Sexual Dysfunction among Men with Alcohol Dependence Syndrome in a Tertiary Care Hospital, Puducherry

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Abstract

Background: Alcohol is a depressant and using it regularly can dampen mood and cause sexual dysfunction on the longer run. Many alcoholics often suffer from severe sexual problems as the result of their drinking. The objective of the study is to find out the prevalence and types of sexual dysfunctions among alcohol dependent patients.

Materials and Methods: A hospital based cross sectional study conducted in Puducherry during December 2016 to November 2017 among 81 males patients aged between 21 -50 years attending Psychiatry OPD with alcohol related problems using Sexual Dysfunction Checklist, framed by using Arizona Sexual Experience Questionnaire (ASEX) and the Diagnostic Criteria for Research (ICD- 10) for sexual dysfunction.

Results: The mean age of the study participants is 33.3+6.66 years. About 40 percent of study population were between the age group of 30 and 40 years. Total Duration of alcohol dependence was 7.47+5.607 years. The prevalence of sexual dysfunction was found to be 67.90% among study population. The Erectile dysfunction and inability to have orgasm was found to be the most common sexual dysfunction among the alcohol dependent patients followed by arousal problem and low sexual desire.

Conclusion: Sexual dysfunction is highly prevalent in patients with alcohol dependence. Chronic alcohol use, severity of dependence, co-morbid substance dependence are all significant predictors of developing sexual dysfunctions. All patients with alcohol use should be routinely evaluated for sexual dysfunctions.

Keywords: Alcohol, Sexual Dysfunction, Alcohol Dependence.

Introduction

According to the world health report (2002) 8.9% of the total burden of the disease worldwide in

2000 was from the use of psychoactive substances.¹ It is reported that 32% of men and 11% of women over the age of 15 consume

alcohol. World Health Organization global status report on alcohol and health 2014 stated that alcohol consumption in India has gone higher².

Sexual dysfunction is known to occur in persons with chronic and persistent use of alcohol. Sexual dysfunction may lead to marked personal distress and marital disharmony among couples.³ There is a strong association between sexual dysfunction and higher quantity and longer duration of alcohol intake.⁴

A cross cultural study for alcohol use done across 8 countries by WHO reported that 12% males consumed alcohol prior to their first sexual intercourse to improve sexual pleasure and to get positive effect but chronic use of alcohol produces a negative effect in sexual functioning and leads to onset of sexual disorders.^{5,6}

According to Grover et al(2014), the prevalence of sexual dysfunction has ranged from 40 -95.2% across the studies. Erectile dysfunction was the most common sexual dysfunction followed by premature ejaculation, retarded ejaculation and reduced sexual desire among men, and vaginal dryness and dyspareunia among women.⁷

Sexual dysfunction among alcohol dependent patients are given least attention by the clinician and the researchers when compare to the other complications of alcohol. Sexual problems in alcohol dependent patients are often unexplored and neglected. Hence It is essential to explore the sexual functioning of every alcohol dependent patients. This study was carried out with the aim to look for the prevalence and clinical correlates of sexual dysfunction among patients who are alcohol dependent.

Materials and Methods

The study was a hospital based cross sectional study conducted in Sri Venkateswara Medical College Hospital and Research Centre, tertiary care hospital in Puducherry during December 2016 to November 2017. The study population included all males patients attending Psychiatry out patient department with alcohol related problems.

Inclusion Criteria: Married men aged 21 – 50 years with diagnosis of alcohol dependence as per Diagnostic and Statistical Manual of Mental disorders-IV (DSM- IV) and dependent on alcohol for at least a duration of one year.

Exclusion Criteria

1. History of Sexual Dysfunction prior to the onset of substance use
2. Patients with acute intoxication or acute withdrawal state.
3. Concurrent presence of other Substance Dependence other than Nicotine.
4. Presence of co-morbid medical illness like hypertension, thyroid dysfunction, diabetes mellitus, alcoholic liver disease, neurological disorders, cardiovascular disorders and renal dysfunction which can cause sexual dysfunction were ruled out by history, investigations and physical examination.
5. Drugs like antipsychotics, antidepressants, anti-hypertensive drugs affecting sexual dysfunction.
6. Presence of co-morbid psychiatric disorders: delusional disorder, anxiety disorder, schizophrenia and mood disorders.

