

إقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

Risk Factors of Drugs Dependence Among People in Gaza Strip

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The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

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Risk Factors of drugs dependence Among People in Gaza Strip

**A Thesis Submitted in Partial Fulfillment of Requirements for
the degree of Master in community mental health**

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نتيجة الحكم على أطروحة ماجستير

بناءً على موافقة عمادة الدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحث/ إبراهيم حسن حسين ربيع لنيل درجة الماجستير في كلية التربية/ قسم صحة نفسية ومجتمعية- علوم التمريض وموضوعها:

Risk Factors of Drugs Dependence Among People in Gaza Strip

وبعد المناقشة التي تمت اليوم السبت 11 رمضان 1434هـ، الموافق 2013/07/20م الساعة الثانية

عشرة ظهراً، اجتمعت لجنة الحكم على الأطروحة والمكونة من:

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علوم التمريض.

واللجنة إذ تمنحه هذه الدرجة فإنها توصيه بتقوى الله ولزوم طاعته وأن يسخر علمه في خدمة دينه ووطنه.

والله ولي التوفيق،،،

عميد الدراسات العليا

د. فؤاد علي العاجز
أ.د. فؤاد علي العاجز



﴿يَا أَيُّهَا الَّذِينَ آمَنُوا إِنَّمَا الْخَمْرُ وَالْمَيْسِرُ وَالْأَنْصَابُ وَالْأَزْلَامُ
رِجْسٌ مِّنْ عَمَلِ الشَّيْطَانِ فَاجْتَنِبُوهُ لَعَلَّكُمْ تُفْلِحُونَ﴾ إِنَّمَا يُرِيدُ
الشَّيْطَانُ أَنْ يُوقِعَ بَيْنَكُمُ الْعَدَاوَةَ وَالْبَغْضَاءَ فِي الْخَمْرِ وَالْمَيْسِرِ
وَيَصُدَّكُمْ عَنْ ذِكْرِ اللَّهِ وَعَنِ الصَّلَاةِ فَهَلْ أَنْتُمْ مُنْتَهُونَ﴾

صدق الله العظيم

سورة المائدة

الآية [90-91]

Abstract

Drug dependence is one of most common mental health problem among young age people in Gaza strip . The incidence rate of new registered addiction mental disorders where 1.8 per 100,000 population in Palestine . Where the total estimation of addictive persons were nearly (1300) cases registered in the Psychiatric primary care centers in the Gaza Strip.

The aim of the study was to know of the risk factors of drugs dependence among people in Gaza Strip.

This study is non-experimental descriptive, Analytic retrospective design. This study focused on the Risk Factors of drugs dependence with its different domains among addict patients in Gaza strip

The study used a random sample design to select a representative sample of male 18 to 62 years, where treated in addiction clinic in Gaza psychological rehabilitation center and psychiatric primary care clinics in the Gaza strip.

A systematic random sample of (306) male participants, which attending and registers to treat from drugs dependence in 4 Psychiatric primary care centers in Gaza Strip.

Exclusion criteria include all clients who don't have file in Governmental community mental health centers or alcoholic patients, 4 patient were excluded and the final sample size was 302, no female drug dependence patient registered in community mental health centers.

Data were collected from patients through structured interview using a Self-prepared 64 items questioner to determine the severity of the factors affecting the measurements of addiction and abuse.

Statistical significance was calculated by using SPSS computer software program

Results showed that: Risk Factors of drugs dependence Among People in Gaza Strip is 52.1% . The highest risk is Psychological dimension 74.1%, , followed by social dimension and Physical dimension 58%, then political and occupation influence dimension 52.2%. constitutes of the risk is family dimension 43.2%. the lowest risk factors is spiritual dimension 21%.

The most of the subjects were taking Tramadol 33.1%, were taking cannabis 14.1%, taking assival 16.9%, were taking cocaine 11.9%, were taking others 10.6%.

Conclusion: The most risk factors that precipitate drug dependence was psychological factor. Tramadol abuse was the most common type of drug dependence in Gaza strip .

مستخلص الدراسة باللغة العربية

خليفة الدراسة

يعتبر الإدمان من أكثر مشاكل الصحة النفسية شيوعاً بين الشباب في قطاع غزة ، ولقد كان معدل حالات الإدمان الجديدة المسجلة 1.8 حالة لكل 100,000 مواطن في فلسطين. بينما كان العدد الإجمالي لعدد حالات الإدمان المسجلة في عيادات الصحة النفسية في قطاع غزة ما يقارب 1300 حالة.

هدف الدراسة : تهدف هذه الدراسة لمعرفة عوامل الخطر لظاهرة الإدمان بين السكان في قطاع غزة.

منهج الدراسة: اعتمدت الدراسة علي المنهج الغير تجريبي الوصفي التحليلي الارتدادي .

ولقد ركزت هذه الدراسة علي العوامل الخطيرة التي تؤدي للإدمان علي العقاقير بجوانبها المختلفة عند المدمنين في قطاع غزة. ولقد استخدمت الدراسة الطريقة العشوائية لاختيار عينة ممثلة للمجتمع من عمر 18-62 سنة الذين تم معالجتهم في عيادة الإدمان في مركز التأهيل النفسي بغزة ومراكز الصحة النفسية المجتمعية في القطاع. ولقد اختيرت العينة بطريقة عشوائية منتظمة من 306 مدمناً ، تم تسجيلهم في أربعة مراكز للصحة النفسية المجتمعية في قطاع غزة. ولقد تم استثناء المدمنين غير المسجلين في مراكز الصحة النفسية المجتمعية الحكومية والمدمنين علي الكحول ، وعددهم 4 مرضى، وكان حجم العينة النهائي 302 مريضاً ، ولم تتضمن الدراسة أية مدمنة من الاناث ، حيث لم توجد حالات من الاناث مسجلة في عيادات الصحة النفسية المجتمعية الحكومية.

وقد تم جمع المعلومات من المرضى من خلال مقابلة منظمة باستخدام استبيان معد ذاتياً من 64 فقرة لتحديد العوامل التي أدت إلي الإدمان على العقاقير. وقد تم حساب الدلالة الاحصائية باستخدام الحقيبة الاحصائية للعلوم الاجتماعية.

النتائج: أظهرت الدراسة أن نسبة شيوع عوامل الخطر للإدمان علي العقاقير بلغت 52.1%، بينما شكل العامل النفسي أعلى بنسبة 74.1%، بينما العامل الاجتماعي والجسدي بنسبة 58% والعامل السياسي الناتج عن الاحتلال بنسبة 43.2%، بينما كان أقل عوامل الخطر العامل الروحاني بنسبة 21%.

ولقد كان معظم أفراد العينة يتعاطون الترامادول بنسبة 33.1%، بينما الذين يتعاطون الحشيش بنسبة 14.1% والذين يتعاطون الأسيفال بنسبة 16.9% بينما كانت نسبة الذين يتعاطون الكوكائين بنسبة 11.9% وكانت نسبة الذين يتعاطون عقاقير أخرى 10.6%.

الاستنتاج: لقد كان أكثر العوامل التي ساعدت على الإدمان العامل النفسي ،وقد كان الترامادول أكثر أنواع العقاقير المخدرة إدماناً في قطاع غزة. وقد فسرت هذه النتائج في ضوء الاطار النظري والبحوث والدارسات السابقة ،وفي ضوء الثقافة الفلسطينية السائدة في قطاع غزة.

Dedication

To my father,

To my mother,

To my wife,

To my children,

To my brother,

To my sister ,

To my friends ,

To endless support,

To encouragement,

To patience.

Ibrahim H. Rabeea

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I thank the patients who participated in this study and I wish to them good health and wellness.

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Ibrahim H. Rabeea

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Abbreviations

AA	Alcoholics Anonymous
ADHD	Attention-Deficit/Hyperactivity Disorder.
AIDS	Acquired Immune Deficiency Syndrome.
APA	American Psychiatric Association`
ATOD	Alcohol, Tobacco, and Other Drugs.
BAC	Blood Alcohol Concentration
BMI	Body Mass Index.
CMH	Community Mental Health
CNS	Central Nervous System.
CPP	Conditioned Place Preference.
DEA	Drug Enforcement Administration.
DMT	Dimethyltryptamine.
DOM	Dimethoxymethyl-Amphetamine.
DOM	Dimethoxymethyl-Amphetamine.
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders, 4th edition, text revision.
FDA	Food and Drug Administration.
GCMHP	Gaza Community Mental Health Program
GGs	Gaza Governorates
GHB	Gamma-Hydroxybutyrate.
GS	Gaza Strip
GSHS	Global School-based Health Survey.
HBSC	Health Behavior in School-aged Children.
HP	highly palatable.
ICD-10	International Classification of disease-Ten edition

IPPA	Inventory of Parent and Peer Attachment.
IUG	Islamic University of Gaza
IM	Intramuscular.
IV	Intravenous.
LSD	lysergic acid diethylamide
MHW	Mental Health and Wellbeing.
MDA	methylenedioxy amphetamine.
MDMA	methylenedioxy-amphetamine.
MOH	Ministry of health.
NA	Narcotics Anonymous.
NGOs	Non-Governmental Organizations
NIAAA	National Institute on Alcohol Abuse and Alcoholism.
NIDA	National Institute on Drug Abuse.
OTC	Over-the-Counter.
PAA	Palestine Autonomous Areas.
PCP	Phencyclidine.
PPF	Palestinian Police Forces.
SS	Sensation-Seeking.
SSDS	Sudden Sniffing Death Syndrome
TCYL	Take Charge of Your Life.
TLR	Toll-like receptor .
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
WB	West Bank
WHO	World Health Organization.

Chapter one

Background

1.1 Introduction:

Drug addiction is a chronic, relapsing disorder in which compulsive drug-seeking and drug-taking behavior persists despite serious negative consequences. Addictive substances induce pleasant states (euphoria in the initiation phase) or relieve distress. Continued use induces adaptive changes in the central nervous system that lead to tolerance, physical dependence, sensitization, craving, and relapse. The addictive drugs discussed here are opioids, cannabinoids, ethanol, cocaine, amphetamines, and nicotine (Hanson et al., 2012). Drugs dependence appear to be given extra nourishment in a climate of disadvantage and deprivation. Clearly that is not the whole story; there are other factors in place, some of which are in individuals as individuals (Mooney, 2005). Drugs dependence defined as a progressive, chronic, relapsing brain disease that involves compulsive substance (drug, alcohol, or tobacco) seeking behavior and loss of control, despite negative physical, mental, and social consequences. drugs dependence is a primary, chronic, neurobiological disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving (AAPM., 2001). drugs dependence that can affect people is one where they use drugs. While some drug addicts become hooked on illegal drugs, others develop a problem with a dependent on prescription medications. Most of these are both physically and psychologically addictive. As a person continues to use the drug, they build up a tolerance to it and they need to take higher doses in an attempt to get the same effect as when they started using.

According to the current Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), substance dependence is defined as: When an individual persists in use of alcohol or other drugs despite problems related to use of the substance, substance dependence may be diagnosed. Compulsive and repetitive use may result in tolerance to the effect of the drug and withdrawal symptoms when use is reduced or stopped. This, along with Substance Abuse are considered Substance Use Disorders (Anthony JC, 2003).

Substance dependence can be diagnosed with physiological dependence, evidence of tolerance or withdrawal, or without physiological dependence. By the American Society of Addiction Medicine definition, drug addiction differs from drug dependence and drug tolerance. It is, both among scientists and other writers, quite usual to allow the concept of drug addiction to include persons who are not drug abusers according to the definition of the American Society of Addiction Medicine. The term drug addiction is then used as a category which may include the same persons who, under the DSM-IV, can be given the diagnosis of substance dependence or substance abuse (Marlatt et al., 2003).

Several theories of drug addiction exist, some of the main ones being genetic predisposition, the self-medication theory, and factors involved with social/economic development. There are strong associations between poverty and addiction (Koob, 2000). It has long been established that genetic factors along with social and psychological factors are contributors to addiction. A common theory along these lines is the self-medication hypotheses. Similar rates of heritability for other types of drug addiction have been indicated by other studies (Cheron 2001).

Knestler hypothesized in 1964 that a gene or group of genes might contribute to predisposition to addiction in several ways. For example, altered levels of a normal protein due to environmental factors could then change the structure or functioning of specific brain circuits during development. These altered brain circuits could change the susceptibility of an individual to an initial drug use experience (Hanson et al. 2012).

Similar patterns across age groups are seen with illicit drug use, including the use of marijuana, methamphetamine, cocaine and crack, heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic drug used nonmedically. Although, the overall percentages of illicit drug use among all age groups in Oklahoma are lower than U.S. averages. However, when asked about illicit drug dependence or abuse, once again the percentages for Oklahoma are near or above U.S. averages (Interim Report, 2003).

It is estimated that 18 million Americans abuse or are addicted to alcohol. Some 12.8 million, or about 6 percent of the nation's population aged 12 and over, have used illegal drugs within the last 30 days. Another 11 million abuse tranquilizers and other psychotropic drugs. Nearly half of Americans report knowing someone with a substance abuse problem. The economic cost of addiction is staggering - it is estimated that every man, woman and child in the U.S. pays nearly \$1,000 a year for unnecessary health care, extra law enforcement, auto crashes, crime and lost productivity resulting from substance abuse. The emotional and psychological costs are immeasurable (McAfee et al., 1998). The prevalence of mental and addictive disorders in the United States for both men and women is obvious, especially when one considers the fact that addictive disorders (nicotine, alcohol, calorie) are major risk factors for heart disease, cancer, stroke, and road traffic collisions (Interim Report, 2003).

The evidence linking deprivation and drugs dependence is strong. Where the gradient from most affluent to most deprived for risk of dependence on alcohol, nicotine and drugs in Great Britain. The relative risk of most deprived to most affluent is, in one instance, nearly 10. Again, in Australia, the causes of Aboriginal ill-health can often be interpreted in terms of deprivation and addiction (Mooney, 2005).

Finally; (MOH, 2006) reported that incidence rate of mental disorders in 2005 was higher than that reported in 2000. This is mainly due to psychological trauma and stress that affected Palestinian people as a result of the Israeli violence during Al Aqsa intifada. In Palestine, 2,261 new cases of mental disorders were reported at the community mental health clinics.

1.2 Study problem

Today, drug abuse is a major problem worldwide. A new government report finds that rates of substance abuse are far higher in people with mental illness.

Drug dependence mainly Tramadol dependence is the most prevalent mental disorder among youth in Gaza strip. (General Directorate of Mental Health Report, 2012). it has a wide range of physiological, social and economic complications on the patient and his family and on the community as a whole.

This study explore the range of this problem and its related psychological, social,

family, physical, spiritual and political risk factors. when identifying the severity of influence of these risk factors, we can develop primary preventive programs to decrease the incidence and prevalence of this community mental health problem.

In Palestine, There are no previous studies to detect factors that lead to serious drug addiction to now , so it is important to conduct this study to identify the most Risk factors in the Gaza Strip.

1.3 Study Justification

This study comes at a time when the Palestinian population have been living in a conflict area for generations, which has rendered their lives miserable. In this most populous area in the world, many people have been exposed to traumatic life experiences. With the everlasting deterioration in the Palestinian difficulties and its ramifications on the economy and living conditions, findings from this study would provide the population-based prevalence estimates of risk factors for addiction. Such information will aid in planning and setting up scientific-based strategies and policies. For example, because of the scarcity of resources, findings will help determine areas with the most need for sustainable community programs and services for treating and diagnosing risk factors for addiction among Palestinian people.

1.4 Aim of the study

To know of the risk factors of drugs dependence among people in Gaza Strip.

