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Predictors of Suicidal Intention and Depression among Patients with Substance Abuse Disorder

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Background*: Substance abuse is one of the most life-threatening illnesses worldwide, which can be associated with adverse consequences related to repeated use of the substance, patients with substance abuse can develop symptoms similar to those seen in many psychiatric disorders including psychotic symptoms, depression, anxiety, and criminal behavior,*
Aim: *the study aimed to identify predictors of suicide and depression among patients with substance abuse disorders.*
Design: *Correlational designs was utilized.*
Sample: *A sample of convenience of 125 substance abuse patients who attended at outpatient clinic in Psychiatry and Addiction Prevention Hospital, El-Manial University Hospitals.*
Data collection tools: *Sociodemographic and clinical data sheet, Beck Depression Inventory (BDI), and Suicide Intent Inventory (BSI), were used to achieve the purpose of the study. A semi structured interview was used to collect the data from the studied sample.*
Main findings*: Findings of the current study reveals that, most of the studied sample (97.6%) were male, all of them experienced moderate to severe level of suicidal intention, and most of them (88.8%) suffering from moderate to severe level of depression.*
Conclusion: *The study concludes that, depression and suicidal intention are common among patients with substance abuse disorder.*
Recommendations*: Educational programs should be provided for families to detect early signs of depression and suicidal ideation among early treated drug abusers, and rehabilitation programs should be provided for patients with substance abuse regarding depression and other psychiatric disorders.*
Keywords*: Predictors, Depression, Suicidal intention, Substance abuse*

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I. Introduction

Substance abuse is a dangerous phenomenon in all countries. According to the World Drug Report (2017), 29.5 million globally suffer from substance use disorders.

Substance abuse is a major problem in Egypt, due to rapidly growing and changing patterns of substance use (Hamdi, etal., 2016). The prevalence of Substance abuse in individuals between 15 and 64 years of age in Egypt was 0.8%. Opioids were the substances of major problem in 44% of the substance dependence patients (tramadol tablets were the main dependence substances in 30% of the sample, heroin in 12%, and nalbuphine in 2%) (Mohamed, El Hamrawya, Shalabya, El Bahya, &Abd Allahb 2015).Substance abuse includes the regular use of illegal drugs or the misuse of legal drugs (University of Maryland Medical Center UMMC, 2013). Widespread drugs include hashish, charas, bhang, opium, alcohol, tobacco and psychotropic drugs. However, heroin is the most commonly used drug worldwide (Mubeen, &Sharif, 2007).

Substance use is a major public health concern (Hernandez, Rodriguez, Spirito, 2015). Substance use increases the risk for substance use disorders and mental health problems later in life (Weissman et al., 2015). Early detection and management of substance use disorders is essential in preventing long-term negative consequences (Curtis, McLellan, Gabellini, 2014). Increased morbidity and mortality arise from mental health problems, poor performance in work, risky sexual behaviors, riding with an impaired driver, and suicide (Mitchell et al., 2016).

The problem of substance abuse reflects on individuals, bypassing their health issues and reverberating on their social, psychological and family demands. There are many possible effects of the family environment on the issue of the use and abuse of psychoactive substances, such as: lack of parental support, overprotection of children, presence of an implicit culture of drug use, existence of conflicts and violence, misinformation and ignorance about drug use (Seleghim, &Oliveira, 2015).

Substance abuse is associated with impairment in various aspects of physical, psychological and socio-occupational functioning. Substance abuse is a growing problem in the world. The global problem of addiction and drug abuse is responsible for millions of deaths and HIV cases (Singh, &Gupta, 2017).People with substance abusedisorder are roughly twice as likely to suffer from mood and anxiety disorders, with the reverse also true. In 2015, an estimated 43.4 million (17.9 percent) adults ages 18 and older experienced some form of mental illness (other than a developmental or substance use disorder), of these, 8.1 million had both a substance use disorder and another mental illness (SAMHSA, 2015).

Suicide is a major health problem, and the global suicide mortality rate amounts to 1.4% of all deaths worldwide. Most suicides are related to psychiatric disease, with depression, and substance use disorders (Bachmann, 2018).Suicide is a complex behavior that probably results from an interaction between biological factors, including genetic predisposition, and a myriad of environmental and psychosocial variables (Bando, Brunoni, Fernandes, Bensenor, &Lotufo, 2012). Besides common mental disorders, substance use disorders (SUD) might be the most well-known and studied factor associated with suicidal behaviors (Poorolajal, Haghtalab, Farhadi, Darvishi, 2010, and Borges, Loera, 2010).

Substance abuse increase risk of suicide (Pompili, Serafini, Innamorati, 2010). Use of other psychoactive substances has also been linked to fatal suicides (Borges, Walters, Kessler, 2010). The consumption of more than two substances has been linked to greater likelihood of both fatal and non-fatal suicidal behavior (Kokkevi, Richardson, &Olszewski, 2012). Substance use independently increases the risk of suicidal behavior (Bohnert, Ilgen, Louzon, 2017). Acute and chronic drug abuse may impair judgment, weaken impulse control, and interrupt neurotransmitter pathways, leading to suicidal tendencies through dis-inhibition (Pompili, Serafini, &Innamorati, 2010).

Depression disorder express in form of depressed mood, anhedonia, decreased energy, feelings of sin or worthlessness, disturbed sleep or appetite, poor concentration, problem of thinking and inability to make decision, and, in severe stages, recurrent thoughts of death or suicide. Depression has many possible causes, including mood disturbance, genetic susceptibility, chronic stressful life, use of psychoactive substances, and medical problems. It is believed that several of these forces interact to bring depression (Marcus, Yasamy, Van Ommeren, Chisholm, & Saxena, 2012).Depression has severe consequences on the productive human force and social areas which calls the attention of care providers for early diagnosis, proper treatment, and intervention (Mossie, Kindu, & Negash, 2016).

Scientific Researches showthat patients with comorbid depression and alcohol use or substance use disorders have the highest long-term suicide risk (16.2%) (Holmstrand, Bogren, &Mattisson, 2015). The prevalence of lifetime suicide attempts among patients with alcohol use disorder and bipolar disorder is reported to be between 21% and 42% (Oquendo, Currier, Liu, 2010). Similarly, patients with bipolar disorder and comorbid substance use disorder have earlier-onset mood symptoms, higher anxiety disorders, more suicide attempts, and more frequent hospitalizations than patients with bipolar disorder alone (Nery,& Soares, 2018).

Gart and Kelly (2015) recognized the role that illegal drug use, and depressive symptoms play in suicide ideation and attempts. Researchers assumed that this may be due to the attempt to desensitize emotions through drug use, thereby not causing them to consider or even attempt suicide. There have been evolving strides to understand the relationship between substance abuse and suicide (Florida Charts, 2015).

