

---

## Knowledge, Attitude and Practice towards Cannabis Abuse among Youth in Khartoum State

\* Alemam A.E & \*\* Elgamel A.A

*\*Alaa Eltayeb Abdullah Alemam Medical Representative in Mermyam Pharma Medical Co. ltd in Khartoum Sudan*

*\*\*Ahmed Awad Abdelrahman Elgamel Forensic Science Institute \_ The National Ribat University \_ Khartoum Sudan*

---

**Abstract:** *Over the past decade, there has been a surge in the use of psychoactive substances, including Cannabis, among youth and university students in Sudan.*

*The study was conducted in Khartoum State universities, schools, treatment and rehabilitation centers during the period from (2018 – 2019). Study sample was 450 participants. Data was collected using a questionnaire and analyzed by SPSS version 23.*

*The prevalence of Cannabis abuse was (7.1%). Males among the users were (75%) and females were (25%). The common age group was 20-30 years (56.3%). The majority of the abusers (87.5%) were at university level of education. Distribution of the abusers was (Bahri 37.2% \_Omdurman 27.7%\_ Khartoum 30%). (52.5%) of the abusers were unemployed & highest percentage (46.9%) with medium economic status. The main causes behind abuse were problem of life stressors (53.1%), study problems (15.6%), divorce of parents (9.4%) and financial problems (6.3%). The majority of the abusers (68.8%) had knowledge about the treatment & rehabilitation centers for substance abuse, (75%) of the respondent had knowledge about the legal consequence of Cannabis abuse & illicit trafficking. The abusers prefer this behavior, due to the feeling of high and euphoria following consumption, while some of them tried to abstain from Cannabis abuse.*

**Keywords:** *Cannabis Sativa, drug abuse, psychoactive substances, illicit trafficking.*

### 1. INTRODUCTION

The flowering plant Cannabis sativa from family Cannabaceae is widely accepted as being indigenous to and originating from Central Asia, & upper South Asia (Geoffrey 2004) (Lambert, 2009).

Cannabis has long been used as hemp fiber, oil, remedy, and as a recreational drug. Many substances including hashish and hash oil, are prepared from the plant (Erwid, 2018).

Globally, in 2013, 60,400 kilograms of Cannabis were produced legally for medical and scientific purposes while: Thousands tons were produced for illicit trafficking. In 2014 there were an estimated 182.5 million Cannabis abusers which is about (3.8%) of the world population aged (15–64). This percentage has not changed significantly between 1998 and 2014 (UN, 2016).

The National Drug Control Committee (NDCC) of Sudan conducted two studies in 13 universities in Khartoum State from 2010 to 2018, with a sample size of 8500 and 14500 respectively. The prevalence of drug abuse was 10.5% and 5% respectively (Daffala, 2018).

The main objective of this study is to assess the knowledge, attitudes and practice towards Cannabis abuse among youth in Khartoum State.

### 2. METHODOLOGY

This is a descriptive, cross sectional, institutional-based study. Conducted in selected universities, schools treatment and rehabilitation centers for drug abuse in Khartoum State.

The sample size is 450 participants (universities 300, schools 100, and rehabilitation center 50).

Data was collected from the participants using a pretested questionnaire.

3. RESULTS

A) Total sample

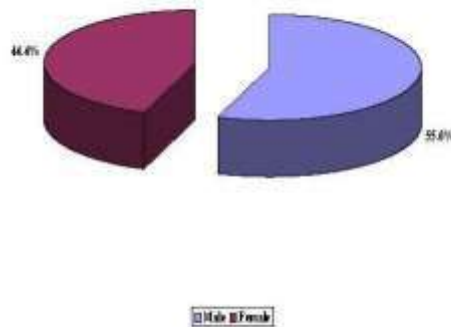


Figure (3.1) Distribution of the respondents according to gender (n=450)

Males were (55.6%) of the respondents and females (44.4%).