1.5 Specific objectives:

- To estimate the prevalence of types of drugs dependence among the study sample.
- To explore the major risk factors for drugs dependence among the study sample.
- To identify the demographic and socio-economic factors affecting the prevalence of drugs dependence among the study sample.
- To identify the psychological risk factors affecting the prevalence of drugs dependence among the study sample.
- To investigate the correlation between demographic data and risk factors for drugs dependence among the study sample.
- To discover of other needed area of research on drug dependence.

1.6 Study questions

This study aimed to answer the following questions:

1. What is the explore the major risk factors for drugs dependence among people In Gaza Strip.
2. What is the prevalence of types of drugs dependence among the study sample in the Gaza Strip.
3. Is there differences between Age and risk factors for drugs dependence drugs dependence among the study sample in the Gaza Strip.
4. Is there differences between age of onset of drugs dependence and risk factors for drugs dependence among the study sample in the Gaza Strip.
5. Is there differences between size of family and risk factors for drugs dependence among the study sample in the Gaza Strip.
6. Is there differences between Occupation before drug dependence and risk factors for drugs dependence among the study sample in the Gaza Strip.
7. Is there differences between marital status and risk factors for drugs dependence among the study sample in the Gaza Strip.
8. Is there differences between place of residence and risk factors for drugs dependence among the study sample in the Gaza Strip.
9. Is there differences between educational level and risk factors for drugs dependence among the study sample in the Gaza Strip.
10. Is there differences between Current occupation and risk factors for drugs dependence among the study sample in the Gaza Strip.
11. Is there differences between family income and risk factors for drugs dependence among sample in the Gaza Strip.
12. Is there differences between governorate of residence and risk factors for drugs dependence drugs dependence among the study sample in the Gaza Strip.

1.7 Context of the study:

Gaza strip is a small area of Palestine, it is about 362 square kilometers, with length about 45 kilometers, and width ranging between 6-12 kilometers, it lies between Egypt, Mediterranean Sea and occupied Palestine. Most of the populations are refugees; they are distributed at five cities, eight refugee camps and about eight villages. It is divided into five governorates; the North, Gaza, Middle, Khanyounis, and Rafah governorate (UNRWA, 2006).

MOH, (2006) In Gaza Strip, the population density is 3,808 inhabitants/km², that comprises the following main five governorates: (EL-Buhaisi, 2010).

- North of Gaza constituted 17% of the total area of Gaza strip and 1.0% of total area of Palestinian territory area with area 61 sq. Km. The total number of population living in North Gaza is to be 265,932 individuals in 2005 with capita per 4,360sq Km.

- Gaza City constituted 20.3% of the total areas of Gaza strip and 1.2% of total area of Palestinian territory area with area 74 sq. Km. The total number of population living in Gaza City is 487,904 individuals in 2005 with capita per 6,593 sq Km.
- Mid-Zone constituted about 15% of the total area of Gaza Strip and 1.0% of total area of Palestinian territory area with area 58 sq. Km. The total number of population living in Mid-Zone is 201,112 individuals in 2005 with capita per 3,467 sq Km.
- Khan younis constituted about 30.5% of the total area of Gaza strip and 1.8% of total area of Palestinian territory area with area 108 sq. Km. The total number of population in Khan younis is 269,601 individuals in 2005 with capita per 2,496 sq Km.
- Rafah constituted about 16.2% of the total area of Gaza strip and 1.1% of total area of Palestinian territory area with area 64 sq. Km. The total number of population in Rafah is 165,240 individuals in 2005 with capita per 2,582 sq Km.

The total number of Palestinian people according to the estimation 2010 was (4,048,403) of which (50.8%) are males, and (49.2%) are females, (MOH, 2010:23). Estimated population number in Palestine is 4,048,403. In Northern governorate (West Bank) 2,513,283, and in Southern governorate (Gaza Strip) 1,535,120. (MOH, 2010).

1.8 Drug Addiction in Palestine:

The situation, with regard to drug abuse, is difficult to assess due to the lack of reliable data and statistics. Drug abusers in Palestine are faced with socially imposed inhibition to admit their dependence and seek treatment (see moral model of addiction). Any how it is believed that there are 25-30 thousands abusers in Palestine, among them there are 3-5 thousands addicts (PPF, Al-Quds, 2000).

The Palestinian Police Forces (PPF), reported small-scale cultivation of both cannabis and opium in the Palestine Autonomous Areas (PAA), the PPF efforts resulted in the destruction of 3415 cannabis plants in 1996, and some 1060 plants of opium poppy have been destroyed in 1995; there are no reports of illicit drug manufacture or diversion of precursors. Trafficking of drugs is confined mostly to male workers commuting in and out of the areas under Palestine authority, the most trafficked drug is cannabis products. Seized drugs include Banjo, heroin, Opium, cocaine, and sedatives (Jayousi, 2003).

Heroin is seized mainly in the West Bank, where possession and illicit trafficking of amphetamines, flunitrazepam (Rohypnol) and fenetyline (Captagon) are also more widespread. Cocaine appears to be more prominent in Gaza. The latter phenomena may reflect the purchase power of some parts of the Gaza society, whereas the former patterns may be due to both the influence of the Israeli illicit market and the vicinity of the west bank to the trafficking route in neighboring Jordan.

The incidence rate of new registered addiction mental disorders where 1.8 per 100,000 population in Palestine (MOH, 2006). Where the total estimation of addictive persons were nearly (1300) cases registered in the Psychiatric primary care centers in the Gaza Strip. The leading cause of death in teenagers is automobile accidents, often related to drinking alcohol. Use and abuse of alcohol at an early age also increase the risk for lifelong dependence on alcohol (Interim Report, 2003).

According to Annual report of general directorate of mental health of ministry of health 73 New case of drug dependence was refueled to CMH clinic during 2012.

The general directorate for controlling the psychoactive substance Repot indicated that tramadol was the most commonly used drug in Gaza strip as illustrated in Annex "5".

According to indicators of crime's monthly reports which conducted by the Public Prosecution, the number of drugs-related issues, are including trading and abuse for the year 2011, 508 narcotic drug case and 1197 case of Tramadol. In 2012, 881 narcotic drug case and the 1196 case of Tramadol. The percentage of abusers was 80% of the total cases. (Public Prosecution, 2013).

1.9 History of Drug Dependence:

The history of drug goes back to 5000 B.C when the summaries used opium, suggested by the fact that they have an ideogram for it which has been translated as Hull, meaning "joy" or "rejoicing", the earliest production of alcohol began 3500 B.C in Egypt. In Greece, the Aphrastus (371-287 B.C) a Greek naturalist and philosopher, recorded what has remained as the earliest undisputed reference to the use of poppy juice, the use of tea in china began five thousand years ago, but only in year 350 A.D., they mentioned it in a Chinese dictionary.

History of tobacco smoking began in the year 1493, it was introduced into Europe by Columbus and has crew returning from America, two hundred years after, in Russia, CZAR Michael executed any one on whom tobacco is found; Czar Alexei rules that anyone caught with tobacco should be tortured until he gave up the name of the supplier; the use of tobacco was prohibited also in Bavaria, Saxony and in Zurich, and Sultan Murad (IV) of the ottoman Empire decrease the death penalty for smoking tobacco, he punished the smokers by beheading, hanging or crushing their hands and feed. History of drugs anyway is not separated from policy, in 1717 liquor licenses in Middlesex (England) was granted only to those who "would take oaths of allegiance and of belief in the king's supremacy over the church" (Jayousi,2003).

Early, more than two hundred years ago the physicians began to study the adverse effect of drugs on both the somatic and psychological wellbeing of man. Benjamin Rush published his "Inquiry into the effects of ardent spirits on the human body and mind" .in it calls the intemperate use of distilled spirits a "DISEASE" and estimates the annual rate of death due to alcoholism in the U.S. as not less than 4000people in a population then less than 6million. Five years after his publication ,Rush persuades his associates at the Philadelphia college of physicians to send an

appeal to congress to impose such heavy duties upon all distilled spirits as shall be effective to restrain their intemperate use in the country (Marlatt et al.,2003).

Three hundred years after Columbus introduced tobacco into Europe, Napoleon's army, returning from Egypt in 1800, and writers in Paris develop their own cannabis ritual, leading in 1844 to the establishment of "Le club de Haschischins" (William A. Emboden) (Anthony JC,2003).

As we mentioned, the opium was widely used in China and the far east nearly one thousand years ago, Poverty obliged the people to use opium in order to increase their ability to endure fatigue and starvation, but in the end of the eighteen century, the first prohibitory laws against opium in China are promulgated and the punishment for keepers of opium shapes was strangulation. But that laws were not enough, China interred two wars to keep opium away from her boundaries and to end the control of Great Britain upon opium (Goldman & Maryland, 2000).

Medical personal, who is exposed to drugs, is at high risk to use and abuse these drugs, The John Hopkins Hospital in Maryland was opened in 1889, one of its world-famous founders, Dr. William Halsted, is a morphine addict. In the beginning of the last century in 1903 the composition of Coca- Cola was changed, coffin replaced cocaine, it contained until this time (Jayousi,2003).

The father of U.S. anti-narcotics laws, give cocaine to their Negro employees to get more work out of them. By the 1951, according to United Nations estimates, there are approximately 200 million marijuana users in the world, the major placed being Indian, Egypt, North Africa, Mexico and the United States.

In his speech in the white house, the American president announced that "More than 280metric tons of cocaine and 13 metric tons of heroine enter our country each year. There are 3.9 million drug users in America, who need, but who didn't receive help, illegal drugs cost our health care system almost\$ 15 billion a year (3.8 \$ billion for treatment). 70% of the world's opium trade comes from Afghanistan, resulting in the significant income to the Taliban (Ljubotina et al.,2004).

1.10 The Costs of Drug Use to Society:

Society pays a high price for drug addiction. Many of the costs are immeasurable - for example, broken homes, illnesses, shortened lives, and loss of good minds from industries and professions. The dollar costs are also enormous. The National Institute on Drug Abuse (NIDA) has estimated that the typical narcotic habit costs the user \$100 or more per day to maintain, depending on location, availability of narcotics, and other factors. If a heroin addict has a \$100-a-day habit, he or she needs about \$36,500 per year just to maintain the drug supply. It is impossible for most addicts to get this amount of money legally; therefore, many support their habits by resorting to criminal activity or working as or for drug dealers (Hanson et al, 2012).

Most crimes related to drugs involve theft of personal property - primarily, burglary and shoplifting and, less commonly, assault and robbery (often mugging). Estimates are that a heroin addict must steal three to five times the actual cost of the drugs to maintain the habit, or roughly \$100,000 per year. Especially with crack and

heroin use, a large number of addicts resort to pimping and prostitution. No accurate figures are available regarding the cost of drug-related prostitution, although some law enforcement officials have estimated that prostitutes take in a total of \$10 to \$20 billion per year. It has also been estimated that nearly three out of every four prostitutes in major cities have a serious drug dependency (Marlatt et al., 2003).

Another significant concern arises from the recent increase in clandestine laboratories throughout the country that are involved in synthesizing or processing illicit drugs. Such laboratories produce amphetamine-type drugs, heroin-type drugs, designer drugs, and LSD and process other drugs of abuse such as cocaine and crack. The DEA reported that 390 laboratories were seized in 1993, a figure that increased to 967 in 1995. Another example of the phenomenal growth of methamphetamine laboratories can be found in Missouri. From 1995 to 1997, seizures of such labs in Missouri increased by 535% (Steward and Sitarmiah 2003). “In Dawson County in western Nebraska. ‘The percentage of meth-related crimes is through the roof’. as reiterated by an investigator with the county sheriff’s office. In the state as a whole, officials discovered 38 methamphetamine laboratories in 1999; last year [2001] they discovered 179” (Hanson et al, 2012).

The reasons for such dramatic increases relate to the enormous profits and relatively low risk associated with these operations. As a rule, clandestine laboratories are fairly mobile and relatively crude (often operating in a kitchen, basement, or garage) and are run by individuals with only elementary chemical skills (Marlatt et al., 2003).

Another interesting discovery is that these laboratories are not always stationary in locations such as garages, barns, homes, apartments, and so on. Though these stationary “labs” predominate, especially in the production of methamphetamine, recently mobile labs have made an appearance: Cooking in cars and trucks helps producers in two ways: It eludes identification by law enforcement; and motion helps the chemical reaction [of methamphetamine production]. Motels are a new production setting. Clandestine labs are also set up in federal parklands, where toxic byproducts pose a danger to hikers and campers. (ONDCP 2002, 58).

1.11 Mental health services:

The Palestinian Authority’s MOH inherited from the Israeli military administration health services that had been neglected and starved for funds during the years of Israeli occupation (Giacaman et al., 2009).

Mental health was particularly neglected. While the Palestinian MOH, with support from the WHO, is continuing to make attempts to expand services beyond the hospital, most services continue to be hospital-based, fragmented and rooted in a biomedical oriented approach (WHO, WB and Gaza Office, 2006).

Currently, the Palestinian MOH operates two psychiatric hospitals, one in Bethlehem with 280 beds serving the WB, and another in Gaza City with 39 beds serving the GS. These hospitals have dominated in formally providing for the mentally ill, with community services remaining patchy. In 2004 the Ministry was operating 13 mental health outpatient clinics, 9 on the WB and 4 in the GS. The

mental health department of the Ministry of Education and Higher Education assures the addition, the UNRWA has been running a mixture of mental health and counseling services within the health and school system in the WB and GS with programs fluctuating in response to the vagaries of funding (Steering Committee on Mental Health, 2004).

By 1995 MOH run 6 CMH centers distributed through GGs; one of them based in Rafah governorate, one in Khan-Younis governorate, one in Mid-Zone, two in Gaza city and one in north Gaza, according MOH planning to cover mental health services in community based, these mental health center provide counseling for mentally ill client and psychopharmacology treatments.

MOH is the main statutory health provider in the outpatient responsible for supervision, regulation, licensure and control of the whole health services. Other health providers include UNRWA, health services belonging to national and international NGOs and some private health sector (for profit) organizations (WHO Final Report, February 2004).

1.11.1 Governmental mental health services:

In GGs, from 1978 to 2008, mental health services used to be under-resourced and fragmented. Part of it used to fall under the general directorate of primary health care, while the other part was under the general directorate of hospitals.

General Directorate of Mental Health consists of 3 departments: mental health services, mental health development and mental health rehabilitation. As well as, the Mental Health directorate runs one psychiatric hospital in Gaza city (now called psychosocial rehabilitation center) in addition to 6 government run CMH centers distributed on all GS districts as following; Al Sourani and West Gaza centers in Gaza governorate, Abu Shabak centre in the North governorate, Nasserite center in the Middle governorate, Gasser Al agha center in Khan-Younis governorate, Tal Al-Sultan center in Rafah governorate.

General Directorate of Mental Health at MOH has been established in 2008 to provide a comprehensive and integrative mental health services to meet our people needs, who suffer from difficult political and economic conditions because of the ongoing occupation and the strict siege imposed on Gaza, this increases stress related mental disorders. The following description of programs, activities and services were provided by General Directorate of Mental Health at MOH according to General Directorate of Mental Health Report (2010).

- **Treatment services:** Reception, assessment, diagnosis, follow-up, and treatment of psychiatric and neurological patients, children and adolescents and drug addicts by psycho-pharmacology, psychotherapy, nursing care, psychosocial support, counseling, psychometrics, electroencephalogram and hospitalization.
- **Training programs:** Supervision and training for students and graduates from the faculties of medicine, nursing and humanitarian sciences. In addition to train internship doctors and Palestinian board students. In-service training for staff

through training courses, study days, workshops, lectures, presentation, case study and courses through video-conference. Training of primary care practitioners on principles of mental health and common mental illness and how to deal with them through intervention guidelines. Organize training courses for other health practitioners in order to help them to provide bio-psycho-social services to clients organizing training courses for workers in other ministries and NGOs.

