International Journal of Emergency Mental Health and Human Resilience, Vol. 17, No.1, pp. 345-351, ISSN 1522-4821

# Social Drift in Patients Suffering from Alcohol and Substance Related Disorders, Amman, Jordan

Hamad Al-Ghafri MD PhD[1], Mohamed A Sayed PhD[2], Ahmed Yousif Ali MD FRC Psych[3]

[1]Director General, NRC, Abu Dhabi, UAE, [2]Head Psychology, NRC, Abu Dhabi, UAE

[3]Head Psychiatry, NRC, Abu Dhabi, UAE

***ABSTRACT:*** *This study describes the characteristics and profiles of substance users in a clinical population who received treatment for their substance abuse at the National Addiction Centre in Amman, Jordan during the period from September 2009 and end of 2010. Further, the study examined the factors purported to be associated with drug abuse that may or may not affect what is regarded as Social Drifting (social downgrading) by examining these factors across three major groups: Heroin, Alcohol, and Other Drug Abusers (including Poly-substance) as defined by DSM1V-TR. The research participants of this study consisted of 250 individuals who were recruited for the purpose of the study. The methodology employed a set of questionnaires that were appropriate to test the main hypotheses of the study. Demographic data were collected using a semi-structured questionnaire identifying relevant characteristics such as age, nationality, religion, educational level and other pertinent information about the subjects. Two other components of the questionnaires addressed current use and severity of use of substances consumed. A third part was designed to capture the social factors and characteristics purported to impact the life of those drug abusers to test the hypotheses generated to examine social drift. A complementary, but integral part of the study used a semi-structured, free–style interview covering a wide range of life circumstances. This part, and researcher observations and guided inquiries were consistently recorded and noted. Results indicated that significant associations between level of educational attainment and heroin use were found. Significantly more of the heroin users had a university degree and higher education compared to the non-heroin users. 25.5% did not complete their education due to addiction, 53.6% reported that their job was affected by their addiction and 73% mentioned that their income changed after addiction. No significant association was found between social drift score and alcohol users compare to non-alcohol users. One interesting finding was revealed with the association between those who drank alcohol and those who did not. By using a Sample T test, we found significant mean age differences between the two groups. The in-depth interviews revealed data on the lives of the Jordanian substance abuser from initiation, escalation, different patterns of use, impact on their lives and seeking treatment. The data collected mapped well onto the bio-psychosocial-spiritual model of addiction and showed the important role the family plays in all aspects of addiction. The narratives of the lives of participants supported the hypothesis of social drift. This data complemented the findings of the quantitative study. The lack of supervision when young people leave to live away from home for higher studies emerged as a major risk for developing drug and alcohol problems. The results will be discussed in light of available literature ad similar studies.* ***Conclusion:*** *The current study is but one small step in establishing the patterns of substance abuse in Amman, Jordan. Caution should be exercised in drawing generalizations from this study due to limitations inherent in this type of studies that will be outlined earlier. Further studies are needed with a more robust methodology and clear understanding of the culture under which drug addiction is maintained.*

**Key words:** *Middle east, drug abuse, social drift, culture, mental health*

## BACKGROUND AND LITERATURE REVIEW

The consequences of psychoactive substance misuse cannot be overlooked in any society. The devastating effects of such abuse on the bio-psycho-social and spiritual domains have consistently been demonstrated and documented. Historically, the ceremonial and spiritual use of various substances and drugs dates back thousands of years. Man has engaged in the use of all kinds of substances ranging from fermented milk, grapes and sugar canes to produce and consume mind altering substances. These effects have been ascribed to "abnormal" and supernatural phenomena and drugs themselves were widely believed to have medicinal, spiritual and /or religious underpinnings. This conceptualization continues to be with many of us as we deal with the damaging effects of such substances and their lingering consequences.

In the Middle East, in general, and Jordanian society in particular, there is a paucity of scholarship in this area owing to a multitude of factors, among which is the relative recent emergence of such problems which have brought to the fore a myriad of associated social complications. The way authorities deal with these complexities can be partially explained by the deeply embedded societal attitudes in the Arabic culture toward addiction.

The shame and sense of guilt and the stigma that traditionally accompany the recognition of addiction in an individual may hamper any significant efforts to tackle the problems before it grows deep enough roots.

The Arab traditions, ethos and practices perceive drug addiction and other psychological maladies as an act of selfishness and

*Correspondence regarding this article should be directed to: mohamed.sayed@nrc.ae

individuals who engage in such practices are seen as social outlaws or pariahs that either should be punished by imprisonment or be subjected to exorcisms of their "demonic possession" and "evil eye".

