



## **Relationship between addiction, anxiety, depression and socioeconomic status among addict people**

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### **Abstract**

Addiction is a chronic, relapsing brain disease that is characterized by repeated and increased use of a substance, the deprivation of which gives rise to symptoms of anxiety and depression.

This study aimed to investigate the relationship between addiction, anxiety, depression and socioeconomic status among addict people. An exploratory descriptive research design was utilized.

**Subjects and method:** The studied sample consisted of 100 addict people, were suffering from depression and anxiety involved in this study.

**Tools:** Personal data, pattern of drug addiction questionnaire, Beck Anxiety Inventory and Beck Depression Inventory.

**Results:** More than half of studied sample has low level of socio- economic status. Also more than one third of studied sample have severe level of anxiety and more than half of studied sample have severe level of depression.

**Conclusion:** Anxiety was positively and significantly correlated with depression ( $r= 0.777$  &  $p= 0.001$ ). In addition, there were highly significant positive correlations between socioeconomic status level, anxiety and depression ( $r=.269$  &  $p=.007$ ).

**Recommendations:** Prophylactic youth programs should involve the whole family members and healthy productive activities should be provided for youth in the community.

**Keywords:** addiction, anxiety, depression and socioeconomic status

### **1. Introduction**

Addiction is a chronic, relapsing brain disease that is characterized by repeated and increased use of a substance, the deficiency of which gives rise to symptoms of distress and an irresistible urge to use the agent again which leads also to physical and mental deterioration<sup>[1]</sup>. According to<sup>[2]</sup> reported that, 50 % of individuals with severe mental disorders are affected by substance abuse. 37 % of alcohol abusers and 53 % of drug abusers also have at least one serious mental illness, of all patients diagnosed as mentally ill, and 29 % abuse either alcohol or drugs.

Drug addict people in Egypt are spending \$2.9 billion on drugs each year. Estimates on how many people are addicted to opiates, cannabis, amphetamine-type stimulants or heroin vary greatly, but range between 600,000 and 800,000. Half the 129,850 people who entered drug rehabilitation were addicted to cannabis, while another 43% were dependent on opiates of various types. Another 7% were addicts of amphetamine-type stimulants that would include ecstasy and methamphetamine<sup>[3]</sup>. Globally, it is estimated that, between 162 million and 324 million people, corresponding to between 3.5% and 7.2% of the world population aged 15 to 64, had used an illicit drug mainly a substance belonging to the cannabis, opioid, cocaine or amphetamine type stimulants group at least once in the previous year<sup>[4]</sup>.

Substance abuse has a major influence on individuals,

families, and communities as its effects are growing, contributing to costly social, physical, and mental health problems. Numerous factors can increase the risk for initiating or continuing substance abuse including socioeconomic status, quality of parenting, peer group influence, and biological/inherent predisposition toward drug addiction<sup>[5]</sup>.

In this respect,<sup>[6]</sup> reported that, estimates of the total overall costs of substance abuse in the United States; including productivity, health and crime-related costs exceed \$600 billion annually. This includes around \$193 billion for illicit drugs, \$193 billion for tobacco, and \$235 billion for alcohol. As staggering as these numbers are, they do not completely describe the breadth of destructive public health and safety consequences of drug abuse and addiction, such as family breakdown, loss of employment, failure in school, domestic violence, and child abuse.

Anxiety and drug addiction are the most common problems in the United States, 53% of people with drug addiction suffer from at least one other mental disorder such as anxiety. In the United States, anxiety and drug addiction are some of the most common psychiatric problems with lifetime rates of 28.8% and 14.6% respectively. The National Epidemiologic Survey on Alcohol and Related Conditions offered a compelling demonstration of this shared risk, revealing striking rates of co-occurring anxiety and drug addiction<sup>[7]</sup>.

Also, [8] stated that, depressive symptoms may develop, as a direct result of taking drugs or as part of withdrawal symptoms when drug-taking stops. Low mood in withdrawal may be brief and self-limiting. But sometimes it can lead to serious, prolonged depressive symptoms. Heavy drug use can lead to major financial problems, difficulties with relationships or trouble with the law. A person taking recreational drugs is likely to have more of these pressures, which may activate depression.

Nurses play vital role in the care of patient experiencing intoxication and withdrawal symptoms, including the physical and psychological effects such as signs and symptoms of anxiety and depression (e.g. feeling of sadness, helplessness, hopelessness, worthlessness, low self-esteem, change in sleep, and change in appetite). So, nurses must assess patient for signs and symptoms, level of anxiety, depression and physical reactions to anxiety (e.g., verbalization of feeling anxious, insomnia, restlessness, tachycardia) [9].

### 1.1 Significance of the study

Drug addiction is considered one of the most serious problems that worry the people in Egypt. The person who is suffering from an addiction may be in financial difficulties which the other person is unaware of. Combine this with their irrational behavior; criminal behavior and person have a recipe for marital breakdown. The most of age group affected by drug addiction is adolescents due to negative consequences on both developmental and legal aspects. More than 12% of Egyptian adolescence is dependent on drugs [10]. High prevalence of anxiety and depression has been found among addict people in the world. Around 25% of people in the community in the United States were alcohol dependence and 43% of drug dependent people had anxiety [11]. Also, a number of studies have indicated that 20% of patients in the Egypt with drug addiction and around 35% of patients with drug addiction have depression [3]. Drug addiction, anxiety and depression also increase negative consequences like hospitalization, accidental injury, self-isolation and suicidal ideation [12]. So, the present study could be helpful to design prophylactic youth programs that involved the whole family members and healthy productive activities that provided for youth in the community to reduce anxiety, depression and increase rate of progress, decrease the rate of relapse and positive treatment outcome.