- **Health education programs:** Provide educational programs through audio and visual media. Provide community education lectures in schools, universities, kindergartens, summer camps, youth clubs and women's institutions.
- **Home visits program:** CMH team visit patients in their homes to assess their condition and give them the necessary treatment and guidance, and to provide their families with education and support and keep monitoring their psychological wellbeing in order to re-integrate the patients in their family and in the community.
- **Institutions visit program:** CMH team visit institutions, associations, youth forums, summer camps, schools and kindergartens to provide psychosocial support and counseling, health education and early detection of cases.
- **Scientific research:** Through organization of and participation in conferences, study days and workshops and provide advice and assistance to researchers. Through medical archive we make monthly and annual statistics about occupancy hospitalization rates, reviewers, and prevalence and incidence rates.
- **Counseling and psychological support program:** Provide psycho-social support to high school students through committee's exams. Provide family counseling programs to guide families to better ways to deal with their children, especially in crisis.
- **Rehabilitation services:** Mental health team provides rehabilitation services for mental health patients and drug addicts to integrate them in the community.
- **Coordination with local and international institutions:** Conduct visits to institutions, centers and associations working in mental health field to promote cooperation, coordination and exchange of expertise and integration of services. Coordinate with schools for early detection and management of mental disorders among children and adolescents. Assess cases and write medical reports for patients who are receiving welfare supports from the Ministry of Social Affairs and UNRWA. Evaluate criminal cases transferred from public prosecutor and courts in order to determine the degree of legal responsibility. Coordinate and cooperate with international organizations such as WHO for the development and organization of mental health services and developing the capacity of mental health workers (General Directorate of Mental Health Report, 2012).

1.11.2 Non-Governmental mental health services:

NGOs have pioneered provision of preventative and mental health services. A key NGO offering CMH services in the GS is the Gaza Community Mental Health Programme (GCMHP), which was established in 1990 to address population mental health needs in the midst of significant social upheaval. GCMHP has adopted a community based approach which not only offers clinical services but also works on public awareness efforts to combat the stigma of mental illness as well as preventative measures. GCMHP engages in advocacy, lobbying for such issues as the prevention of torture and the empowerment of women. GCMHP employs 45 professionals at four clinics and four women's centers across Gaza. Each clinic has a CMH team consisting of psychiatrist, psychologist, GP, social worker and psychiatric nurses. Also supporting units are available which employ an occupational therapist, a physiotherapist and an Electroencephalogram technician. Their priorities are women, children, victims of torture and other human rights violations, training and education (WHO Final Report, February 2004).

1.11.3 UNRWA mental health services:

In May/June 2002, UNRWA Gaza started a program in prevention in mental health, to answer the needs of the refugees during the second Intifada. It involves 66 counselors working in schools, medical centers and community centers in the camps. Activities are at the level of prevention and patients are referred when professionals in mental health are needed. The link with resources in the community is developed. The counselors are mainly involved in group counseling with parents, teachers, children, adolescents. A significant number of refugees attend the government-run mental health clinics. UNRWA have reported plans to develop a crisis intervention service by hiring 14 mental health counselors and, through NGOs, 15 CMH activists. They also state that they will contract private psychiatrists and psychologists to accept referrals of clients that cannot be managed by mental health counselors. UNRWA has indicated that they will pay for the first twelve sessions of treatment (WHO Final Report, February 2004).

1.12 Operational definitions

1.12.1 drugs dependence:

Drugs dependence is defined as a chronic, relapsing brain disease that is characterized by compulsive drug seeking and use, despite harmful consequences. It is considered a brain disease because drugs change the brain - they change its structure and how it works. These brain changes can be long lasting, and can lead to the harmful behaviors seen in people who abuse drugs.

Drug dependence was diagnosed according DSM4 criteria by psychiatrists.

1.12.2 Risk factors:

Risk factors include those individual or social factors associated with an increased likelihood of a negative outcome. Risk Factors can be related to biological, behavioral, and social/environmental characteristics. They include characteristics such as family history, depression or residence in neighborhoods where substance abuse is tolerated. where the more factors that place the child at risk for substance abuse, the more likely it is she or he will experience substance use.

The researcher was measured by personal data (age, sex, marital status ,family size, place of residence, education status, occupation, income). Will be obtained from client file .

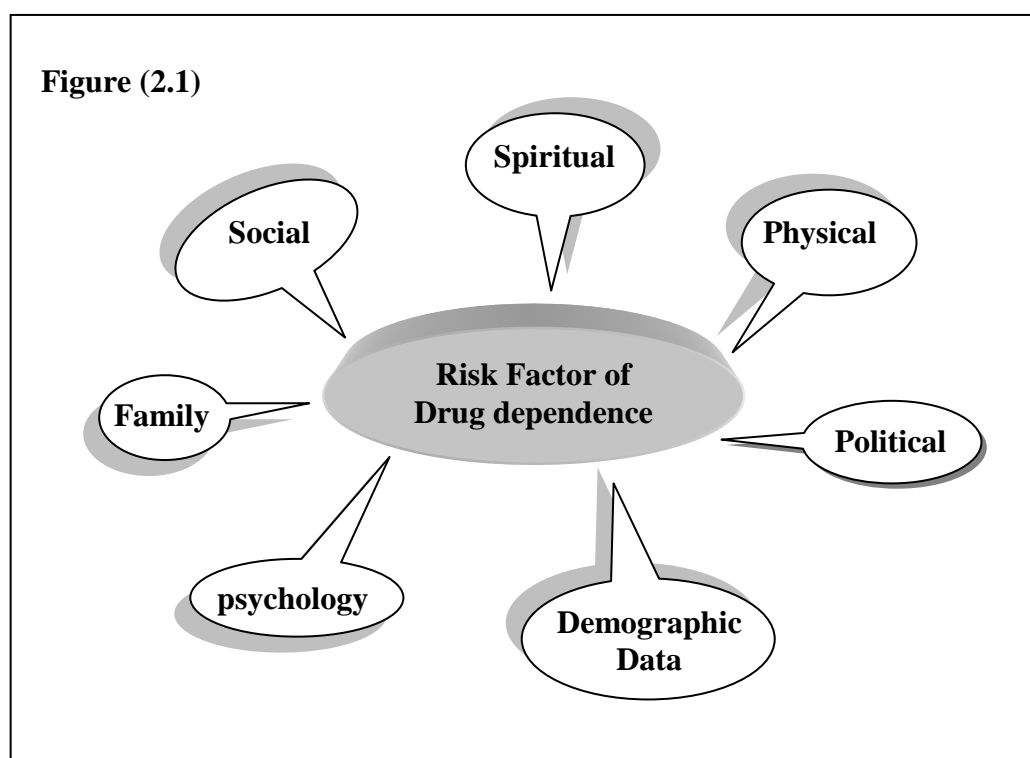
Data on spiritual status, family status, social status, psychological status, political status, will be obtained from third part of questionnaire .

Chapter Two

Conceptual Framework

Chapter Two

Conceptual Framework



The researcher developed his model about the conceptual basis of his research, this diagram clarifies the study about the risk factor of drug dependence with its domains,

2.1 Drugs Dependence and Addiction:

Individuals make choices to begin using drugs. Some people begin using drugs to relieve a medical condition and then continue to use the drugs after the medical need is over. Teenagers who are depressed or who have another psychiatric disorder sometimes begin using illicit drugs in an attempt to self-medicate. Other people begin taking drugs to feel pleasure, to escape the pressures of life, or to alter their view of reality. This voluntary initiation into the world of addictive drugs has strongly influenced society's view of drug abuse and drug addiction and their treatment.

Drug addiction is a chronic, relapsing disorder in which compulsive drug-seeking and drug-taking behavior persists despite serious negative consequences. Addictive substances induce pleasant states (euphoria in the initiation phase) or relieve distress. Continued use induces adaptive changes in the central nervous system that lead to tolerance, physical dependence, sensitization, craving, and relapse. The addictive drugs discussed here are opioids, cannabinoids, ethanol, cocaine, amphetamines, and nicotine (Hanson et al., 2012).

Addiction is the continued use of a mood altering substance or behavior despite adverse dependency consequences, or a neurological impairment leading to

such behaviors. Addictions can include, but are not limited to, drug abuse, exercise abuse, sexual activity and gambling. Classic hallmarks of addiction include impaired control over substances or behavior, preoccupation with substance or behavior, continued use despite consequences, and denial. Habits and patterns associated with addiction are typically characterized by immediate gratification (short-term reward), coupled with delayed deleterious effects (long-term costs).(Marlatt et al.,2003)

Physiological dependence occurs when the body has to adjust to the substance by incorporating the substance into its 'normal' functioning. This state creates the conditions of tolerance and withdrawal. Tolerance is the process by which the body continually adapts to the substance and requires increasingly larger amounts to achieve the original effects. Withdrawal refers to physical and psychological symptoms experienced when reducing or discontinuing a substance that the body has become dependent on. Symptoms of withdrawal generally include but are not limited to anxiety, irritability, intense cravings for the substance, nausea, hallucinations, headaches, cold sweats, and tremors (Quirk SW,2009).

Alcoholism and drug abuse are major problems in the all world. Clinically, the correct terminology for alcoholism and drug abuse is “psychoactive substance use disorders” or, more recently, “substance-related disorders.” The epidemiology of substance- related disorders varies(Hanson et al.,2012).

The Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) defines substance- related disorders in broad and functional terms, encompassing both alcoholism and drug abuse. This approach allows the clinician to ask similar questions about any substance in deciding whether the patient shows evidence of dependence or abuse. Specific measures are designed to address alcoholism as a separate diagnostic entity, of course, while other measures are designed to address different drugs of abuse

No single cause exists for the development of substance-related disorders: biomedical, psychological, and social factors all play a role. Stressful events sometimes serve as catalysts for drinking and drug-using behavior. For many drugs, increased use can lead to both psychological and physical dependence, which results in a number of important biomedical, psychological, and social sequelae. For alcoholism, these may be cirrhosis, depression, and marital and occupational problems; for other drugs, such as cocaine dependency, these may be myocardial infarction, depression, and marital, legal, and occupational problems (Goldman & Maryland, 2000).

Alcoholism has been characterized as a primary chronic disease with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is often progressive and fatal. Alcoholism is characterized by impaired control over drinking, preoccupation with the drug (alcohol), use of alcohol despite adverse consequences, distortion in thinking, and denial of either excessive drinking or its sequelae. Each of these symptoms may be continuous or periodic. Drug abuse can also be characterized in genetic, psychosocial, and environmental terms. The disease process is progressive, although not as often fatal, if cigarette smoking is excluded. Substance abuse can simply be defined as using a psychoactive substance drug to such an extent that it interferes with health, occupational, or social function (Gullotta & Adams, 2005).

2.2 Concept of Drugs Dependence:

The concept of substance dependence has had many officially recognized and commonly used meanings over the decades. Two concepts have been used to define aspects of dependence: behavioral and physical. In behavioral dependence, substance-seeking activities and related evidence of pathological use patterns are emphasized, whereas physical dependence refers to the physical (physiological) effects of multiple episodes of substance use. In definitions stressing physical dependence, ideas of tolerance or withdrawal appear in the classification criteria. The term intoxication is used for a reversible nondependent experience with a substance that produces impairment (Sadock & Sadock, 2007).

Somewhat related to dependence are the related words addiction and addict. The word addict has acquired a distinctive, unseemly, and pejorative connotation that ignores the concept of substance abuse as a medical disorder. Addiction has also been trivialized in popular usage, as in the terms TV addiction and money addiction. Although these connotations have helped the officially sanctioned nomenclature to avoid use of the word addiction, common neurochemical and neuroanatomical substrates may be found among all addictions, whether to substances or to gambling, sex, stealing, or eating. These various addictions may have similar effects on the activities of specific reward areas of the brain, such as the ventral tegmental area, the locus ceruleus, and the nucleus accumbens (Anthony JC, 2003).

Addiction can be described as a complex disease. In 1964, the World Health Organization (WHO, 1998:9) of the United Nations defined it as “a state of periodic or chronic intoxication detrimental to the individual and society, which is characterized by an overwhelming desire to continue taking the drug and to obtain it by any means” .

Accordingly, addiction is characterized as compulsive, at times uncontrollable, drug craving, seeking, and use that persist even in the face of extremely negative consequences (NIDA, 1999). This relentless pursuit of a drug of choice occurs despite the fact that the drug is usually harmful and injurious to bodily and mental functions.

The word addiction, derived from the Latin verb *addicere*, refers to the process of binding to things. Today, the word largely refers to a chronic adherence to drugs. This can include both physical and psychological dependence. Physical dependence is the body's need to constantly have the drug or drugs, and psychological dependence is the mental inability to stop using the drug or drugs.

The Diagnostic and Statistical Manual of Mental Disorders, 4th edition, text revision (DSM-IV-TR), published by the American Psychiatric Association (2000), differentiates among intoxication by, abuse of, and addiction to drugs. Although substance abuse is considered maladaptive, leading to recurrent adverse consequences or impairment, it is carefully differentiated from true addiction, called substance dependence, the essential feature of which is continued use despite significant substance-related problems known to the user. Many of the following features are usually present:

- Tolerance. The need for increased amounts or diminished effect of same amount.
- Withdrawal. The experience of a characteristic withdrawal syndrome for the specific substance, which can be avoided by taking closely related substances. Unsuccessful attempts to cut down.
- Compulsive. An increasing amount of time spent in substance-related activities, such as obtaining, using, and recovering from its effects (Hanson et al,2012).

Also, addiction can be defined in various ways and in the past 40 years, there have been notable changes in the medical definition of substance dependence, the main medical category to capture addiction(Rehm,2003:3). The current ICD-10 definition comprises at least three of the following criteria: strong desire or compulsion to use; impaired capacity to control use in terms of onset, termination or levels of use; physiological withdrawal state when substance use has ceased or been reduced, or use to relieve or avoid withdrawal; tolerance (i.e. increased doses are required in order to achieve effects originally produced by lower doses); progressive neglect of alternative pleasures or interests; and persisting with use despite harm (Marlatt et al.,2003).

American Pain Society (2001) defines Addiction is a primary, chronic, neurobiological disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.

Smelter & Bara (2012) defines Addiction is a behavioral pattern of substance use characterized by a compulsion to take the drug primarily to experience its psychic effects. Fear that patients will become addicted or dependent on opioids has contributed to inadequate treatment of pain. This fear is commonly expressed by health care providers as well as patients and results from lack of knowledge about the low risk of addiction.

2.3 Models of Addiction:

Various models attempt to describe the essential nature of drug addiction. Newspaper accounts of “inebriety” in the 19th and early 20th centuries contain an editorializing undertone that looks askance at the poor morals and lifestyle choices followed by the inebriate. This view has been termed the moral model (the belief that people abuse alcohol because they choose to do so), and although it may seem outdated from a modern scientific standpoint, it still characterizes an attitude among many traditional North Americans and members of many ethnic groups (Smith & Sunderwirth,2005).

The prevailing concept or model of addiction in America is the disease model (the belief that people abuse alcohol because of some biologically caused condition). Most proponents of this concept specify addiction to be a chronic and progressive disease, over which the sufferer has no control. This model originated in part from research performed by Jellinek, one of the founders of addiction studies (1960), among members of Alcoholics Anonymous (AA). He observed a seemingly inevitable progression in his subjects, which they made many failed attempts to

arrest. This philosophy is currently espoused by the recovery fellowships of AA and Narcotics Anonymous (NA) and the treatment field in general. It has even permeated the psychiatric and medical establishments' standard definitions of addiction. There are many variations within the broad rubric of the disease model.

