



The Sociodemographic and the Clinical Characteristics of Substance Abuse Patients in Baljurashi Psychiatric Hospital, Albaha Region, Saudi Arabia

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Abstract

Background and Objectives: Although drug abuse is a major public health problem worldwide, there are a lot of cases, data reported in rapidly developing countries like Saudi Arabia and Gulf states. The study was conducted to determine the prevalence of substance abuse and addiction in Al-Baha region and to know the type of substances commonly abused by the patients.

Design and settings: Cross sectional study was conducted.

Patients and methods: Patients who attended in Baljurashi Psychiatric Hospital Out-patient department over three months were interviewed using structured questionnaire and Mini International Neuropsychiatric Interview (MINI) for diagnosis.

Results: We were able to collect data from 303 psychiatric patients. Most of studied patients were single, unemployed, Saudi nationals, males of young age, with low educational level. The total prevalence of substance abuse or dependence was 20.1%. Amphetamine was the most common substance abused by the patients followed by cannabis and benzodiazepines. Psychotic symptoms were prominent in majority of the cases.

Conclusion: We were able to know the magnitude of substance abuse problems in Al-Baha Region, certain clinical and socio-demographic patterns were observed in drug abuser. This can help in establishing a good services and preventive measures for substance abuser.

Keywords: Substance abuse; Addiction; Prevalence; Al Baha; Saudi Arabia

Introduction

Al Baha region is considered one of the thirteen administrative areas in Saudi Arabia. It is situated in the South-western part of the kingdom, about 1000 Kilometer away from Riyadh City (Capital of Saudi Arabia). It is a high land area on mountains roughly 2000-2500 feet of sea level, so it is cold in most of year days. It has about 700,000 population, developed much in the last few years with a lot of administrative governmental buildings cover whole areas and serve all people. In addition to many general and private hospitals as well as a new university called Al Baha University built in 2007. Al Baha city is the mother centre of the area and it has many towns distributed all over. Currently, there a specialist psychiatric hospital in Baljurashi City with capacity of 100 Beds. We used to receive patients referred from police station, National Anti-Drug Agency, social security, schools, prisons and other general hospitals for full psychiatric assessment and evaluation and possible admission if needed. Substance abuse is increasing among all age groups in Al Baha area that is why Saudi government is planning to establish new hospital in our region specialized for treatment of those patients having psychiatric diseases and substances addiction called psychiatric hospital and addiction with capacity of 200 beds. Drinking was popular in Arabia before it is prohibition by Islam fourteen centuries ago. However, sporadic drinking continued despite religious and social disapproval. The

rapid cultural, socioeconomic development (Table 1) associated with oil boom; led to new attitudes, lifestyles including drug misuse. The treatment of addict patients in Saudi Arabia is free, confidential and secured in all Hope and psychiatric hospitals.

Literature review

Alcohol and drug abuse is a common international problem worldwide. Kingdom of Saudi Arabia, like other countries, suffered much from this problem, which caused physical, psychological,

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Table 1: Shows the socio-demographic profile and characteristics of all patients studied.

Socio-Demographic Characteristics	Frequency	Percentage (%)
Age		
18-30	102	33.7
31-45	124	40.9
46-65	77	25.4
Sex		
Male	230	75.9
Female	73	24.1
Nationality		
Saudi	299	98.7
Non-Saudi	4	1.3
Marital Status		
Married	168	55.4
Single	117	38.6
Divorced	18	5.9
Occupation		
Student	20	6.6
Employed	69	22.8
Jobless	214	70.6
Education		
Primary	123	40.6
Intermediate	73	24.1
Secondary	62	20.5
University & above	45	14.9
Religion		
Muslim	302	99.7
Non-Muslim	1	0.3