### 1.2 Aim of the study

This study aimed to investigate the relationship between addiction, anxiety, depression and socioeconomic status among addict people.

### 1.3 Research Questions

- What is the relation between addiction, anxiety and depression?
- What is the relation between addiction, anxiety and depression and socioeconomic status?

## 2. Subjects and Method

### 2.1 Research Design

An exploratory descriptive research design was utilized in this study.

### 2.2 Setting

The study was conducted at inpatient of addiction management unit of Assiut University Hospital.

### 2.3 Sample

Screen for all drug addict patients attending at inpatient an addiction management unit according to determined criteria at the beginning of the study by using Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI). Patients who have score on Beck Anxiety Inventory ranged from (8-15) identified as having anxiety. Also Patients who have score on Beck Depression Inventory (BDI) ranged from (14-19) identified as having depression. According to the previous steps, one hundred study patients were suffering from depression and anxiety involved in this study.

### The sample of this study selected according to the following criteria

**Inclusion criteria:** Accept to participate in the study; diagnosed with drug addiction and the age range between (15 to 50 years).

**Exclusion criteria:** Drug addict people with mental retardation and organic brain disorder.

### 2.4 Tools of the study

#### 2.4.1 Tool (1) Socio demographic data

Developed by the researcher that included age, marital status, residence, occupation and level of education.

#### 2.4.2 Tool (2) Scale for measuring family socioeconomic status:

This scale has been developed by [13] and was updated scale included all the variables of the previous one and translated into Arabic by [14] and back translated into English to check validity and reliability. It consists of 7 domains, it includes education and cultural, occupation, family, family possessions, economic, home sanitation, and health care that assess socioeconomic status of the family. This scale has a total score of 84, and levels of socioeconomic status are categorized as following: (<42) = very low level of socioeconomic status, (42< - 63) = low level of socioeconomic status, (63<-71.4) = middle level of socioeconomic status, (71.4:84) = high level of socioeconomic status.

#### 2.4.3 Tool (3) Pattern of drug addiction questionnaire

This questionnaire developed by the researcher. It included: route of administration (oral, inhalation, injection, others); age of starting abuse (years); duration of abuse (less than one year, more than one year); motivation for use (bad friends, trial, increase strength and energy, escape from life stressors, weakness sexual ability) and desired effects (extraversion, elation, stimulation to work, sexual potency, happiness).

#### 2.4.4 Tool (4) Beck Anxiety Inventory (BAI)

It was developed by [15] and translated into Arabic by [16] and back translated into English to check validity and reliability. It consists of a 21 items, it multiple-choice self-report

inventory that measures the severity of an anxiety and covers the major cognitive, affective, and physiological symptoms of anxiety. Scoring system is rated on 4 point likert scale used (0) not at all, (1) mildly; It did not bother me much, (2) moderately; It was very unpleasant, but I could stand it, (3) severely; I could barely stand it. The scoring system was categorized as (0-7) minimal level of anxiety, (8-15) mild anxiety, (16-25) moderate anxiety, and (26-63) severe anxiety. Cronbach's alpha showed a strong reliability with a standardized alpha of 0.92 to 0.94 among the 21 items.

**2.4.5 Tool (5) Beck depression inventory (BDI)**

This scale has been developed by [17] and copyrighted [18] and was translated to Arabic by [19] and back translated into English to check validity and reliability and was updated by [20]. Internal consistency showed a high value for standardized alpha (Cronbach's) = 0.92. The questionnaire contains 21 questions about how the subject has been feeling; each question has asset of at least four possible answer choices, ranging from 0 to 3, indicating the severity of the symptom. Items 1 to 13 assess symptoms that are psychological in nature, while items 14 to 21 assess more physical symptoms. The scoring system ranged from 0-63 and levels of depression are categorized as (0-13) minimal depressive symptoms, (14- 19) mild depression, (20- 28) moderate depression, and (29- 63) severe depression.

**2.5 Administrative and Ethical consideration**

Research proposal were approved from Ethical Committee in the Faculty of Nursing. There is no risk for study subject during application of research. Informed oral consent was obtained from the participant that is willing to participate in the study, after explaining the nature and purpose of the study. Confidentiality and anonymity were assured. The Studied subject had the right to refuse to participate or withdraw from the study at any time.

**2.6 Pilot study**

A pilot study was carried out before stating data collection. It was carried out on ten patients to clarity, and applicability of the study tools and to estimate the time needed to collect data. These 10% of patients were included in the study because no modification was done.

**2.7 Data collection**

The study was carried from beginning of august 2019 to end January 2020.

**2.8 Statistical Analysis**

The collected data were coded, categorized, tabulated, and analyzed using the Statistical Package for the Social Science (SPSS 20). Numerical data were expressed as mean and SD. Quantitative data were expressed as frequency and percentage. For quantitative data, comparison between two variables was done using t-test and comparison between more than two variables used ANOVA test. Relation between different numerical variables was tested using Pearson correlation. Probability (p-value) less than 0.05 was considered significant and less than 0.001 was considered highly significant.