This model has been bitterly debated: viewpoints range from fierce adherence to equally fierce opposition, with intermediate views casting the disease concept as a convenient myth (Hanson et al, 2012).

Those who view addiction as another manifestation of something gone awry with the personality system adhere to the characterological or personality predisposition model (the view of chemical dependency as a symptom of problems in the development or operation of the system of needs, motives, and attitudes within the individual). Every school of psychoanalytic, neopsychanalytic, and psychodynamic psychotherapy has its specific "take" on the subject of addiction (Frosch,1999). Tangentially, many addicts are also diagnosed with personality disorders - a broad category of psychiatric disorders, formerly called "character disorders," that includes the antisocial personality disorder, borderline personality disorder, schizoid personality disorder, and others; these serious, ongoing impairments are difficult to treat, such as impulse control disorders and sociopath. Although few addicts are treated by psychoanalysis or psychoanalytic psychotherapy (a theory of personality and method of psychotherapy originated by Sigmund Freud, focused on unconscious forces and conflicts and a series of psychosexual stages), a character logical type of model was a formative influence on the drug-free, addict-run, "therapeutic community" model, which uses harsh confrontation and time-extended, sleep depriving group encounters. People who follow the therapeutic community model conclude that addicts must have withdrawn behind a "double wall" of encapsulation (an adaptation to pain and avoidance of reality, in which the individual withdraws emotionally and further anesthetizes himself or herself by chemical means), where they failed to grow, making such techniques necessary (Steward and Sitarmiah 2003).

Others view addiction as a "career," a series of steps or phases with distinguishable characteristics. One career pattern of addiction includes six phases (Clinard & Meier 2001).

- Experimentation or initiation
- Escalation (increasing use)
- Maintenance or "taking care of business" (optimistic use of drugs coupled with successful job performance)
- Dysfunction or "going through changes" (problems with constant use and unsuccessful attempts to quit)
- Recovery or "getting out of the life" (arriving at a successful view about quitting and receiving drug treatment)
- Ex-addict (having successfully quit).

2.4 Forms and Methods of Taking Drugs:

Drugs come in many forms. How a drug is formulated - solution, powder, capsule, or pill- influences the rate of passage into the bloodstream and consequently its efficacy. The means of introducing the drug into the body will also affect how

quickly the drug enters the bloodstream and how it is distributed to the site of action, as well as how much will ultimately reach its target and exert an effect (Buxton, 2006)

The principal forms of drug administration are oral ingestion, inhalation, injection, and topical application.

2.4.1 Oral Ingestion:

One of the most common and convenient ways of taking a drug is orally. This type of administration usually introduces the drug into the body by way of the stomach or intestines. Following oral administration, it is difficult to control the amount of drug that reaches the site of action, for three reasons:

- The drug must enter the bloodstream after passing through the wall of the stomach or intestines without being destroyed or changed to an inactive form. From the blood, the drug must diffuse to the target area and remain there in sufficient concentration to have an effect.
- Materials in the stomach or intestines, such as food, may interfere with the passage of some drugs through the gut lining and thus prevent drug action. For example, food in your stomach will diminish the effects of alcohol by altering its absorption (Buxton, 2006)

The liver might metabolize orally ingested drugs too rapidly, before they are able to exert an effect. The liver is the major detoxifying organ in the body, which means it removes chemicals and toxins from the blood and usually changes them into an inactive form that is easy for the body to excrete. This function is essential to survival, but it creates a problem for the pharmacologist in developing effective drugs or the physician prescribing the correct dose of a drug to treat a serious disease. The liver is especially problematic to oral administration because the substances absorbed from the digestive tract usually go to the liver before being distributed to other parts of the body and their site of action. For this reason, cocaine taken orally is not very effective (Mathias, 2004).

2.4.2 Inhalation:

Some drugs are administered by inhalation into the lungs through the mouth or nose. The lungs include large beds of capillaries, so chemicals capable of crossing membranes can enter the blood as rapidly as they can via intravenous (IV) injection and can be equally as dangerous (Meng et al. 1999). Ether, chloroform, and nitrous oxide anesthetics are examples of drugs that are therapeutically administered by inhalation. Nicotine, cocaine, methamphetamine, and heroin are drugs of abuse that can be inhaled as smoke (Mathias, 2004). One serious problem with inhalation is the potential for irritation to the mucous membrane lining of the lungs; another is that the drug may have to be continually inhaled to maintain the concentration necessary for an effect. Inhalation of illicit drugs of abuse is common to prevent contracting AIDS, which can be transmitted by IV injection with contaminated needles (Meng et al. 1999).

2.4.3 Injection:

Some drugs are given by intravenous (IV), intramuscular (IM), or subcutaneous (SC) injection. A major advantage of administering drugs by IV is the

speed of action; the dosage is delivered rapidly and directly, and often less drug is needed because it reaches the site of action quickly. This method can be very dangerous if the dosage is calculated incorrectly, the drug effects are unknown, or the user is especially sensitive to the drug's adverse effects. In addition, impurities in injected materials may irritate the vein; this issue is a particular problem in the drug-abusing population, in which needle sharing frequently occurs. The injection itself injures the vein by leaving a tiny point of scar tissue where the vein is punctured. If repeated injections are administered into the same area, the elasticity of the vein is gradually reduced, causing the vessel to collapse. Intramuscular injection can damage the muscle directly if the drug preparation irritates the tissue or indirectly if the nerve controlling the muscle is damaged. If the nerve is destroyed, the muscle will degenerate (atrophy) (Buxton, 2006). A subcutaneous injection may damage the skin at the point of injection if a particularly irritating drug is administered. Another danger of drug injections arises when contaminated needles are shared by drug users. This danger has become a serious problem in the spread of infectious diseases such as AIDS and hepatitis (National Institute on Drug Abuse [NIDA], 2007).

2.4.4 Topical Application:

Those drugs that readily pass through surface tissue such as the skin, the lining of the nose, and under the tongue can be applied topically, for systemic (whole-body) effects. Although many drugs do not appreciably diffuse across these tissue barriers into the circulation, there are notable exceptions. For example, a product to help quit smoking, a nicotine transdermal patch (Nicoderm), is placed on the skin; the drug passes through the skin and enters the body to prevent tobacco craving and withdrawal. In addition, several drugs of abuse, such as heroin and cocaine, can be "snorted" into the nose and rapidly absorbed into the body through the nasal lining (Mathias, 2004).

2.5 Distribution of Drugs in the Body and Time-Response Relationships:

Most drugs are distributed throughout the body in the blood. The circulatory system consists of many miles of arteries, veins, and capillaries and includes 5 to 6 liters of blood. Once a drug enters the bloodstream by passing through thin capillary walls, it is rapidly diluted and carried to organs and other body structures. It requires approximately 1 minute for the blood, and consequently the drugs it contains, to circulate completely throughout the body.

2.5.1 Factors Affecting Distribution:

Drugs have different patterns of distribution depending on the following chemical properties:

- Their ability to pass across membranes and through tissues.
- Their molecular size (large versus small molecules) Their solubility properties (do they dissolve in water or in fatty [oily] solutions?)
- Their tendency to attach to proteins and tissues throughout the body.

These distribution-related factors are very important because they determine whether a drug can pass across tissue barriers in the body and reach its site of action.

By preventing the movement of drugs into organs or across tissues, these barriers may interfere with drug activity and limit the therapeutic usefulness of a drug if they do not allow it to reach its site of action. Such barriers may also offer protection by preventing entry of a drug into a body structure where it can cause problems (Buxton, 2006).

Blood is carried to the nerve cells of the brain in a vast network of thin-walled capillaries. Drugs that are soluble in fatty (oily) solutions are most likely to pass across these capillary membranes (known as the blood–brain barrier) into the brain tissue. Most psychoactive drugs, such as the drugs of abuse, are able to pass across the blood–brain barrier with little difficulty. However, many water-soluble drugs cannot pass through the fatty capillary wall; such drugs are not likely to cross this biological barrier and affect the brain (Hanson et al, 2012).

Second biological barrier, the placenta, prevents the transfer of certain molecules from the mother to the fetus. A principal factor that determines passage of substances across the placental barrier is molecule size. Large molecules do not usually cross the placental barrier, whereas small molecules do. Because most drugs are relatively small molecules, they usually cross from the maternal circulation into the fetal circulation; thus, most drugs (including drugs of abuse) taken by a woman during pregnancy enter and affect the fetus (O’Brien, 2006).

2.5.2 Required Doses for Effects

Most drugs do not take effect until a certain amount has been administered and a crucial concentration has reached the site of action in the body. The smallest amount of a drug needed to elicit a response is called its threshold dose.

The effectiveness of some drugs may be calculated in a linear (straight-line) fashion—that is, the more drug that is taken, the more drug that is distributed throughout the body and the greater the effect. However, many drugs have a maximum possible effect, regardless of dose; this is called the plateau effect. OTC medications, in particular, have a limit on their effects. For example, use of the nonprescription analgesic aspirin can effectively relieve your mild to moderate pain, but aspirin will not effectively treat your severe pains, regardless of the dose taken. Other drugs may cause distinct or opposite effects, depending on the dose. For example, low doses of alcohol may appear to act like a stimulant, whereas high doses usually cause sedation (Buxton, 2006).

2.5.3 Time-Response Factors:

An important factor that determines responses is the time that has elapsed between when a drug was administered and the onset of its effects. The delay in effect after administering a drug often relates to the time required for the drug to disseminate from the site of administration to the site of action. Consequently, the closer a drug is placed to the target area, the faster the onset of action.

The drug response is often classified as immediate, short-term, or acute, referring to the response after a single dose. The response can also be chronic, or long-term - a characteristic usually associated with repeated doses. The intensity and quality of a drug’s acute effect may change considerably within a short period of

time. For example, the main intoxicating effects of a large dose of alcohol generally peak in less than 1 hour and then gradually taper off. In addition, an initial stimulating effect by alcohol may later change to sedation and depression (Mathias,2004).

The effects of long-term, or chronic, use of some drugs can differ dramatically from the effects noted with their short-term, or acute, use. The administration of small doses may not produce any immediately apparent detrimental effect, but chronic use of the same drug (frequent use over a long time) may yield prolonged effects that do not become apparent until years later. Although for most people there is little evidence to show any immediate damage or detrimental response to short-term use of small doses of tobacco, its chronic use has damaging effects on heart and lung functions (Westmaas and Brandon 2004). Because of these long-term consequences, research on tobacco and its effects often continues for years, making it difficult to unequivocally prove a correlation between specific diseases or health problems and use of this substance. Thus, the results of tobacco research are often disputed by tobacco manufacturers with vested financial interests in the substance and its public acceptance.

Another important time factor that influences drug responses is the interval between multiple administrations. If sufficient time for drug metabolism and elimination does not separate doses, a drug can accumulate within the body. This drug buildup due to relatively short dosing intervals is referred to as a cumulative effect. Because of the resulting high concentrations of drug in the body, unexpected prolonged drug effects or toxicity can occur when multiple doses are given within short intervals. This situation occurs with cocaine or methamphetamine addicts who repeatedly administer these stimulants during “binges” or “runs,” increasing the likelihood of dangerous effects (Hanson et al, 2012).

2.6 Drug Dependence:

Drug dependence can be associated with either physiological or psychological adaptations. Physical dependence reflects changes in the way organs and systems in the body respond to a drug, whereas psychological dependence is caused by changes in attitudes and expectations. In both types of dependence, the individual experiences a need (either physical or emotional) for the drug to be present for the body or the mind to function normally.

2.6.1 Physical Dependence

In general, the drugs that cause physical dependence also cause a drug withdrawal phenomenon called the rebound effect. This condition is sometimes known as the paradoxical effect because the symptoms associated with rebound are nearly opposite to the direct effects of the drug. For example, a person taking barbiturates or benzodiazepines will be greatly depressed physically but during withdrawal may become irritable, hyperexcited, and nervous and generally show symptoms of extreme stimulation of the nervous system, and perhaps even life-threatening seizures. These reactions constitute the rebound effect (Marlatt et al.,2003).

Physical dependence may develop with high intensity use of such common drugs as alcohol, barbiturates, narcotics, and other CNS depressants. However, with moderate, intermittent use of these drugs, most people do not become physically dependent. Those who do become physically dependent experience damaged social and personal skills and relationships and impaired brain and motor functions (Hanson et al, 2012).

Withdrawal symptoms resulting from physical dependency can be prevented by administering a sufficient quantity of the original drug or one with similar pharmacological activity. The latter case, in which different drugs can be used interchangeably to prevent withdrawal symptoms, is called crossdependence. For example is the use of methadone, a long-acting narcotic, to treat withdrawal from heroin (O'Brien 2006). Such therapeutic strategies allow the substitution of safer and more easily managed drugs for dangerous drugs of abuse and play a major role in treatment of drug dependency.

2.6.2 Psychological Dependence

The World Health Organization states that psychological dependence instills a feeling of satisfaction and psychic drive that requires periodic or continuous administration of the drug to produce a desired effect or to avoid psychological discomfort. This sense of dependence usually leads to repeated self-administration of the drug in a fashion described as abuse. Such dependence may be found either independent of or associated with physical dependence. Psychological dependence does not produce the physical discomfort, rebound effects, or life-threatening consequences that can be associated with physical dependence. Even so, it does produce intense cravings and strong urges that frequently lure former drug abusers back to their habits of drug self-administration. In many instances, psychological aspects may be more significant than physical dependence in maintaining chronic drug use. Thus, the major problem with cocaine or nicotine dependence is not so much the physical aspect, because withdrawal can be successfully achieved in a few weeks; rather, strong urges often cause a return to chronic use of these substances because of psychological dependence. How does psychological dependence develop?

If the first drug trial is rewarding, a few more rewarding trials will follow until drug use becomes a conditioned pattern of behavior. Continued positive psychological reinforcement with the drug leads, in time, to primary psychological dependence. Primary psychological dependence, in turn, may produce uncontrollable compulsive abuse of any psychoactive drug in certain susceptible people and cause physical dependence. The degree of drug dependence is contingent on the nature of the psychoactive substance, the quantity used, the duration of use, and the characteristics of the person and his or her environment (Anthony JC, 2003).

Even strong psychological dependence on some psychoactive substances does not necessarily result in injury or social harm. For example, typical dosages of mild stimulants such as coffee usually do not induce serious physical, social, or emotional harm. Even though the effects on the CNS are barely detectable by a casual observer, strong psychological dependence on stimulants like tobacco and caffeine-containing beverages may develop; however, the fact that their dependence does not typically induce antisocial and destructive behavior distinguishes them from most forms of dependence-producing drugs (Hanson et al, 2012).

2.7 Types of Drug Users:

Just as a diverse set of personality traits (for example, introverts, extroverts, type A, obsessive compulsive, and so on) exists, so drug users vary according to their general approach or orientation, frequency of use, and types and amounts of the drugs they consume. Some are occasional or moderate users, whereas others display much stronger attachment to drug use. In fact, some display such obsessive-compulsive behavior that they cannot let a morning, afternoon, or evening pass without using drugs. Some researchers have classified such variability in the frequency and extent of usage as fitting into three basic patterns: experimenters, compulsive users, and “floaters” or “chippers” (members of the last category drift between experimentation and compulsive use) (SAMHSA,2007).