social and economic consequences in our societies. That is why the government starts to fight these poisons as well to find solutions to eradicate in order to prevent further consequences and risks on generations in the future. Kingdom of Saudi Arabia spent and still spending large amount of money to stop spread of illegal drugs and it is a target of all drug dealers because it is rich country and its position on the borders from south (Yemen) and from North (Jordan, Syria, Iraq), as well as has borders with other Gulf countries. Kingdom of Saudi Arabia built so many psychiatric hospitals all over the country and addiction hospitals in Riyadh, Jeddah and Dammam cities for treatment and rehabilitate those patients needs such services and planning to distribute addiction treatment centers in all regions. Regarding consequences of addiction: individuals who had problems with both alcohol and illicit drugs abuse appear to be violent and having impulsive behavior including the adolescent patients [1]. Studies proved that 50% of patients having Attention Deficit Hyperactivity disorder tend to abuse substance [2]. Moreover, Dual diagnosis is common among chronic psychiatric patients, 51% comorbidity with substance abuse was found and majority abused 3 or more drugs [3]. Psychotic disorders are complications of substances abuse. But in general the prevalence substance abuse in schizophrenic patients is comparable to that in the general population with exception of stimulant and hallucinogen abuse which maybe greater in schizophrenic patient [4]. It is commonly held that substance use co-morbidity in schizophrenia represents self-medication to alleviate positive and negative symptoms, cognitive impairment, or medication side effects [5]. Depression is chronic disorder and drug abuse has been thoughts to cause depression or form of self-medication for depression [6]. In previous studies conducted in the Kingdom of Saudi Arabia, the prevalence of substance dependence in psychiatric outpatients was 22.6% [7]. despite the religious prohibition and society instruction to

Table 2: Shows the clinical diagnosis according to, M.I.N.I criteria.

Clinical Diagnosis	Frequency	Percentage (%)
Depression	49	16.2
Dysthymia	20	6.6
Suicidality	7	2.3
Manic Episode	27	8.9
Panic Attack	8	2.6
Agoraphobia	8	2.6
Social Phobia	10	3.3
OCD	9	3.0
PTSD	3	1.0
Psychotic Disorders	94	31.0
Mood Disorders	20	6.6
GAD	38	12.5
Antisocial Personality Disorders	10	3.3
Total	303	100

avoid and stop substance abuse in Arab countries, the prevalence is still growing. The prevalence of substance abuse in Arab countries is as follow: Saudi Arabia (3%), Egypt (22.5%) in secondary school student and (22.1%) in male university student and (7.2%) in female university student, Jordan (16.6%) in university student, Kuwait (4.4%), Lebanon (17%) abuse for marijuana in high school, Morocco (15.56%) of cannabis, United Arab Emirates (5,2%), alcohol is the substances most commonly used especially in high school and university student [8]. Risk factors for substance abuse in Arab countries is (Table 2) cigarette smoking and the risk increase for people who abuse alcohol followed by peer pressure and poor family communication, male used to abuse substance more than female except for tranquilizers and barbiturate which is common in female, substance abuse is frequently co-morbid with psychiatric illnesses especially schizophrenia [8]. It is known that, the common age for starting abuse drugs is between 12 and 18. Men are start to abuse drugs in age younger than female [8]. In early 1990's in Saudi Arabia, the most common substance abused in a hospital based study in Jeddah was heroin followed by alcohol [9]. The rate of psychotic symptoms increase by the increased years of dependence [10]. However, women, most commonly abuse nicotine and 70% of them had family history of substance abuse [11]. Chronic substance abuse is associated with cognitive deficits in cortical, sub-cortical and neuro-modulatory mechanisms that interfere rehabilitative programs [12]. In Saudi Arabia, substance abuse relapse is related to many factors including unemployment which is the most significant risk factors followed by social stresses, Age, peer pressure and family stresses [13].

Research Methodology

Introduction, ethical approval and informed consent

We conducted a descriptive cross-sectional study on 303 total patients attended Baljurashi Psychiatric hospital, In Al Baha Region, kingdom of Saudi Arabia, Data were collected over a period of 3 months from January 2013 until end of March 2013, Ethical approval was obtained from the ethical medical research committee in Al Baha health affairs, and from Baljurashi psychiatric hospital administration. Informed consent was obtained from each patient before participating in the study.

Objectives

- To study the co-morbidity between psychiatric disorder and substance abuse
- To know the most frequent type of substances in order to help in setting future plans and policy to solve such problem as intervention.