**3. Result**

**Table 1:** Distribution of personal data for Study Sample (n=100)

Variables	No	%
<b>Age groups</b>		
16-20 years	6	6.0
21-30 years	58	58.0
31-40 years	28	28.0
41-50 years	8	8.0
Mean±SD(range)	29.27±7.15(18-50)	
<b>Marital status</b>		
Single	57	57.0
Married	43	43.0
<b>Residence</b>		
Rural	68	68.0
Urban	32	32.0
<b>Educational level</b>		
Primary	7	7.0
Preparatory	19	19.0
Secondary	63	63.0
University	11	11.0
<b>Occupation</b>		
Not work	3	3.0
Employee	15	15.0
Farmer	8	8.0
Student	4	4.0
Manual workers	70	70.0

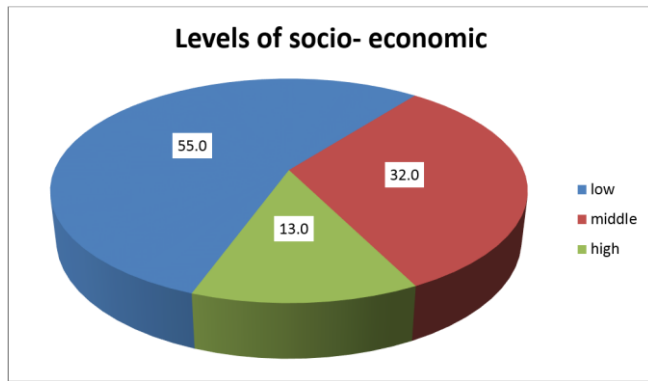
Table (1) illustrates personal data of study group. As regard age, the mean age of the study group was 29.27±7. About 58.0% of them were at age group ranged from 21 to 30 years old.

As regard marital status; 57.0% of study sample was single, also 68.0% of them from rural area. As regard occupation it was clear that, 70.0% of study sample was manual workers. In addition 63.0% of them graduated from secondary school.

**Table 2:** Distribution of pattern of drug addiction data for Study Sample (n=100)

Variables	No	%
<b>Diagnosis</b>		
poly drug addict	56	56.0
non poly drug addict	44	44.0
<b>Types of drug use</b>		
Tamol or tramadol	19	19.0
Hashish	12	12.0
Opium	7	7.0
Cocaine	21	21.0
Mixed (Tamol, tramadol, Hashish or Opium)	36	36.0
Tamol or tramadol	5	5.0
<b>Methods of drug use</b>		
Oral	76	76.0
Inhalation	7	7.0
Injection	17	17.0
<b>Duration of abuse</b>		
Less than one year	6	6.0
More than one year	94	94.0
Mean±SD (range)	22.92±5.20(15-40)	
<b>Motivation for use</b>		
Bad friends	36	36.0
Trial	17	17.0
Increase strength and energy	29	29.0
Escape from life stressors	6	6.0
weakness of sexual ability	12	12.0
<b>Desired effects</b>		
extraversion	35	35.0
Stimulation to work	50	50.0
The feeling of sexual potency	12	12.0
Happiness	3	3.0

Table (2) shows distribution of study group regarding pattern of drug addiction which indicates that, 56.0% of study sample was poly drug addict, while 36.0% of them used mixed types as (Tamol or tramadol-Hashish Opium). Regarding methods of drug use, 76.0% of study group used drug orally. As regard duration of abuse; 94.0% of study group used drug more than one year. As regard motivation for use, 36.0% of study group was motivated for use drugs by bad friends. However, 29.0% of study group was motivated for use of drugs to increase strength and energy. As regard desired effects for drug addict, about half (50.0%) of the study group due to stimulated to work.



**Fig 1:** Distribution of socio- economic Levels for Study Sample (n=100)

Figure (1) shows more than half (55%) of study sample has low level of socio- economic status.

**Table 3:** Relationship between personal data and socio-economic status levels for Study Sample (n=100)

Variable	low		middle		high		P. value
	No	%	No	%	No	%	
<b>Age groups</b>							0.817
16-20 years	3	5.5	3	9.4	0	0.0	
21-30 years	34	61.8	17	53.1	7	53.8	
31-40 years	13	23.6	10	31.3	5	38.5	
41-50 years	5	9.1	2	6.3	1	7.7	
<b>Marital status</b>							0.324
Single	35	63.6	16	50.0	6	46.2	
Married	20	36.4	16	50.0	7	53.8	
<b>Residence</b>							0.016*
Rural	43	78.2	20	62.5	5	38.5	
Urban	12	21.8	12	37.5	8	61.5	
<b>Educational level</b>							<0.001**
Primary	7	12.7	0	0.0	0	0.0	
Preparatory	8	14.5	6	18.8	5	38.5	
Secondary	39	70.9	23	71.9	1	7.7	
University	1	1.8	3	9.4	7	53.8	
<b>Occupation</b>							<0.001**
Not work	3	5.5	0	0.0	0	0.0	
Employee	3	5.5	5	15.6	7	53.8	
Farmer	6	10.9	1	3.1	1	7.7	
Student	2	3.6	0	0.0	2	15.4	
Manual workers	41	74.5	26	81.3	3	23.1	

- Chi-square test, \* Significant difference at p. value<0.05. \*\* Significant difference at p. value<0.01.

Table (3) shows the relationship between personal data and levels of socio-economic status among study sample. It shows that, there were no statistically significant differences between personal data and levels of socio-economic status among study sample except in residence (p=0.016\*), level of education and occupation (p= 0.001\*\*).