Traditionally, the two conceptualizations alluded to above have gradually given way to "emergent awareness" in dealing with drug addiction. Notwithstanding this emerging positive attitude, people continue to rely on the "medicalized" treatment as a form of accepted intervention while continue to ignore the psycho-social and spiritual aspects of addiction. As a result, we continue to witness a great deal of failure in service planning, funding and provision of treatment for addicted persons due to the aforementioned "road blocks" prevalent in the society.

The Middle East is the region that roughly encompasses a majority of western Asia (excluding the Caucasus) and Egypt. The term is used as a synonym for Near East, in opposition to Far East.

There have been many studies carried out globally to research the characteristics of the addicted individuals but, in the Middle East, little is known about this issue, as it is a considerably new and emerging problem in the region's communities.

Although the scope of this study is to cover drugs of abuse, it will also cover alcohol use and related complications. Alcohol consumption is illegal in many countries in the Middle East but it is consumed and the related harms are very conspicuous.

Although the study of drug addiction and addicted individuals profiles and characteristics have been extensively studied and are well documented in the international literature, there is paucity of such research in the Middle Eastern countries and cultures. This can be attributed to a number of complicated and interrelated factors that hamper research to be carried out.

One of the endemic reasons probably has to do with communication of distress and help seeking behaviour. However, recent trends in globalization and trade and the consequential social problems associated with addictive substances have brought to the fore the need for strategies in public health planning to deal with addictive substance and addicted individuals. As a result, a great deal of legislative work has been established or updated, prohibiting the misuse of addictive substances that goes hand in hand with Islamic religion prohibition pertaining to Alcohol and substance use/misuse.

The current study will focus on exploring the drug issue in Jordan, one of the most rapidly growing countries in the Middle East and one that has certain unique characteristics such as its history, geographical location, political structure, and perhaps the great many expatriates and refugees, who settled in the country and consequently contribute to the rift in the social fabric in an otherwise conservative society that prides itself of its Bedwin traditions, ethos and values.

The aforementioned factors are further complicated by the stigma that is often attached to mental health in general and drug use in particular. There is a web of interrelated factors that consider addiction not to be a medical or psychological phenomenon, but a shameful event that permeates the life of the individual and his or her relationship with society at large. Consider for example what Al-Darmaki and Sayed (2009) wrote in this regard:

"…mental illness is also considered as a sign of weakness in the individual's faith. Therefore, a person with [addiction] should strengthen his or her relationship with Allah through prayers and readings from the *Quran*" (p.470)

In the present study, we will explore the underlying aspects of addicts' characteristics in order to better understand the "web of interrelationship" that surrounds the addictive behaviour of the targeted group. This study will therefore focus on patient's demographics, personal and social characteristics. We will explore the concept of patient's social 'drift', a concept that has no parallel in the Arabic traditions.

Social drift, is traditionally defined as an "act or the motion of drifting, the force of which impels or drives; an overpowering influence or impulse for the individual" (Fox, 1990). The concept and its implications play a major role in the addict's life and the progressively negative decline in an individual's quality of life and his/her social position. It becomes evidently important to identify the degree of drift that is associated with addiction so that early intervention will help individuals restore their social position and help them re-integrate into their respective class and social surroundings.

Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors. Addiction is characterized by inability to consistently abstain, impairment in behavioral control, and craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death (ASAM, 2012).

In a study on the quality of life and gender among heroin addicts entering a methadone treatment facility in Nottingham, United Kingdom, (Pugdoolers, Domingo-Salvany, & Brugal 2004), it was shown that levels of unemployment, criminal records and low educational levels were high among patients studied, all of which are indicate a compromised quality of life. The study also emphasised the need for gender-specific education, especially with regard to sexual behaviour and the health risk associated with drug use especially intravenous drug use and sharing paraphernalia.

Another study looked at the characteristics of drug addicts who attempt suicide in Ireland (Roy, 2003), where it was shown that most patients who attempted suicide were females with a long history of depression and alcoholism. Generally, these factors and others including history of childhood trauma, psychoticism, neuroticism and introversion indicate that there are social, personality related, familial, developmental and psychiatric risk factors that may predispose drug users to suicidal behaviour and eventually completed suicide.

A study on the co-morbidity in drug abuse patients (Meini, Capovaini, & Moncini, 2001) describes the clinical characteristics of 66 patients diagnosed with drug abuse. The study shows that there is a high rate of co-morbidity between drug abuse and depression, bipolar disorder, panic attacks, anorexia nervosa, and social phobia. Such findings have led investigators to conclude that psychiatric disorders may encourage addicts to use drugs in order to self-medicate. International literature well supports this conclusion [cite studies].

For example, a study conducted at Sainte Marguerite University Hospital in Marseilles, France '*Analysis of the Active Files from 1996- 2001*' (Lancon, Jaquent, Labrune et al., 2001) – looked at the characteristics of addict patients and showed that the presence of depression, psychotic disorders, and anxiety was noted in 46%, 30% and 24% respectively of all patients treated there.