- To investigate the relation between gender, other socio-demographic factors and substance abuse.

a. **Study design**

The study is cross sectional study was conducted on psychiatric patients attending Baljurashi psychiatric hospital services in Albaha region, Saudi Arabia.

b. **Study area**

Baljurashi psychiatric Hospital. This is 100 beds capacity and it is the only specialist psychiatric hospital in Albaha Region with many departments including Emergency Department, outpatient Department, inpatient department, as well as Child, Adolescent psychiatric department, also social and psychological services. Manpower include 7 psychiatrist specialists and 3 psychiatric consultants and 8 psychiatrist residents working together to help all patients.

c. **Study population**

Visitors of Baljurashi psychiatric hospital usually come from different areas seeking treatment and they usually come accompanied with their relatives, including male and female subjects, all age groups, Saudi and non-Saudi patients. Patients were referred from general hospitals, primary health care physicians, police stations, schools and prisons.

d. **Sampling**

Sample size was calculated using the following formula:

$$N = Z^2 \pi(1-\pi)/d^2, \text{ where } N = \text{sample size}$$

Z = standardized variables that corresponds to 95% level of confidence.

II = mental illness prevalence rate

D = desired marginal error.

The prevalence of substance dependence in psychiatric outpatient in Saudi Arabia was 22.6%.

$$II = 0.226$$

$$Z = 2$$

$$D = 0.05$$

$$N = 4 \times 0.226 \times (1 - 0.226) / 0.0025$$

$$= 279 \text{ patients}$$

Data collection started on January 2013 until end of March 2013.

Inclusion criteria

- 1) Aged 18 years and above
- 2) Male and female subjects attending the hospital services
- 3) Willing to give informed consent to participate in this study.

Exclusion criteria

- 1) Severely psychotic or intoxicated or having withdrawal signs
- 2) Severe cognitive impairment
- 3) Mental retardation
- 4) Refuse to give informed consent.

Diagnostic tools

- 1) Structured interview socio-demographic data
- 2) M.I.N.I (Mini International Neuropsychiatric Interview).

Data management

- Data collection was based on face to face interviews
- Data analysis was performed using SPSS, version 16 for windows.

Research assistant who collected the data

- Resident psychiatric doctors
- Specialist Psychiatrist in Baljurashi Psychiatric Hospital.

Results

The total numbers of patients included in this study were 303 patients.

The patients age range between 18 and 65 years, majority of them (n=124, 40.9%) were between 31-45 years. there were (102 patients, 33.7%) their age ranged between 18-30 years. And less number of patients (n=77 patients=25.4%) were between 46-65 years. Male gender (n=230 patients=76%) constituted higher number compared to female sex (n=73 patients=24%), Most of participants (n=299 patients=98.7%) were Saudi nationals, only (4 patients=1.3%) were non Saudi.

Regarding the Marital Status the study showed that (168 patients=55.4%) were married. While (117 patients=38.6%) were single. We found in this study that (n=214 patients=70.6%) were unemployed compared to (69 patients =22.8%) were employed. Only (20 patients=6.6%) were students. Regarding the educational level, this study showed that (123 patients=40.6%) completed primary school, while (73 patients =24%) had intermediate school education, only (n=45 patients=14.9%) had completed university education. Most of the patients (n=302 patients=99.7%) were Muslim while (1 patient=0.3%) were Non-Muslim. We found that (55 cases=18.2%) were having positive family history of psychiatric Disorders wither psychotic or Neurotic Disorders. Also this study showed that (36 patients out of 303 patients=11.9%) had been arrested by police. (16 patients =5.3%) were found to have family history of substance abuse (Table 3). Most of the cases attended were psychotic (n=94 patients=31%). Chronic Depressed patients were (49 patients=16.2%). Then Generalized Anxiety Disorder (G.A.D) diagnosis represented (38 patients =12.5%). A total of 303 cases included in this study (27 patients=9%) were having Manic episode, while only (20 cases=6.6%) got the Diagnosis of Dysthymia, the same as Mood disorders. Data Analysis showed that Personality Disorder (Antisocial Type) and (Social Phobia Diagnosis) were found to be the same (n=10 patients=3.3%). Anxiety Disorders including panic attack and agoraphobia Diagnosis represented only (8 cases=2.6%). Suicidal patients wither they had attempts or ideas or thoughts were 7 cases only (=2.3%). (Post-traumatic stress disorder= P.T.S.D) Diagnosis was found to be n=3 patients, 1% in this report. We found that (8 patients=2.6%) were Alcoholic Abuser, while (2 patients=0.7%) were Alcoholic Dependents. This Based on Diagnostic Criteria of the Abuse and Dependency Definitions. Statistical analysis also revealed that drugs abuser were 24 patients= 7.9%), while Drugs dependants were 38 patients= 12.5%). The results showed that (16 patients= 5.3%) became Amphetamine abuser compared to (24 patients= 7.9%) became Amphetamine Dependant. Hashish (Cannabis)= T.H.C substance was abused by (11 patients=3.6%) and (10 patients=3.3%) became Dependant on it. Benzodiazepines abuse

Table 3: Substance Abuse or Dependence in relation to Socio-demographic characteristics.