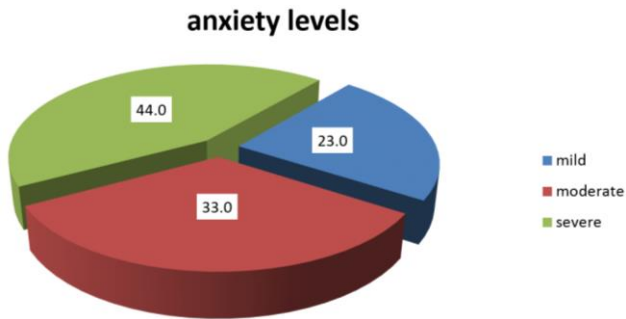
**Table 4:** Relationship between socio-economic status levels and pattern of drug addiction for Study Sample (n=100)

Variables	low		middle		high		P. value
	No	%	No	%	No	%	
<b>Diagnosis</b>							0.082
Poly drug addict	26	47.3	23	71.9	7	53.8	
Non poly drug addict	29	52.7	9	28.1	6	46.2	
<b>Types of drug use</b>							0.008**
Tamol or tramadol	14	25.5	3	9.4	2	15.4	
Hashish	8	14.5	4	12.5	0	0.0	
Opium	5	9.1	2	6.3	0	0.0	
Cocain	8	14.5	12	37.5	1	7.7	
Mixed (Tamol, tramadol, Hashish or Opium)	18	32.7	11	34.4	7	53.8	
Tamol or tramadol	2	3.6	0	0.0	3	23.1	
<b>Methods of drug use</b>							0.800
Oral	41	74.5	25	78.1	10	76.9	
Inhalation	5	9.1	2	6.3	0	0.0	
Injection	9	16.4	5	15.6	3	23.1	
<b>Duration of abuse</b>							0.328
Less than one year	5	9.1	1	3.1	0	0.0	
More than one year	50	90.9	31	96.9	13	100.0	
<b>Motivation for use</b>							0.307
Bad friends	19	34.5	11	34.4	6	46.2	
Trial	9	16.4	5	15.6	3	23.1	
Increase strength and energy	20	36.4	8	25.0	1	7.7	
Escape from life stressors	4	7.3	2	6.3	0	0.0	
weakness of sexual ability	3	5.5	6	18.8	3	23.1	
<b>Desired effects</b>							0.020*
extraversion	17	30.9	10	31.3	8	61.5	
Stimulation to work	34	61.8	15	46.9	1	7.7	
The feeling of sexual potency	3	5.5	6	18.8	3	23.1	
Happiness	1	1.8	1	3.1	1	7.7	

- Chi-square test, \* Significant difference at p. value<0.05. \*\* Significant difference at p. value<0.01.

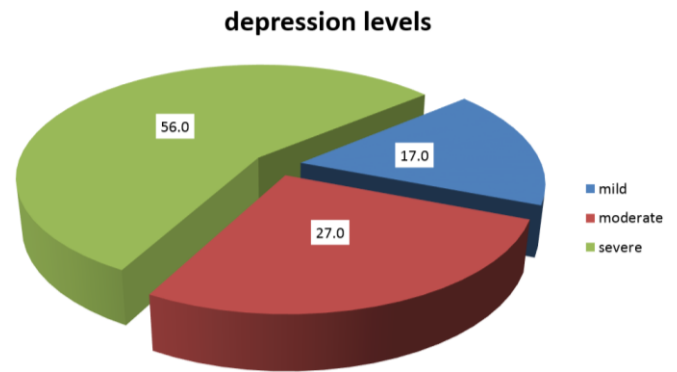
Table (4) shows the relationship between pattern of drug addiction data and levels of socioeconomic status among

study sample. About (47.3%) of the study group have low level of socioeconomic status were poly drug addict; (74.5%) of them used drug orally and (90.9%) of them used drug more than one year; (36.4%) of them reported that they motivated for drug addict to increase strength and energy and (61.8%) of them reported that, their desired effect of drug addict to stimulation to work. Also, it shows that, there were no statistically significant differences between pattern of drug addiction data and levels of socio-economic status among study sample except in types of drug use ( $p=0.008^{***}$ ) and desired effect ( $p 0.020^*$ ).



**Fig 2:** Distribution of anxiety inventory scale Levels for Study Sample (n=100)

Figure (2) shows that, about (44%) of study sample have severe level of anxiety.



**Fig 3:** Distribution of depression inventory scale Levels for Study Sample (n=100)

Figure (3) illustrates that, 56% of study sample have severe level of depression.

**Table 5:** Relationship between anxiety, depression with pattern of drug addiction for Study Sample (n=100)

Variables	N	Mean±SD of anxiety	Mean±SD of depression
<b>Diagnosis</b>			
poly drug addict	56	26.46±7.55	26.43±6.59
non poly drug addict	44	25.64±9.17	26.58±5.92
P. value		0.622	0.909
<b>Types of drug use</b>			
Tamol or tramadol	19	25.37±7.36	26.34±6.32
Hashish	12	25.83±10.89	25.92±5.84
Opium	7	26.29±9.34	28.31±5.2
Cocain	21	29.19±6.52	29.07±5.6
Mixed (Tamol, tramadol, Hashish or Opium)	36	25.44±8.47	24.81±6.61
Tamol or tramadol	5	21±7.78	27.26±7.26
P. value		0.394	0.228
<b>Methods of drug use</b>			
Oral	76	26.58±7.81	26.51±6.43
Inhalation	7	26.29±9.34	28.31±5.2
Injection	17	23.88±9.91	25.66±6.1
P. value		0.481	0.646
<b>Duration of abuse</b>			
Less than one year	6	24.83±9.66	23.98±8.89
More than one year	94	26.18±8.22	26.66±6.1
P. value		0.701	0.314
<b>Motivation for use</b>			
Bad friends	36	26.92±7.18	28.16±5.07
Trial	17	27.41±7.18	28.17±6.03
Increase strength and energy	29	22.48±9.04	23.81±6.77
Escape from life stressors	6	26.33±8.98	20.9±3.89
weakness of sexual ability	12	30.42±8.48	28.43±6.5
P. value		0.044*	0.003**
<b>Desired effects</b>			
extraversion	35	26.43±7.33	27.14±5.85
Stimulation to work	50	24.44±8.53	25.59±6.59
The feelinfg of sexual potency	12	30.42±8.48	28.43±6.5
Happiness	3	32.67±6.66	26.37±4.32
P. value		0.062	0.472