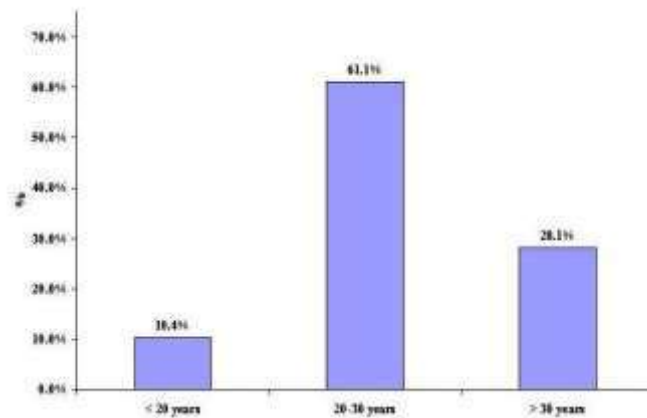


Figure (3.2) Distribution of the respondents according to age group

Highest percentage of the respondents (61.1%) aged between 20-30 years and lowest percentage (10.4%) aged less than 20 years.

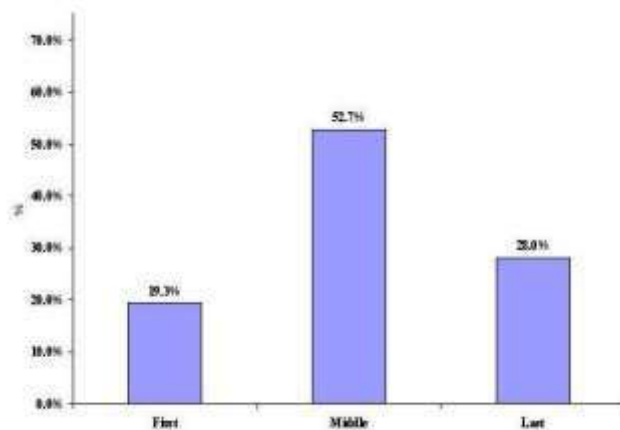


Figure (3.3) Distribution of the respondents according to order in the family (n=450)

Most of the respondents 52.7% order in the family is middle and 19.3% first order.

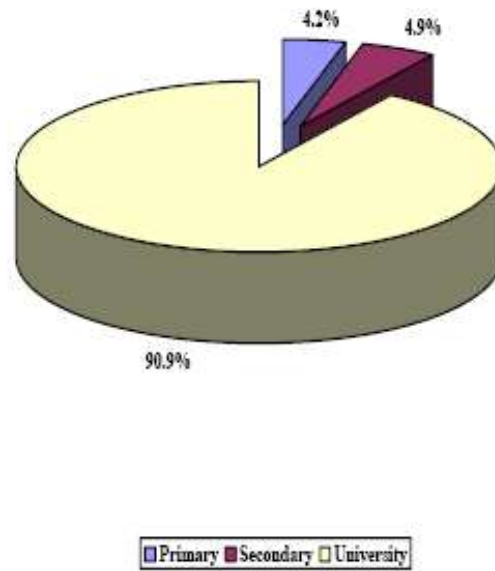


Figure (3.4) Distribution of the respondents according to educational level (n=450)

The majority of the respondents 90.9% had university level of education and only 4.2% had primary level.

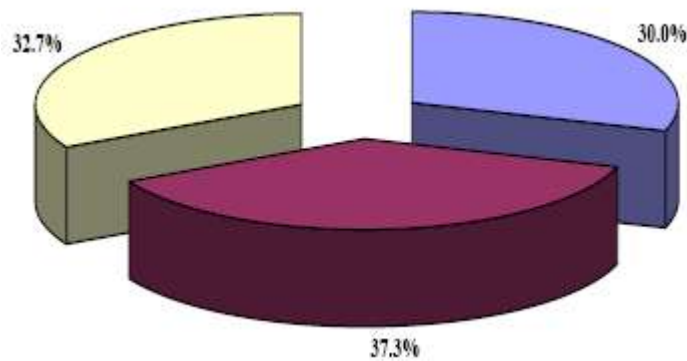


Figure (3.5) Distribution of the respondents according to residence (n=450)

Highest percentage of the respondents 37.2% from Bahri area, 32.7% from Omdurman and 30% from Khartoum .

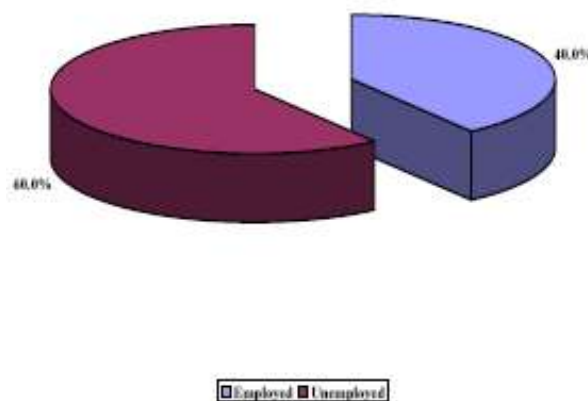


Figure (3.6) Distribution of the respondents according to employment situation (n=450)

Most of the respondents 60% were unemployed and 40% were employed.