Psychiatric nurses have been working in specialist drug roles for at least the past five decades, with their early roles and responsibilities well documented. During that time, the role has expanded to include prescribing and settings have diversified in both statutory and third sector provider organizations. They include primary and secondary care settings, accident and emergency departments, police custody suites, prisons, needle and syringe programmes and homelessness services (Royal Collage of nursing, 2017).

Significance of the study

According to the Ministry of Health report on drug addiction in Cairo, 1.4 million people were addicted to drugs, particularly heroin and/or tramadol (Viney, 2017). According to the FDCTA, the percentage of drug abuse in Egypt is 10.4 percent (FDCTA, 2018). A National Survey report stated that 8.5% of Egyptians or six million people who are addicted to drugs, that the majority of them are between 15 and 25 years old and that the addicts are considered as criminals rather than patients in need for treatment (Khoweiled et al., 2012).The last Egyptian National Survey report shows that 8.6% of Egyptians used drugs at least once during their lives (Hamdi, etal., 2013).

Patients with substance abuse can develop symptoms similar to those seen in many psychiatric disorders including psychotic symptoms, depression, anxiety, mood swings, and criminal behavior (Mangrum, 2012). Substance abuse is one of the most life-threatening illnesses worldwide, which can be associated with adverse consequences related to repeated use of the substance (Arumalla,2016).

Substance abuse might result in disturbances in social, occupational, or recreational activities. Additionally, intoxication and withdrawal might have devastating impacts on health. Nurses are directly involved in providing care for patients with substance abuse disorder.Therefore, they are in ideal position to

help patients suffering from substance abuse. However, the nurse role in assessment and management of substance abuse is not well-defined (Rayan, 2016).

Nurses should expectsubstance abuse and understand of its risk factors. Nurse should correctly assess patients and immediately report any signs and symptoms of addiction. Sudden alteration in behaviors and personality, social withdrawal, poor occupational performance, preoccupation with substances abused, and sudden weight changes are among the commonly reported symptoms of substance abuse (Rayan, 2017).

Results of this study will increase nurse's knowledge related to depression, and suicidal intention among patient with substance abuser disorder; this might be incorporated in the future plan of care for such group of patients. In addition, such data may have an impact on the provided care in the way to be cost effective and to decrease the load upon personal and hospital resources. It might also generate an attention and motivation for further researches into this area.

II. Subjects and Methods

Aim of the Study

The aim of this study was to identify the predictors of suicide anddepression among patients with substance abuse disorder.

Research Question:

1. What's the level of depression among patients with substance abuse disorder?
2. Is there a suicidal intention among patients with substance abuse disorder?
3. What are the predictors of depression and suicidal intention among patients with substance abuse disorder?

Research Design

Correlational research design was utilized for the current study; such design fits the nature of the problem under investigation. Correlational research is a non-experimental research design technique which helps researchers to establish a relationship between two closely connected variables(Sileyew, 2019).

Sample

A sample of convenience of 125 substance abuse patients who attended at outpatient clinic in Psychiatry and Addiction Prevention Hospital, El-Manial University Hospitals were selected for the conduction of the current study. The patients fulfill the diagnostic criteria of substance use disorders according to the Diagnostic and Statistical manual of Mental disorders (DSM-5) (APA, 2013). Inclusion criteria of 125 substance abuse patient aged between 18 to 50 years and the following substance use disorders were included alcohol, cannabis, hallucinogen, Opioids, sedatives/hypnotic, strokes, and stimulant use disorders. patient's in intoxication or withdrawal state, and patient's with comorbid psychiatric disorders were excluded.

Setting

The study was carried outpatient clinic at Psychiatry and Addiction Prevention Hospital, El-Manial University Hospitals: The hospital consists of 6 inpatient departments male and female and 125 beds. The hospital provides care for all kinds of acute and chronic psychiatric disorders, and patients with substance abuse disorders. The out-patient clinic provides services for about 30 substance abuse patients daily for about 3 days weekly. The hospital also provides sessions of psychotherapy and chemo therapy, intelligence, memory, and self-confidence tests. Outpatient services are conducted daily from 8 to 1pm. The department receives about 90 new patients per week covering the whole array of diagnoses, with about 400 follow up patients. Males are slightly more represented in the department partially due to the stigma of mental illness that hits females harder. The volume of flow in the child psychiatry outpatient on the average is 90 new patients and 80 patient's follow-up

Tools of Data Collection

Data were collected over a period from Jan 2018 till Sept 2018 by using a socio-demographic data sheet and Suicidal intention inventory and Beck depression scale.

1. Socio-demographic and Medical Data Sheet: it includes, age, sex, level of education, marital status, occupation, residence, duration of abuse, number of previous admissions, type of substance abuse.
2. Beck Depression Inventory (BDI): is a 21-item self-reporting questionnaire for evaluating the severity of Depression in normal and psychiatric populations (Piotrowski, Sherry, Keller (1985), Beck, Steer, (1986). Developed by Beck et al. in 1961, it relied on the theory of negative cognitive distortions as central to Depression. It underwent revisions in 1978: the Beck Depression Inventory -IA and 1996 and the BDI-II, both copyrighted (Beck, Steer, Brown,1996).The Beck Depression Inventory -II does not rely on any

particular theory of Depression and the questionnaire has been translated into several languages. A shorter version of the questionnaire, the Beck Depression Inventory Fast Screen for Medical Patients (BDI-FS), is available for primary care use. That version contains seven self-reported items each corresponding to a major depressive symptom in the preceding 2 weeks.

The Beck Depression Inventory-II contains 21 items on a 4-point scale from 0 (symptom absent) to 3 (severe symptoms). Anxiety symptoms are not assessed but affective, cognitive, somatic and vegetative symptoms are covered, reflecting the DSM-IV criteria for major Depression. Scoring is achieved by adding the highest ratings for all 21 items. The minimum score is 0 and maximum score is 63. Higher scores indicate greater symptom severity.

In non-clinical populations, scores above 20 indicate Depression (Kendall, Hollon, Beck, Hammen, Ingram, 1987).Score provide a measure of the severity of self-reported depression: 0-13 indicate minimal Depression, 14-19 (mild Depression), 20-28 (moderate Depression) and 29-63 (severe Depression) Beck, Steer, Brown (1996).

3. Suicide Intent Inventory (BSI): It is a clinician-rating scale and is presented in a semi structured interview format. It is designed to quantify the intensity of current conscious suicidal intent by scaling various dimensions of self-destructive thoughts or wishes and assess suicidal intention. The scale was found to have a high internal consistency and moderately high correlation with clinical ratings of suicidal risk and self-administrated measures of self-harm (Beck, Kovacs, Weissman, 1979). An Arabic version was used (Aly, Abdel Latief, Abdel Latief, &El Naggar, 2012).

Score provide a measure of the severity of self-reported suicidal intension: (15-19) low suicidal intention, (20-28) medium suicidal intention, and (29-38) high suicidal intention (Beck, Schuyler, & Herman, 1974).