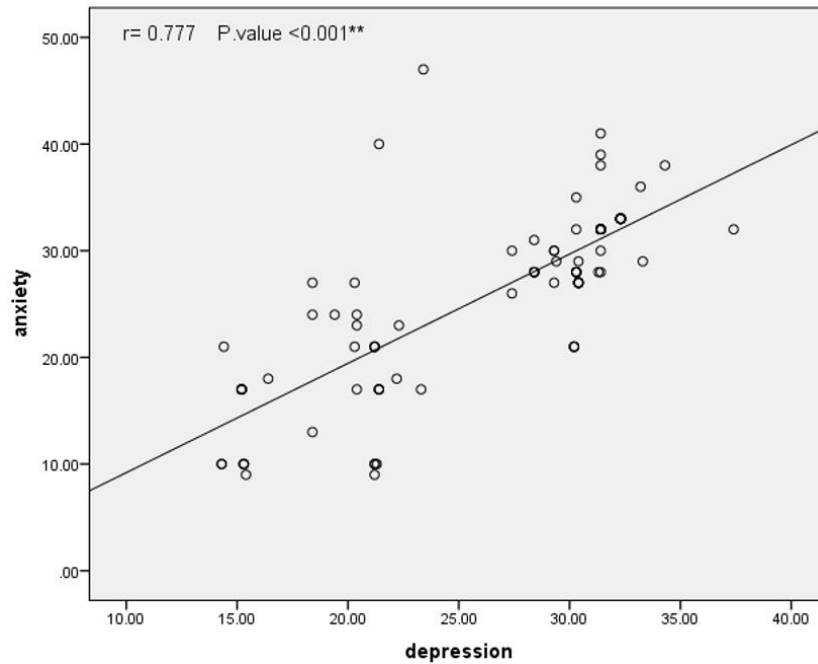
Independent T-test

One Way Anova \*Statistically Significant difference at P. value <0.05, \*\*Statistically Significant difference at P. value <0.01



Table (5) shows that, there were no statistically significant differences for mean score of pattern of drug addiction data, anxiety and depression in all variables except in motivation

for use and anxiety ( $p= 0.044^*$ ) and motivation for use and depression ( $p=0.003^{**}$ ) respectively.



**Fig 4:** Correlation between anxiety and depression among drug addict people

Figure (4) shows anxiety was positively and significantly correlated with depression ( $r= 0.777^{**}$  &  $p= 0.001$ ).

**Table 6:** Correlation between pattern of drug addiction, socioeconomic status level, anxiety and depression (n=100)

	Diagnosis	Types of drug use	Methods of drug use	Duration of abuse	Motivation for use	Desired effects	Total anxiety	Total depression	Socioeconomic status
Diagnosis	1								
Types of drug use	-.655 <sup>**</sup>	1							
Methods of drug use	.554 <sup>**</sup>	-0.121	1						
Duration of abuse	-0.031	-0.128	-0.140	1					
Motivation for use	-0.121	-0.060	-0.096	.245 <sup>*</sup>	1				
Desired effects	-.294 <sup>**</sup>	0.071	-.285 <sup>**</sup>	0.053	.620 <sup>**</sup>	1			
anxiety	-0.050	-0.038	-0.118	0.039	0.022	0.120	1		
depression	0.012	-0.037	-0.033	0.102	-0.162	0.000	.777 <sup>**</sup>	1	
Total socioeconomic status	-0.123	.221 <sup>*</sup>	-0.025	0.173	-0.003	0.018	.307 <sup>**</sup>	.343 <sup>**</sup>	1

Table (6) illustrates that, there were highly significant positive correlations between types of drug use, methods of drug use and diagnosis. Also, there were significant positive correlations between desired effects and diagnosis, methods of drug use with motivation for use. Moreover, there were significant positive correlations between depression and anxiety. In addition, this table shows that, there were highly significant positive correlations between socioeconomic status level, anxiety and depression ( $r=.269$  &  $p=.007$ ).

**4. Discussion**

Drug addiction is one of the most life threatening illnesses worldwide, which can be associated with adverse consequences related to repeated use of the substance. Untreated drug addiction might result in disturbances in social, occupational, or recreational activities. Furthermore,

intoxication and withdrawal might have devastating impacts on health [21].

The current study finding showed that the mean age of the studied sample was  $29.27 \pm 7$ . This finding was similar to previous study that, reported by [22] who found that, the mean age of the studied sample were  $28.8 \pm 8.31$  also, However, this finding was contradicted with other study that, reported by [23] who found that, mean age of the studied sample were  $43 \pm 10.4$ .