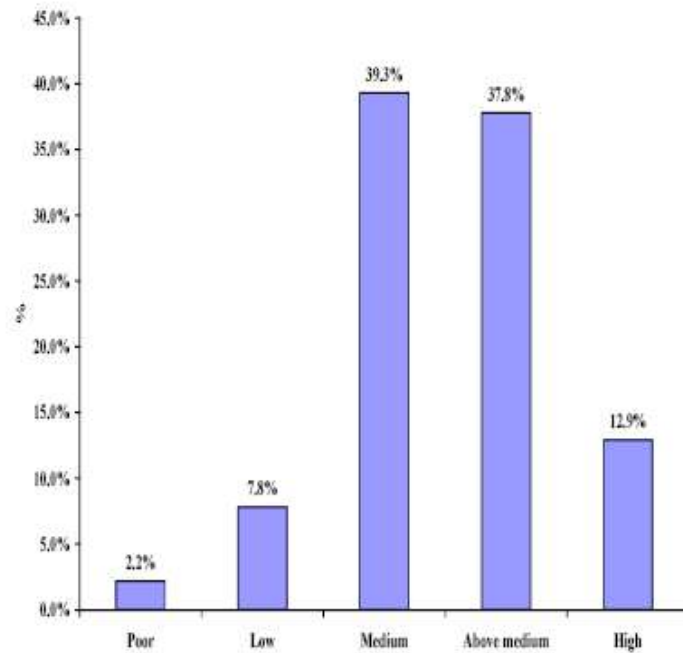


Figure (3.7) Distribution of the respondents according to socioeconomic status (n=450)

One third of the respondent 39.3% had medium status and 2.2% poor socioeconomic status.

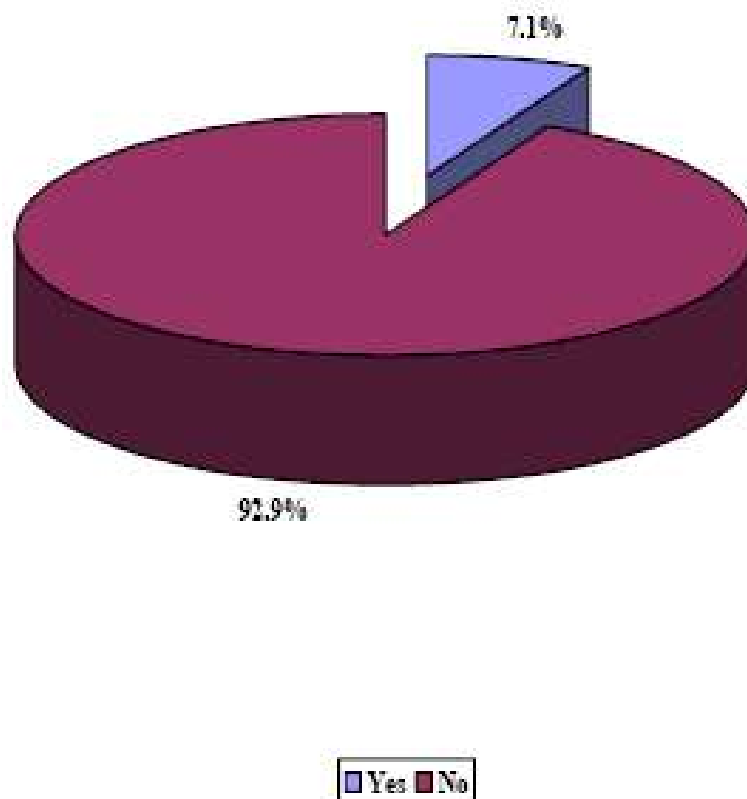


Figure (3.8) Distribution of the respondents according to prevalence of Cannabis use (n=450)

The majority of the respondents 92.9% do not use Cannabis and the prevalence of Cannabis use was 7.1% of the respondents .