Procedure

An official permission was granted after the investigator presented the documented papers, and introduced herself to director of Psychiatric Medicine and Addiction Prevention Hospital, El-Manial University hospitals after explaining the aim of the research the investigator obtain participants oral agreement to participate in this study, assessment was carried out by using the selected tools, each patient was interviewed individually, in semi- structured interview for about 30minutes to 1 hour, the questionnaires were read and explained and the choices were recorded by investigator. after explaining the purpose of the interview and getting agreement of patients to participate in the research. The investigator assured the voluntary participation and confidentiality to each subject who agreed to participate. The data collection took place in the period from march 2018 to August 2018.

Ethical Considerations:

All subjects (patients) were informed that anonymity and confidentiality of each participant was protected by the allocation of a code number for each response to the questionnaire. Patients were informed that; they can withdraw at any time during the study without giving reasons. Their withdrawal will not affect the care they are receiving and relationship with the investigators. Confidentiality was assured and subjects were informed that the content of the tool will be used for the research purposes only.

Pilot Study

A pilot study was conducted in order to test the reliability and validity of the questionnaire items and clarity of the questions. A total of 10% of the study sample were recruited for the pilot study. All subjects included in the pilot study met the criteria for inclusion. The pilot study revealed that no modification need to be done.

Statistical Analysis

Data were analyzed using statistical package for social (SPSS) version 20. Numerical data were express as a mean, SD qualitative data were expressed as frequency and percentage for statistical relations among different study variables were done by using Pearson correlation test with probability (p- value) > 0.05 indicates non- significant result.

III. Results

It is clear from table (1), and figure (1) that, the studied sample consisted of 125 patients diagnosed with substance abuse disorder according to DSM-5 criteria (DSM-5,2013). Most of them (97.6%) were male, with mean age (30.11±7.8), and near half of them (48%) their age between (18-27) years, and one third of them

(35.2%) their age between (27-38) years, two third of them (68%) from urban area, and more three quarter of them (78.4%) were not work, and (84%) were educated.

Tabl**e (1)** Frequency distribution of studied sample according to Sociodemographic characteristics (n=125).

Items	No	%
1-Age (years)		
- 18-	60	48
- 27-	44	35.2
- 38-	18	14.4
- 45-50	3	2.4
M±SD 30.11±7.8		
2- Residence		
- Rural	40	32
- Urban	85	68
3- Occupation		
- Work	27	21.6
- Not-work	98	78.4
4- Educational level		
- Educated	105	84
- No educated	20	16

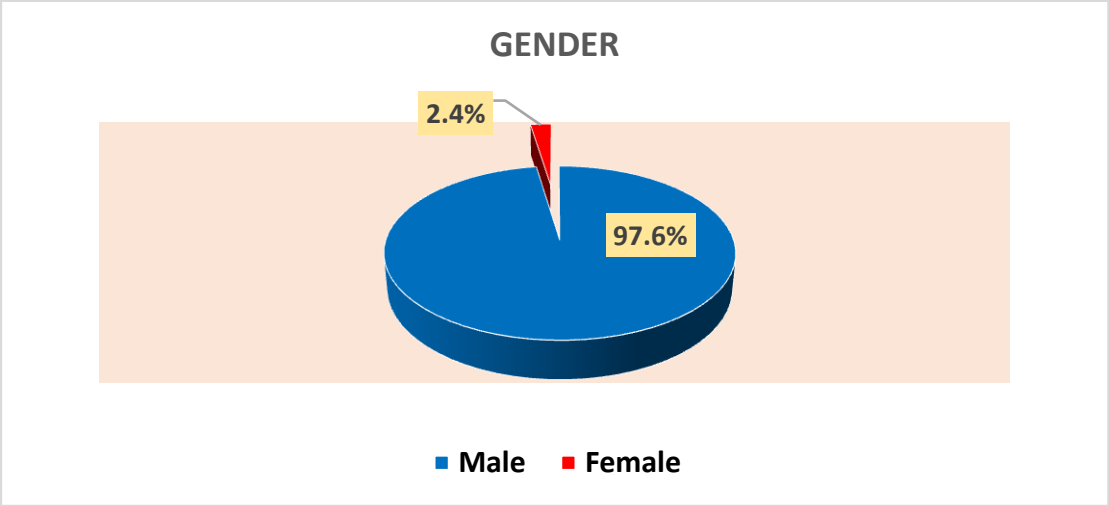

Figure (1) Frequency distribution of studied sample according to gender (n=125).

Figure (2) shows that, slightly more than half (57.6%) of the studied sample were single, and one third (35.2%) of them were married. Moreover, figure (3) reveals that, (40.8%, 32.8%, and 26.4%) are addict from 1-3 years, 3-5, and more than five years respectively.

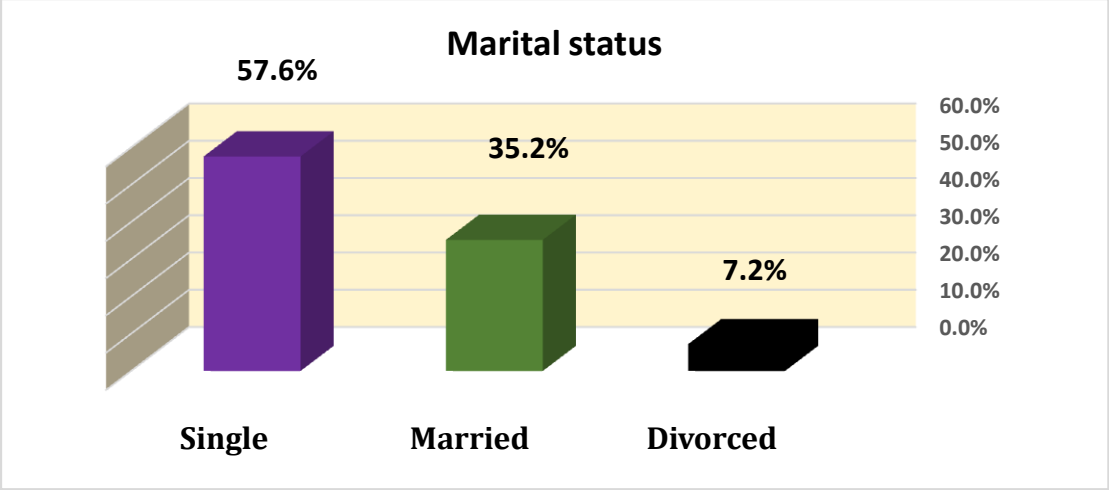

Figure (2) Frequency distribution of studied sample according to Marital status (n=125).