Also more than half of them were at age group ranged from 21 to 30 years old and single in addition more than two third of them graduated from secondary school. In this respect, [24] found that, about more than half of the study group graduated from secondary school. This might be attributed to cultural differences and many life stressors who faced the individual in this age group such as inability to form a

family and inability to get a job commensurate with qualification. Travel outside the country look for a job and become far from their country and their family, meeting bad friends who encourage them to take drugs to forget problems, give him strength and energy to work more and escape from life stressors.

The current study revealed that, more than half of the studied sample was poly drug addict and more than one third of them used mixed types as (Tamol or tramadol-Hashish Opium). This result was consistent with finding of [25] who revealed that, more than half of the studied sample was poly drug addict.

Also, [26] found that, more than half of studied sample used mixed types as (Tamol or tramadol, Hashish, Opium). This might be related to the studied sample prefer to take more than one type of drug, to feel more euphoric. Also, they believe that taking more than one type of drug might increases their ability of sexuality more than to take one type of drugs, as reported by the patients. Whereas, this finding was not supported by [27] who found that, the majority of the studied sample was single drug addict.

The current study showed that, more than two thirds of the studied sample used drug orally. In this respect, [28] found that, more than two thirds of the studied sample used drug orally. This finding could be explained by; oral method is easily used, has low risk and is available method to drug addict people. Also, drug addict people prefer administrating drugs by oral method rather than injectable method because they believe that, injectable method is difficulty to be used, more dangerous, have more dangerous side effects and more expensive than oral method, as reported by the patients. In contrast with [29] who found that, more than one quarter of the study group used drug injectable.

As regard duration of abuse, the present study revealed that, the majority of the studied sample used drug more than one year. This result was consistent with the finding of [30] who demonstrated that, the majority of the study group used drug more than one year. This might be attributed to the drug addict people believe that, drug addiction becomes a part of their daily life habit for them and unable to dispense about drug addiction, this is according to the researcher's opinion of the current study.

Also more than one thirds of the studied sample used drugs because companionship of bad friends motivated them to drugs use. This finding was similar with [31] who found that, more than one thirds of the studied sample used drugs because of bad friends. Whereas, this finding was contrary with [31] who found that, more than two thirds of the studied sample used drugs because of weakness of sexual ability. This might be explained by, drug addict people take the drugs because of a lot of sit with bad peers and their affect and love to share with them in drug use.

As regard desired effects of drugs, the present study revealed that, more than two third of the studied sample used drugs because of stimulation to work. This finding partially supported with [33] who found that, more than one thirds of the studied sample used drugs because of stimulation to work. This might be explained by that, drug addict people believed that drug addiction give them strength and energy that stimulate them to work, as reported by the patients. Whereas, this finding was not supported by

[32] who found that, more than two thirds of the study group reported that, they used drugs because of feeling of sexual potency.

The present study revealed that, more than one third of the studied sample had severe levels of anxiety and more than half of them had severe level of depression. This finding was similar to [34] who showed that, more than two thirds of the studied sample had severe level of anxiety and also [35] who found that, more than half of the studied sample had severe level of anxiety. This could be explained by anxiety commonly presents as a symptom of drugs withdrawal.

In addition, this finding was congruent with [36] who demonstrated that, more than half of the studied sample had severe level of depression. In this respect, this finding partially supported by [37] who found that, more than one third of the studied sample had severe level of depression.

The present study showed that, anxiety was positively and significantly correlated with depression. This might be related to anxiety as a state of emotional disturbance caused by a chemical disturbance in the centers of emotion in the brain which is correlated with depression, which leads to similar symptoms such as mental distraction and inability to concentrate and hesitate in making decisions. Also, depression is the seventh and final stage in the development of anxiety, and that it is normal and expected to become anxious patients pessimistic and depressed with their sense of disability and inability to bear life [38].

Similarly [24] revealed that, anxiety is positively and significantly correlated with depression. While, this finding was contradicted with [39] who found that, anxiety was positively and non-significantly correlated with depression. In addition [40] reported that; drug addiction can cause depression and depression can cause drug addiction. There are a number of drugs that people use and abuse that can directly affect the brain and cause depression. For example, marijuana slows down brain functioning and diminishes cognitive abilities and can cause depression in a significant number of individuals and alcohol can do the same thing.

Similarly [41] reported that, depression is frequently co-occurring with drug addiction. The relationship between the two disorders is bi-directional, meaning that people with drug addiction are more likely to suffer from depression, and vice versa. People who are depressed may drink or abuse drugs to lift their mood or escape from feelings of guilt or despair. Also, [42] reported that, drug addiction may elicit feelings of shame, guilt, and powerlessness which may contribute to higher anxiety and depressive symptoms.

The present study illustrated that, there were highly significant positive correlations between patterns of drug addiction. Socioeconomic status level, anxiety Inventory scale and depression Inventory scale. This finding supported by [43] who stated that, drug addiction, anxiety and depression that develop independently of intoxication and withdrawal are among the most prevalent psychiatric disorders in the United States. Associations between most drug addiction, anxiety and depression were overwhelmingly positive and significant, suggesting that treatment for a co- morbid anxiety or depression should not be withheld from individuals with drug addiction.

In this respect [44] found that, drug addiction; anxiety and depression are frequently co-occurring. Approximately, 41% to 65% of persons with drug addiction also have a

history of at least one anxiety and depression, and approximately 50% of persons with anxiety and / or depression also have a lifetime history of at least one drug addiction. In addition, this finding was in agreement with, <sup>[45]</sup> who found that, there were statistically significant differences between personal data and levels of socio-economic status among studied sample. While, <sup>[46]</sup> demonstrated that, there were no statistically significant differences between personal data and levels of socio-economic status among study group except residence and level of education. Also, <sup>[47]</sup> found that, there were no statistically significant differences between personal data and levels of socio-economic status among studied sample.

