

Public Beliefs about Alcohol and Substance Use in Saudi Arabia: A Cross Sectional Study

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Abstract

Abuse of alcohol and other substances became a substantial and escalating health and social problem worldwide as hospitals across the world are inundated with patients suffering from conditions associated with or caused by substance use. A descriptive correlation cross section research design was utilized to conduct this study with the aim to assess the Saudi public beliefs about alcohol and substance use in central region of Saudi Arabia on a non – probability convenience sample of 316 Saudi adults who were recruited from public areas of highest community assembly points. Data were collected using a two part questionnaire. First part concerned with the participant's demographic background and sources of information about alcohol and substance use, Second part of the questionnaire included 30 statements translated version of the Addiction Belief Inventory (ABI) Luke, Ribisl, Walton, & Davidson (2002). An official approval to conduct the study was obtained from the ethical committee of the research unit at College of Nursing – Riyadh affiliated to King Saud bin Abdulaziz University for Health Sciences along with an informed written consent was obtained from the participants who agreed to participate in the study. Participants who gave consent to participate in the study were individually interviewed and data were collected over a two month period. Data were coded for entry and analyzed using Statistical Package of Social Studies (SPSS) version 18.0. 22 (7%) of the participants had tried alcohol or any other substance at least once in their life. Nineteen participants (6%) had an addicted family member while 71 (22.5%) knew somebody who has addiction problem. Sources of information about addiction varied among the study participants with the internet as a source of information ranked first followed by television shows, movies and series, discussion with family and friends, school or university classes, magazines and newspapers and personal experience. Analysis of data revealed only statistically significant difference between male and female participants in relation to personal substance trial or use ($X^2 = 4.974$, $p = 0.02$). The highly ranked believes among Saudi adults were: Addicted persons are capable of drinking/using substances socially ($M = 4.23$, $SD = 0.870$), a recovering addict should rely on other experts for help and guidance ($M = 4.23$, $SD = 0.863$), an alcoholic/addict must seek professional help ($M = 4.22$, $SD = 1.015$), to be healed addicted persons have to stop using all substances ($M = 4.03$, $SD = 1.111$), relapse is a personal failure ($M = 4.03$, $SD = 1.121$). Developing and implementing culturally sensitive public awareness campaigns about the hazards of alcohol and other substance use and the services available to help persons with such problems within the Saudi community in public areas of highest community assembling and throughout all media channels including TV, radio, internet, SMS messages is highly recommended

Keywords: alcohol, substance use, beliefs, Saudi public

Introduction

Alcohol and other substance use became a substantial and escalating health and social problem worldwide as hospitals across the world are inundated with patients suffering from conditions associated with or caused by substance use (Bowley, Rein, Cherry, Vellema, Snyman, Boffard, 2004 & Ramchand, Marshall, Schell, Jaycox, Hambarsoomians, Shetty, et al. 2009). This is particularly true among youth, with indicators showing an increasingly younger age of onset for first-time use of alcohol or other substances (UNODC, 2014). Substance related disorders are a recognized psychiatric diagnosis and are classified as such in the Diagnostic and Statistical Manual for Mental Disorders. The Diagnostic and Statistical Manual of Mental Disorders fifth Edition (DSM-5) defines addiction as maladjustment manner of substance use leading to clinically significant distress that occurs within a 12 months period (APA, 2013).

Negative consequences of alcohol and substance use are not restricted to physical health only as it has profound negative effects on one's social environment, social behavior and social interactions (Klingemann, 2001). According to the United Nations Office on Drugs and Crime (UNODC) 2014 report globally, it is estimated that in 2012, between 162 million and 324 million people, corresponding to between 3.5 percent and 7.0 percent of the world population aged 15-64, had used an illicit substance (mainly a substance belonging to the opioids, cocaine, cannabis or amphetamine – type stimulants group) at least once in the previous year. The

report also mentioned that substance use continues to cost a momentous toll internationally, with loss of productive years of many persons and priceless human lives being lost. An estimated 183,000 (range: 95,000-226,000) drug-related deaths were reported in 2012 globally.