A study conducted by Liu C. (2006) in China describes the personality characteristics and psychological correlations of addicts under treatment. Results show that the main characteristics of addict patients studied include low self-assessment with related defects in self-recognition, their emotions are described as particularly "cold",

and they are found to be detached and showed inclination toward and hostility and assault.

Children of alcoholics are considered to be at high risk of developing alcoholism, when compared with other randomly selected groups, because they are more at risk of maladaptive behaviours due to a combination of many risk factors present in their lives. These include the parents' substance-abusing behaviour, which can place the child at biological, psychological and environmental risk. The above observations were revealed by a study of the children of substance abusers by (Johnson & Left, 1999) which demonstrates the relationship between parental substance abuse and subsequent alcohol problems in their children.

There are many characteristics that describe the effects of substance abuse and addiction ostensibly leading to social drifting. These characteristics may include familial, social, economic, educational, and political ones. This study will consider these various factors as they relate to addiction and describes how they may or may not lead to social drifting.

"Social drift" is a term used in social epidemiology to describe the downward mobility of an individual, in terms of the social scale, due to chronic illness (Marshall, 1998). This phenomenon is believed to lead to the observed concentrations of individuals with chronic illnesses in lower social classes (Marshall, 1998). This observation has also contributed to an intense debate about cause and effect with regard to social class and illness, particularly in relation to mental illness (Buck & Morrison, 1988; Fox, 1990; Hurst, 2007). The drift hypothesis has mainly been studied in those with schizophrenia with findings that support the hypothesis (Buck & Morrison, 1988) as well as contradict it (Fox, 1990; Hurst, 2007). The relationship between social drift (SD) and addiction revealed somewhat similar conclusions. A literature search found nine papers reporting research findings relating to social drift. One paper was a quasi-experimental study dealing directly with substance abuse and social drift (Buu et al., 2007) and one paper looked at opiate exposure and unemployment, which is an index of social drift (Gascon & Spiller, 2009). Both these studies were in the USA. Others examined social drift in relation to mental health. Three studies were included as they provided indirect evidence of social drift, one from Pakistan (Ali et al., 2009) and two from the Middle East (Abalkhail, 2001; Al Kandari, 2007).

Individuals with high rates of substance abuse are more likely to migrate to disadvantaged neighborhoods because of chronic hardship or because of convenience of obtaining alcohol and drugs (Buu et al., 2007). Buu et al. (2007) studied 206 white alcoholic men who had committed driving offences, recruited mainly through courts records. The residential address at baseline and at a 12-year follow-up was studied. Regression analysis of the data revealed that the greater the alcohol problem of the individual, the greater the likelihood of him remaining or moving into a disadvantaged neighborhoods. The results also show the residential areas of alcoholics in remission were indistinguishable from non-alcoholics. These findings show clear evidence for social drift associated with problem drinking similar to that seen in psychiatric disorders. The researchers stressed. However, that this effect is only shown when confounding variables, such as age, initial socioeconomic status, and anti-social symptomatology was controlled. The finding that recovery from alcoholism protects against downward social drift is further evidence in support of the existence of social drift. A major limitation of the Buu et al. (2007) study is that all subjects in the study were male and hence cannot be used to make generalizations regarding the public at large. A similar study needs to be carried out with women before attempting to generalize. Another limitation of the study is the recruitment criteria, which required that eligible men had to be in a relationship with a woman and residing with a child. This limits generalizability of the data. Nevertheless, the study is methodologically good and sets the benchmark for future studies in this area.

Since substance abuse disorders are seen as chronic relapsing conditions, it can be argued that those who are diagnosed with substance abuse might be subject to the same phenomenon of social drift. Social drift (Social Downgrading) is defined by the degree by which an addict social economic and educational attainment are adversely influenced by their continuous use of certain addictive drugs and the degree with which their social stance is affected irrespective of their respective socio-economic stance. As a general observation, social drift in the current context involves a downward spiral in an individual's educational achievement, employment, marital status and family relationships, social networks (social capital), wealth, accommodation and general status in society. In addition, it could also involve gaining a record in the criminal justice system as a result not only of the illegality of using substances, but also as a result of criminal activity to obtain drugs and to survive.

Social status, social class, social group and socio-economic status are all terms used interchangeably in the literature as umbrella terms that can have slightly different connotations. They may also mean different things in different countries and cultures. In the current context concepts such as social networks or social capital must also be taken into consideration.