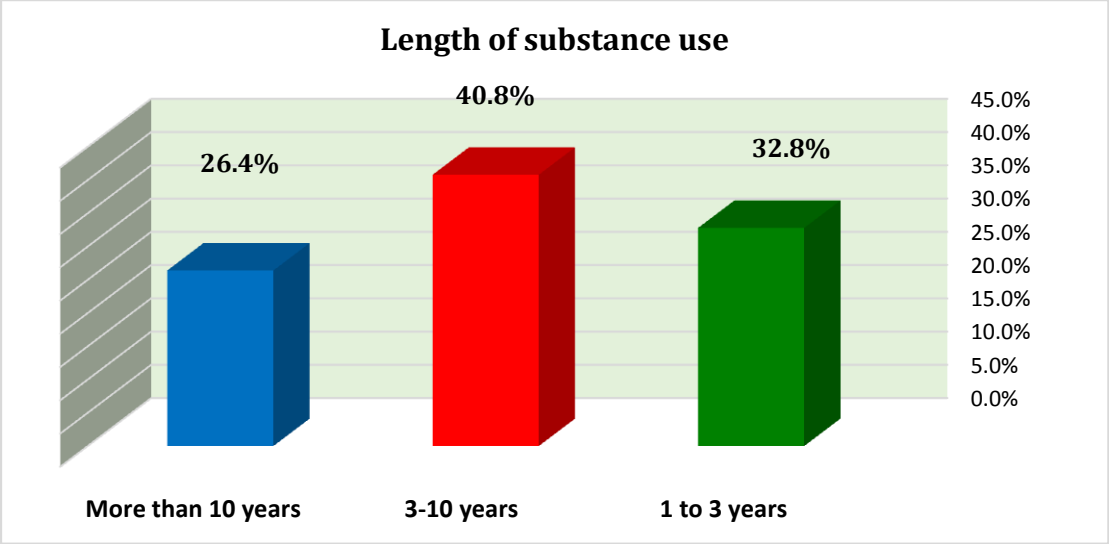

Figure (3) Frequency distribution of studied sample according to length of substance use (n=125).

As regard type of substance abuse table (2) shows that, (36.8%, 36%, 15.2%, 10.4%, and 1.6%) are Multi-drugs, Opioids, Cannabis, Sensetic cannabinoids, and stimulants respectively.

Table (2) Frequency distribution of studied sample according to type of substance abuse (n=125).

Items	No	%
- Opioids	45	36
- Cannabis	19	15.2
- Sensetic cannabinoids	13	10.4
- Stimulants	2	1.6
- Multi-drugs	46	36.8

As regards level of suicidal intention figure (4) showed that, (64%, 36%) of the studied sample have moderate, and severe suicide intention respectively.

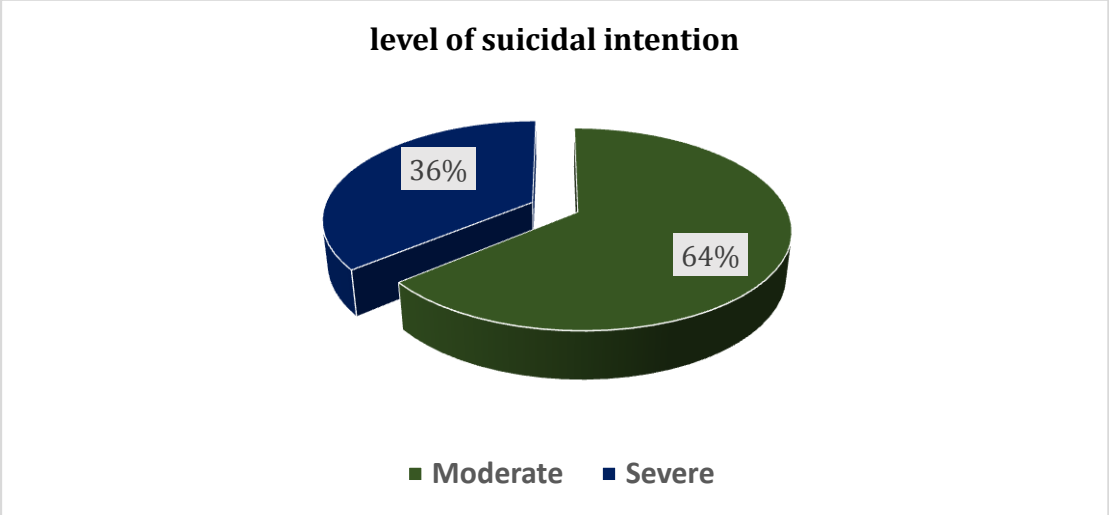

Figure (4) Frequency distribution of studied sample according to level of suicidal intention (n=125).

Figure (5) showed that, (45.6%, and 43.2%) of the studied sample suffering from severe and moderate level of depression respectively, and (11.2%) have minimum and mild depression.

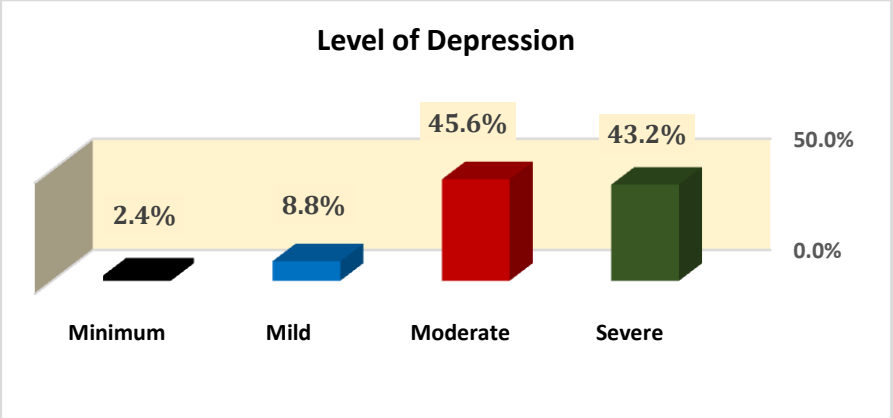

Figure (5) Frequency distribution of studied sample according to level of depression (n=125).

Table (3) revealed that, there is statistically significant correlations between educational level, and suicidal intention level among the studied sample where r = (11.08) at p= (0.05). Meanwhile, there are no statistically significant correlation were detected in relation to other mentioned variables.

Table (3) *relation between sociodemographic characteristics of the studied sample and suicidal intention level, and level of depression.*

Item	Suicide Intention level		Leve of depression	
	r	p-value	r	p-value
- Age	2.85	0.415	0.214	0.74
- Gender	0.009	0.922	3.803	0.284
- Residence	0.408	0.523	0.169	0.982
- Marital status	4.34	0.114	5.787	0.448
- Occupation	1.54	0.819	9.435	0.665
- Educational level	11.08*	0.05	22.1	0.105

Significant ≤ 0.05

IV. Discussion

Results of the current study showed that, the mean age of the studied sample were (30.11and standard deviation 7.8),with no statistically significant relation between age of the patient and suicidal intention and level of depression, this may be related to that, those group of patients were early adult and may abusing drugs as a stress management because of increased unemployment and loss of motivation, and unstable economic life.