**B) Cannabis users:**

**Table (3.1)** *Distribution of the Cannabis users according to socio demographic data (n=32)*

		<i>N</i>	<i>%</i>
<b>Gender</b>	Male	24	75.0
	Female	8	25.0
<b>Total</b>		32	100.0
<b>Age</b>	< 20 years	3	9.4
	20-30 years	18	56.3
	> 30 years	11	34.4
<b>Total</b>		32	100.0
<b>Order in family</b>	First	7	21.9
	Middle	16	50.0
	Last	9	28.1
<b>Total</b>		32	100.0
<b>Educational level</b>	Primary	0	0.0
	Secondary	4	12.5
	University	28	87.5
<b>Total</b>		32	100.0
<b>Residence</b>	Khartoum	2	6.3
	Bahri	17	53.1
	Omdurman	13	40.6
<b>Total</b>		32	100.0
<b>Job</b>	Employed	12	37.5
	Unemployed	20	62.5
<b>Total</b>		32	100.0
<b>Socioeconomic statuts</b>	Poor	0	0.0
	Low	0	0.0
	Medium	14	43.8
	Above medium	15	46.9

Socio demographic characteristics of the Cannabis users are shown in table (3.1):

- Males among the users were 75% and females were 25% (ratio 1:3).
- The common age group was 20-30 years (56.3%).
- Half of them 50% are ranked in the middle order family.
- The majority 87.5% at university level of education.
- Highest percentages 53.1% are from Bahri area.
- Two third (52.5%) are unemployed.
- Highest percentage (46.9%) had medium economic status.

**Table (3.2)** *Distribution of the Cannabis users knowledge on Cannabis rehabilitation and legal aspects (n=32)*

<b>Knowledge</b>		<i>N</i>	<i>%</i>
<b>Addiction rehabilitation centers</b>	Yes	22	68.8
	No	10	31.3
<b>Total</b>		32	100.0
<b>Legal consequence for abuse</b>	Yes	24	75.0
	No	8	25.0
<b>Total</b>		32	100.0
<b>Illicit trafficking</b>	Yes	24	75.0
	No	8	25.0
<b>Total</b>		32	100.0

The majority of the Cannabis users 68.8% had knowledge about the rehabilitation centers for addictions, 31.3% did not.

The majority of Cannabis abusers 75% had knowledge about the legal consequence of Cannabis abuse and 75% about legal consequence for Cannabis illicit trafficking (table 3.2).

**Table (3.3)** *Distribution of the Cannabis abusers practice (n=32)*

		N	%
<b>Duration</b>	< 5 years	18	56.3
	5-10 years	9	28.1
	> 10 years	5	15.6
<b>Total</b>		32	100.0
<b>Cigarette per day</b>	One	19	59.4
	Two	6	18.8
	Three	3	9.4
	> three	4	12.5
<b>Total</b>		32	100.0
<b>Cigarette per week</b>	7	19	59.4
	14	6	18.8
	> 14	7	21.9
<b>Total</b>		32	100.0
<b>Preference</b>	Alone	16	50.0
	With group	16	50.0
<b>Total</b>		32	100.0

The group of Cannabis users (table 3.3):

- 56.3% used Cannabis for less than 5 years, and 15.6% for more than 10 years.
- 59.4% smoked one cigarette per day and 12.5% more than 3.
- 59.4% smoked 7 cigarettes per week.
- 50% preferred to smoke alone and the other half preferred to smoke with group.

**Table (3.4)** *Distribution of the Cannabis users attitudes towards Cannabis (n=32)*

		N	%
<b>Feeling</b>	Relax and calm	15	46.9
	High mood and funny	13	40.6
	Activeness	4	12.5
<b>Total</b>		32	100.0
<b>Think to stop</b>	Yes	12	37.5
	No	20	62.5
<b>Total</b>		32	100.0
<b>Other drugs</b>	Yes	4	12.5
	No	28	87.5
<b>Total</b>		32	100.0
<b>Change in personality</b>	Yes	23	71.9
	No	9	28.1
<b>Total</b>		32	100.0
<b>Effect on the type of Change</b>	Positive	16	69.6
	Negative	7	30.4
<b>Total</b>		23	100.0

Attitudes half of the Cannabis abusers are shown in table (3.4).

- Most of the Cannabis abusers 46.9% feel relaxed and calm, 40.6% experienced high mood and funny and 12.5% high activity.

- Two thirds of users 62.5% did not think to stop use, while 37.5% tried to stop Cannabis use.
- Abuse of other drug was reported by 12.5% of the Cannabis abusers.
- 23 of the abusers said the use of Cannabis changed their lives, of them 69.6% to positive and 30.4% to negative.

