23-28 years	82	66.3780	8.98	F=15.36
29-36 years	54	76.7593	7.60	P=.000
>37 years	59	71.0169	11.99	
Total	235	71.0851	9.78	

Table-VII

Relation between cause of starting using drugs of the respondents with total mean score of HRQOL of drug abuser

Cause of starting drugs		N	Mean	SD	Test Statistics
Using drugs by friend's influence	Yes	158	73.7342	7.70839	T= 6.435
	No	77	65.6494	11.30413	p=.000
Using drugs due to depression	Yes	51	70.0000	10.90504	T= .894
	No	184	71.3859	9.46711	p=.372
Using drugs by family issues	Yes	66	65.5758	11.77228	T= 5.749
	No	169	73.2367	7.95468	p=.000

Discussion:

The study showed that one third of the respondents were within the age group 23-28 years 34%, were within the age group 16-22 years, 23% were within the age group 31-40 years and 25% were within the age group >37 years. The mean age was found 32.29 ± 11.47 years (Table-I). In a study by Nazmun Nahar Naz from Dhaka university, most participants (n=39) are aged between 25-35 years old, 38 participants are aged between 18-24 years and 24 participants age e" 36 years[8]. The mean SD of age range is 28.8 ± 7.9[8]. Other studies Kadri Bhagyalaxmi and Kedia, 2003 have shown in India, out of 560 subjects, 46 % of user where in the age group of 26 to 35 years. The mean age of users was (32.8 ± 6) years[9]. Another study in Bangladesh showed that out of 500 users, all of them between 15 to 35 years old and the mean age was 28.4 ± 6.7 years[10]. A report by the World Health Organization (WHO) suggests that most of the drug users in Bangladesh are predominantly men aged between 18 and 30. Although estimates vary widely, it is thought that approximately 5 million people in Bangladesh are dependent on drugs, mostly young people. This is a growing trend that is alarming and shows no sign of improvement at this time. According to the 2011 National Survey on Drug use and health, 22.5 million American age 12 and above (8.7% of the total population) had used an illegal drug or abused a prescription drug in the month the survey was conducted those numbers have since risen[3]. Most of the respondent's religion were Islam 86.4% and rest were Hindu 13.6%, majority of the respondents 51.1% were married, 45.1%. According to the study of Nazmmun Nahar Naz, out of 101 participants, 36.6% users were married, 40.6% were unmarried, 12.9% were divorced and 9.9% participants lived together[8].

In the study among the respondents, 21.3% completed primary education level, 4.7% respondents can sign only, 11.5% completed JSC, 17.4% completed SSC, 19.1% completed HSC, 21.3% completed graduation and above. Respondents completed primary and graduation were showed the majority percentage. Bawan's 2002 study on 75 women in India found that half of them were illiterate. Another study, Kadri, Bhagyalaxmi and Kedia 2003 study showed that out of 560 subjects, most of the users were educated up to primary or secondary level[6]. Among the respondents 30.2% were day labor, 27.2% were businessman, 12.8% were service holder, 10.6% unemployed, 13.6% were student, 5.5% were from other profession. In fact, the majority of drug users were unemployed according to the Journal of Health, Population and Nutrition (JHPN)[9]. According to Naz's study 28.7% were employed, 15.8% were students and 8.9% participants were unemployed[8]. Bawan 2002 found that out of 75 women in India 67 % employed, 45% are commercial sex workers and 15 % involved in peddling at the road side[2,11]. The study showed more than one third of the respondents 45.1% earned monthly less than 10000 Tk., 31.9% earned monthly 10001-20000 Tk., 8.5% earned monthly 20001-30000 Tk., 6.4% earned monthly 30001-40000 Tk. According to the 2001 National survey on drug use and health, the statistics showed that the rate of alcohol abuse was 10% higher in those that were employed than it was for the unemployed[12,13]. In another study, published in the American journal of preventive Medicine, approximately 78% of individuals with an income of 7500 US dollar and above reported that they consumed alcohol, compared with 45% of those with an annual income of less than US$ 30000. More than 80 % of college graduates reported that drunk, in comparison to less than 52% of those who had a high school education or less[14,15].