Sample size

To study the prevalence of sexual dysfunction among alcoholics, the minimum required calculated sample size was calculated to be 81. Based on the formula $n = 4PQ/d^2$, where P is the prevalence of sexual dysfunction among alcohol dependents in a previous study done by Bijil Simon et al(2007)⁸, Q is 100-P= 28 and d is absolute precision, 10%.

Data collection Methods

Institutional Ethical committee approval was obtained. The study subjects were recruited after obtaining prior informed written consent. Semi-structured proforma was used to obtain socio-demographic details, history, physical examination and mental status examination. Severity of Alcohol Dependence Questionnaire (SADQ)⁹ was used to assess the severity of

alcohol dependence. Sexual Dysfunction Checklist was framed using Diagnostic Criteria for Research (ICD-10)¹⁰ for sexual dysfunction and Arizona Sexual Experience Questionnaire (ASEX)¹¹.

Results

The mean age of the study participants is 33.3+6.66 years. About 40 percent of study population were between the age group of 30 and 40 years. Among the study population 51 percent of the subjects had passed high school. Majority of them are employed (86.46%) and belong to middle class according to B.G. Prasad socio economic status classification [Table 1]

It was observed in our study that the mean age of onset of alcohol use 24.03 + 4.166 years. Total Duration of alcohol dependence was 7.47+5.607 years. Average alcohol intake was found to be 375 +159.006 ml/day. It was also observed that 52%

of the patients were severely alcohol dependent [Table 2]

The Erectile dysfunction and inability to have orgasm was found to be the most common sexual dysfunction among the alcohol dependent patients followed by arousal problem and low sexual drive [Table 3]

According to ASEX a person is considered to have sexual dysfunction if the score is 19 and above, Has a score of more than 5 on any one domain, Has a score of more than 4 on any three domains of ASEX. The prevalence of sexual dysfunction was found to be 67.90% among study population. [Table 4]

As per the check list, highest prevalence was seen for Anorgasmia(46.9%) and dissatisfaction with own sexual performance (43.2%), followed by difficulty achieving erection(43.20%), difficulty maintaining erection (39.50%), Premature ejaculation (34.50) and dissatisfaction with sexual frequency (34.50).[Table 5]

Table :1 Socio-Demographic Details of the study participants (n=81)	
Social Demographic Parameter	No (%)
Age of participants	
21- 26	4(4.93)
27-31	6(7.40)
32-36	20(24.69)
37-41	22(27.16)
42-47	19(23.45)
48-50	10(12.34)
Educational Status	
Primary	14(17.28)
Middle school	13(16.04)
High school	16(19.75)
Higher Sec school	13(16.04)
Graduates and above	13(16.04)
Illiterate	12 (14.81)
Socio Economic Status	
Upper (Class I)	12(14.82)
Middle(Class II,III,IV)	41(50.62)
Lower(Class V)	28(34.56)
Occupation	
Employed	70(86.46)
Unemployed	11(13.54)

Table :2 Distribution of Study subjects based on alcohol intake (n=81)

Alcohol Use	Mean + SD
Age of onset of use in years	25.03± 4.266
Duration of Alcohol Dependence	7.37 ± 5.707
Average alcohol intake in ml per day	356.83 ±159.006

Table 3: Distribution of study participants based on Sexual Dysfunction as per ASEX

Sexual Dysfunction Variables	Number	%
Low sexual desire/Drive	19	23.45
Arousal Problem	25	30.86
Erectile Dysfunction	35	43.20
Inability to reach orgasm	37	45.67
Dissatisfaction with orgasm	38	40.90

Table 4: Distribution of study participants with Sexual Dysfunction based on ASEX Scoring(n=55)

ASEX Score	Number	%
ASEX Global Score ≥ 19	38	69.09
ASEX Score 4 on 3 domains but global score of < 19	10	18.18
ASEX Score 5 on 1 domain but global score of < 19	7	12.72