The results in the same line with, El-Sherbiny, (2015) who indicated that, the Substance abuse was significantly higher among individuals between 18 and 25 years of age (44%) than among those between 26 and 40 years of age. Moreover, Lemstra, Rogers, Thompson, Moraros, & Buckingham, (2011) reported that, substance abuse was found to be highest in age group of 21-30 years (61.9%).In-addition , Hamdi, etal., 2016) showed that, most of the sample was from the age group (26-35 years old). Moreover, Mustafa, & Zafer, (2016) indicated that, the mean age of the patients was 38.23±8 years with age range from 17-80 years. Majority of the patients (59%) has age range from 31 to 45 years of age. Other studies are in harmony with our results showing that the mean age of the addicts' first-time use of heroin was 22±4 years old (Salama et al., 2015).

Regarding the gender of the studied sample the study results reported that, majority (97.6%) of the studied sample were male with no statistically significant correlation between gender and suicidal intention and level of depression, this may be related to that, interpersonal dominance typically associated with masculinity predicts more substance use among male than female, in addition, women may be more prone to hiding their substance abuse out of fear of social stigma, loss of child custody, or repercussions from a spouse. The study in the same context with, Hamdi, etal, (2016) who stated that, the male gender was positively correlated (with high significance) to the use of substance(s), (15.8% males versus 2.2% females), and the ratio between males: females is about 7:1, (13:1 in Delta and middle Egypt governorates, 2.7:1 in Cairo, 7:1 in Coastal region governorates, 5:1 in Upper Egypt governorates). Also, the study is support by, Afolabi, Oladotun, Chinwe,(2014) who indicated that,more male patients than female patients receiving substance abuse treatment, (86% male & 13.8% female).

The study results indicated that, more than half of the studied sample were single, with no statistical significant correlation between marital status and suicidal intention and level of depression. This results may be related to that, single patients suffer from unemployment and loss of responsibilities. The study results in the same line with, Hamdi, etal., (2016) who stated that, marital status was also significantly correlated to substance use and abuse. It was of the highest prevalence among those married twice (30.9%), and those who were

divorced (25.7%). The study result was contradicted with, Lin, Karno, Grella, (2011) who indicated that, substance abuse is more common among individuals who are divorced, separated, or widowed.

The current study results revealed that, more than three quarters of the studied sample were not work, this may be described by recurrent absenteeism, loss production, tiredness and sleeping on the work, withdrawal effect which affect work performance, loss of efficiency, lower morale of co-workers, supervisors, or tasks, preoccupation with obtaining and using substance while at work, which interfere with their attention and concentration, illegal activities at work include selling drugs to other employee.

The study result is supported by, National Survey on Drug Use and Health, (2011) who stated that, there has been link between employment status and substance use. Being unemployed have been found to lead to an increase in level of drug abuse which is caused indirectly by stress generated from the unemployment, in addition, Afolabi, Oladotun, Chinwe, (2014), evidenced that those who are not working are more predisposed to higher rates of illicit drug use. This unemployment may be as a result of exclusion from vocational services, a motivational symptom associated with substance abuse and or inadequacy about the jobs.

Moreover, Pradhan, Sharma, Shrestha, Shrestham, (2012) indicated that, twenty (47.6%) subjects were unemployed, followed by 16 (38.1%) were students, 6 (14.3%) employed. Among the 20 unemployed patients, 16 (80%) had depression. Four out of six (66.6%) employed subjects and 11 (68.8%) out of 16 students had depression

As regards the type of addictive substance the study result showed that, more than one third of the studied patients (36%) are positive for opioids, this can be attributed to opioids apparent repetition as a remedy for alleviating pain, reducing stress and depression, and improving sexual performance, also patients with opioids use can easily access at relatively low price. Moreover, the study results indicated that more than one third (36.8%) were positive multi-drug use.

Most of the patients used multiple drugs, followed by addiction to tramadol, a synthetic opioid that appeared in Egypt primarily as a drug for pain relief and later on as an addictive drug. According to the scale, the patterns of drugs used among patients were very high; the scale mean was 45 in mixed drug use. The table also shows that the use of hallucinogen, like LSD and MDMA, and amphetamines is not common among patients in Upper Egypt (Yassa, & Badea, 2019).

Yassa, and Badea, (2019) indicated that, the change of the trends of abuse in Egypt from cannabis and its leaves (Bango) to use the tramadol. This is confirmed by Bassiony et al. (2015) who prove that the tramadol began to be the gateway for drug abuse in Egypt. Wide availability of tramadol, its cheap price, and media appearance as a painkiller helped to introduce it widely among Egyptians (Fawzi 2011; Alsirafy et al. 2015; Bassiony et al. 2015).

Mahgouba, El-Hadidyb, Abo El Hodab, &Atrouny, (2016) founded that 43% of cases were positive for multidrug and other drug use, 12% were positive for tramadol use, and 2% were positive for heroin use. This result is in agreement with another study, which reported that about 43.94% (n=145) of the patients were under polysubstance use, whereas the percentages of patients who used one substance were as follows: tramadol, 30.30% (n=100); and heroin, 11.52% (n=38) (Mohamed et al., 2015).

Hamdi, etal., (2016)stated that, Cannabis was the commonest in all regions. In total, 77% of the substance users were using Cannabis. Alcohol (28.6% of total use) was the 2nd common substance of use in all Egyptian governorates, except in Upper Egypt (where the opiates were commoner than alcohol). Meanwhile, in governorates outside the Upper Egypt, opiates were the 3rd common substance of use in Egypt (23.4% of total use). The pharmacological agents (14.6%), the stimulants (1.9%) and the organic solvents (1.5%) are following in frequency, respectively.

The commonly used substances were found to be in the following order: Cannabis was the commonest in all regions. In total, 52.39% of the substance users were using Cannabis which represents 15.91% of the sample. This was consonant with the rates of cannabis use in North Africa which was found to be 4.3% of the General Population (World Drug Report, 2014).

The study in the same line with, Rather, Bashir, Sheikh, Amin, and Zahgeer , (2013) The most common substances of abuse identified include medicinal opioids (65.7%), cannabis (63.6%), benzodiazepines (45.5%), other prescription medications (43.4%), inhalants (11.1%), and cocaine (7.5%). Poly-substance abuse was present in 91.9% of patients.

An Egyptian study shows that tramadol dependence starts as follows: 21% of the patients started tramadol dependence for its pleasurable effect (to improve mood), 20% of the patients for sexual purpose (prolongation of the time of intercourse), 14.1% to get more power for hard work (to delay feeling fatigue), 13%for pain relief, 12% as self-medication to relieve depression, 11% as self-medication to relive anxiety, 9.5%because of peer pressure, and 4.5% for other purposes (Mohamed, El Hamrawya, Shalabya, El Bahya, Abd Allahb, 2015).