Cross-sectional and population based epidemiological studies from many countries indicate that substance abuse is more prevalent in lower social classes (Galea et al., 2004). In a comprehensive review, Galea et al., (2004) show that countries including the USA, Europe and Australia (Fawzy et al., 1987; Madianos et al., 1995; Roy et al., 1999; Berkman & Kawachi, 2000; Boys et al., 2002; Lindstrom, 2003; Roy et al., 2003) all show a higher prevalence of substance abuse problems in the lower social classes. None of these studies, however, looked at the earlier or original social status of the populations surveyed; hence they cannot be used as evidence for social drift in substance abuse. In fact, there are very few studies that have looked at social drift, or factors relating to social drift, in the area of substance abuse and addiction. The few studies relating to this are those in the area of mental health that have relevance to substance abuse and will be reviewed in the next chapter.

## MATERIALS AND METHODS

A two-staged prospective combined quantitative-qualitative study of patients admitted to the 30-bed National Addiction Centre in Jordan, the only specialized addiction centre in Amman, Jordan was conducted. The study is divided into two main phases of data collections:

Phase One, included every patient admitted to the centre over a 12 month period. An enhanced, study- specific clinical data sheet was completed for each participant who included their demographic and social characteristics. From knowledge of existing patients it was anticipated that there should be at least 200 potential participants.

There was no ethical committee in Jordan, as such, to approve this study but administrative approval was obtained—from the Minister of Health in Jordan.

Phase two included in-depth interviews of a purposive sub-sample of patients, highlighting the social drift and its consequences.

The enhanced clinical data sheet was developed and pre-tested by two groups, to for validation. A pilot was carried out with patients admitted to the Centre as a pre-test. The feedback from the pre-test was added to, and modified in, the original data sheets. The patients were interviewed and the nature of the study was fully explained to them.

The data sheets covered patient demographics, medical and psychiatric history, history of substance abuse, main substance

used and its duration and any complications due to psychoactive substance use and previous treatment and rehabilitation history. It also looked at family status; social status and other details relevant to the drift aspects. The sheets were translated into Arabic and, in each individual case, were filled in by the team in front of the patient.

The study sample included all the patients who satisfied the inclusion criteria and agreed to be in the study and signed the consent form.

Information was gathered for inpatient treatment program either from patients personally or from the ambulance personnel, family, friends, and relatives, the referring source or the patients.

The sheets were filled out by the researcher or the admitting physician who were one of three resident doctors working at the Centre. The patients were informed about the nature of the study and the limits of its confidentiality. Patient consent was obtained before beginning to fill out the sheet. The questionnaire was only completed when a patient felt sufficiently comfortable to provide the required information.

Staff was trained on the study protocol and on how to complete the sheets. Training was provided by the Head of Psychiatry in Jordan Dr Tawfiq Daradekha, who was also the local supervisor Dr Ahmed Khafaji and the principal investigator to ensure the importance of having the right information.

The data sheets were collected every month and data entry started from the first month.

The use of this methodological approach to examine this phenomenon provides a very rich, essential and grounded theoretical framework, with which we can only begin to understand the complexity of this phenomenon. Hence it provides an analytical edge. Research evidence demonstrates that these combined methods may provide interwoven framework of understanding this endeavour and consequently makes it more insightful and incisive.

To further analyze the data, Chi-square test was used to test some of the hypotheses, in particular, the association between type of drugs abused and demographic characteristics.

## RESULTS

Results revealed certain patterns of use among the population studied. Of the 250 participants,

41.2% reported that they use alcohol exclusively.

27.2% reported using other drugs, but not heroin or alcohol.

18.8% identified themselves as heroin and other drug users (non-alcohol).

The mean average age for all participants was 32.3 years with the majority under 35 years of age (68%). The youngest reported age was 11 years. 25.2% of the sample reporting drinking alcohol before their 15th birthday, a significant outcome that will be discussed shortly.

Regarding nationality and origin, the majority were Jordanians (94.4%) of whom 52% was educated at the preparatory level of education. 80% were employed and of those 60% did manual labor. With regard to referral source, 66.8% referred by their families and about a third (30.8%) were self-referred.

The results pertaining to comorbid disorders were obtained by either established diagnosis, or self-description of a syndrome that may indicate this diagnostic impression. Depression was prevalent in almost one fifth of the sample notwithstanding which group studied they belong to.

Hypertension was reported by a small group (3.6%) spreading across all groups.

Smoking prior to addiction was found to be significantly higher in terms of percentage (89.7).

The mean age for first misuse of alcohol was 18.31 years, with the youngest user at 12 years old. The majority of subjects using alcohol were between the ages of 16 to 30 years of age (Table 1).

To further analyze the data, Chi-square test was used to test some of the hypotheses, in particular, the association between type of drugs abused and demographic characteristics. Results revealed a significant association between education attainment and heroin use. Significantly more of the heroin users had a university degree or higher when compared to the non-heroin users. One interesting finding was revealed with the association between those who drank alcohol and those who did not. By using a Sample T test, we found significant mean age differences between the two groups [cite these differences].