The United Nations Office on Drugs and Crime (UNODC) reported that solvent use is an emergent movement in the Kingdom of Saudi Arabia among secondary school students with many users progressing to harder forms of substance use such as cannabis and hashish. The report added that in Saudi Arabia, there is substantial use of fenetylline (a stimulant tablets known among Saudi public as Captagon). Based on this piece of information, the UNODC predict that this “would seem to imply that these substances are used in Saudi Arabia at a significant scale.” The UNODC specific country profile goes on to state that there is also use of cannabis, a rising use of heroin and cocaine, although at an overall low level. Moreover, UNODC Annual Report Questionnaire from Saudi Arabia 2008-2010 mentioned that Saudi Arabia has also reported by far the largest amount of khat (a plant based new psychoactive substances) seizures in the Middle East especially among adolescence. Furthermore, the UNODC concluded that there may also be a substantial amount of hidden use in Saudi Arabia because of social and cultural restrictions predominant in the region that may hamper addicts from admitting their use of alcohol or other substances (UNODC, 2014).

Because of the religious and culturally conservative nature of the Saudi community, information about the scope of alcohol and substance use problem in Saudi Arabia is limited. On the other hand, statistical indicators of the Ministry of Health in Saudi Arabia presented a significant increase in specialized psychiatric hospitals inpatient admissions and outpatient visits in 2007 compared admissions and outpatient visits in 2003 (MOH, 2004). Some of this increase could arise from the prevalent problems related to alcohol and other substance use.

Data collected by the World Health Organization Regional Office for the Eastern Mediterranean in 2003 estimates that the extent of alcohol use in the kingdom of Saudi Arabia is significant and that the data from the last five years imply a constant trend in the use of alcohol among Saudi population (WHO, 2003).

In Saudi Arabia, Alcohol or other addictive substances use is viewed as “illegal act” mainly because of the Islamic Utter nature of the Saudi Arabia’s government and that Saudi’ law is based on Islamic Sharia rules, which outlaw consumption of any amount of alcohol or alcoholic beverages and other forms of substances. Consequently, for legal and religious basis, any use of alcohol is considered as illegal act and strongly stigmatized and criminalized by Saudi general population (Al-Haqwi, 2010).

Knowledge and attitude about Alcohol and substance use are quite diverse (Luke, Ribisl, Walton, & Davidson, 2002) and of vital importance for prevention as well as effective treatment of substance use especially among adolescents as it is the age when the majority of substance users start use of variety of substances (Nebhinani, Nebhinani, Misra & Grewal, 2013). High knowledge of harmful consequences of substance was reported in students and general public.

Numerous studies in adolescent population have reported positive association between knowledge and beliefs about alcohol and substance use and their attitudes toward substances, in addition research has shown that clinicians who interact with substance use patients on a regular basis and have a better understanding of the illness have a better attitude towards treating substance use (Bander, Goldman, Schwartz, Rabinowitz, English 1987 & Miller, Sheppard, Colenda, Magen, 2001 & Kalebka, Bruijns, van Hoving, 2013).

Beliefs about addiction may influence personal decisions regarding alcohol or substance use (Trafimow, 1996), individual behaviors toward people with substance use problems (Luoma, Twohig, Waltz, Hayes, Roget, Padilla, et al., 2007), and personal acceptance of new addiction-related information. For instance, moralistic attitudes about addiction reduce acceptance and increase stigma toward those with alcohol or substance use disorders (Caplehorn, Irwig & Saunders, 1996a; Luoma et al., 2007; Peele, 1998). Such stigma may generate a barrier to individual acceptance of personal substance use and consequently postponing onset of management.

Recent findings by the National Survey on Drug Use and Health (SAMHSA, 2009) provide a conclusive example of the influence of addiction beliefs and attitudes. Of the 23 million individuals (8.3% of the total U.S. population age 12 and older) who met the diagnostic criteria for substance use disorders during 2008, 21 million people did not receive appropriate treatment at any specialty hospital, mental health centers or substance use rehabilitation facility (SAMHSA, 2009, Section 7.3). When interrogated, 3.7% agreed they needed treatment but made no effort to obtain help and 95.2% refused to acknowledge they needed treatment. Thus, user beliefs and attitudes represented a barrier to actually receiving treatment.

