

# SEXUAL DYSFUNCTIONS AMONG CANNABIS AND TRAMADOL USERS

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## Introduction

Cannabis and tramadol have huge popularity in Egyptian community claiming their effects on sexual function and delayed ejaculation. The prevalence of tramadol use was 12.3% among university students, with higher prevalence in male (20.2%) than female students (2.4%). In a recent study on the lifetime prevalence of alcohol and substance use in Egypt, cannabis was the most misused drug, prevalence of cannabis abuse among general population is 7.25–14.5%. Much research has found that tramadol can produce changes in gonadal hormone levels. Tramadol as an opioid may have negative effects on libido, erectile function (EF) and ejaculatory function. One research group has reported dose-related reduction in the plasma testosterone levels of male subjects after chronic intensive use of cannabis. However, other studies with human males have found testosterone levels to be within normal limits after marijuana usage. in view of the contradictory reports of the effects of cannabis on sexual function and androgens. also encouraged by scarcity of Data about sexual effect of tramadol we decided to conduct this study.

## Aim of the work

The aim of this study is to compare between the prevalence of sexual dysfunction among cannabis, tramadol abusers and the prevalence among general population samples

## Patients and Methods

**Patients:** This study included 120 participants divided into 3 groups.

Group 1: 40 patient cannabis abusers

Group 2: 40 patient tramadol abusers

Group 3: 40 healthy volunteer matched to the same age of previous 2 groups.

**Methods:** A Case control Study design was used on a random sample of all participants who fulfilled the inclusion criteria. The following tools and techniques were used:

History taking to collect sociodemographic data, medical, psychiatric and drug history and detailed history was taken from all the studied sample about any comorbid medical condition excluding them from the study. Measurement of serum total testosterone level using cobas e 411 for immunoassay tests (disk system). Arizona Sexual Experience Scale (ASEX) Arabic version to detect sexual Dysfunction During any stage of sexual process.

## Results

Table 1: Comparison between the three studied groups according to testosterone level (n = 120)

Testosteron level	Group I (n = 40)	Group II (n = 40)	Group III (n = 40)	H	p
Min. – Max.	2.76 – 11.20	2.14 – 6.32	2.51 – 7.87	23.588*	<0.001*
Mean ± SD.	5.45 ± 1.72	3.74 ± 1.33	4.79 ± 1.35		
Median (IQR)	5.19(4.21 – 6.25)	3.35(2.76 – 4.64)	4.58(3.75 – 5.73)		
Sig.bet.grps	p1<0.001*,p2= 0.135 p3=0.001*				

H: H for **Kruskal Wallis test** **Group I:** Cannabis abusers **Group II:** Tramadol abusers **Group III:** Healthy volunteer matched to the same age of previous 2 p: p value for comparing between the three studied groups p<sub>1</sub>: p value for comparing between **Group I** and **Group II** p<sub>2</sub>: p value for comparing between **Group I** and **Group III** p<sub>3</sub>: p value for comparing between **Group II** and **Group III**\*: Statistically significant at p ≤ 0.05

Table 2: Comparison between the three studied groups according to ASEX (n = 120)

ASEX	Group I (n = 40)	Group II (n = 40)	Group III (n = 40)	H	p
Min. – Max.	5.0 – 17.0	5.0 – 21.0	5.0 – 17.0	10.504*	0.005*
Mean ± SD.	11.78 ± 3.29	13.47 ± 3.15	11.28 ± 2.66		
Median (IQR)	12.0(9.50 – 15.0)	14.0(11.0 – 15.0)	11.0(9.50 – 13.0)		
Sig.bet.grps	p1=0.041*,p2=0.249,p3=0.001*				

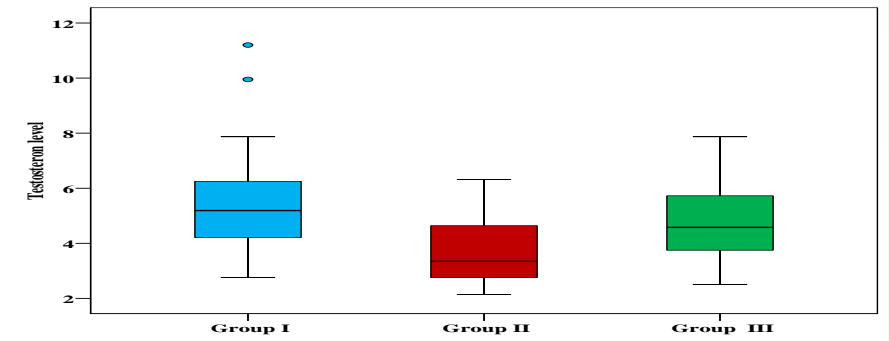


Figure 1: Comparison between the three studied groups according to testosterone level (n=120)

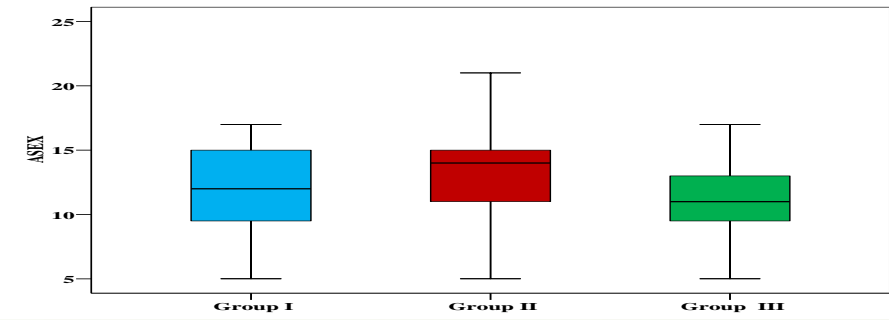


Figure 2: Comparison between the three studied groups according to ASEX (n = 120)

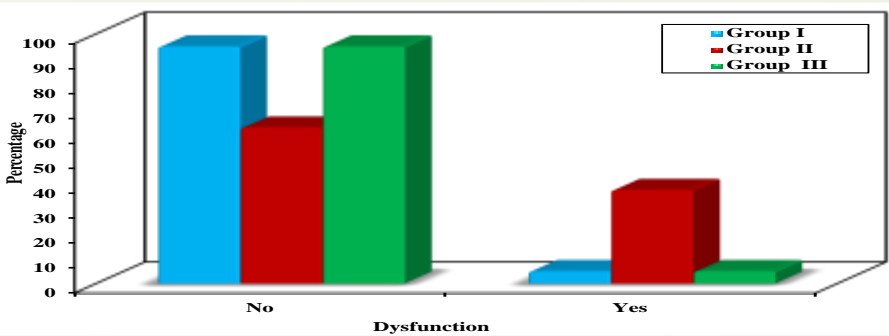


Figure 3: Comparison between the three studied groups according to dysfunction (n= 120)

## Conclusion

Tramadol has a significant effect on serum testosterone level (decrease it) among males. Tramadol as an opioid have negative effects on male sexual functions libido, erectile function (EF) and ejaculatory function. Cannabis has no significant effect on serum testosterone level or male sexual functions.