The current study results indicated that, most of the studied sample were educated, with statistically significant correlation between educational level and suicidal intention, this can be interpreted as lower

chancesfor employment and making family is less, so they abusing drugs as stress management and this level of education encourage them to seek medical help.

In accordance to, Hamdi, etal., (2016) who stated that, the association with lower education was highly significant, the less educated people were more common users of substance(s): 34.2% of those graduated from primary school, 25.1% of illiterate persons, 23.2% of those graduated from preparatory school and 22.8% of those who can barely read and write

In the same line with, Augustine, & Godiya, 2014, Chikere, & Mayowa, 2011; and National Survey on Drug Use and Health, 2011) who reported that, level of education, most especially tertiary level has been proven to be a consistent predictor to substance abuse,

The study results showed that, two third of the studied sample were suffer from severe suicidal intention. This may be related to that, patients with substance abuse suffer from extreme irritability, feeling of despair, hopelessness, worthlessness, impaired judgment, physical illness related to illegal drug misuse, sadness which reinforce impulsiveness and suicidal thoughts.

The study results in consistent with, Wong, Zhou, Goebert, & Hishinuma (2013) who reported the positive association of substance abuse with suicide ideation and planning. In addition, Borges, Loera, (2010) stated that, although there is a correlation between the disorder caused by the use of substances and suicidal behavior, a large number of addicts will never attempt suicide. Moreover, Kwon, Yang, Park, &Kim, (2013) stated that, drug addicts attempt suicide by overuse of drugs that is an overdose, or a combination of drugs and tablets, while in a few cases the manner in which the suicide is attempted is not directly related to drugs.

In accordance to, Maloney, Degenhardt, Darke, (2007) who indicated that, people who abuse or drugs or are dependent on them, attempting suicide nearly six times more often than people who do not abuse these substances. The rate of completed suicide among addicts is 2 to 3 times higher than among the males who are not addicts. Among women, the use of substances increases the risk of suicide for 6.5 to 9 times compared to women non addicts

The study results showed that, most of the studied sample suffer from moderate to severe level of depression. Moreover,depression had the strongest association among all measures of suicidality in univariate as well as in multivariate analysis. This is consistent with previous studies by (Wong et al., 2013; Kaley, Mancino, & Messias, 2014) who shown a strong association between depression and all measures of suicidality

The result is supported by, Botega, etal., (2015) who found a prevalence of suicidal ideation in 17.1% and attempt in 2.8% of the investigated individuals. In addiction (Cantãoi , Bottil, 2015) who observed that, 30.08% and 32.52% for ideation and attempt, respectively. These data demonstrate a higher prevalence of suicide among drug addicts and how much the risk factors should be routinely investigated in the evaluation of a patient's suicide risk

The result in the same line with,Mahgouba, etal., 2016 who stated that, a higher mean score of Hamilton scale of depression was found with a high statistically significant difference. Moreover, Pradhan, Sharma, Shrestha, &Shrestham, (2012) moderate depression was more frequent among addicts,a total of 31 (73.8 %) cases were found to be suffering from Depression, in which 19 (45.2%) had mild to moderate depression and 12 (28.6%) had severe depression

The result is supported by Pradhan, Sharma, Shrestha, Shrestham, (2012), who showed that, 73.8% patients with substance use disorder were suffering from depression. The results are consistent with findings of other researches. In a study done in Latin America, 58.4% of illicit drug users had depression (Ferigolo, Stein, Fuchs, &Barros, 2009). Another study, Lemstra, etal., 2011 showed that depression was present in 81.4% among substance abuser patients.

A total of 31 (73.8 %) cases were found to be suffering from Depression, in which 19 (45.2%) had mild to moderate depression and 12 (28.6%) had severe depression (Lemstra, etal., 2011).

The results in the same line with, Lemstra, etal, (2011) who indicated that, eight patients (19%) were in the age group 11-20 years, 26 (61.9%) were in the age group 21-30 years, seven (16.7%) were in age group 31-40 years and one patient (2.4%) was above 41 years of age. Out of the eight patients of 11-20 years of age, four (50%) had depression. Twenty patients (76.9%) out of 26 patients from the age group 21-30 years had depression. Depression was seen in six (85.7%) patients of age 31-40 years. Twenty (47.6%) subjects were unemployed, followed by 16 (38.1%) were students, 6 (14.3%) employed. Among the 20 unemployed patients, 16 (80%) had depression. Four out of six (66.6%) employed subjects and 11 (68.8%) out of 16 students had depression

The results in the same context with,Lemstra, etal, (2011) who indicates that depression is a major comorbidity among patients with substance use disorder. As the person indulges in substance use, personality factors like strange behavior, social disinhibition and other type of psychotic symptoms come to the front whereas depression goes in the background and is underdiagnosed and undertreated.

V. Conclusion

The study results conclude that,unemployment, hopelessness and irritability, anhedonia, guilty feeling and feeling of being punished the main predictors of depression, and suicidal intention patients with substance abuse.All studied sample were experiencemoderately to severely level of suicidal intention and most of them experience symptoms of depression ranging from moderate to severe level.

VI. Recommendations

The study results recommended that:

1. Psychiatric nurses should be trained to assess patients with substance abuse for psychiatric disorders.
2. Educational programs should be provided for families to detect warning and early symptoms of suicidal ideationsand depression among patients with substance abuse disorders.
3. Rehabilitation programs should be provided for patients with substance abuse regarding depression and other psychiatric disorders.

References

[1]. Afolabi, B., Oladotun, A., Chinwe, I. (2014). Socio-Demographic Variables and Personality Profiles of Patients with Substance Use Disorder in a Drug Abuse Treatment Facility in Nigeria, Research on Humanities and Social Sciences, Vol.4, No.15.

[2]. Aly N., Abdel Latief S, Abdel Latief A, El Naggar A (2012). Assessment of suicidality risk factors and its management at Poison Control Center Cairo University (adolescence suicidality). Journal of American science 8:724-728.

[3]. Alsirafy S, Saleh R, Fawzy R, Alnagar A, Hammad A, El Sherief W, Farag D, Radwan R .(2015). The fear of using tramadol for pain control (tramadolophobia) among Egyptian patients with cancer. J Opioid Manag 11(6):474-480

[4]. American Psychiatric Association.(2013). Diagnostic and Statistical Manual of Mental Disorders fifthEdition Dsm-5. American Psychiatric Publishing, Washington, DC.

[5]. Arumalla, V.K., et al. (2016). Ligature Mark in Hanging – Gross and Histopathological Examination with Evaluation and Review. J Addict Depend 2(2): 1- 7.