Characteristics	Substance Abuse or Dependence		X ²	P
	Yes	No		
Age				
18-30	27(26.5%)	75(73.5%)	4.37	0.04
31-45	23(18.5%)	101(81.5%)		
46- 65	11(14.3%)	66(85.7%)		
Sex				
Male	61(26.5%)	169(73.5%)	24.2	0.001
Female	0(0%)	73(100%)		
Nationality				
Saudi	61(20.4%)	283(79.6%)	1.02	0.4
Non-Saudi	0(0%)	4(100%)		
Marital status				
Married	25(14.9%)	143(85.1%)	6.7	0.03
Single	32(27.4%)	85(72.6%)		
Divorced	4(22.2)	14(77.8%)		
Occupation				
Student	4(20%)	16(80%)	0.001	0.09
Employed	14(20.3%)	55(79.7%)		
Jobless	43(20.1%)	171(79.9%)		
Education				
Primary	16(13%)	107(87%)	13.1	0.4
Intermediate	25(34.2)	48(65.8%)		
Secondary	12(19.4)	50(80.6%)		
University	8(17.8%)	37(82.2%)		
Religion				
Muslim	61(20.2%)	241(79.8%)	0.2	0.7
Non-Muslim	0(0%)	1(100%)		

was only (4 cases =1.3%) and Benzodiazepines Dependants were (9 cases=3%). Only one patient (0.3%) was volatile Dependant and Nil patient abused volatile substance.

Age and Drugs Abuse:

In this present study we found that out of total 24 Drug abusers. 11 patients aged 18-30 years another 11 patient aged between 31-45 years, only 2 patients were elder than 45 years. P=.05

Sex and Drugs Abuse:

Regarding the gender differences among those patients, Drugs abusers observed in this Research were male (24 patients), No female patients were recorded to be abuser or Dependant. P= .001

Marital Status and Drugs Abuse:

In this study, we found that 16 patients were single and 6 were married, only 2 patients were divorced, P=.06

Occupation and Drugs Abuse:

This Research reported that 17 Drug Abuser patients were jobless and 6 Drug Abuser patients were employed, while 1 patient was student, P =.823

Education and Drugs Abuse:

Data Analysis showed when we compared Educational level and substance abuse we found that 10 patients completed intermediate education, 6 patients completed primary school education, 5 patients completed secondary school education, and only 3 patients completed university education. P=.600

The total numbers of drug abuse patients were (24). We have found that 12 patients were having history of police arrest. P= 0.00, while out of total (38) drug dependant patients, 21 patients were having history of police arrest. P=.001. Our findings revealed that the total number of substance abuse or Dependence were (61 patients = 20.1%), 27 patients (26, 5%) were aged between 18-30 years, 23 patients (18.5%) were between 31-45 years, while 11 patients (14.3%) were older than 45 years. P=.04

Sex of the patients and substance abuse and dependence

This study showed that male patients were (61 patients 26, 5%), while female participants were zero (0%). P =.001

Nationality of substance abuse or dependence

In this research all substance or dependant patients were Saudi nationals i-e (61 patients, 20.1%) and no other nationality abused or become dependant i-e (n= 0, (0%) and P =.4

Marital status and substance abuse or dependence

The data analysis showed (25 participants= 14.9%) were married, while (32 patients, 27.4%) were single, and only (4 patients, 22.2%) were divorced. P=.03

Occupation and substance abuse or dependence

In the present study we found that out of 61 patients, (43 patients, 20.1%) patients were jobless (unemployed) and (14 patients, 20.3%) were employed; only (4 patients, 20%) were student. P=.09

Education and substance abuse or addict patients

Regarding educational level (25 patients, 34.2%) completed

intermediate school. (16 patients, 13%) hold primary education, while (12 patients, 19.4%) hold secondary education, only (8 patients, = 17.8%) finished university education. $P = .4$

Religion and substance abuse or dependence

Statistical analysis of the data showed that all patients (61 patients, 20.2%) were Muslim and Non-Muslim recorded to abuse or become dependent. $P = .7$