Experimenters begin using drugs largely because of peer pressure and curiosity, and they confine their use to recreational settings. Generally, they more often enjoy being with peers who also use drugs recreationally. Alcohol, tobacco, marijuana, hallucinogens, and many of the major stimulants are the drugs they are most likely to use. They are usually able to set limits on when these drugs are taken (often preferred in social settings), and they are more likely to know the difference between light, moderate, and chronic use (Karberg & James,2002).

Compulsive users, in contrast, “devote considerable time and energy to getting high, talk incessantly (sometimes exclusively) about drug use [and “funny” or “weird” experiences] and become connoisseurs of street drugs”. For compulsive users, recreational fun is impossible without getting high (Hanson et al, 2012). Other characteristics of these users include the need to escape or postpone personal problems, to avoid stress and anxiety, and to enjoy the sensation of the drug’s euphoric effects. Often, they have difficulty assuming personal responsibility and suffer from low self-esteem. Many compulsive users are from dysfunctional families, have persistent problems with the law and/or have serious psychological problems underlying their drug-taking behavior. Problems with personal and public identity, excessive confusion about their sexual orientation, boredom, family discord, childhood sexual and/or mental abuse, academic pressure, and chronic depression all contribute to the inability to cope with issues without drugs (Westmaas and Brandon 2004).

Floaters or chippers focus more on using other people’s drugs without maintaining a steady supply of drugs. Nonetheless, chippers, like experimenters, are generally light to moderate consumers of drugs. Chippers vacillate between the need for pleasure seeking and the desire to relieve moderate to serious psychological problems. As a result, although most are on the path to drug dependence, at this stage they drift between experimental drug-taking peers and chronic drug-using peers. In a sense, these drug users are marginal individuals who do not strongly identify with experimenters or compulsive users (O’Brien 2006).

2.8 Major Types of Commonly Abused Drugs:

2.8.1 Narcotics (Opioids):

The word narcotic has been used to label many substances, from opium to marijuana to cocaine. The translation of the Greek word *narkotikos* is “benumbing or

deadening.” The term narcotic is sometimes used to refer to a CNS depressant, producing insensibility or stupor, and at other times to refer to an addicting drug. Most people would not consider marijuana among the narcotics today, although for many years it was included in this category. Although pharmacologically cocaine is not a narcotic either, it is still legally classified as such. Perhaps part of this confusion is due to the fact that cocaine, as a local anesthetic, can cause a numbing effect (Hanson et al, 2012).

For purposes of the present discussion, the term narcotic is used to refer to those naturally occurring substances derived from the opium poppy and their synthetic substitutes. These drugs are referred to as the opioid (or opiate) narcotics because of their association with opium. They have similar pharmacological features, including abuse potential, pain-relieving effects (referred to as analgesics), cough suppression (antitussive), and reduction of intestinal movement, often causing constipation.

2.8.1.1 Pharmacological Effects:

The most common clinical use of the opioid narcotics is as analgesics to relieve pain. These drugs are effective against most varieties of pain, including visceral (associated with internal organs of the body) and somatic (associated with skeletal muscles, bones, skin, and teeth) types. Used in sufficiently high doses, narcotics can even relieve the intense pain associated with some types of cancer (Gutstein and Akil 2006).

The opioid narcotics relieve pain by activating the same group of receptors that are controlled by the endogenous substances called endorphins (Kreek et al. 2004). The endorphins are peptides (small proteins) that are released in the brain, in the spinal cord, and from the adrenal glands in response to stress and painful experiences. When released, the endorphins serve as transmitters and stimulate receptors designated as opioid types. Activation of opioid receptors by either the naturally released endorphins or administration of the narcotic analgesic drugs blocks the transmission of pain through the spinal cord or brain stem and alters the perception of pain in the “pain center” of the brain. Because the narcotics work at multiple levels of pain transmission, they are potent analgesics against almost all types of pain.

Interestingly, the endorphin system appears to be influenced by psychological factors as well. It is possible that pain relief caused by administration of placebos or nonmedicinal manipulation such as acupuncture is due in part to the natural release of endorphins (Eshkevaria & Heath 2005). This relationship suggests that physiological, psychological, and pharmacological factors are intertwined in pain management through the opioid system, which makes it impossible to deal with one without considering the others.

2.8.1.2 Mechanisms Action of Opioid Narcotics

The opioid receptors are the site of action of the naturally occurring endorphin peptide transmitters and are found throughout the nervous system, intestines, and other internal organs. Because narcotic drugs such as morphine and heroin enhance the endorphin system by directly stimulating opioid receptors, these

drugs have widespread influences throughout the body. For example, the opioid receptors are present in high concentration within the limbic structures of the brain. Stimulation of these receptors by narcotics causes release of the transmitter dopamine in limbic brain regions. This effect contributes to the rewarding actions of these drugs and leads to dependence and abuse (Zocchi et al. 2003).

2.8.1.3 Side Effects

One of the most common side effects of the opioid narcotics is constipation. Other side effects include drowsiness, mental clouding, respiratory depression (suppressed breathing is usually the cause of death from overdose), nausea and vomiting, itching, inability to urinate, a drop in blood pressure, and constricted pupils (Drug Facts and Comparisons 2005). This array of seemingly unrelated side effects is due to widespread distribution of the opioid receptors throughout the body and their involvement in many physiological functions (Gourlay, 2004). With continual use, intolerance develops to some of these undesirable narcotic responses.

2.8.1.4 Commonly Used Opioid Narcotics:

Heroin:

Heroin is a synthetic opiate drug that is highly addictive. It is made from morphine, a naturally occurring substance extracted from the seed pod of the Asian opium poppy plant. Heroin usually appears as a white or brown powder or as a black sticky substance, known as “black tar heroin”.

Heroin can be injected, snorted/sniffed, or smoked—routes of administration that rapidly deliver the drug to the brain. Injecting is the use of a needle to release the drug directly into the bloodstream. Snorting is the process of inhaling heroin powder through the nose, where it is absorbed into the bloodstream through the nasal tissues. Smoking involves inhaling heroin smoke into the lungs. All three methods of administering heroin can lead to addiction and other severe health problems (Aronson, 2009).

Morphine:

Is the standard by which other narcotic analgesic agents are measured (Way et al. 1998). It has been used to relieve pain since it was first isolated in 1803. Morphine has about half the analgesic potency of heroin but 12 times the potency of codeine. It is commonly used to relieve moderate to intense pain that cannot be controlled by less potent and less dangerous narcotics. Because of its potential for serious side effects, morphine is generally used in a hospital setting where emergency care can be rendered, if necessary. Most pain can be relieved by morphine if high enough doses are used (Reisine and Pasternak 1995); however, morphine is most effective against continuous dull pain.

The side effects that occur when using therapeutic doses of morphine include drowsiness, changes in mood, and inability to think straight. In addition, therapeutic doses depress respiratory activity; thus, morphine decreases the rate and depth of breathing and produces irregular breathing patterns. Like the other narcotics, it can create an array of seemingly unrelated effects throughout the body, including nausea

and vomiting, constipation, blurred vision, constricted pupils, and flushed skin (Way et al. 1998).

Codeine:

Codeine is a naturally occurring constituent of opium and the most frequently prescribed of the narcotic analgesics. It is used principally as a treatment for minor to moderate pain and as a cough suppressant. Maximum pain relief from codeine occurs with 30 to 50 milligrams. Usually, when prescribed for pain, codeine is combined with either a salicylate (such as aspirin) or acetaminophen (Tylenol). Aspirin-like drugs and opioid narcotics interact in a synergistic fashion to give an analgesic equivalence greater than what can be achieved by aspirin or codeine alone. Although not especially powerful, codeine may still be abused. Codeine containing cough syrup is currently classified as a Schedule V drug. Because the abuse potential is considered minor, the (Food and Drug Administration) FDA has ruled that codeine cough products can be sold without a prescription; however, the pharmacist is required to keep them behind the counter and must be asked in order to provide codeine-containing cough medications. Despite the FDA ruling, about 50% of the states have more restrictive regulations and require that codeine-containing cough products be available only by prescription (Hanson et al, 2012).

Meperidine:

Meperidine (Demerol) is a synthetic drug that frequently is used as an analgesic for treatment of moderate pain; it can be taken in tablet form or injected. Meperidine is about one tenth as powerful as morphine, and its use can lead to dependence (Gutstein and Akil 2006). This drug is sometimes given too freely by some physicians because tolerance develops, requiring larger doses to maintain its therapeutic action. With continual use, it causes physical dependence. Meperidine addicts may use large daily doses (3–4 grams per day). Repeated use of high doses of meperidine can cause seizures (Gutstein & Akil 2006).

Methadone:

Methadone was first synthesized in Germany in 1943, when natural opiate analgesics were not available because opium could not be obtained from the Far East during World War II. Methadone was first called Dolophine, after Adolph Hitler; one company still uses that trade name. (On the street, methadone pills have been called dollies.) As previously described, methadone is often substituted for heroin in the treatment of narcotic-dependent people (Drug Facts and Comparisons 2005). It is an effective analgesic, equal to morphine if injected and more potent if taken orally (Way et al. 1998).

The physiological effects of methadone are the same as those of morphine and heroin. As a narcotic, methadone produces psychological dependence, tolerance, and then physical dependence and addiction if repeated doses are taken (Belluck 2003). It is effective for about 24 to 36 hours; therefore, the addict must take methadone daily to avoid narcotic withdrawal. It is often considered as addictive as heroin if injected; consequently, because methadone is soluble in water, it is formulated with insoluble, inert ingredients to prevent it from being injected by narcotic addicts.

Fentanyl:

The fentanyl belong to a family of very potent narcotic analgesics (200 times the potency of morphine) that are often administered intravenously for general anesthesia. These synthetic opioid narcotics include drugs such as sufentanil and alfentanil (Gutstein and Akil 2006). fentanyl are also used in transdermal systems (patches on the skin) in the treatment of chronic pain (Duragesic). Occasionally, reports surface of individuals abusing a fentanyl patch by licking, swallowing, or even smoking it. It is estimated that some 100 different active forms of fentanyl could be synthesized; up to now, about 10 derivatives have appeared on the street (Way et al. 1998).

They are considered to be “designer” drugs. Because of their great potency, ease of production, and low costs, the fentanyl's have sometimes been used to replace heroin. Fentanyl-type drugs can appear in the same forms and colors as heroin, so there is nothing to alert users that they have been sold a heroin substitute (NIDA 2007). Due to their powerful effects, these drugs are especially dangerous, and incredibly small doses can cause fatal respiratory depression in an unsuspecting heroin user (Fodale 2006). It is likely that hundreds have died from overdosing with heroin laced with fentanyl. Because of an enhanced “high,” addicts are tempted to use these lethal combinations. Because these drugs are sometimes very difficult to detect in the blood owing to the small quantities used, there is no reliable information regarding the extent of fentanyl abuse. Fentanyl is so potent that even abusing the patch has caused overdoses and even death (Aronson,2009).

2.8.1.5 Other Narcotic Opioid:

Tramadol:

Tramadol is a prescription drug, similar to morphine, which helps in the treatment of pain. There are some similarities in structure between tramadol and morphine, though morphine has a much higher addiction profile, and there is particular danger in overusing many forms of the medication because it also contains acetaminophen. Overuse of acetaminophen can quickly damage the liver, which can be accelerated if a person simultaneously consumes alcohol.

Dependency shouldn't be considered the same as addiction, particularly when patients take the medication exactly as prescribed by doctors. Many people need to take tramadol on a regular basis in order to control serious pain as might occur from conditions like neuralgia. Regular dosage of this medication can create dependency. If at some point tramadol is no longer needed, doctors and patients can evolve a plan for safely coming off of the medication(Zocchi et al. 2003).

Tramadol addiction usually occurs when there is an illicit overuse of the pain killer. Although Tramadol is usually prescribed by physicians, a lot of people order their supply through the internet. Because of this, their use becomes unmonitored this increasing their risk to become addicted to the medication. Aside from ordering Tramadol via the Internet, addicted clients usually get prescriptions from more than one doctor. This allows them to buy the medicine in drug stores without any limit (Gutstein & Akil 2006).

Effects of Tramadol Abuse

The effects of Tramadol use vary and may not be experienced by all individuals. Side effects include:

- Nausea and vomiting.
- Euphoria.
- Shallow breathing.
- Dizziness.
- Constipation.
- Drowsiness or sedation(Aronson,2009).

Physical tolerance can occur as the body becomes accustomed to a particular drug; thus, more of the drug is needed to produce the original desired effect. Psychological dependence can occur as people believe that they cannot function properly without the drug. Individuals with a tolerance to tramadol are at risk of overdose due to the consumption of increased amounts of the drug. People who have been taking tramadol should not stop using the drug immediately, as this can precipitate withdrawal symptoms. Withdrawal symptoms include the following:

- Nausea and vomiting.
- Upset stomach.
- Cold sweats.
- Cravings.
- Diarrhea.
- Fatigue.
- Tremors.
- Depression.
- Irritability, agitation or aggressiveness.
- Muscle and joint pain.
- Seizures.
- Restless legs (O'Brien 2006).

One of the common reasons why addicted cannot easily stop their addiction to Tramadol is due to the presence of the different withdrawal symptoms. Once the drug is stopped it will cause the body to manifest painful and agonizing symptoms that make people go back to taking Tramadol. Although counseling and medical treatment can be useful to the patient, these interventions may still show no effect if the dependency is not treated (Achord, 1999).

Because of this, it is vital to provide interventions that could help remove the masking effects of Tramadol to pain. The dependency to this drug that can lead to addiction can be treated through the use of rapid detoxification, while the patient is under the influence of an anesthesia. This process gets rid of all the opiates in the brain, which can help reduce the patient's dependency to the drug.

This type of method in removing the patient's dependency to the opioid drug is considered to be safe, effective, humane and non-judgmental. In fact, this type of detoxification process has already been used to many patients all over the world. Fortunately, most of the cases that used this kind of treatment ended up successfully.

These are some of the things that people should know about Tramadol addiction (Hanson et al, 2012).

2.8.2 Stimulants:

Stimulants are substances that cause the user to feel pleasant effects such as a sense of increased energy and a state of euphoria, or “high.” This effect is likely due to the ability of these drugs to release dopamine. The user may also feel restless and talkative and have trouble sleeping. High doses administered over the long term can produce personality changes or even induce violent, dangerous, psychotic behavior. Methamphetamine addicts make notoriously bad decisions that hurt them and their loved ones (Hanson et al, 2012).

Major Stimulants:

Amphetamines:

Amphetamines and amphetamine-like drugs are the most widely used illicit substances, second only to cannabis, in the United States, Asia, Great Britain, Australia, and several other western European countries. Methamphetamine, a congener of amphetamine, has become even more popular in recent years.

The racemate amphetamine sulfate (Benzedrine) was first synthesized in 1887 and was introduced to clinical practice in 1932 as an over-the-counter inhaler for the treatment of nasal congestion and asthma. In 1937, amphetamine sulfate tablets were introduced for the treatment of narcolepsy, postencephalitic parkinsonism, depression, and lethargy. In the 1970s, a variety of social and regulatory factors began to curb widespread amphetamine distribution. The current US Food and Drug Administration (FDA)-approved indications for amphetamine are limited to attention-deficit/hyperactivity disorder (ADHD) and narcolepsy; however, amphetamines are also used in the treatment of obesity, depression, dysthymia, chronic fatigue syndrome, acquired immune deficiency syndrome (AIDS), dementia, and neurasthenia (Aronson,2009).