Table 5: Sexual Dysfunction as per Sexual dysfunction checklist

Sexual Dysfunction Variables	n (%)
Has the prospect of having sex with your partner produced such aversion, fear or anxiety that you avoided any sexual activity (Aversion to sex)?	2 (2.46)
Have you had a lack or loss of sexual desire, which has led you to initiating sexual activity with your partner or engaging in solitary masturbation, at a frequency clearly lower than previous levels (Low sexual desire)?	19 (23.4)
Have you had a difficulty in getting an erection sufficient for intercourse (Difficulty achieving erection)?	35(43.20)
Have you had difficulty in maintaining erection (full erection occurs during the early stages of lovemaking but disappears when intercourse is attempted or before ejaculation if it occurs) (Difficulty maintaining erection)?	32 (39.50)
Have you found that frequently (or always) you have ejaculated before you would like to: before entry? < 1 min? < 3 min? (Premature ejaculation)	28 (34.5) 20 (24.69) 8 (9.87)
Have you frequently had problems in ejaculating even when erect (Inhibited / delayed ejaculation)?	2 (2.46)
Have you ever ejaculated without getting full erection (Orgasm with flaccid penis)?	18 (22.22)
Do you have difficulty in reaching the peak of pleasure at the time of ejaculation (Anorgasmia)?	38 (46.9)
Have you felt pain in the genitals during sexual intercourse (Coital pain)?	16 (19.75)
Are you satisfied with the frequency of sex (Frequency dissatisfaction)?	28 (34.56)
Are you satisfied with your sexual relationship with your partner (Dissatisfaction of sexual relation with partner)?	10 (12.34)
Are you satisfied with your sexual performance(Dissatisfaction with own sexual function)?	35 (43.2)

Discussion

In the present study, the sexual dysfunction prevalence among alcohol dependent patients was found to be 67 %.In a similar study done by Vijayasanen ME et al¹², the prevalence of sexual dysfunction was 71 % among 97 male alcohol dependent patients. Bijil Simon et al⁸ studied the sexual dysfunction in 100 male patients with diagnosis of alcohol dependent syndrome found that 72% had one or more sexual dysfunctions. The sexual dysfunction prevalence observed in our study is almost similar to above mentioned studies.

The most common sexual dysfunctions noted in our study was Erectile Dysfunction(43.20%) and inability to achieve orgasm(45.67%) followed by dissatisfaction with orgasm, arousal problem and low sexual desire. The sexual disturbances noted by Vijayasanen et al¹² in their study revealed diminished sexual desire (58%), ejaculatory incompetence (22%), erectile impotence (16%) and premature ejaculation(4%). In a review study done Grover et al⁷, the common sexual dysfunction reported was erectile dysfunction followed by premature ejaculation, retarded ejaculation and decreased sexual desire. According to Bijil Simon et al⁸, the most common sexual dysfunction was found to be premature ejaculation followed by erectile dysfunction and low sexual desire. Comparing our study results with similar studies on various sexual dysfunction we found that erectile dysfunction was the most common problem observed in alcohol dependent patients.

Many of the male alcohol dependent patients may not be aware of concept of orgasm and so would have found it difficult reporting about it to the psychiatrist compared to other sexual problems like erectile dysfunction, premature ejaculation and decreased sexual desire. This could be the possible reason for under reporting of orgasmic dysfunction in other studies.

Even though many of the previous studies have that co-morbid use of tobacco increases the prevalence of sexual dysfunctions in patients with

alcohol dependent syndrome, we did not find similar association to support the same .Since our study was done in small sample size attending tertiary care centre, hence results cannot be generalized to all patients with alcohol dependent.

Conclusion

Sexual dysfunction is highly prevalent in patients with alcohol dependence. Chronic alcohol use, severity of dependence, co-morbid substance dependence are all significant predictors of developing sexual dysfunctions and hence all patients with alcohol use should be routinely evaluated for sexual dysfunctions.

Sexual dysfunction induced by alcohol use is most of the time reversible with quitting alcohol use .Such important information may be used in motivating every alcohol dependent patients.

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