History of Police arrest and Drugs abuse

Family history of psychiatric Disorder, substance abuse and addiction

This study showed that (17 patients = 30.9%) were having positive family history of psychiatric Disorder, compared to (44 patients = 17.8%) were not found to have family history of psychiatric. Disorder ($P = .076$)

Family history of substance abuse and substance abuse and addiction:

Out of total 61 patients were abused and depended on drugs, we found that (13 patients, 81.2%) were having positive family history of substance abuse, while (48 patients, 16.7%) were not. $P = .0001$

History of police arrest and substance abuse and addiction

Patients with history of police arrest in this report were (32 patients, 88.9%) compared to (29 patients, 10.9%) were not arrested by police at any time. $P = .0001$

Discussion

There were only few studies that had been conducted in the Kingdom of Saudi Arabia that focused on substance abuse and dependence disorders.

Socio-demographic characteristics

The majority of patients abused substances in this study were of young age, most of them were single, jobless, male and of lower educational level. These results are similar to a study done in Al-Qassim region, Central Saudi Arabia regarding socio-demographic parameters [14] and similar as well to a study done in Saudi Arabia, Soliman Fakeeh private hospital, Jeddah by Abdel-Gawad, et al. (1996) [15].

Gender differences in substance abuse

Because of shame, guilt, and society stigma, no female's patients were found in our study abused substances. The study area is a rural tribal population with cultural restriction for females to be engaged in the community. This is may be a protective factor that do not enable female to have an easy access to drug abuse like males. In spite of this, there may be some females in the community who abuse substances but due to cultural barriers and restriction they do not have an easy access to get psychiatric services.

Prevalence of substance abuse

The prevalence of substance abuse or dependence in the present study was 20.1% which is similar and comparable to other studies done in other regions of the Kingdom of Saudi Arabia as well as similar and comparable to other studies done in other Arab countries. Abdel Hay, et al., (2004) found a prevalence of 22.6% of substance abuse among outpatients attendant in Buryida psychiatric hospital in Al Qaseem Region Central part of the Kingdom of Saudi Arabia [7].

Type of Substance Abused

The most common substances abused in our study in Al Baha region were amphetamine followed by cannabis and benzodiazepines. However, the concurrent poly drug use can be explained in the domain of self-mediation [16]. Amphetamine dependence constitutes more than 50% of patients and 16% of patients admitted to mental hospital in dammam [17]. Among first admission to Amal Hospital of Dammam, over two decades (1986-2006), a total of 12,743 patients were admitted. In the second decade, amphetamine problem was increased from 12.1% to 48.1% [18].

Psychotic disorders due to amphetamine abuse

The majority of the patients in this study were having psychotic disorders followed by mood disorders and anxiety disorders. There were 21.3% their psychotic disorder was due to abuse of substance in general; specifically 18% were due to amphetamine in particular, These results were similar to a study done in Buraydah Mental Hospital, Al-Qassim, KSA, where they found that third of 106 total patients were psychotics due to amphetamine abuse, and those patients with amphetamine psychosis have antisocial personality disorders. [19] Another study done in Al-Amal Complex for mental health in Dammam by Abdel-Razek, et al., (2006) showed that the psychotic symptoms were very common with Amphetamine dependent patients especially at early age, that may lead to chronic psychosis [20].

History of Police Arrest In Relation To Substance Abuse

Almost half of the abused or dependant patients in this study reported to have been arrested by police due to some crimes. Only few patients who abused or dependent on substances have family history of substance abuse and family history of psychiatric disorders.

Conclusion

Now a day Saudi Arabia is facing marked changes in substance use among treatment seeking patients in addiction centers. Prospective studies using structural and standardized data collection promise more reliable results. Qualitative studies are necessary in the future. Despite religious, cultural, legal issues the substance misuse still growing in the K.S.A and considered number one enemy, also one of the leading and most complicated health and social problems faced by our country. Raising awareness in the Saudi health care society will help to find appropriate solutions through public health orientations, education and programmes. Finally these results can help the decision makers to understand the magnitude of substance abuse and addiction in Al Baha region that can help to implement preventive and therapeutics measures in order to eradicate this problem since drug addiction now considered a chronic, relapsing brain disease.

Study strength

This is the first study that had been conducted in this subject specifically in the south-western part of Saudi Arabia, Al baha region we were able to collect a good sample of patients in this study and our results were similar to other studies done in other regions of the kingdom of Saudi Arabia and in other countries in the gulf region.