No significant association was found between the social drift score and alcohol users compared to non-alcohol users.

The findings are discussed in terms of previous literature on pattern of drug abuse in the region and internationally. Implications for future research are also outlined.

### Qualitative Results

Interviews revealed the early stages of initiation. The general trends were that most of the patients started their use within a social context and with strong peer pressure. The first use in certain cases was either facilitated or initiated by individuals from the community such as family members and friends. This can be considered as a change to the expected norms in Arab culture, but might be considered consistent with the culture where family members encourage substance use such as smoking cigarettes to prove manhood. This could happen between brothers and other relatives. The influence of parental and family member substance use on the initiation and continuation of substance use in Western countries is well documented (Wolstein et al., 1998; Yu, 2003). Parental or family member substance use has also been found to be a predictor of adolescent substance use in Eastern countries (Ismail et al., 2009). There is also literature where the family cohesiveness is seen to be a protective factor (Cleveland et al., 2012). No literature was found examining these factors in Arab countries.

What might be seen as ordinary or common in many Western cultures may go against the fundamentals of an Islamic society. It is of interest to consider whether this signifies rebellion in younger generations or changing societal norms. In any Islamic culture, the role of the family is potentiated by the Islamic views of caring and helping each other. Family members still play a major role in Jordanian life and this was reflected in many of the narratives featuring both the initiation of substance use and the process of persuading the person to seek treatment. The culture is considered to be a close knit one socially and this can explain why friends pay an important role in the early initiation. Having a mixed culture of Bedouin and modern society, Jordan represents the two extremes between a conservative community and an open society.

In recent times, the concept of the extended family in Arab cultures is beginning to disappear and is being replaced by the modern small nuclear family or even individuals (male) living on their own while working in areas far away from their own villages or towns. This decreases the level of family supervision and allows more social freedom. Within this context, curiosity and the desire to experience novel stimuli were common causes of initiation of substance use. It can be considered as an early indicator of a change in attitudes towards substance use among certain sections of the Jordanian population. Individuals or small family units living in the

**Table 1.**
Demographic Characteristics of the Total Sample and the Three Addiction Groups

| Sample | Total sample N=250 | Alcohol only N=103 | Any heroin N=56 | Poly drugs (i.e. alcohol + heroin + others) N=147 |
|---|---|---|---|---|
| **Unit** | **N (%)** | **N (%)** | **N (%)** | **N (%)** |
| **Gender** | | | | |
| Males | 250 | 103 | 56 | 147 |
| **Age** | | | | |
| Mean (SD) | 32.3 (8.1) | 34.5 (8.4) | 33.8 (7.4) | 30.7 (7.6) |
| 17-20 years | 8 (3.2) | 3 (2.9) | 0 (0) | 5 (3.4) |
| 21-25 years | 50 (20) | 13 (12.6) | 6 (10.7) | 37 (25.2) |
| 26-30 years | 64 (25.6) | 17 (16.5) | 18 (32.2) | 47 (32.0) |
| 31-35 years | 48 (19.2) | 26 (25.3) | 12 (21.4) | 22 (14.9) |
| 36-40 years | 36 (14.4) | 17 (16.5) | 10 (17.9) | 19 (12.8) |
| 41-45 years | 26 10.4) | 16 (15.5) | 5 (9.0) | 10 (6.8) |
| 46-50 years | 14 (5.6) | 8 (7.8) | 4 (7.2) | 6 (4.1) |
| 51 years and above | 4 (1.6) | 3 (2.9) | 1 (1.8) | 1(0.7) |
| **Marital Status** | | | | |
| Single, never married | 96 (38.4) | 40 (38.8) | 18 (32.1) | 56 (38.1) |
| Married | 122 (48.8) | 52 (50) | 29 (51.8) | 70 (47.6) |
| Divorced | 29 (11.6) | 10 (9.7) | 7 (12.5) | 19 (12.9) |
| Widowed | 2 (0.8) | 0 (0) | 2 (3.6) | 2 (1.4) |
| Separated | 1 (0.4) | 1 (1.0) | 0 (0) | 0 (0) |
| **Nationality** | | | | |
| Jordanians | 236 (94.4) | 95 (92.2) | 53 (94.6) | 141 (95.9) |
| Others (Other Arabs, Non Arabs) | 14 (5.6) | 8 (7.8) | 3 (5.4) | 6 (4.1) |
| **Religion** | | | | |
| Muslim | 245 (98.0) | 99 (96.1) | 56 (100) | 146 (99.3) |
| Christian | 5 (2.0) | 4 (3.0) | 0 (0) | 1 (0.7) |
| **Education** | | | | |
| None | 1 (0.4) | 1 (1.0) | 0 (0) | 0 (0) |
| Primary | 38 (15.2) | 14 (13.6) | 5 (8.9) | 24 (16.3) |
| Preparatory | 81 (32.4) | 42 (40.8) | 16 (28.6) | 39 (26.5) |
| Secondary | 96 (38.4) | 34 (33.0) | 22 (21.4) | 62 (42.2) |
| University and above | 34 (13.6) | 12 (11.7) | 13 (23.2) | 22 (15) |
| **Employment Status** | | | | |
| Manual | 121 (48.4) | 51 (49.5) | 25 (44.6) | 70 (47.6) |
| Admin | 52 (20.8) | 28 (27.2) | 13 (23.2) | 24 (16.3) |
| Professional | 27 (10.8) | 6 (5.8) | 7 (12.5) | 21 (14.3) |
| Unemployed | 50 (20.0) | 18 (17.5) | 11 (19.6) | 32 (21.8) |
| **Source of Referral** | | | | |
| Family | 167 (66.8) | 63 (61.2) | 35 (62.5) | 104 (70.7) |
| Self | 77 (30.8) | 38 (36.9) | 20 (35.7) | 39 (26.5) |
| Hospital/Clinic | 3 (1.2) | 2 (2.0) | 0 (0) | 1 (1.0) |
| Police | 1 (0.4) | 0 (0) | 1 (1.0) | 1 (1.0) |
| Others | 2 (0.8) | 0 (0) | 0 (0) | 2 (1.4) |