While research about addiction beliefs and attitudes is prominent in the literature, no published studies have examined Saudi public beliefs about alcohol and substance use.

Aim of the Study

The aim of this study was to examine public beliefs about alcohol and substance use in central region of Saudi Arabia

Subjects and Methods

Research design

A descriptive correlation cross section research design was utilized to conduct this study with the aim to assess the Saudi public attitudes and beliefs about alcohol and substance use in central region of Saudi Arabia.

Setting

Participants were recruited from public areas of highest community assembly points such as shopping malls, parks, outpatient clinics waiting areas, high schools, colleges and universities.

Participants

A non – probability convenience sample of 316 Saudi adults were invited and agreed to participate in the study and completed the study survey.

Data Collection Tool

Data were collected using a two part questionnaire. First part concerned with the participant's demographic background as gender, age, level of education, occupation and sources of information about alcohol and substance use.

Second part of the questionnaire included 30 statements translated version of the Addiction Belief Inventory (ABI) Luke, Ribisl, Walton, & Davidson (2002), which was used in this study as a measure of addiction attitudes and beliefs. The ABI is a 30-item instrument that measures addiction beliefs and attitudes using a 5-point Likert scale that ranges from 1 (strongly disagree) to 5 (strongly agree). Luke et al.'s (2002) confirmatory factor analysis and structural equation modeling of the ABI revealed eight subscales, with Cronbach alphas ranging from .61 to .83, and re-test reliability correlations averaging .46.

Luke et al.'s (2002) subscales are identified and defined as follows:

1. Inability to Control: Addicted persons cannot regulate their alcohol/substance use. Social uses of substances are not possible.
2. Chronic Disease: Addiction is a chronic disease that does not get better. The only chance for management is abstinence.
3. Reliance on Experts: Recovery is only possible with help from others, especially experts and professionals.
4. Responsibility for Actions: Addicted persons are responsible for their actions and substance use.
5. Responsibility for Recovery: Addicted persons are personally responsible for their own recovery.
6. Genetic Basis: Addiction has genetic causes.
7. Coping: Alcohol/substance is used to cope with stressful life situations.
8. Moral Weakness: Using alcohol/drugs is a sign of moral weakness and is a willful action.

The Addiction Belief Inventory was translated from English to Arabic by the researchers; face validity was performed using back translation from Arabic to English by a bilingual translator who was blind to the original English version of the questionnaire.

Test retest method was used to determine the reliability of the Arabic version of the Addiction Belief Inventory, by applying the translated questionnaire twice on 20 subjects who were excluded from the study. The reliability was 0.89. In addition, Cronbach's Alpha was calculated to be 0.87. Subjects needed 10 - 15 minutes to complete the questionnaire. A pilot study was conducted to test the feasibility and applicability of the tool. The pilot study was carried out on ten subjects who were excluded from the study. The result of the pilot study was help in refining the translation of some questions.

Ethical Considerations

An official approval to conduct the study was obtained from the ethical committee of the research unit at College of Nursing – Riyadh affiliated to King Saud bin Abdulaziz University for Health Sciences. Informed written consent was obtained from the participants who agreed to participate in the study. Anonymity was ensured by using identification codes on the questionnaires. No identifying information about the participants was collected. It was clearly stated that participation is voluntary and confidential and that the responses will only be used for the purposes of the current study, in addition, participants were assured about their right to withdraw from the study at any time.

Data collection

Participants who gave consent to participate in the study were individually interviewed and data were collected over a two month period (September and October 2014). Data were collected from various settings in order to represent different sociodemographic characteristics of Saudi population including shopping malls, parks, outpatient clinics waiting areas, high schools, colleges and universities.

Data Analysis

Data were coded, entered and analyzed using Statistical Package of Social Studies (SPSS) version 18.0. Data was presented using descriptive statistics in the form of frequencies and percentages. Interval and ratio variables were presented in the form of means and standard deviations. Between group sociodemographic and believes differences were analyzed using non probability Chi Square test (χ^2). Pearson r was used to test correlation and independent samples t test was used to compare between male and female participants mean ABI categories scores. The significance level was chosen as ($p < 0.05$).