The current study showed the distribution of the respondent according to their use of drug. Among the respondents, the study showed majority of the respondents used ganja 79.6 %, followed by 45.5% Yaba, 35.7% alcohol, 30.0% injectable drug, 14.9% phensidyl, 9.8% tablets and rest 9.4% consume heroine (Figure-1). The causes of starting drugs were also found out through the questionnaire. More than two third respondents started using drug by friend influence 67.2%, followed by family issue 28.1%, depression 21.7% and rest other causes 10.6% (Figure-2). The study showed that majority of the respondents that mentioned that they used drug per day 1 to 5 times 60.0 % followed by 10.2% used less than 1 time and 23.8% used more than 5 times (Table-II). Symptoms when stop using drugs were found in this study, majority 62.1 % mentioned that they had restlessness when not using drugs followed by 42.6% had insomnia, 34.5% had loss of temper and 29.4% had other issues (Table-III). Out of 235 respondents 70.6% respondents used of illicit drug to feel better mentally in last 30 days, out of which 12.4% respondents used of illicit drug 1 to 2 times, 20.4% used 3 to 7 times, 1.7 % used 8 to 14 times and rest 35.7% used 15 times or more. 29.4 % respondents mentioned that they were never used of illicit drug to feel better in last 30 days (Table-IV). Out of 235 respondents, majority 57.9% absolutely believed that if drug use reduces social activities. 26.4% mentioned a fair bit and rest 2.1 % mentioned a little bit (Table-V). Significant difference was shown in age (F=15.36, P= .000). Average score of health related quality of life were lower in age group 23-28 year (66.378 ± 8.98) than other age groups. Person within the

age group 29-36 (76.76 ± 7.60) showed the highest score than age group more than 37 years (71.0169 ± 11.99) (Table-VI). Significant difference was showed in this study is those who started using substances due to friend influence (t= 6.435, P=.000) and family issues (t= 5.749, P=.000). Average score of health related quality of life were lowest in respondents who started using substances due to family issues (65.5758 ± 11.77) than friend influence (73.7342 ± 7.708) and depression (70.000 ± 10.905). No significant difference was showed in those who started using substances due to depression (t=.894, P=.372) (Table-VII).

Conclusion:

Most of the substance users have problem in relation to socio-demographic characteristics to health related quality of life in the domain of physical pain, sleeping problem, aggressiveness, lack of concentration, deterioration of physical and mental health. Optimistic finding that using drugs reduce social activities. For preventing addiction, awareness through mass media, parental education about addiction, family counselling at rehabilitation period, co-ordination by the different law enforcing agencies, strong legislation by the Government can combat substance use and increase health related quality of life (HRQODL) indicator in a good position in Bangladesh.

References:

1. Akhter J. Prevalence of substance abuse among female residential students of Dhaka University. ASA University Review 2012; 16(1): 115-127.
2. Ministry of Social Justice and Empowerment. Govt. of India. Women and Drug Abuse: The Problem in India. Highlights of the Report, 2002.
3. Burger SD, Donoho CJ, Wayment HA. The relative contribution of race/ethnicity, socioeconomic status, health, and social relationships to life satisfaction in the United States. 2009 Mar; 18(2):179-89.
4. Donovan D. Mattson ME, Cisler RA, Longabaugh R, Zweben A. Quality of life as an outcome measure in alcoholism treatment research. J Stud Alcohol Suppl 2005 Jul; Sup(15): 119 -39.
5. Hays RD, Morales LS, Reise SP. Item response theory and health outcomes measurement in the 21st century. Medical Care 2000 Sep; 38(9 Suppl): 1128-42.
6. Kadri AM, Bhagyalaxmi A. A study of socio-demographic profile of substance abusers attending a de-addiction centre in Ahmadabad city. Indian J Community Med 2003; 28(2):74-76.
7. Kotina S, Sawant VVD, Kokiwar P. A study to determine causes, prevalence and knowledge regarding consequences of substance abuse: a community based cross sectional study. International Journal of community medicine and Public health 2016 March; 3(3):730-34.
8. Naz NN. The effect of substance abuse on the quality of life of the user [dissertation]. University of Dhaka; 2015.
9. Nordfjærn T. Do severity levels of substance use relate to self-reported variations in psychosocial distress? Journal of Substance Use 2011; 16(6):422-38.
10. Roy J, Morshed NM, Qusar MS, Nahar JS, Miah MS, Shah MA, et al. Personality Traits of Substance Users in Bangladesh. Bangabandhu Sheikh Mujib Medical Univ J 2011 Feb; 3(2):76-81.
11. Rudolf H, Watts J. Quality of life in substance abuse and dependency. International Review of Psychiatry 2002; 14(3):190-97.
12. Sani MN. Drug addiction among undergraduate students of private universities in Bangladesh. Procedia Social and Behavioral science 2010; 5:498-501.
13. Swann AC, Dougherty DM, Pazzaglia PJ. Pham M, Moeller FG. Impulsivity: a link between bipolar disorder and substance abuse. Bipolar disorder 2004 Jun. 6(3): 204-12.
14. Ventegodt S, Merrick J. Psychoactive drugs and quality of life. The scientific world Journal 2003 Aug; 3:694-706.
15. Wit HD. Impulsivity as a determinant and consequence of drug use: a review of underlying processes. Addiction Biology 2009 Jan; 14(1):22-31.