city for economic reasons, while the extended family live in villages far away, is relatively new in Jordanian society. This appears to have resulted, as would be expected, in diminished influence of the family. The family is known to be a protective factor against developing substance abuse problems (Cleveland et al., 2012). This was further demonstrated by many participants reporting that they kept their problems hidden from their families as they anticipated that this would cause them distress.

The stressors of their life led to emotional instability, which was obvious among participants, with many reporting that they started using substances to cope with stress and emotional difficulties. There was some evidence to support the self-medication hypothesis of substance abuse (Khantzian, 1977) and the coping dimension of adolescent substance use (Wills et al., 2004). There were instances where it was family members who offered drugs to help the participants cope with problems, and this was a sign of good intention towards a relative.

Another interesting finding to emerge was that participants used, or were encouraged to use, substances to help improve sexual performance or reduce anxiety about sex. This was a new concept, not found in the existing literature on reasons for initiation. Participants discovered later on that continuous use actually led to impotence and decline in their sexual performance and sexual dysfunction, especially in those who used heroin. This issue could contribute to lowering of the individual's self-esteem, particularly if he was married, as sexual performance is considered to be an important part of Middle Eastern culture.

Some participants reported early initiation into substance abuse at social events such as weddings. Wedding and social events in any culture are situations where families invite their relatives and friends to share in their happiness and every effort is made to make the experience pleasurable for guests. In cultures where alcohol and other intoxicant use are permitted, they are served at these events. Such practices are not generally acceptable in the Jordanian culture,

yet this appears to be taking place. It may be that some sections of society see this as a way of indicating higher social class, wealth or Westernisation.

Peer pressure being found to be one of the major factors for first use in this study is consistent with literature from other countries (Cleveland et al., 2012). It is difficult to conclude whether this finding signifies rebellion in the younger generation or changing social norms. This was reflected in the in-depth interviews where, as the severity of addiction increased. The individual deviated from cultural norms to adopt behaviours to satisfy the dependency.

### Substances used

As authorities gain the upper hand and restrict the availability of a substance, users find new ways of achieving similar effects of a banned drug by using other substances. Participants tried combinations of medications to get similar effects to the previous substance of abuse. Patients sometimes knew the composition of the substances and their effects on mood and the psychological state, and they tried to find ways to potentiate the effects. The new substance or substances may sometimes be more harmful, as they are not manufactured to meet any quality standards and may contain toxic substances (e.g. Captagon and Tramadol).

Alcohol was the most commonly used substance. This is not surprising as it is widely available, relatively easy to obtain, cheap in price and often made locally. For many patients, it was the first substance being abused and led to dependency. Some moved onto other drugs (Table 2).

Although cannabis is widely used across the world, there were few references to it during the interviews and, like tobacco, drug users appeared to take cannabis for granted and do not see it as a serious drug. There was a reference to using cannabis as a "shisha". This is a single or multi-stemmed instrument for smoking flavoured tobacco called Mu'assel, in which the smoke is passed through a water basin (often glass based) before inhalation (Maziak et al., 2005). This is not a well-known practice and there is no reference to it in the literature.

## CONCLUSION

This study principally examined the relationship between several demographic factors and a population of individuals suffering from a Substance Use Disorder in a Rehabilitation Center in Amman, Jordan, to determine:

(a) The profile and characteristics of those participants.