Cocaine:

Cocaine is an alkaloid derived from the shrub *Erythroxylon coca*, which is indigenous to South America, where the leaves of the shrub are chewed by local inhabitants to obtain the stimulating effects. The cocaine alkaloid was first isolated in 1860 and first used as a local anesthetic in 1880. It is still used as a local anesthetic, especially for eye, nose, and throat surgery, for which its vasoconstrictive and analgesic effects are helpful. In 1884, Sigmund Freud made a study of cocaine's general pharmacological effects and, for a period of time, according to his biographers, was addicted to the drug. In the 1880s and 1890s, cocaine was widely touted as a cure for many ills and was listed in the 1899 Merck Manual. It was the active ingredient in the beverage Coca-Cola until 1902. In 1914, however, once its addictive and adverse effects had been recognized, cocaine was classified as a narcotic, along with morphine and heroin (Sadock & Sadock,2007).

Cocaine can be administered orally, inhaled into the nasal passages, injected intravenously, or smoked. The form of administration is important in determining the

intensity of cocaine's effects, its abuse liability, and the likelihood of toxicity (Nathan et al. 1998).

Cocaine can have profound effects on several vital systems in the body (Drug Facts and Comparisons 2005). With the assistance of modern technology, the mechanisms whereby cocaine alters body functions have become better understood today. Such knowledge may eventually lead to better treatment of cocaine dependence. Most of the pharmacological effects of cocaine use stem from enhanced activity of catecholamine (dopamine, noradrenaline, adrenaline) and serotonin transmitters. It is believed that the principal action of the drug is to block the reuptake and inactivation of these substances following their release from neurons. Such action prolongs the activity of these transmitter substances at their receptors and substantially increases their effects. The summation of cocaine's effects on these four transmitters causes CNS stimulation. The increase of noradrenaline activity following cocaine administration increases the effects of the sympathetic nervous system and alters cardiovascular activity (Hanson et al, 2012).

Crack:

Between 1985 and 1986, a special type of freebased cocaine known as crack or "rock" appeared on the streets. By 1988, approximately 5% of high school students had tried crack. As of 1992 this number had fallen to 2.6%, by 1999 it rose to 4.6%, but by 2006 it declined again to 2.1%. Crack is inexpensive and can be smoked without the dangerous explosive solvents mentioned earlier in the discussion of freebasing. It is made by taking powdered cocaine hydrochloride and adding sodium bicarbonate (baking soda) and water. The paste that forms removes impurities as well as the hydrochloride from the cocaine. The substance is then dried into hard pieces called rocks, which may contain as much as 90% pure cocaine. Other slang terms for crack include base, black rock, gravel, Roxanne, and space basing (Johnston 2007).

Like freebased cocaine, crack is usually smoked in a glass water pipe. When the fumes are absorbed into the lungs, they act rapidly, reaching the brain within 8 to 10 seconds. An intense "rush" or "high" results, and later a powerful state of depression, or "crash," occurs. The high may last only 3 to 5 minutes, and the depression may persist from 10 to 40 minutes or longer in some cases. As soon as crack is smoked, the nervous system is greatly stimulated by the release of dopamine, which seems to be involved in the rush. Cocaine prevents resupply of this neurotransmitter, which may trigger the crash (Hanson et al, 2012).

OTC Sympathomimetic:

Although often overlooked, the sympathomimetic decongestant drugs included in OTC products such as cold, allergy, and diet aid medications have stimulant properties like those of caffeine (Appelt 1999). For most people, the CNS impact of these drugs is minor, but for those people who are very sensitive to these drugs, they can cause jitters and interfere with sleep. For such individuals, OTC products containing the sympathomimetics should be avoided before bedtime.

The common OTC sympathomimetics (Ephedrine, Naphazoline, Oxymetazoline, Phenylephrine, Pseudoephedrine, Tetrahydrozoline). OTC agents were packaged to look like amphetamines (called look-alike drugs) and legally sold on the street, usually to children or high school students. Although much less potent than amphetamines (even though they can be used as precursor chemicals to make methamphetamine), these minor stimulants can be abused and have caused deaths. Attempts to regulate look-alike drugs resulted in passage of the federal and state Imitation Controlled Substances Acts. These statutes prohibit the packaging of OTC sympathomimetics to look like amphetamines(Hanson et al, 2012).

These laws have not resolved the problem, however. Other products containing the OTC sympathomimetics are promoted on the street as “harmless speed” and “OTC uppers.” It is likely that use of such products can lead to the abuse of more potent stimulants.

As previously mentioned, some of the sympathomimetics that are included in cold medicines can be readily converted into methamphetamine. For this reason, as of 2006 federal statutes require these products be secured in a locked case behind the counter and sold in limited quantities (Baldauf 2006).

2.8.3 Hallucinogens (Psychedelics):

Hallucinogenic drugs have been used for thousands of years. Historically, drug-induced hallucinogenic states were usually part of social and religious rituals. Recognition of profound effects of lysergic acid diethylamide (LSD) on mental functioning in 1943 markedly changed things. Unlike plant-based hallucinogens, such as psilocybin mushrooms and peyote cacti, more potent chemically synthesized hallucinogenic compounds, such as LSD, could be more readily researched, distributed, and used, leading to continued fascination with this heterogeneous group of drugs and to many thousands of scientific reports of hallucinogenic drug effects, speculations about mechanisms of action, and discussions of medical and societal problems resulting from hallucinogen distribution, use, and consequences (Sadock, & Sadock,2007).

Hallucinogens are natural and synthetic substances that are variously called psychedelics or psychotomimetic because, besides inducing hallucinations, they produce a loss of contact with reality and an experience of expanded and heightened consciousness. The hallucinogens are classified as Schedule I drugs; the US Food and Drug Administration (FDA) has decreed that they have no medical use and a high abuse potential(Appelt 1999).

The classic, naturally occurring hallucinogens are psilocybin (from some mushrooms) and mescaline (from peyote cactus); others are harmine, harmaline, ibogaine, and dimethyltryptamine (DMT). The classic synthetic hallucinogen is LSD, synthesized in 1938 by Albert Hoffman, who later accidentally ingested some of the drug and experienced the first LSD-induced hallucinogenic episode. Some researchers classify the substituted or so-called designer amphetamines, such as 3,4-methylenedioxyamphetamine (MDMA), as hallucinogens. Because these drugs are structurally related to amphetamines(Hanson et al, 2012).

Types of Hallucinogenic Agents:

Due to recent technological developments, understanding of hallucinogens has advanced; even so, the classification of these drugs remains somewhat arbitrary. Many agents produce some of the pharmacological effects of the traditional psychedelics, such as LSD and mescaline.

A second type of hallucinogen includes those agents that have amphetamine-like molecular structures (referred to as phenylethylamines) and possess some stimulant action; this group includes drugs such as DOM (dimethoxymethyl-amphetamine), MDA (methylenedioxy amphetamine), and MDMA (methylenedioxymethamphetamine or Ecstasy). These agents vary in their hallucinogen or stimulant properties. MDA is more like an amphetamine (stimulant), whereas MDMA is more like LSD (hallucinogen). In large doses, however, each of the phenylethylamines causes substantial CNS stimulation(Sadock, & Sadock,2007).

The third major group of hallucinogens comprises the anticholinergic drugs, which block some of the receptors for the neurotransmitter acetylcholine. Almost all drugs that antagonize these receptors cause hallucinations in high doses. Many of these potent anticholinergic hallucinogens are naturally occurring and have been known, used, and abused for millennia(Hanson et al, 2012).

Lysergic Acid Diethylamide LSD:

A large class of hallucinogenic compounds with well-studied structure–activity relationships is represented by the prototype LSD. LSD is a synthetic base derived from the lysergic acid nucleus from the ergot alkaloids. That family of compounds was discovered in rye fungus and was responsible for lethal outbreaks of St. Anthony's fire in the Middle Ages. The compounds are also present in morning glory seeds in low concentrations. Many homologs and analogs of LSD have been studied. None of them has potency exceeding that of LSD.

Physiological symptoms from LSD are typically few and relatively mild. Dilated pupils, increased deep tendon motor reflexes and muscle tension, and mild motor incoordination and ataxia are common. Increased heart rate, respiration, and blood pressure are modest in degree and variable, as are nausea, decreased appetite, and salivation(Appelt 1999).

Many persons maintain that a single experience with LSD has given them increased creative capacity, new psychological insight, relief from neurotic or psychosomatic symptoms, or a desirable change in personality. In the 1950s and 1960s, psychiatrists showed great interest in LSD and related substances, both as potential models for functional psychosis and as possible pharmacotherapeutic agents. The availability of these compounds to researchers in the basic neurosciences has led to many scientific advances(Sadock, & Sadock,2007).

Mescaline:

Mescaline is usually consumed as peyote, picked from the small blue-green cacti *Lophophora williamsii* and *Lophophora diffusa*. The buttons are the dried, round, fleshy cacti tops. Mescaline is the active hallucinogenic alkaloid in the

buttons. Use of peyote is legal for the Native American Church members in some states. Adverse reactions to peyote are rare during structured religious use. Peyote usually is not consumed casually because of its bitter taste and sometimes severe nausea and vomiting preceding the hallucinogenic effects (Gardner 1998).

Many plants contain N,N-dimethyltryptamine (DMT), which is also found normally in human biofluids at very low concentrations. When DMT is taken parenterally or by sniffing, a brief, intense hallucinogenic episode can result. As with mescaline in the phenethylamine group, DMT is one of the oldest, best documented, but least potent of the tryptamine hallucinogens. Synthesized homologs of DMT have been evaluated in humans and structure activity relationships reasonably well described (Hanson et al, 2012).

Psilocybin Analogs

An unusual collection of tryptamines has its origin in the world of fungi. The natural prototype is psilocybin itself. That and related homologs have been found in as many as 100 species of mushroom, largely of the *Psilocybe* genus. Psilocybin is usually ingested as mushrooms. Many species of psilocybin-containing mushrooms are found worldwide. In the United States, large *Psilocybe cubensis* (gold caps) grow in Florida and Texas and are easily grown with cultivation kits advertised in drug-oriented magazines and on the Internet. The tiny *Psilocybe semilanceata* (liberty cap) grows in lawns and pastures in the Pacific Northwest. Psilocybin remains active when the mushrooms are dried or cooked into omelets or other foods (Appelt 1999).

Psilocybin mushrooms are used in religious activities by Mexican Indians. They are valued in Western society by users who prefer to ingest a mushroom instead of a synthetic chemical. Of course, one danger of eating wild mushrooms is misidentification and ingestion of a poisonous variety. At a large American university, 24 percent of students reported using psychedelic mushrooms or mescaline, compared with 17 percent who reported LSD use. Psilocybin sold as pills or capsules usually contains phencyclidine (PCP) or LSD instead (Sadock, & Sadock, 2007).

Marijuana

Simply the hemp plant, *Cannabis sativa*, which has been cultivated for thousands of years. When smoked, the dried and crushed leaves, stems, and seeds of cannabis produce sedative and mind-altering effects, which vary according to the potency of the variety of plant used.

Cannabis preparations are obtained from the Indian hemp plant *Cannabis sativa*, a hardy, aromatic annual herb. The cannabis plant has been used in China, India and the Middle East for approximately 8,000 years for its fiber and as a medicinal agent. It is the most commonly used illicit drug in the United States and, by most estimates, around the world as well.

Gateway drugs are drugs that serve as the gate or path that usually precedes the use of illicit drugs, such as marijuana, heroin, and LSD. Gateway drugs, or drugs of entry, serve to initiate a novice user into the drug-using world. Although the linkage is not biochemical, common gateway drugs include tobacco, inhalants,

alcohol, and anabolic steroids. The claim that marijuana use most often leads to the use of other more serious drugs, such as heroin, remains controversial (Gardner 1998).

The then-widely held belief of the 1930s that marijuana is a destructive assassin of youth is no longer considered valid for casual or occasional users of this drug. In most individuals, low to moderate doses of cannabis produce euphoria and a pleasant state of relaxation (Goldstein 1995:780). After a few minutes of forcibly holding the smoke in the lungs, most users suddenly experience the high. In this state of euphoria, the user experiences a dry mouth, elevated heartbeat, and some loss of coordination and balance, coupled with slower reaction times and a feeling of euphoria (mild to elevated intoxication). Blood vessels in the eyes expand, which accounts for reddening of the eyes. Some people experience slightly elevated blood pressure, which can double the normal heart rate. These effects can become intensified when other drugs, such as LSD and/or psychedelic (“magic”) mushrooms, are combined with the marijuana.

Although typical marijuana use does not appear to cause severe emotional disorders like the other hallucinogens, some experts suggest it can aggravate underlying mental illness such as depression. Each month, thousands of people seek professional treatment due to marijuana-related problems (Narconon 2007). In contrast to other hallucinogens that have a combination of stimulant and psychedelic effects, high doses of marijuana cause a combination of depression and hallucinations and enhance the appetite (Fleckenstein 2000)

2.8.4 Inhalants:

Inhalant drugs (also called inhalants or volatile substances) are volatile hydrocarbons such as toluene, n-hexane, methyl butyl ketone, trichloroethylene, trichloroethane, dichloromethane, gasoline, and butane. These chemicals are sold in four commercial classes: solvents for glues and adhesives; propellants for aerosol paint sprays, hair sprays, frying pan sprays, and shaving cream; thinners (e.g., for paint products and typing correction fluids); and fuels. At room temperature, these compounds volatilize to gaseous fumes that can be inhaled through the nose or mouth, entering the bloodstream by the trans pulmonary route. Despite their chemical differences, it is generally believed, although not proved, that these compounds share certain pharmacological properties (Sadock & Sadock, 2007).

Many of these substances were never intended to be used by humans as drugs; consequently, they are not often thought of as having abuse potential. However, abuse of inhalants is a serious public health problem; according to data obtained from the National Institute on Drug Abuse (NIDA)-sponsored Monitoring the Future study, 16.1% of 8th graders have misused an inhalant at least once in their lifetime. Among 10th and 12th graders, lifetime reported use was 13.3% and 11.1%, respectively. This frequency of inhalant abuse among 8th graders surpasses the frequency of abuse of such highly publicized drugs as cocaine (3.4%), amphetamines (7.3%), and marijuana (15.7%) in this age group (Johnston et al. 2007).

Types of Inhalants:

Volatile Substances:

Over the past 50 years, the number of products containing volatile substances has increased substantially. This category of agents includes aerosols (e.g., spray paints, hair sprays, deodorants, air fresheners), art or office supplies (e.g., correction fluids, felt-tip marker fluids), adhesives (e.g., airplane and other glues), fuels (e.g., propane, gasoline), and industrial or household solvents (e.g., nail polish remover, paint thinners, dry-cleaning fluids). Some volatile substances exist as gases (e.g., nitrous oxide; the propellant in whipping cream cans), and others as liquids that vaporize at room temperature (e.g., gasoline). In some cases, the abuser inhales vapors directly from their original containers (called sniffing or snorting). Still others inhale volatile solvents from plastic bags (called bagging) or from old rags or bandannas soaked in the solvent fluid and held over the mouth (called huffing) (Fleckenstein 2000).

Acute effects of the volatile chemicals that are commonly abused include initial nausea with some irritation of airways causing coughing and sneezing. Low doses often bring a brief feeling of lightheadedness, mild stimulation followed by a

loss of control, lack of coordination, and disorientation accompanied by dizziness and possible hallucinations. In some instances, higher doses can produce relaxation and depression leading to sleep or coma. If inhalation is continued, dangerous hypoxia may occur and cause brain damage or death. In other cases, SSDS can occur. Other potential toxic consequences of inhaling such substances include hypertension and damage to the cardiac muscle, peripheral nerves, brain, and kidneys. In addition, chronic users of inhalants frequently lose their appetite, are continually tired, and experience nosebleeds. If use of inhalants persists, some of the damage becomes irreversible (Goldstein 1995).