Study limitations

The study was hospital based, not community based, may be future study can consider community sample as well.

References

1. Swartz MS, Swanson JW, Hiday VA, Borum R, Wagner R, et al. (1998) Taking

- the wrong drugs: the role of substance abuse and medication noncompliance in violence among severely mentally ill individuals. *Social psychiatry and psychiatric epidemiology* 33: S75-S80.
2. Horner BR, Scheibe KE (1997) Prevalence and implications of attention-deficit hyperactivity disorder among adolescents in treatment for substance abuse. *Journal of the American Academy of Child & Adolescent Psychiatry* 36: 30-36.
 3. Caton CL, Gralnick A, Bender S, Simon R (1989) Young chronic patients and substance abuse. *Psychiatric Services* 40:1037-1040.
 4. Mueser KT, Yarnold PR, Levinson DF, Singh H, Bellack AS, et al. (1990) Prevalence of substance abuse in schizophrenia: demographic and clinical correlates. *Schizophrenia bulletin* 16:31-56.
 5. Chambers RA, Krystal JH, Self DW (2001) A neurobiological basis for substance abuse comorbidity in schizophrenia. *Biological psychiatry* 50: 71-83.
 6. Abraham HD, Fava M (1999) Order of onset of substance abuse and depression in a sample of depressed outpatients. *Comprehensive Psychiatry* 40:44-50.
 7. Abd El-Hay M, Ramadan E, Elsayy H (2004) Prevalence and correlates of substance dependence in first episode schizophrenia. *Egypt J Psychiat* 23:113-19.
 8. Mariana M, Salamone, Aunee N, Karam, Trek A, et al. (2008) Epidemiologic Assessment of Substance Use in the Arab World. *The Arab Journal of Psychiatry*. 19: 100 -125.
 9. Osman AA (1992). Substance abuse among patients attending a psychiatric hospital in Jeddah: a descriptive study. *Annals of Saudi medicine* 12:289-293.
 10. Alibrahim O, Elawad N, Misau YA, Shaikh TM, Allam N, et al. (2012) Drug dependence and psychotic symptoms: a retrospective study of adolescents who abuse drugs at Al-Amal Hospital in Jeddah, Saudi Arabia. *Journal of Public health in Africa* 3: 1-10
 11. Sawwaf, Muna, Chaleby K (2009) Substance Abuse among Women the Saudi Culture. Virginia Ministry of Health Saudi Arabia Jeddah Saudi Arabia.
 12. Al-Zahrani MA, Elsayed YA (2009). The impacts of substance abuse and dependence on neuropsychological functions in a sample of patients from Saudi Arabia. *Behavioral and Brain Functions* 5:1-11.
 13. Al Nahedh N (1999) Relapse among substance-abuse patients in Riyadh, Saudi Arabia. *EMHJ-Eastern Mediterranean Health Journal* 5:241-246.
 14. Qureshi NA, Al-Habeeb, TA (2000) Sociodemographic Parameters and Clinical Pattern of Drug Abuse in Al-Qassim Region--Saudi Arabia. *Arab journal of psychiatry* 11:10-21.
 15. Abdel-Gawad, TMS, Osman MI (1996) Heroin addiction: Physical and social implication. *Egyptian Journal of Psychiatry* 19:33-47.
 16. Latkin CA, Mandell W (1993) Depression as an antecedent of frequency of intravenous drug use in an urban, nontreatment sample. *International Journal of the Addictions* 28:1601-1612.
 17. El-Tantawy A, Raya Y, Al-Yahya A, El-Desoky I (2010). Amphetamine Abuse among Patients with First Episode of Acute Psychosis. *Current Psychiatry* 17:73-81.
 18. AbuMadini MS, Rahim SI, Al-Zahrani MA, Al-Johi AO (2008) Two decades of treatment seeking for substance use disorders in Saudi Arabia: Trends and patterns in a rehabilitation facility in Dammam. *Drug and alcohol dependence* 97:231-236.
 19. El-Tantawy A, Raya Y, Al-Yahya A, El-Desoky I (2010) Amphetamine Abuse among Patients with First Episode of Acute Psychosis. *Current Psychiatry* 17:73-81.
 20. Abdel-Razek Y, Refaat G, Abdel- Razek G (2006) Amphetamine related symptoms: Descriptive analysis and reasoning. *Current Psychiatry Ain Shams University* 13:44-54.