(b) The effect of drug addiction on social mobility (Social Drift or Downgrading) on them, their families, domiciles and social costs exhibited in these domains. This study revealed that a significant association between level of educational attainment and heroin use was found. Significantly more of the heroin users had a university degree and higher compared to the non-heroin users. 25.5% did not complete their education due to addiction, 53.6% reported that their job was affected by their addiction and 73% mentioned that their income changed after addiction. No significant association was found between social drift score and alcohol users compare to non-alcohol users. One interesting finding was revealed with the association between those who drank alcohol and those who did not. By using a Sample T test, we found significant mean age differences between the two groups. These findings should not be looked at as exhaustive since there are some methodological considerations and a "web of interrelationships" that surrounds a study of such magnitude and complexity. Since there are no reports in the literature of a study in the Middle Eastern region on a clinical population of substance users using mixed methodology of combining qualitative and quantitative approaches it can be concluded that this is the first study of its nature. The study had two main objectives, first, to describe or draw a profile of an addicted person in Jordan, and second, to examine the link between substance use and social drift. The results of the survey has allowed a clear profile of this clinical population to be drawn in terms of descriptive statistics that could act as a baseline for future research and be used to make comparisons with similar studies in the region and the rest of the world. The qualitative study has produced invaluable data on the lives of substance abuser in Jordan and this is unique information captured for the first time. It also presents the findings from a bio psychosocial-spiritual perspective, which shows that the pattern and consequences of substance abuse in Jordan follow this recognized model. Both the quantitative and qualitative data provided support for the hypothesis of social drift in this population. The qualitative data presented a clear picture of this. Both sets of data collected can be used to inform prevention and treatment interventions. The quantitative study has produced data that could also contribute to developing culturally appropriate prevention and treatment interventions as well as serve as a baseline for future comparisons of trends.

The implication for practice from this study includes facilitating greater family involvement in treatment and prevention and the need for interventions to tackle smoking. Interventions to encourage more family involvement and supervision when young people leave home to attend university have the potential of being an effective in prevention. The implications for policy include reviewing the ease of accessing alcohol in the country, making treatment more accessible by opening more facilities, addressing high levels of smoking in the country and coordinating drug and alcohol policies with neighboring countries.

The lessons learnt and the limitations of the study should inform and contribute to improving future research in this area.

Addiction, as a chronic disease, is complicated by several factors. This study demonstrated that individuals suffering from a Substance use Disorder (SUD)/addiction comprise a heterogeneous group, and tend to abuse multiple substances simultaneously, what is referred to as Polysubstance misuse or dependence. Its results are in line with prevalence figures from epidemiological studies that show, comorbidity of Substance misuse/dependence and a co-occurring psychiatric diagnosis are quite high ,ranging from 20-50%) (Cite). One of the interfering variables that make the study of such population somewhat difficult is the presence of a web of interrelated social variables that impact individuals, their families and society at large. Although the present study did not arrive at a clear association between factors studied and participants, the picture has largely been complicated by the cultures in which these habits have been developed and practiced. In a society like Jordan, there are certain caveats to keep in mind in interpreting results reported in this study. Nonetheless, the study established a somewhat clear path for future research to follow by identifying the pattern of substance abuse in the Jordanian society, and the factors associated with Social Drift (SD). The results of this study paved the way for a closer focus on the aggravating social factors that could have a lasting impact on the cycle of addiction and rate of relapse if not recognized and tackled. It is worth noting that neither this study nor similar ones have indicated factors that are intrinsically associated with the consumption and

**Table 2.**
Frequency Distribution of Respondents by Substance of Abuse (N=250)

| Substance/Substance combination | Frequency n (%) |
|---|---|
| Alcohol only | 103 (41.2) |
| Other drugs + no alcohol + no heroin | 68 (27.2) |
| Heroin + other drugs + no alcohol | 47 (18.8) |
| Alcohol + other drugs + no heroin | 23 (9.2) |
| Alcohol + heroin + other drugs | 9 (3.6) |
| **Total** | **250 (100)** |

subsequent addiction to a particular drug; rather, any person, under the "certain conditions" or combination of circumstances may develop substance misuse problems. One may safely conclude that while negative life events may lead to downward social drift (or conversely drift may lead to negative life events), it is the ongoing stressors (Emotional like high EE from the families, financial, cultural, etc…) that perpetuate the disability and increase the risk of relapse, the chronicity of the illness and the downward drift. Notwithstanding the results of this study, one should be careful in interpreting these results as causative since a great deal of variables are at play and because the study was not designed to answer such hypotheses. The current study is but one small step in establishing the patterns of substances abuse in Amman, Jordan. Caution should be exercised in drawing generalizations from this study due to limitations inherent in this type of studies that were outlined earlier. Further studies are needed with a more robust methodology and clear understanding of the culture under which drug addiction is maintained.