## 5. Conclusion

**Based on the results of present study, it can be concluded that**

Anxiety was positively and significantly correlated with depression ( $r = 0.777^{**}$  &  $p = 0.001$ ). There were highly significant positive correlations between types of drug use, methods of drug use and diagnosis. Also, there were significant positive correlations between desired effects and diagnosis, methods of drug use with motivation for use. In addition, there were highly significant positive correlations between socioeconomic status level, anxiety and depression ( $r = .269$  &  $p = .007$ ).

## 6. Recommendations

**Based on the current study findings, the following recommendations are suggested:**

1. Proper follow up and management of psychological problems among addict people to prevent relapse.
2. Prophylactic youth programs should involve the whole family members and healthy productive activities should be provided for youth in the community.

## 7. References

1. Csiernik R. Substance use and abuse: Everything matters, Canadian Scholars' Press. 2016; 12(1):1-20.
2. American Medical Association. Substance abuse and mental health, anxiety, depression and drug addiction, help guide.org, 2015, 47-57.
3. Mohamed R, Hammad A, El Hamrawy G, Rajab Z, El Bahy S, Soltan R. Dual diagnosis and psychosocial correlates in substance abuse in Menoufia, Egypt, Menoufia Medical Journal. 2014; 26(2):114.
4. Hamdi E, Sabry N, Sedrak A, Khowailed A, Loza N. Socio-demographic Indicators for Substance Use and Abuse in Egypt. J Addiction Prevention. 2016; 4(1):8-14.
5. Sussman S, Skara S, Ames S. Substance abuse, Preventing drug use among adolescents Subst Use Misuse: 2010; (43):18-28.
6. Mather C, Rehm J, Popova S. National Drug Intelligence Center, The Economic Impact of Illicit Drug Use on American Society, Global burden of disease and injury and economic cost attributable to alcohol use and drug use. 2015; 73(82):223-233.
7. Kushner M, Krueger R, Frye B, Peterson J. Epidemiological perspectives on co-occurring anxiety and drug addiction, Anxiety and drug addiction. New York: Springer, 2010, 3-17.

8. Comer B, Ronald J. Substance-Related Disorders. Depression symptoms, Abnormal Psychology, New York, NY: Worth. 2014; 8(2):278-298.
9. Philo A. Nurses roles on anxiety and drug addiction, Journal of Substance Abuse Treatment, 2014; 45(4):235-245.
10. Mohamed G, Fouad A. "Prevalence of substance abuse among adolescent school students in Zigzag. Egyptian Journal of Psychiatry. 2014; 35(3):161.
11. Gilbert D, John C, Dunkin G, Rudy S. Co-Occurring Disorders and Treatment, Anxiety and Substance Abuse. 2018; 24(9):1080-1088.
12. Compton W, Stinson F, Grant B. Lifetime of DSM-IV mood and anxiety disorders and specific drug use disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. Journal of Clinical Psychiatry. 2014; 17(2):247-257.
13. Fahmy S, El-Sherbini A. Determining simple parameters for social classifications for health research. Bulletin of the High, Institute of Public Health. 1983; 13(1):95-108.
14. El-Gilany A, El-Wehady A, El-Wasify M. Updating and validation of the socioeconomic status scale for health research in Egypt. Eastern Mediterranean Health Journal. 2012; 18(9):962-968.
15. Beck A, Epstein N, Brown G, Steer R. An inventory for measuring clinical anxiety, Psychometric properties, Journal of consulting and clinical Psychology. 1988; 5(6):893-897.
16. Soluman T. Standard characteristics of the Arabic Image of the Peak List of Anxiety in the State of Kuwait - Journal of Education and Psychological Sciences. 2015; 16(2):1-33.
17. Beck A. Inventory for measuring depression, Arch Gen psychiatry, 1961, 61-71.
18. Polger V, Michael S. Beck Depression Inventory, gale encyclopedia of mental disorders, encyclopedia, and com, 2003.
19. Abdel- Khalek A. Arabization and Preparation: Beck's instruction manual for depression. Alexandria: University Knowledge House, 1998.
20. Basher A. Department of Psychology – El-Hajj khdar University - Batna - Legalization of the second Aaron Tz Beck list for depression - Journal of the Arab Psychological Sciences Network, Issue 25-26 Winter & Spring, 2010, 1-17.
21. Ahmadi J, Arumalla V, Rayan A. Positive effect of low dose of buprenorphine in the treatment of severe hashish withdrawal craving: An original arcade. J Addict Depend. 2016; 2(2):1-13.
22. Hekmat S, Alam Mehrjerdi Z, Moradi A, Ekhtiari H, Bakhshi S. Cognitive flexibility, attention and speed of mental processing in opioid and methamphetamine addicts in comparison with non-addicts, Basic and Clinical Neuroscience. 2011; 2(2):12-19.
23. Bear U, Beals J, Novins D, Manson S. Alcohol detoxification completion, acceptance of referral to substance abuse treatment, and entry into substance abuse treatment among Alaska Native people, Addictive Behaviors. 2017; 16(5):25-32.
24. Nasirzadeh M, Eslami A, Sharifirad G, Hasanzadeh A. The mental health and substance abuse among youths