Results

Data were collected from various public settings with the aim to assess the Saudi public attitudes and beliefs about alcohol and substance use in central region of Saudi Arabia. The sample consisted of 316 Saudi adults. 172 (54.4%) were male and 144 (45.6%) were female. Participants' age ranged from 18 to 70 years with a mean age of 27.98 year ($SD \pm 10.342$). Majority of the study participants were single (214, 67.7%) followed by married 95 (30.1%) and only 7 (2.2%) were divorced. Near half of the participants 146 (46.2%) held a bachelor degree and 112 (35.4%) had a high school education. More than half of the participants in the study 174 (55.1%) were students where 115 (36.4%) were working and 19 (6%) were not working and eight participant (2.5%) were retired.

When asked if the participants had tried alcohol or any other substance 22 (7%) responded yes.

Nineteen participants (6%) had an addicted family member while 71 (22.5%) knew somebody who has addiction problem. Sources of information about addiction varied among the study participants with the internet as a source of information ranked first followed by television shows, movies and series, discussion with family and friends, school or university classes, magazines and newspapers and personal experience.

Table 1: Sociodemographic data of the Participants (n = 316)

Variable	Frequency (N)	Percent (%)
Gender		
Male	172	54.4
Female	144	45.6
Marital Status		
Single	214	67.7
Married	95	30.1
Divorced	7	2.2
Education		
Quran Karim	4	1.3
Elementary education	8	2.5
Secondary education	6	1.9
High school	112	35.4
Diploma degree	17	5.4
Bachelor degree	146	56.2
Master degree	19	6.0
PhD or equivalent	4	1.3
Occupation		
Student	174	55.1
Working	115	36.4
Not working	19	6
Retired	8	2.5
Did you try or took Alcohol or any substance?		
No	294	93
Yes	22	7
Do you have an addicted family member?		
No	297	94
Yes	19	6
Do you know somebody who has addiction problem?		
No	245	77.5
Yes	71	22.5

Table 2: Sources of Information about Addiction (n = 316)

Source	Yes (N, %)	No (N, %)
Internet	152 (48.1)	164 (51.9)
Television shows	113 (35.8)	203 (64.2)
Movies and series	105 (33.2)	211 (66.8)
Discussion with family and friends	91 (28.8)	225 (71.2)
School or university classes	52 (16.5)	264 (83.5)
Magazines and newspapers	41 (13)	275 (87)
Personal experience	33 (10.4)	283 (89.6)

Analysis of data revealed only statistically significant difference between male and female participants in relation to personal substance trial or use ($X^2 = 4.974$, $p = 0.02$). Male and female groups were comparable in relation to having an addict family member ($X^2 = 0.026$, $p = 0.78$) and knowing anyone who has addiction problem ($X^2 = 2.100$, $p = 0.094$).

Table 3: Difference between Male and Female Participants in relation to Substance Trail or Use (n = 316)

Statement	Male (n, %)	Female (n, %)	X^2	P
Did you try or took any substance?				
Yes	17 (5.4)	5 (1.6)	4.974	0.020
No	155 (49.1)	139 (44)		
Do you have an addict family member?				
Yes	10 (3.2)	9 (2.8)	0.026	0.78
No	162 (51.3)	135 (42.7)		
Do you know anyone who has addiction problem?				
Yes	44 (13.9)	27 (8.5)	2.100	0.094
No	128 (40.5)	117 (37)		

As presented in table 4, in exploration of the participants beliefs about alcohol or substance use, findings revealed that the highly ranked beliefs were as following: Addicted persons are capable of drinking/using substances socially ($M = 4.23$, $SD = 0.870$), a recovering addict should rely on other experts for help and guidance ($M = 4.23$, $SD = 0.863$), an alcoholic/addict must seek professional help ($M = 4.22$, $SD = 1.015$), to be healed addicted persons have to stop using all substances ($M = 4.03$, $SD = 1.111$), relapse is a personal failure ($M = 4.03$, $SD = 1.121$), recovery is a continuous process that never ends ($M = 3.99$, $SD = 1.056$), and people use substances to lessen their depression ($M = 3.98$, $SD = 1.036$). The least ranked believes were: a drinking or substance use problem can only get worse ($M = 1.84$, $SD = 1.083$) followed by some people are alcoholics/addicts from birth ($M = 1.99$, $SD = 1.207$) and alcoholism/substance use is inherited ($M = 1.99$, $SD = 1.207$).