[6]. Augustine, B. N. & Godiya, A. (2014). Substance Use and Violent Behaviour of Students in Nasarawa State University, Keffi – Nigeria. European Academic Research Vol. I, Issue 10

[7]. Bachmann, S. (2018). Epidemiology of Suicide and the Psychiatric Perspective. Int J Environ Res Public Health, 15(7)

[8]. Bando DH, Brunoni AR, Fernandes TG, Benseñor IM, Lotufo PA. (2012).Suicide rates and trends in Sao Paulo, Brazil, according to gender, age and demographic aspects: a join point regression analysis. Rev Bras Psiquiatr.;34:286-93.

[9]. Bassiony M, Salah El-Deen G, Yousef U, Raya Y, Abdel-Ghani M, El-Gohari H, Atwa S .(2015). Adolescent tramadol use and abuse in Egypt. Am J Drug Alcohol Abuse 41(3):206–211.

[10]. Beck, A. T., & Steer, R. A. (1987). Beck Depression Inventory manual. Harcourt, Brace, Jovanovich.

[11]. Beck, AT, Steer, RA Brown, GK (1996). BDI-II: Beck Depression Inventory Manual2nd ed. San Antonio, TX Psychological Corporation

[12]. Beck, A. T., Kovacs, M., & Weissman, A. (1975). Hopelessness and suicidal behavior: An overview. Journal of the American Medical Association, 234, 1146-1149

[13]. Beck, A. T., Schuyler, D., & Herman, I. (1974). Development of suicidal intent scales. In A. T. Beck, II. L. P. Resnik, & D. J. Lettieri (Eds.), The prediction of suicide. Bowie, Md.: Charles Press.

[14]. Beck, A. T., Ward, C. H., Mendelson, M., mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. Archives of General Psychiatry, 4, 561-571.

[15]. Bohnert KM, Ilgen MA, Louzon S, et al. (2017). Substance use disorders and the risk of suicide mortality among men and women in the US Veterans Health Administration. Addiction 2017; 112:1193-1201.

[16]. Borges G, Loera CR. (2010). Alcohol and drug use in suicidal behaviour. Curr Opin Psychiatry.;23:195-204.

[17]. Borges G, Loera CR. (2010). Alcohol and drug use in suicidal behaviour. Curr Opinion. Psychiatry ;23(3):195–204.

[18]. Borges G, Walters EE, Kessler RC. (2010). Associations of substance use, abuse, and dependence with subsequent suicidal behavior. Am J Epidemio; 151:781-9.

[19]. Botega NJ, Marín-León L, Oliveira HB, Barros MBA, Silva VF, Dalgalarrondo P. (2009). Prevalence of suicidal ideation, suicide plans, and attempted suicide: a population-based survey in Campinas, São Paulo State, Brazil]. Cad. Saúde Pública [Internet]. ;25(12):2632-8.

[20]. Cantão L, Botti NCL. (2016). Suicidal behavior among drug addicts. Rev Bras Enferm. 2016;69(2):366-73.

[21]. Chikere, E. I. C. & Mayowa, M. O. (2011). "Prevalence and Perceived Health Effect of Alcohol Use among Male Undergraduate Students in Owerri, South-East Nigeria: A Descriptive Cross-Sectional Study." BMC Public Health 11: 118.

[22]. Curtis BL, McLellan AT, Gabellini BN .(2014). Translating SBIRT to public school settings: an initial test of feasibility. J Subst Abuse Treat 46:15–21.

[23]. EL-Sherbiny AAM .(2015). Drug abuse among patients of Tanta university hospital outpatient clinic, Gharbia governorate, Egypt. Tanta Med J 43:82–88.

[24]. Fawzi MM (2011) Some medicolegal aspects concerning tramadol abuse: the new Middle East youth plague 2010. An Egyptian overview. Egypt J Forensic Sci 1:99-102

[25]. Ferigolo M, Stein AT, Fuchs FD, Barros HMT. (2009). Influence of depression and early adverse experiences on illicit drug dependence: a case control study. Rev Bras Psiquiatr.;31(2):106-13.

[26]. Florida Charts. (2015). Injury and Violence. Suicide: Florida Department of Health. Retrieved

[27]. Fund for Drug Control and Treatment of Addiction (FDCTA) (2018). Egypt: Towards a drug-free government

[28]. Hamdi E, Gawad T, Khoweiled A, Sidrak AE, Amer D, Mamdouh R, Fathi H, Loza N. (2013). Lifetime prevalence of alcohol and substance use in Egypt: a community survey. Journal of Substance Abuse. ;34(2):97-104.

[29]. Hamdi E, Sabry N, Sedrak A, Khowailed A, Rabie LN, Ramy H (2016). Sociodemographic Indicators for Substance Use and Abuse in Egypt. J Addiction Prevention. Vol.:4, Issue:1.

[30]. Hernandez L, Rodriguez AM, Spirito A. (2015). Brief family-based intervention for substance abusing adolescents. Child Adolesc Psychiatr Clin N Am 24:585–599.