## REFERENCES


American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.)

*American society of Addiction Medicine: Public Policy Statement: Definition of Addiction,* Adopted by the ASAM Board of Directors April 19, 2011.

Annie, B., et al. (2007). Alcoholism Effects on Social Migration and Neighborhood Effects on Alcoholism Over the Course of 12 Years. *Alcoholism: Clinical and Experimental Research*, *31*(9), 1545–1551.

Berkman, L., & Kawachi, I. (2000). *Social Epidemiology*. New York: Oxford University Press.

Bolton, J., Cox, B., Clara, I., & Sareen, J. (2006) Use of Alcohol and Drugs to Self-Medicate Anxiety Disorders in a Nationally Representative Sample. *Journal of Nervous & Mental Disease*, *194*(11), 818-825.

Buck, E.M., & Morrison, S.L. (1988). Schizophrenia and Social Class. *The Challenge of Epidemiology: Issues and Selected Readings*. Washington, DC: Pan American Health Organization.

Cleveland, M.J., Feinberg, M.E., & Jones, D.E. (2012). Individual, Family, Peer and Contextual Risk and Protective Factors. *Psychology of Addictive Behaviors*, *26*(4), 703-713.

Fawzy, F.I., Coombs,R.H., Simon, J.M., et al. (1987). Family composition, socioeconomic status, and adolescent substance use. *Addictive Behaviors*, *12*, 79-83.

Fox, W. (1990). Social class, mental illness, and social mobility: the social selection –drift hypothesis for serious mental illness. *Journal of Health and Social Behavior*, 31, 344-353.

Galea, S., Nandi, A., & Vlahov, D. (2004). The Social Epidemiology of Substance Use. *Epidemiologic Reviews*, *26*, 36-54.

Hurst, C.E. (2007). *Social Inequality: Forms, Causes, and Consequence*s (6th ed.). Boston: Pearson Education.

Ismail, A.C., Seneviratne, R., Newcombe, P.A., & Wanigaratne, S. (2009). A Model of Substance Abuse Risk: Adapting to the Sri Lankan Context. *Evaluation Review*, *33*, 83-97.

Johnson, J.L., & Leff, M. (1999). Children of substance abusers: Overview of research findings. *Pediatrics*, *103*(Suppl 2), 1085-1099.

Khantzian, E.J. (1977). The self-medication of substance misuse disorders: a reconstruction and recent application. *Harvard Review of Psychiatry*, *4*, 231-244.

Londstrom, M., Moghaddassi, M., Bolin, K., et al. (2003). Social participation, social capital, and daily tobacco smoking: a population based multilevel analysis in Malmo, Sweden. *Scandinavian Journal of Public Health*, *31*, 444-450.

Madianos, M.G., Gefou-Madianou, D., Richardson, C., et al. (1995). Factors affecting illicit and licit drug use among adolescents and young adults in Greece. *Acta Psychiatrica Scandinavica*, *4*, 58-264.

Marshall, G. (1998). *A Dictionary of Sociology*. Oxford: Oxford University Press.

Meini, M., Capovani, B., & Moncini, M. (2001). Comorbidity in drug abuse. J*ournal of Psychopathogy*, *7*, 4.

Regier, D.A., Farmer, M.E., Rae, D.S., et al. (1990). Comorbidity of Mental Disorders With Alcohol and Other Drug Abuse: Results From the Epidemiologic Catchment Area (ECA) Study. *JAMA*, *264*(19), 2511-2518.

Roy, A. (2003). Characteristics of drug addicts who attempt suicide. *Psychiatry Research*, *121*(1), 99-103.

Roy, E., Haley, N., Leclerc, P., et al. (2003). Drug injection among street youths in Montreal: predictors of initiation. *Journal of Urban Health*, *80*, 92-105.

Sayed, M. & Al-Dharmaki, F. (2010). *Counseling in the United Arab Emirates: Challenges and Cultural Perspectives*. Gerstein, L., Heppner, P.P., Ægisdóttir, S., Leung, S.A., & Norsworthy, K.L. (eds.). International Handbook of Counseling around the Globe. Thousand Oaks, CA: Sage.

Wallace, J.M., Forman, T.A., Guthrie, B.J., et al. (1999). The epidemiology of alcohol, tobacco and other drug use among black youth. *Journal of Studies in Alcohol*, *60*, 800-809.

Wills, T.A., Resko, J.A., Ainette, M.G., & Mendoza, D. (2004). Role of parent support and peer support in adolescent substance use: A test of mediated effects. *Psychology of Addictive Behaviors*, *18*, 122-134.

Wolstein, J., Rosinger, C., & Gastpar M. (1998). Children and families in substance misuse. *Current Opinion in Psychiatry*, *11*(3), 279-283.