- aged 18 to 29: A comparative study, *Journal of education and health promotion*. 2013; 22(1):22-26.
25. Bornovalova M, Gratz K, Daughters S, Hunt E, Lejuez W. Initial RCT of a distress tolerance treatment for individuals with substance use disorders, *Drug and alcohol dependence*. 2012; 122(1-2):70-76.
  26. Ansari-Moghaddam A, Rakhshani F, Shahraki-Sanavi F, Mohammadi M, Miri-Bonjar M, Bakhshani N. Prevalence and patterns of tobacco, alcohol, and drug use among Iranian adolescents: A meta-analysis of studies, *Children and Youth Services Review*. 2016; 12(6):68-79.
  27. Meray M, Ahmed F, Rania A. Study of Drug Abuse among University Students in Sohag, Egypt, *Journal of Forensic, Toxicology and Medicolegal Analysis*. 2016; 1(2):19-23.
  28. Mohamed N, El Hamrawy L, Shalaby A, El Bahy M, Allah M. An epidemiological study of tramadol HCl dependence in an outpatient addiction clinic at Heliopolis Psychiatric Hospital, Menoufia Medical Journal. 2015; 28(2):59-66.
  29. Jabeen S, Raja S, Saeed S, Zafar M, Ghani A, Mahmood A, Raja G. Factors Influencing Vulnerability Towards Heroin Addiction in a Pakistani Cohort, *Pakistan J Zool*. 2017; 49(1):95-99.
  30. Womack S, Shaw D, Weaver C, Forbes E. Bidirectional associations between cannabis use and depressive symptoms from adolescence through early adulthood among at-risk young men. *Journal of studies on alcohol and drugs*. 2016; 77(2):287-297.
  31. El-Sawy H, Abdel Hay M, Badawy A. Gender differences in risks and pattern of drug abuse in Egypt, *Egypt J Neural Psychiatry* Nero surge. 2010; 47(1):413-418.
  32. Calsyn D, Cousins S, Hatch-Maillette M, Forchimes A, Mandler R, Doyle S, Woody G. Sex under the influence of drugs or alcohol, Common for men in substance abuse treatment and associated with high-risk sexual behavior, *The American journal on addictions*. 2010; 19(2):119-127.
  33. Volkow N. Drug addiction, Brains and Behavior, *The Science of Addiction*, 2014; 44(1):570-580.
  34. Hodgson K, Almasy L, Knowles M, Kent W, Curran E, Dyer D *et al*. Genome-wide significant loci for addiction and anxiety, *European Psychiatry*. 2016; 36(7):47-54.
  35. Horigian V, Weems C, Robbins M, Feaster D, Ucha J, Miller M *et al*. Reductions in anxiety and depression symptoms in youth receiving substance use treatment, *The American journal on addictions*. 2013; 22(4):329-337.
  36. Arseneault C, Alain M, Plourde C, Ferland F, Blanchette-Martin N, Rousseau M. Impact evaluation of an addiction intervention program in a quebec prison, *Substance abuse, research and treatment*. 2016; 11(9):22-64.
  37. Rohde P, Turner C, Waldron H, Brody L, Jorgensen J. Depression change profiles in adolescents treated for comorbid depression/substance abuse and profile membership predictors, *Journal of Clinical Child & Adolescent Psychology*. 2018; 47(4):595-607.
  38. Nagy D. Relationship between anxiety and depression, anxiety and depression, *Journal of psychiatric nursing*. 2016; 25(13):187-190.
  39. Mannarini S, Boffo M. Anxiety, bulimia, drug and alcohol addiction, depression, and schizophrenia: what do you think about their etiology, dangerousness, social distance, and treatment? A latent class analysis approach, *Social psychiatry and psychiatric epidemiology*. 2015; 50(1):27-37.
  40. David B. Substance abuse, what is the relationship between depression and substance abuse? *Journal of Substance Abuse Treatment*. 2011; 20(2):119-125.
  41. Smith K. Depression, Depression and Related Conditions, *Substance Abuse and Depression*, Vertical Health LLC, 2018, 29-30.
  42. Safran S, Pollack M. Internal cue exposure and the treatment of drugs abuse, *Lessons from the treatment of panic disorder*, *Journal of Anxiety Disorders*. 2012; 18(5):69-87.
  43. Fisher S, Sheehan C, Stevens D, Hargons C. Alcohol-Related Disorders and Other Substance Use Disorders, *In Handbook of DSM-5 Disorders in Children and Adolescents*, Springer, Cham. 2017, 539-562.
  44. Vazquez H, Forte A, Camino S, Tondo L, Baldessarini R. Treatment implications for bipolar disorder co-occurring with anxiety syndromes and drug addiction, *The Treatment of Bipolar Disorder, Integrative Clinical Strategies and Future Directions*. 2017; 52(2):21-43.
  45. Raeisei A, Arbabisarjou A, Mojahed A. An Investigation of the Socio-Economic Status of the Addicts in Lashar and Nikshahr County and Its Comparison with Ordinary People, *Global journal of health science*. 2015; 7(3):194-204.
  46. Patrick M, Wightman P, Schoeni R, Schulenberg E. Socioeconomic status and substance use among young adults: a comparison across constructs and drugs, *Journal of studies on alcohol and drugs*. (2012); 73(5):772-782.
  47. Richardson L, Wood E, Kerr T. The impact of social, structural and physical environmental factors on transitions into employment among people who inject drugs, *Social Science & Medicine*. 2013; 76(2):126-133.