Table 4: Saudi Adults Beliefs about Addiction (n = 316)

Statement	Mean	Std. Deviation
1. An addicted person can control their use	2.75	1.477
2. Alcoholics/addicts can learn to control their drinking/using	2.86	1.274
3. Addicted persons are capable of drinking/using drugs socially	4.23	0.870
4. Treatment can allow alcoholics/addicts to drink/use socially	2.28	1.156
5. A drinking or drug problem can only get worse	1.84	1.083
6. Recovery is a continuous process that never ends	3.99	1.056
7. To be healed addicted persons have to stop using all substances	4.03	1.111
8. Alcoholism/drug abuse is a disease	3.55	1.180
9. Alcoholics/addicts are not capable of solving their drinking/drug problem in their own	3.60	1.213
10. An alcoholic/addict must seek professional help	4.22	1.015
11. A recovering addict should rely on other experts for help and guidance	4.23	0.863
12. An alcoholic/addict should not be held accountable for things they do while they are drunk or high	3.16	1.384
13. It is not an alcoholic/addict's fault they drink/use	2.63	1.387
14. Alcoholics/addicts are not responsible for things they did before they learned about their addiction	2.94	1.357
15. Alcoholics/addicts are responsible for their recovery	3.17	1.434
16. Only the alcoholic/addict themselves can decide when to stop drinking/using drugs	3.70	1.252
17. Ultimately, the addict is responsible to fix him/herself	3.85	1.201
18. Some people are alcoholics/addicts from birth	1.99	1.207
19. Alcoholism/drug addiction is inherited	1.99	1.207
20. Children of alcoholics/addicts who drink or use drugs will become alcoholic/addict	2.34	1.205
21. An addicted person uses alcohol/drugs to avoid personal problems	3.76	1.213
22. People use drugs/alcohol to feel better about themselves	3.88	1.123
23. People use substances to lessen their depression	3.98	1.036
24. Alcoholics/addicts use because they cannot cope with life	3.68	1.139
25. Alcoholics/addicts use substances to escape from bad family situations	3.83	1.101
26. Abusing alcohol/drugs is a sign of personal weakness		
27. Alcoholics/addicts are personally responsible for their addiction	3.89	1.046
28. Relapse is a personal failure	3.80	1.187
29. Alcoholics/addicts start drinking / using because they want to	4.03	1.121
30. It is their fault if an alcoholic/addict relapses	3.07	1.340
	3.83	1.225

Table 5 compares between male and female Saudi adults mean scores of the ABI categories. It shows that the two groups are comparable in the following categories: inability to control, chronic disease, responsibility for action, responsibility for recovery and moral weakness, while the results showed statistically significant difference between the two groups in relation to the reliance on expert mean score ($p = 0.002$), coping ($p = 0.003$) and genetic basis ($p = 0.040$).

Table 5: Comparison of the Mean Score of the Addiction Belief Inventory Categories between Male and Female Saudi Adults

ABI Categories	Male (n = 172)	Female (n = 144)	t	p
	M ± SD	M ± SD		
1. Inability to control	11.89 ± 3.410	12.06 ± 2.949	- 0.458	0.647
2. Chronic disease	13.20 ± 2.652	13.34 ± 2.610	- 0.466	0.642
3. Reliance on expert	11.56 ± 2.566	12.40 ± 2.220	- 3.075	0.002
4. Responsibility for action	8.59 ± 3.601	8.72 ± 3.441	- 0.307	0.759
5. Responsibility for recovery	10.58 ± 3.384	10.56 ± 3.060	- 0.195	0.845
6. Genetic basis	6.55 ± 3.050	6.86 ± 2.877	2.059	0.040
7. Coping	18.26 ± 7.797	19.76 ± 3.951	- 3.013	0.003
8. Moral weakness	18.10 ± 4.718	18.74 ± 4.298	- 1.247	0.213