**Table (3.5)** *Distribution of the Cannabis users problems in life (n=32)*

Problems	N	%
No	5	15.6
Divorce of parents	3	9.4
Financial problems	2	6.3
Stresses	17	53.1
Study problem	5	15.6
<b>Total</b>	<b>32</b>	<b>100.0</b>

Most of Cannabis abusers 53.1% had problems of life stressors, 15.6% study problems, 9.4% divorce of parents and 6.3% financial problems (table 3.5).

#### 4. DISCUSSION

The prevalence of Cannabis abuse was (7.1%) (Figure 3.8). Among the participant in this study. Compared to (Ibnauf,2016) who reported the prevalence of (21.3%) abusers of cannabis by medical students in Khartoum. (Tarig et al, 2016) reported 31% of substances abusers in Sudan which is in line with our current study.

Results of this study are in line with National Drug Control Committee (NDCC) of who Sudan conducted two important studies in 13 universities in Khartoum State from 2010 to 2018, with a sample size of 8500 and 14500 respectively. The prevalence of drug abuse was 10.5% and 5% respectively (Daffala, 2018).

The main causes behind abuse were (53.1%) problems of life stressors, (15.6%) study problems, (9.4%) divorce of parents and 6.3% financial problems (Table 3.5). 56.3% used Cannabis for less than 5 years, and 15.6% for more than 10 years (Table 3.3). (Gregg and colleagues 2009) found that the most commonly endorsed reasons for substances in people with schizophrenia and other psychotic disorders were: when they want to chill out or relax (94.3%), when they feel stressed (90.4%), and when they are

bored (89.6%). They also found that (50.9%) of participants used substances to cope with or reduce auditory hallucinations, and (57.4%) to abate feelings of suspiciousness or paranoia. (Thornton (2012)) repeated that Cannabis was used for pleasure. Exploring the relationship between Cannabis and psychosis by some abusers (Mane et al 2015).

Sociodemographic characteristics of the Cannabis users showed that Males among the users were (75%) and females were (25%). The common age group was 20-30 years (56.3%). In (50%) of the abusers order in the family is the middle. The majority (87.5%) are at university level of education. Highest percentage of the abusers (53.1%) are from Bahri area. Two third (52.5%) are unemployed. The majority (46.9%) had medium economic status (Table 3.1). Analysis of the sociodemographic data of those arrested for drug-related crimes (2010–2014) provides greater detail about drug use in Sudan. Ninety-five per cent were male, 18–30 years old and unskilled workers of low educational level. Khartoum state, as expected, scored the highest percentage of (64%) (Society Studies Center, 2015). Moreover, a continuous increase in drug-related criminal activity is expected up to 2021, based on observed and forecasted data (General Directorate of Narcotics Control, 2014), a sign of the gravity of the situation.

Which points to the importance of strategy plant to face the challenge of abusers (68.8%) had knowledge about the rehabilitation centers for treatment of drug abusers, (75%) had knowledge about the legal consequence of Cannabis abuse and (75%) known about legal impact for Cannabis illicit trafficking (Table 3.2). Prevention is better than treatment by de facto and is more cost-effective. For every dollar spent on prevention, at least ten can be saved in future health, social and crime preventive (National Institutes of Health, 2008) (United Nations Office on Drugs and Crime, 2013).

Most of the Cannabis users (46.9%) experienced feeling of relaxation and calmness, (40.6%) repeated high mood and funny behavior and (12.5%) expressed feeling of high activity. Two thirds of users (62.5%) did not thought to

stop use, and (37.5%) tried to stop Cannabis use. Abuse of other drug was reported by (12.5%) of the Cannabis users, (71.9) of the users said the use of Cannabis changed their lives, of them (69.6%) said that was to positive and (30.4%) said it was to negative (Table 3.4). Many studies portray Cannabis abuse as having a range of positive functions. (Williams and Parker 2001) used a longitudinal study to explore whether a sample of young English adolescents who used drugs in their teenage years subsequently reduced their use.

Although it was found that participants were less involved in drugs, Cannabis generally remained in use due to its positive functions like stress reduction. Some students repeated that Cannabis was considered to be the 'ideal' drug to relax, which serves as a motivating factor to using the drug.

Some authors qualitatively explored the positive impact of heavy Cannabis use on young people (Melrose, et al, 2007). In terms of the positive functions cited, Cannabis use acted as a 'social lubricant' which encouraged peer bonding and provided a sense of social belonging.