Anesthetics:

When used properly, other forms of inhalants with abuse potential are important therapeutic agents. Included in this category are anesthetics such as ether, chloroform, halothane, and nitrous oxide. Although all the anesthetic gases work much like the central nervous system (CNS) depressants, only nitrous oxide is available enough to be a significant abuse concern. Nitrous oxide is a colorless gas that is used frequently for minor outpatient procedures in offices of both physicians and dentists. It is often referred to as “laughing gas” because it can cause giggling and laughter in the patient receiving it. Nitrous oxide produces a unique profile of stimulant, hallucinogenic, and depressant effects. Because it is readily accessible, health professionals themselves or their staff are most likely to abuse nitrous oxide (Hanson et al, 2012).

In addition to being found in a clinical setting, nitrous oxide is sold in large balloons from which the gas is released and inhaled for its mind-altering effects. It is also found in small cylindrical cartridges used as charges for whipped cream dispensers. These cylinders and other plastic containers filled with nitrous oxide are referred to as “whippets.” Although significant abuse problems of nitrous oxide are infrequent, there are occasional reports of severe hypoxia (i.e., a lack of oxygen) or

death due to acute overdoses or psychosis. For the most part, nitrous oxide does not pose a significant abuse problem for the general public(Sadock & Sadock,2007).

2.8.5 CNS Depressants: Sedative-Hypnotics:

Before the era of modern drugs, the most common depressant used to ease tension, cause relaxation, and help forget problems was alcohol. These effects undoubtedly accounted for the immense popularity of alcohol and help explain why this traditional depressant is the most commonly abused drug of all time.

Attempts to find CNS depressants other than alcohol that could be used to treat nervousness and anxiety began in the 1800s with the introduction of bromides. These drugs were very popular until their toxicities became known. In the early 1900s, bromides were replaced by barbiturates. Like bromides, barbiturates were initially heralded as safe and effective depressants; however, problems with tolerance, dependence, and lethal overdoses soon became evident. It was learned that the doses of barbiturates required to treat anxiety also could cause CNS depression, affecting respiration and impairing mental functions (Charney et al. 2006). The margin of safety for barbiturates was too narrow, so research for safer CNS depressants began again.

It was not until the 1950s that the first benzodiazepines were marketed as substitutes for the dangerous barbiturates. Benzodiazepines were originally viewed as extremely safe and free from the problems of tolerance, dependence, and withdrawal that occurred with the other drugs in this category. Unfortunately, benzodiazepines have since been found to be less than ideal antianxiety drugs. Although relatively safe when used for short periods, long-term use can cause dependence and withdrawal problems much like those associated with their depressant predecessors. These problems have become a major concern of the medical community(Hanson et al, 2012).

Many of the people who become dependent on CNS depressants such as benzodiazepines began using the drugs under the supervision of a physician. Some clinicians routinely prescribe CNS depressants for patients with stress, anxiety, or apprehension without trying nonpharmacological approaches, such as psychotherapy or counseling. This practice sends an undesirable and often detrimental message to patients - that is, CNS depressants are a simple solution to their complex, stressful problems(Fleckenstein 2000).

2.8.5.1 The Effects of CNS Depressants:

The CNS depressants are a diverse group of drugs that share an ability to reduce CNS activity and diminish the brain's level of awareness. Besides the benzodiazepines, barbiturate-like drugs, and alcohol, depressant drugs include antihistamines and opioid narcotics such as heroin.

Depressants are usually classified according to the degree of their medical effects on the body. For instance, sedatives cause mild depression of the CNS and relaxation. This drug effect is used to treat extreme anxiety and often is referred to as anxiolytic. Many sedatives also have muscle-relaxing properties that enhance their relaxing effects. Depressants are also used to promote sleep and are frequently

prescribed. Approximately 43 million sleeping pills were distributed in the United States in 2005. This represented a 32% increase over 2001. Hypnotics (from the Greek god of sleep, Hypnos) are CNS depressants that encourage sleep by inducing drowsiness. Often when depressants are used as hypnotics, they produce amnesiac effects as well. As already mentioned, the effects produced by depressants can be very enticing and encourage inappropriate use (Sadock & Sadock, 2007).

The effects of the CNS depressants tend to be dose dependent. Thus, if you were to take a larger dose of a sedative, it might have a hypnotic effect. Often, the only difference between a sedative and a hypnotic effect is the dosage; consequently, the same drug may be used for both purposes by varying the dose. By increasing the dose still further, an anesthetic state can be reached. Anesthesia, a deep depression of the CNS, is used to achieve a controlled state of unconsciousness so that a patient can be treated, usually by surgery, in relative comfort and without memory of a traumatic experience. With the exception of benzodiazepines, if the dose of most of the depressants is increased much more, coma or death will ensue because the CNS becomes so depressed that vital centers controlling breathing and heart activity cease to function properly (Drug Facts and Comparison 2005).

2.8.5.2 Types of CNS Depressants:

All CNS depressants are not created equal. Some have wider margins of safety; others have a greater potential for nonmedicinal abuse. These differences are important when considering the therapeutic advantages of each type of CNS depressant. In addition, unique features of the different types of depressants make them useful for treatment of other medical problems. For example, some barbiturates and benzodiazepines are used to treat forms of epilepsy or acute seizure activity, whereas opioid narcotics are used to treat many types of pain. Some of these unique features will be dealt with in greater detail when the individual drug groups are discussed. The benzodiazepines, barbiturate-like drugs, antihistamines, and the naturally occurring gamma-hydroxybutyrate (GHB). Other CNS depressants, such as alcohol and opiates (Sadock & Sadock, 2007).

The unique features of the CNS depressants help determine the likelihood of their abuse. For example, abuse is more likely to occur with the fast-acting depressant agents than with those agents that have long-lasting effects. Currently, nonmedicinal use of the sedatives occurs in approximately 2–4% of the population. This abuse is most likely to be caused by the benzodiazepines (Substance Abuse and Mental Health Services Administration [SAMHSA] 2007).

Benzodiazepines: Valium-Type Drug:

Benzodiazepines are by far the most frequently prescribed CNS depressants for anxiety and sleep. Because of their wide margin of safety (death from overdose is rare), benzodiazepines have replaced barbiturate-like drugs for use as sedatives and hypnotics. Benzodiazepines were originally referred to as minor tranquilizers, but this terminology erroneously implied that they had pharmacological properties similar to those of antipsychotic drugs (major tranquilizers), when they are actually very different. Consequently, the term minor tranquilizer is usually avoided by clinicians (Landis and Bryant 1999).

The first true benzodiazepine, chlordiazepoxide (Librium), was developed for medical use and marketed about 1960. The very popular drug Valium came on the market about the same time. In fact, Valium was so well received that from 1972 to 1978 it was the top-selling prescription drug in the United States. Its popularity has since declined considerably (Hanson et al, 2012).

Because of dependence problems, the benzodiazepines are now classified as Schedule IV drugs. In recent years, considerable concern has arisen that benzodiazepines are overprescribed because of their perceived safety; it has been said, somewhat facetiously, that the only way a person could die from using benzodiazepines would be to choke on them. Clinicians are concerned about this overconfident attitude toward benzodiazepines and warn patients against prolonged and unsupervised administration of these drugs (Charney et al. 2006).

Barbiturates:

Barbiturates are barbituric acid derivatives that are used in medicine as sedatives and hypnotics. Barbituric acid was first synthesized by A. Bayer (of aspirin fame) in Germany in 1864. The reason that he chose the name barbituric acid is not known. Some have speculated that the compound was named after a girl named Barbara whom Bayer knew (Fleckenstein 2000).

The first barbiturate, barbital (Veronal), was used medically in 1903. The names of the barbiturates traditionally end in -al, indicating a chemical relationship to barbital, the first one synthesized. Historically, barbiturates have played an important role in therapeutics because of their effectiveness as sedative-hypnotic agents, which allowed them to be routinely used in the treatment of anxiety, agitation, and insomnia. However, because of their narrow margin of safety and their abuse liability, barbiturates have been largely replaced by safer drugs, such as benzodiazepines. Despite the reduced therapeutic use of the barbiturates, in 2006, 6.6% of high school seniors recreationally used a barbiturate (Johnston 2007).

Uncontrolled use of barbiturates can cause a state of acute or chronic intoxication. Initially, there may be some loss of inhibition, euphoria, and behavioral stimulation - a pattern often seen with moderate consumption of alcohol. When taken to relieve extreme pain or mental stress, barbiturates may cause delirium and produce other side effects that can include nausea, nervousness, rash, and diarrhea. The person intoxicated with barbiturates may have difficulty thinking and making judgments, may be emotionally unstable, may be uncoordinated and unsteady when walking, and may slur speech (not unlike the drunken state caused by alcohol) (Hanson et al, 2012).

2.8.5.3 Other CNS Depressants:

Non-barbiturate Drugs with Barbiturate-Like Properties

This category of depressants includes agents that are not barbiturates but have barbiturate-like effects. All of these drugs cause substantial tolerance, physical and psychological dependence, and withdrawal symptoms. The therapeutic safety of these CNS depressants more closely resembles that of barbiturates than benzodiazepines; consequently, like barbiturates, these agents have been replaced by the safer and easier-to-manage benzodiazepines (Charney et al. 2006).

Chloral Hydrate:

Chloral hydrate (Noctec), or “knock- out drops,” has the unsavory reputation of being a drug that is slipped into a person’s drink to cause unconsciousness. In the late 1800s, the combination of chloral hydrate and alcohol was given the name Mickey Finn on the waterfront of the Barbary Coast of San Francisco when sailors were in short supply. An unsuspecting man would have a friendly drink and wake up as a crew member on an outbound freighter to China (Fleckenstein 2000).

Chloral hydrate is a good hypnotic, but it has a narrow margin of safety. This compound is a stomach irritant, especially if given repeatedly and in fairly large doses. Addicts may take enormous doses of the drug; as with most CNS depressants, chronic, long-term use of high doses will cause tolerance and physical dependence (Sadock & Sadock, 2007).

Glutethimide

Glutethimide (Doriden) is another example of a barbiturate-like drug that can be abused and that causes severe withdrawal symptoms. It also induces blood abnormalities in sensitive individuals, such as a type of anemia and abnormally low white cell counts. Nausea, fever, increased heart rate, and convulsions occasionally occur in patients who have been taking this sedative regularly in moderate doses.

Methypylon

Methypylon (Noludar) is a shortacting nonbarbiturate that is used as a sedative and hypnotic. Its effects are similar to those of Doriden, and it is capable of causing tolerance, physical dependence, and addiction, much like barbiturates.

Methaqualone

Few drugs have become so popular so quickly as methaqualone. This barbiturate-like sedative-hypnotic was introduced in India in the 1950s as an antimalarial agent. Its sedative properties, however, were soon discovered. It then became available in the United States as Quaalude, Mequin, and Parest (Hanson et al, 2012).

Antihistamines

Antihistamines are drugs used in both nonprescription and prescription medicinal products. The most common uses for antihistamines are to relieve the symptoms associated with the common cold, allergies, and motion sickness. Although frequently overlooked, many antihistamines cause significant CNS depression and are used as both sedatives and hypnotics. For example, the agents hydroxyzine (Visteril) and promethazine (Phenergan) are prescribed for their sedative effects, whereas diphenhydramine is commonly used as an OTC sleep aid (Drug Facts and Comparisons 2007).

GHB (Gamma-Hydroxybutyrate):

GHB is a colorless, tasteless, and odorless substance found naturally in the body resulting from the metabolism of the inhibitory neurotransmitter GABA

(Drasbek et al. 2006). It was first synthesized nearly 30 years ago by a French researcher who intended to study the CNS effects of GABA. It was initially believed that GHB exerted its effects by enhancing CNS GABA systems, although this mechanism has recently been questioned. There is some evidence that GHB is itself a neuromodulator with its own receptor targets in the brain. Because of its central depressant effects, GHB has been used in Europe as an adjunct for general anesthesia, a treatment for insomnia and narcolepsy (a daytime sleep disorder), and a treatment for alcoholism and alcohol withdrawal and narcotic dependence. During the 1980s, GHB became available without a prescription in health food stores and was used principally by body builders to stimulate the release of growth hormone with the intent to reduce fat and build muscle. More recently, this substance became popular for recreational use due to what has been described as a pleasant, alcohol-like, hangover-free high with aphrodisiac properties. In 2006, 1.1% of high school seniors were reported to have used GHB. Because of its frequent use by young people at nightclubs and bars, GHB became known as a club drug (Johnston 2007).

2.9 Major Theoretical Explanations:

2.9.1 Biological theories:

Biological explanations have tended to use genetic theories and the disease model to explain drug addiction. The view that alcoholism is a sickness dates back approximately 200 years (Heitzeg 1996). The disease perspective is upheld by Jellinek's (1960) view that alcoholism largely involves a loss of control over drinking and that the drinker experiences clearly distinguishable phases in his or her drinking patterns. For example, concerning alcoholism, the illness affects the abuser to the point of loss of control. Thus, the disease model views drug abuse as an illness in need of treatment or therapy.

According to biological theories, drug abuse has a beginning stemming from physical characteristics that cause certain individuals either to experiment with or to crave drugs to the point of abusive use. Genetic and biophysiological theories explain addiction in terms of genetics, brain dysfunction, and biochemical patterns.

Biological explanations emphasize that the central nervous system (CNS) reward sensors in some people are more sensitive to drugs, making the drug experience more pleasant and more rewarding for these individuals (Khantzian 1998). In contrast, others find the effects of drugs of abuse very unpleasant; such people are not likely to be attracted to these drugs.

Most experts acknowledge that biological factors play an essential role in drug abuse. These factors likely determine how the brain responds to these drugs and why such substances prove addictive. It is thought that by identifying the nature of the biological systems that contribute to drug abuse problems, improved prevention and treatment methods can be developed (Koob, 2000).

All the major biological explanations related to drug abuse assume that these substances exert their psychoactive effects by altering brain chemistry or neuronal (basic functional cell of the brain) activity. Specifically, the drugs of abuse interfere with the functioning of neurotransmitters, chemical messengers used for communication between brain regions.

2.9.2 Psychological Theories:

Psychological theories mostly deal with mental or emotional states, which are often associated with or exacerbated by social and environmental factors. Psychological explanations of addiction include one or more of the following: escape from reality, boredom, inability to cope with anxiety, destructive self-indulgence to the point of constantly desiring intoxicants, blind compliance with drug-abusing peers, self-destructiveness, and conscious and unconscious ignorance regarding the harmful effects of abusing drugs. Freud established early psychological theories. He linked “primal addictions” with masturbation and postulated that all later addictions, including those involving alcohol and other drugs, were caused by ego impairments (Burns 1997).

Freud said that drugs compensate for insecurities that stem from parental inadequacies, which themselves may cause difficulty in adequately forming bonds of friendships. He claimed that alcoholism is an expression of the death instinct, as are self-destruction, narcissism, and oral fixations. Although Freud’s views represent interesting intuitive insights often not depicted in other theories, his theoretical concerns are difficult to observe and test, and they do not generate enough concrete data for verification (Hanson et al.2012).

Social Psychological Learning Theories:

Other extensions of reinforcement or learning theory focus on how positive social influences by drug-using peers reinforce the attraction to drugs. Social interaction, peer camaraderie, social approval, and drug use work together as positive reinforcers to sustain drug use. Thus, if the effects of drug use become personally rewarding “or become reinforcing through conditioning, the chances of continuing to use are greater than for stopping”. It is through learned expectations or association with others who reinforce drug use that individuals learn the pleasures of drug taking. Similarly, if drug use leads to poor and disruptive social interactions, drug use may cease (Akers 1992).