Table 6: Comparison of the Mean Score of the Addiction Belief Inventory Categories between Saudi Adults Who Tried or Used Any Substance and Those Who Did not Try Any Substance

ABI Categories	Did you try or took any substance?				t	p
	Yes (n = 22)		No (n = 294)			
	Mean	SD	Mean	SD		
1. Inability to control	10.14	3.707	12.10	3.128	2.805	0.005
2. Chronic disease	11.68	2.868	13.38	2.576	2.966	0.003
3. Reliance on expert	9.91	2.860	12.10	2.349	4.151	0.000
4. Responsibility for action	6.36	3.347	8.74	3.522	1.779	0.076
5. Responsibility for recovery	10.73	4.002	10.61	3.179	- 0.170	0.865
6. Genetic basis	5.95	3.331	6.26	2.965	0.460	0.646
7. Coping	17.0	6.133	19.09	4.319	2.117	0.035
8. Moral weakness	16.68	5.017	18.51	4.486	1.647	0.101

Comparison of the mean Score of the addiction belief inventory categories between Saudi adults who tried or used any substance and those who did not try any substance before indicated a significant difference between the two groups in relation to the following scale categories reliance on expert ($t = 4.151$, $p = 0.000$), chronic disease ($t = 2.966$, $p = 0.003$) inability to control ($t = 2.805$, $p = 0.005$), coping ($t = 2.117$, $p = 0.03$) while there was no statistically significant difference between the two groups in relation to the following categories: responsibility for recovery, genetic basis, moral weakness and Responsibility for action.

Discussion

Use of alcohol and other substances is a significant and escalating health and social problem worldwide affecting all age groups (Al-ghzawi, Al Bashtawy, Azzeghaiby, Alzoghaibi, 2014). This study was conducted with the aim to examine the beliefs of the Saudi general public about various aspects of the alcohol and substances use issue in the central region of Kingdom of Saudi Arabia. Consumption of alcohol or other addictive substances is considered as "illegal" in Saudi Arabia, as the Saudi law is based on Islamic Sharia rules, which forbids consumption of any amount of alcohol or any other form of substances. Therefore, for religious and legal reasons, any use of alcohol is considered as illegal act by Saudi general public (Al-Haqw 2010). In harmony with religious and legal constraints, Majority (93%) of the participants in the current study did not try or took any substances which can be interpreted by the conservative nature of the Saudi culture. In addition to some attributes of the participants included in the study showed that more than 94 % of them had at least high school education and 91.5 % of the study participants were working. Those two variables worked as protective factors for the participants as it is well evidenced in the literature that alcohol and substance use is more prevalent among low educational level and unemployed people (APA, 2013 & UNODC, 2014), only 7% of participants in this study have tried alcohol or other substance and 6% had an addicted family member. This gives a brief idea that Alcohol and substance use is really a blooming problem in the Saudi community.

In accordance with Villan, (2001) and Om Prakash et al, (2009) most of the participants in the current study reported mass media e.g. internet, television shows, movies and series as the main sources of knowledge about alcohol and substance use. This shows the impact of media as major source of information regarding alcohol and substance use issues. This also points towards the potential role of the media in educating the public about the negative consequences of alcohol and substance use, in addition understanding the process of media impact on addiction beliefs may provide opportunities to influence policy makers' decisions about preventative/therapeutic interventions for alcohol and substance use (McCreanor et al, 2013).

Number one ranked belief in the current study was addicted persons who are capable of drinking/using substance socially. This finding was supported by Room (2005) who stated that drinking alcohol is a social behavior that is often associated with presence in a social alliance; it may even be a signal of power and status for instance during parties, wedding receptions and business meetings. Second highly ranked public belief was the Saudis' beliefs that a recovering addict should rely on experts for help and guidance, an alcoholic/substance user must seek professional help, to be healed and addicted persons have to stop using all substances, relapse is a personal failure. All these beliefs can be attributed to the relatively high level of education of the study subjects and reflect sound understanding of the nature of the use as a problem that has to be managed professionally in the proper setting with the help of specialized professionals. Those beliefs also can color the Saudi public attitudes towards people experiencing alcohol and substance use problems. In addition it can work as protective factor to the participants and their families against alcohol and substance use. Those findings also support the findings of the research study conducted by (Iqbal, 2000) who found that substance use treatment centers have to be able to provide comprehensive preventive, medical evaluation, treatment and counseling services to the public in general and people with substance use problem in particular.