[31]. Holmstrand C., Bogren M., Mattisson C., Brådvik L. (2015). Long-term suicide risk in people with no, one or more mental disorders: The Lundby study 1947–1997. Acta Psychiatr. Scand; 132:459-469.
[32]. Gart, R., & Kelly, S. (2015). How illegal drug use, alcohol use, tobacco use, and depressive symptoms affect adolescent suicidal ideation: A secondary analysis of the 2011 Youth Risk Behavior Survey. Issues in Mental Health Nursing, 36(8), 614-620.
[33]. Kaley, S., Mancino, M. J., & Messias, E. (2014). Sadness, suicide, and drug misuse in Arkansas: Results from the Youth Risk Behavior Survey 2011. Journal of the Arkansas Medical Society, 110(9), 185–186.
[34]. Kendall PC, Hollon SD, Beck AT, Hammen CL, Ingram RE. (1987).Issues and recommendations regarding use of the Beck Depression Inventory. Cognitive Ther Res 1987;11:289-299.4
[35]. Khoweiled A, et al. (2012). Filling the GAP; meeting the needs for treatment and treatment centers in Egypt. Egypt: General Secretariat of Mental Health, Ministry of Health.
[36]. Kokkevi A, Richardson C, Olszewski D, et al. (2012). Multiple substance use and self-reported suicide attempts by adolescents in 16 European countries. Eur Child Adolesc Psychiatry ;21:443-50.
[37]. Kwon, M., Yong, S., Kin, D., J. (2013). Factors that affect substance user's suicidal behavior: a view from the assiction severity. Index in Korea, Annual General psychiatryc, 12 (1):35
[38]. Lemstra M, Rogers M, Thompson A, Moraros J, Buckingham R. (2011). Risk indicators of Depressive Symptomatology Among Injection Drug Users and Increased HIV Risk Behavior. Can J Psychiatry;56(6);358-366.
[39]. Lin JC, Karno MP, Grella CE, et al. (2011). Alcohol, tobacco, and nonmedical drug use disorders in U.S. Adults aged 65 years and older: data from the 2001-2002 National Epidemiologic Survey of Alcohol and Related Conditions. Am J Geriatr Psychiatry; 19:292-99.
[40]. Mahgoub, R., El-Hadidy, M., Abo El Hoda, M., Atrouny , M. (2016). A study of opioid dependence among Mansoura University students. Egyptian Journal of Psychiatry, 37 (3) 174-179
[41]. Maloney E, Degenhardt L, Darke S, et al. (2007). Suicidal behaviour and associated risk factors among opioid-dependent individuals: a case-control study. Addiction;102:1933–1941.
[42]. Mangrum LF. (2012). Client and service characteristics associated with addiction treatment completion of clients with co-occurring disorders. Addict Behav 2012; 34 :898-904.
[43]. Marcus M., Yasamy M. T., van Ommeren M., Chisholm D. (2012). Saxena S. Depression: a global public health concern. Proceedings of the 65th World Health Assembly; Geneva, Switzerland. World Health Organization
[44]. Mitchell SG, Schwartz RP, Kirk AS, Dusek K, Oros M, Hosler C et al. (2016). SBIRT implementation for adolescents in urban federally qualified health centers. J Subst Abuse Treat 60:81–90.
[45]. Mohamed NlR, El Hamrawya LG, Shalabya AS, El Bahya MS, Abd Allahb MM (2015). An epidemiological study of tramadol HCl dependence in an outpatient addiction clinic at Heliopolis Psychiatric Hospital. MMJ 28:591-596.
[46]. Mossie, A, Kindu, D., and Negash, A. (2016). Prevalence and Severity of Depression and Its Association with Substance Use in Jimma Town, Southwest Ethiopia, Depression research treatement journal, Volume 2016, Article ID 3460462, 7 pages
[47]. Mubeen C, Sharif M (2007) Drug Addiction among Females in District Lahore (Pakistan). J Agri Soc Sci 3: 101-103.
[48]. Mustafa, A., Zafer, U. (2016). Prevalence of depression among substance users presented to psychiatry department of a tertiary care hospital. JSZMC 2016;7(1):896-899.
[49]. National Survey on Drug Use and Health (2011). Summary of National Findings.
[50]. Nery FG, Soares JC: Comorbid bipolar disorder and substance abuse: evidence-based options. Curr Psychiatry 2018; 10:57-67.
[51]. Oquendo MA, Currier D, Liu S, et al (2010). Increased risk for suicidal behavior in comorbid bipolar disorder and alcohol use disorders. J Clin Psychiatry; 71:902- 909 7.
[52]. Owoaje, T. T. & Bello, J. 2010. "Psychoactive Substance Use among Undergraduate Students of the University of Ibadan, Nigeria." Tropical Journal of Health Sciences 7(2): 112-125.
[53]. Piotrowski, C., Sherry, D., & Keller, J. W. (1985) Psycho-diagnostic test usage: a survey of the Society for Personality Assessment. Journal of Personality Assessment, 49, 115-119.
[54]. Pompili, M., Serafini, G., Innamorati, M., Dominici, G., Ferracuti, S., Kotzalidis, G.D., & Lester, D. (2010). Suicidal behavior and alcohol abuse. International Journal of Environmental Research and Public Health, 7(4): 1392-1431.
[55]. Poorolajal J, Haghtalab T, Farhadi M, Darvishi N. (2016). Substance use disorder and risk of suicidal ideation, suicide attempt and suicide death: a meta-analysis. J Public Health (Oxf);38:e282-e91.
[56]. Pradhan SN , Sharma SC , Shrestha MR , Shrestha S. (2012).A study of depression among patients with substance abuse disorder. journal of Kathmandu Medical College, Vol. 1, No. 2, Issue 2, Oct.-
[57]. Rather, Y., Bashir, W., Sheikh, A., Amin, M., and Zahgeer , Y. (2013). Socio-demographic and Clinical Profile of Substance Abusers Attending a Regional Drug De-addiction Centre in Chronic Conflict Area: Kashmir, India, Malays J Med Sci; 20(3): 31–38.
[58]. Rayan, A. (2017). Assessment and Management of Patients with Drug Abuse: Nurses Should be Involved. J Addict Depend 2(4): 1-4
[59]. Rayan, A. (2016). Assessment and Prevention of Risk Factors Associated with Smoking in Jordanian Adolescents: Application of Newman System Model as a Guiding Framework. (2016) J Addict Depend 2(3): 1-5.
[60]. Royal Collage of Nursing. (2017). The Role of Nurses in Alcohol and Drug Treatment Services A resource for commissioners, providers and clinicians
[61]. Salama, M., Abdelsalam,M., Nwidu, L., Zaki,M., El-Bendary, M., Anber, N., Aggour, A., Elmorsy, E. (2015). Liver functions derangement among substances abusers, Int J Med Phar Vol 6, Issue 3
[62]. SAMHSA. (2015). Mental Health Annual Report 2015 Use of Mental Health Services: National Client-Level Data, Department of Health and Human Services: Substance Abuse and Mental Health Services Administration.
[63]. Schilling, E. , Aseltine, R. H., Glanovsky, J. L., James, A., & Jacobs, D. (2009). Adolescent alcohol use, suicidal ideation, and suicide attempts. Journal of Adolescent Health, 44(4), 335–341.
[64]. Seleghim MR, Oliveira MLF. (2013). Influence of the family environment on individuals who use crack. Acta Paul Enferm [Internet]. 2013[cited 2015 Feb 13];26(3):263-8.
[65]. Sileyew, K. (2019). Research Design and methodology, 6th edition, Pearson Education Limited
[66]. Singh J, & Gupta P K;. (2017). Drug Addiction: Current Trends and Management. The International Journal of Indian Psychology, 5, 1
[67]. University of Maryland Medical Center(UMMC) (2013). Drug abuse. UMMC. 5.
[68]. Viney S. (2017). As drug addiction rises in Cairo, experts offer recommendations. Egypt Independent, May 16, 2012. Available at: http://www.egyptindependent.com/news/drug-addiction-rises-cairo-experts-offer-recommendations. Accessed June 15,

[69]. Weissman DG, Schriber RA, Fassbender C, Atherton O, Krafft C, Robins RW et al. (2015). Earlier adolescent substance use onset predicts stronger connectivity between reward and cognitive control brain networks. Dev Cogn Neurosci 16:121–129.
[70]. Wong, S.S., Zhou, B., Goebert, D., & Hishinuma, E.S. (2013). The risk of adolescent suicide across patterns of drug use: A nationally representative study of high school students in the United States from 1999 to 2009. Social Psychiatry and Psychiatric Epidemiology, 48(10), 1611-1620.
[71]. World Drug Report (2017): drug use disorders, united nations office on drug and crime
[72]. World Drug Report (2014): drug use disorders, united nations office on drug and crime
[73]. Yassa, H., Badea, S. (2019). Patterns of drug abuse in Upper Egypt: cause or result of violence?Egyptian Journal of Forensic Sciences, 9:14