Participants stated that it helped alleviate worries and relax them. In addition, Cannabis abuse was found to play a role in anger management and avoiding other sorts of trouble. The drug was suggested to provide a relief from boredom by enhancing daily activities due to the 'high' effect. An extensive report by the Joseph Rowntree Foundation (Melrose, et al., 2007) claimed that for young people 'heavy Cannabis use' was defined not so much by the amounts consumed or spent but by the personal and social impacts of regular use. Moreover when young people generally talked about their experiences with Cannabis they reported a range of negative impacts, whether they recognized them or not (Melrose, et al., 2007).

## **5. CONCLUSION**

The current study showed that the prevalence of Cannabis abuse was (7.1%), more common in males, age group 20-30 years, university students, and medium socioeconomic status.

The main causes for Cannabis abuse were problems of life stressors, study problems, divorce of parents and financial problems.

The majority of Cannabis abusers had knowledge about rehabilitation centers, legal aspects and consequence of abuse and illicit trafficking in Cannabis.

The attitudes of the Cannabis abusers tend to prefer the abuse, due to the desired feelings and relaxation after use, while some of them tried to stop abuse of Cannabis.

## **6. RECOMMENDATIONS**

1. Current efforts to reduce supply should be supplemented by measures to reduce the demand for Cannabis abuse.
2. Treatment and rehabilitation services should be readily available and easily accessible to affected individuals.
3. Working towards implementation of the national drug control strategy and raising funds for training and research are of paramount importance.
4. A national survey to determine the extent of the problem is a mandatory and must extend to cover all sectors of the society.
5. Re-evaluation of the government's strategies towards a more effective harm reduction programme when dealing with young people.

## **REFERENCES**

- Daffala A. (2018). Intention of Drug Control Day – The NDCC Police House in Khartoum State.
- Erwids (2018). Cannabis, Basics, <https://www.erowid.org>.
- General Directorate of Narcotics Control (2014) Annual Drug Related Crime Report. MOI.
- Geoffrey W. G. (2004). Brian Anthony Whittle; Philip Robson. *The Medicinal Uses of Cannabis and Cannabinoids*. Pharmaceutical Press. pp. 74



- Gregg, L., Barrowclough, C., & Haddock, G. (2009). Development and validation of a scale for assessing reasons for substance use in schizophrenia: The ReSUS scale. *Addictive Behaviors*, 34, 830-837.
- Ibnauf A. (2016) Alcohol and substance use among Sudanese medical students: a cross-sectional study. A paper presented at the 6th International Psychiatric Conference, 7–10 Oct. 2016, Khartoum, Sudan.
- Lambert, M. D (2009). *Cannabinoids in Nature and Medicine*. Wiley-VCH. p. 20.
- Mane, A., Fernandez-Exposito, M., Berge, D., Gomez-Perez, L., Sabate, A., Toll, A., DiezAja, C., & Perez, V. (2015). Relationship between Cannabis and psychosis: Reasons for use and associated clinical variables. *Psychiatry Research*, 229, 70-74.
- Melrose, M., Turner, P., Pitts, J., & Barrett, D. (2007). *The impact of heavy Cannabis use on young people*. York: Joseph Rowntree Foundation.
- National Institutes of Health (2008) *Principles of Drug Addiction Treatment: A Research-Based Guide*, 3rd edn, p. 12 NIH.
- Small, E (2015). "American law and the species problem in Cannabis: Science and semantics". *Bulletin on Narcotics*. 27 (3): 1–20.
- Tarig O., Victor C., Abdulmoneim A., et al. (2016) Epidemiology of substance use among university students in Sudan. *Journal of Addiction*, 2016(8), 2476164.
- Thornton, L. K., Baker, A., Lewin, T. J., Kay-Lambkin, F. J., Kavanagh, D. J., Richmond, R., Kelly, B., & Johnson, M. P. (2012). Reasons for substance use among people with mental disorders.
- UN (2013) *International Standards on Drug Use Prevention*. United Nations Office on Drugs and crimes, Vienna, Austria.
- UN (2016). "Statistical tables". *World Drug Report 2016* . United Nations Office on Drugs and crimes. Vienna, Austria.
- Williams, L., & Parker, H. (2001). Alcohol, Cannabis, ecstasy and cocaine: drugs of reasoned choice amongst young adult recreational drug users in England. *International Journal of Drug Policy*, 12(5-6), 397-413.