While comparing male and female in relation to substance trial or use, findings of the current study

concluded statistically significant difference between male and female. Furthermore while comparing the male and female participants in regard to their beliefs using ABI, there were significant difference between the two groups in relation to the reliance on expert. As a coincidence in recent decades, there has been increased concern about drinking behavior as an aspect of gender roles (Bergmark, 2004 & Bloomfield et al, 2001). It has been consistently shown that adult males consume more alcohol and have more alcohol-related problems than females, which has led the majority of early alcohol research to focus primarily on alcoholism among men (Curran & Booth, 1999) and their male offspring. In a study conducted among medical students in Riyadh, Saudi Arabia regarding alcohol and substance use in the Saudi community gave evidence that young male adults involve in substance use behavior and also mostly affected by their gender, marital status and education (Iqbal, 2000, Abumadini 2008& Al-Haqwi 2010).

In congruence with Newcomb, Maddahian & Bentler (1986), understanding vulnerability to alcohol and substance use can be enhanced better through exploring people's beliefs and attitudes towards alcohol and substance use. Participants in the current study highly believed that people use substances to minimize their depression. This finding implies the importance of educating public about healthy outlets and ways to manage their perceived stress and reduce their vulnerability to depression and consequently protect people against using alcohol or substances to cope with different life stressors. In contrast, believing that drinking and substance use problems are inherited problem ranked least among the study participants. Perceived causes of any problem can contribute to the prevention and health seeking behaviors related to that problem. Educational programs should be directed towards emphasizing the sound beliefs and modifying and correcting the wrong beliefs using relevant best research evidences.

A need for substance dependent treatment is perceived, this need for treatment, however, did not seem to oblige perceiving addicts as patients in this study. Considering all the treatment modalities, it is important to note that the effectiveness of treatment can be relatively difficult to measure, due to specific patient characteristics that may play a significant role in that person's treatment experience. Treatment centers must be available to prevent and treat alcohol and substance abuse. Counseling and educational services should be made available to meet the wide-ranging needs of the Saudi community (Ken, Andria & Tamara, 2011).

Conclusions and Recommendations

Beliefs towards alcohol and substance use varied among Saudi adults who included in this study. It is possible that the participants' beliefs about alcohol and other substances use may influence receptivity of addiction related information and could help identify probable elements for prevention and effective treatment programs. Only few research studies are conducted in the Saudi community regarding this issue, further research is indicated to elucidate the attitudes and use of the Saudi adults regarding addiction and create awareness about the consequences and predisposing factors.

Based on the findings of this study, the following recommendations are suggested:

1. Development and implementation of public awareness campaigns about the hazards of alcohol and other substances use and the services available to help persons with such problems within the Saudi community in public areas of highest community assembling and throughout all media channels including TV, radio, internet, SMS messages... etc.
2. Development of awareness programs specific for school and college students and other high risk groups about the hazards of alcohol and other substances use are urgently needed to meet those groups' unique needs.
3. Develop effective and culturally sensitive, gender-based, evidence-based prevention, treatment, counseling and rehabilitation interventions programs for those patients with alcohol and substance use related disorders.
4. Develop and implement programs and services for the reduction of social and health consequences of substance use, including general and selective substance use prevention treatment, rehabilitation and social reintegration.
5. Multiple and regular "stress coping strategies" sessions should be organized and implemented for high risk groups to help them to cope with life stressors and to minimize the possibility of use of alcohol or other substances.
6. The results signify that more extensive data is required to fully assess the status of alcohol and drug use. A central information gathering commission has to be established that would be responsible to collect data from all concerned agencies; this could help study the trends and consequences of substance use in the Saudi community. The collected data can be used for setting priorities and making recommendations for further research, treatment and take preventive steps aiming for a golden Saudi alcohol and substance use free era.

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Conflict of Interests

The authors declare that they have no conflict of interests with any organization regarding the materials discussed in this manuscript.

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