Note that positive reinforcers, such as peers, other friends and acquaintances, family members, and drug advertisements, do not act alone in inciting and sustaining drug use. Learning theory as defined here also relies on some variable amounts of imitation and trial-and-error learning methods.

2.9.3 Sociological Theories:

Sociological explanations for drug use share important commonalities with psychological explanations under social learning theories. The main features distinguishing psychological and sociological explanations are that psychological explanations focus more on how the internal states of the drug user are affected by social relationships within families, peers, and other close and more distant relationships, whereas sociological explanations focus on how factors external to the drug user affect drug use. Such outside forces include the types of families, adopted lifestyles of peer groups, and types of neighborhoods and communities in which avid drug users reside. The sociological perspective views the motivation for drug use as largely determined by the types and quality of bonds (attachment versus detachment) that the drug user or potential drug user has with significant others and with the

social environment in general. The degree of influence and involvement with external factors affecting the individual compared with the influence exerted by internal states distinguishes sociological from psychological analyses(Koob, 2000).

As previously stated, no one biological and psychological theory can adequately explain why most people use drugs. People differ from one another in terms of personality, motivational factors, upbringing, learned priority of values and attitudes, and problems faced. Because of these differences, many responses and reasons exist why people take drugs, which results in a plurality of theoretical explanations. Furthermore, the diverse perspectives of biology, psychology, and sociology offer their own explanations for drug use and abuse. There are two sets of sociological theories: social influence and social structural. Social influence theories focus on microscopic explanations that concentrate on the roles played by significant others and their impact on an individual. Structural influence theories focus on macroscopic explanations of drug use and the assumption that the organizational structure of society has a major independent impact on an individual's use of drugs. The next sections examine these theories (Heitzeg 1996).

Social Learning Theory:

Social learning theory explains drug use as learned behavior. Conventional learning occurs through imitation, trial and error, improvisation, rewarded behavior, and cognitive mental associations and processes. Social learning theory focuses directly on how drug use and abuse are learned through interaction with other drug users (Liska & Messner 1999).

This theory emphasizes the pervasive influence of primary groups - that is, groups that share a high amount of intimacy and spontaneity and whose members are emotionally bonded. Families and long-term friends are examples of primary groups. In contrast, secondary groups share segmented relationships in which interaction is based on prescribed role patterns. An example of a secondary group is the relationship between you and a salesclerk in a grocery store or relationships between employees scattered throughout a corporation. Social learning theory addresses a type of interaction that is highly specific. This type of interaction involves learning specific motives, techniques, and appropriate meanings that are commonly attached to a particular type of drug (Heitzeg 1996).

Labeling Theory:

Although controversy continues over whether labeling is a theory or a perspective (Heitzeg 1996), this text takes the position that labeling is a theory, because it explains something very important with respect to drug use. Although labeling theory does not fully explain why initial drug use occurs, it does detail the processes by which many people come to view themselves as socially deviant from others. Note that the terms deviant (in cases of individuals) and deviance (in cases of behavior) are sociologically defined as involving the violation of significant social norms held by conventional society. The terms are not used in a judgmental manner, nor are the individuals judged to be immoral or "sick"; instead, the terms refer to an absence of the patterns of behavior expected by conventional society. Labeling theory says that other people whose opinions we value have a determining influence over our self-image (Cheron 2001).

Subculture Theory:

Subculture theory speaks to the role of peer pressure and the behavior resulting from peer group influences. In all groups, there are certain members who are more popular and respected and, as a result, exert more social influence than other peer members. Often, these more socially endowed members are group leaders, task leaders, or emotional leaders who possess greater ability to influence others. Drug use that results from peer pressure demonstrates the extent to which these more popular and respected leaders can influence and pressure others to initially use or abuse drugs (Heitzeg 1996).

2.9.4 Structural Influence Theories:

Structural influence theories focus on how elements in the organization of a society, group, or subculture affect the motivation and resulting drug use behavior that is for nonmedical -most often recreational- use. The belief is that no single factor in the society, the group, or the subculture produces the attraction to drug use, but rather that the organization itself or the lack of organization largely causes this behavior to occur.

Social disorganization and social strain theories (Liska & Messner 1999) identify the different kinds of social change that are disruptive and explain how, in a general sense, people are adversely affected by the change. Social disorganization theory asks, What in the structure and organization of the social order (the larger social structure) causes people to deviate? Social strain theory attempts to answer the question, What in the structure and organization of the family, the peer, and employee social structure causes someone to deviate? This theory suggests that frustration results from being unable to secure the means to achieve sought-after goals, such as the goal of securing good income without much education, a well-paying job without prior training, and so on. Such perceived shortcomings compel an individual to deviate to achieve desired goals (Heitzeg 1996).

Control Theory:

The final major structural influence theory, control theory, emphasizes influences outside the self as the primary cause for deviating to drug use and/or abuse. Control theory places importance on positive socialization. Socialization is the process by which individuals learn to internalize the attitudes, values, and behaviors needed to become participating members of conventional society. Generally, control theorists believe that human beings can easily become deviant if left without the social controls provided by groups and organizations. Thus, theorists who specialize in control theory emphasize the necessity of maintaining bonds to family, school, peer groups, and other social, political, and religious organizations (Liska & Messner 1999).

2.10 Risk Factors of Drugs Dependence and Addiction:

Many, perhaps millions, of individuals use or even occasionally abuse drugs without compromising their basic health, legal, and occupational status and social relationships. Why do a significant minority become caught up in abuse and addictive behavior? The answer stems from the fact that many (i.e., not a single) factors generally contribute to an individual becoming addicted (Syvertsen, 2008).

It is important to recall that the “mix” of risk factors differs for each person. It varies according to social, cultural, and age groups and individual and family idiosyncrasies. Most addiction treatment professionals believe that it is difficult, if not impossible, to tease out these factors before treatment, when the user is still “talking to a chemical,” or during early treatment, when the brain and body are still recuperating from the effects of long-term abuse. Once a stable sobriety is established, one can begin to address any underlying problems. An exception is the mentally ill chemical abuser, whose treatment requires special considerations from the outset (Hanson, 2012).

The general effect of most drugs is greatly influenced by a variety of psychological and environmental factors. Unique qualities of an individual’s personality, his or her past history of drug and social experience, attitudes toward the drug, expectations of its effects, and motivation for use are extremely influential. These factors are often referred to collectively as the person’s mental set.

The setting, or total environment, in which a drug is taken may profoundly modify its effect. The mental set and setting are particularly important in influencing the responses to psychoactive drugs (drugs that alter the functions of the brain). For example, ingestion of LSD, a commonly abused hallucinogen, can cause pleasant, even spiritual-like experiences in comfortable, congenial surroundings. In contrast, when the same amount of LSD is consumed in hostile, threatening surroundings, the effect can be frightening, taking on a nightmarish quality (Solomon, 2002).

Risk and protective factors have been defined by Clayton (1999) to include individual characteristics, attributes, situational conditions, or environmental contexts that increase the probability of drug use or misuse or transition to another level of use. Protective factors inhibit, reduce, or buffer the probability of drug use and misuse or a transition to further drug involvement. However, risk and protective factors cannot always be differentiated at the individual level. For example, a protective factor for one adolescent could be a risk factor for another adolescent. Specifically, family involvement could be protective if a family promotes health and no substance use, but family involvement could be high-risk if family members use and “encourage” substance use with their own use and related behaviors. Substance use also can change the balance of risk and protective factors, which may change the level of substances used (Gullotta & Adams, 2005).

A bio/psycho/social/spiritual theoretical perspective has been proposed as a way of thinking about substance abuse. This framework presents theoretically grounded approaches and incorporates the interaction of behavior, environment, spirituality, and biology. It is also compatible with a public health focus on the interaction of the agent (substance), the host (the adolescent), and the environment (the setting that brings the two together) (Martin et al, 2002). The

bio/psycho/social/spiritual theoretical perspective incorporates four possible pathways or combinations of pathways to substance abuse:

- Biology or genetic pathways include heritability and biologically based theories of substance abuse, which are commonly depicted as the disease model of addiction.
- Psychological pathways incorporate individual characteristics that contribute to the motivation to use substances, expectancies to use, personality factors, and thinking that substance abuse is a learned behavior that can be unlearned.
- Social and environmental pathways include laws, culture, family norms, customs, and peer associations which are related to substance abuse.
- Spirituality incorporates the idea that a belief in something is a protective factor from substance abuse as well as being important for recovery from substance abuse (O'Brien & Vincent,2003).

Although the clinical literature is fairly consistent in the idea that spirituality is related to recovery, it is not without controversy since the focus can be on the idea that spirituality and religiosity are similar.

2.11 Predisposing Factors in The Abuse of Drugs:

2.11.1 Adolescence:

It is apparent that the period of greatest risk for beginning the use of cigarettes is in the age 12-13 years, and the age of 15 years is the time of greatest risk for initiating alcohol use and for beginning marijuana smoking. Current data also indicate that for many youth, alcohol and other drug use actually begins before the age of 18. The teen and preteen years are times of exploring new ideas, times of fast learning and for risk-taking. People exhibit an excessive drive in their pursuit of new and novel sensations and stimulation. Preteenager in this age is ready to experiment many new behaviors as part of the natural process of separating from parents and developing a sense of independence and self-identity. At the same time, adolescence tend to develop an increased sense of concern with their own appearance and abilities—described as adolescent "Egocentrism", these two conditions make teenagers especially vulnerable to the influences of peer groups (Jayousi,2003).

Adolescents often accept dares to discover and try the unknown including smoking, alcohol and other drugs. Teenagers have no experience and there decision making ability is limited and they have no control over there impulses. It is known that the time of the first use of alcohol or other drug is very important for the future possibility to continue alcohol and drug abuse, the younger the age when teenager first use alcohol or other drug, the more likely he will have alcohol and drug problems (Clayton,1999).

Signs that appears to be linked with teenagers abuse and drug related problems include school failure, low interest in school and adult achievement, rebelliousness and alienation, early antisocial behavior, easy and frequent lying, lack of empathy for other's feelings, insensitivity to punishment and early use of alcohol and other drugs.

2.11.2 Personality:

Tobacco and alcohol (and other psycho-active drugs) are often used as a coping method in dealing with problems of self-identity, self-esteem, boredom, family discord, academic pressure and chronic depression.

In some instances drug abuse is related to asserting independence or more simply a self-indulgent desire for wellbeing. One of the dangers associated with any drug taken for coping purposes is that it's prolonged use tends to undermine self-esteem and personal power. Temporary feelings of enhanced power, confidence, security and even creativity are attributed to the drug rather than to the self (Gullotta & Adams,2005).

As the drug is credited for its beneficial effects, drug takers tend to confirm their own personal deficiencies and thereby prolong their dependence on chemicals. Long-term survey of drug use in normal populations suggest that personality factors indicative of maladjustment, usually precede the use of marijuana and other illegal drugs, delinquent and deviant activities, as well as attitudes and values favorable to defiance, also occur before involvement with illicit drug use.

Despite extensive studies to link certain personality traits to a predisposition for drug use as well as for addiction, no general "addictive personality " seems to exist (O'Brien & Vincent,2003).

Escape to the inner self is one response of people who feel estranged from society and close friends. Surrounded by ugliness, confusion and people who can't be trusted or believed, the person under takes a search for inner world with beauty, meanings and truth. Without a meaningful past and unwilling to plan for an unknown and uncontrollable future, the modern person tends to focus on the here- and-now; now experience is the hallmark of the now generation; Hedonism had ascended its throne (Jayousi,2003).

2.11.3 Drug Fads and Myth About Drugs:

People are often caught up in one fad or another, new clothes fads, hairdos, or music fads; whatever new is often considered better. The drug culture is no exception. The much-publicized gurus and entertainment stars, aided by sensational accounts of drug happenings in the news media and the lyrics of "acid" and "heavy metal" rock, have raised the hopes and aspirations of many with the psychedelic gospel of salvation. Unscrupulous chemists and pushers, seeking a wider sales market, develop new fads in illegal drugs. However, the drug user seeking new sensations with "fad" drugs may risk serious physical and mental impairment, many face death (Guo et al,2002).

Designer drugs, unlike "designer clothing" are dangerous and potentially lethal. These fad drugs are created by changing the molecular structure of one element of a legal drug. Synthetic heroin, named Fentanyl, which is commonly called "China White" or "Persian White". This drug is 100-200 times more potent than heroin, and is so powerful that a very small amount may be fatal. In some cases, heroine look-alike has caused Parkinson's disease-like symptoms of jerking motion, shaking, rigidity irreversible brain damage and death (Hanson et al,2012).

Clove cigarettes, another fad, have caused great concern in the U.S., these cigarettes contain 40% ground clove leaves mixed with 60% tobacco. Eugenol, a toxic substance in the clove leaves, is an anesthetic, when burned, this substance may cause serious damage to the lungs, and deaths have been reported from extreme lung irritation, which results in blister like formation blocking normal breathing.

Other fads seen recently include licking frogs, smoking banana peels, mainlining or injecting various drug combinations. Users continue to invent new ways to get high, without thinking of the seriousness of their action and taking unknown risks with potentially lethal combination(Harrison & Narayan,2003:113).

Unfortunately, in the Palestinian society, there is an acceleration of the number of peoples who use -in fact abuse- the water pipe with Molasses tobacco, especially young age group with relatively high female participation (Gullotta & Adams,2005).

2.11.4 Changes and Conflicts in Society:

This group of factors has its' significant effect on drug use first of all because it affects a big numbers through all the classes of any society. Among the factors which can increase the drug abuse behavior is the adverse economic conditions, both in case of affluence and poverty (O'Brien & Vincent,2003).

Female roll and behavior in society had been changed worldwide in the last few decades; the civilization and women's movement had and still have notable effect on the female-status, with deep consequences both inside and outside the family structure; As a result of those two factors, economic confusion and family destruction, on can expect the manifestation of permissiveness, normlessness and individualism as the philosophy of Freedom, the freedom to do one's own thing (Clayton,1999).

Dominancy of superficial relationship, loss of the value of feelings and emotions; all life aspects are measured with material terms, and for many (especially the youth) the lack of opportunity for a achieving success by legitimate means. Absence of the social control requiring conformity leads to drug abuse. Those more attached to conventional society are less likely to engage in behavior that violates societal values and norms. Socially detached persons will not feel the constraint of these norms and values (Guo et al,2002).

2.11.5 Genetic causes

Research into the biological causes of addiction has resulted in convincing evidence that there is a hereditary vulnerability to alcoholism. Alcohol-related disorders have been found in multiple generations of families and have been studied over time. It is believed that many people with a genetic predisposition to alcoholism will progress to dependency if they begin using alcohol. Although a similar assumption is often made about other drugs of abuse, research evidence is much more difficult to obtain. Mood-altering drugs produce various pharmacological effects. The use of drugs over time is often influenced by fads and availability. Thus, different generations of families may be exposed to different types of drugs, whereas use of alcohol has been consistent over several generations. This makes the

multigenerational study of drug abuse more difficult than similar studies of alcoholism (Jayousi,2003).

2.12 Enabling Factors:

Drug market, availability and accessibility As a matter of fact, there is no addiction without drugs, the presence of different drugs in deferent sittings is an important factor which may lead to use and abuse of drugs, the tragically example for that is the number of addicts among the medical and paramedical personnel.

Other factors which, may act as enabling process is parent and sibling drug abuse. Parental and relative's alcoholism and drug abuse increases the risk of alcoholism and drug abuse in offspring. Attitudes and early drinking behaviors appear to be shaped more by parents and relatives than by peers. The absence of the control of official organs in our country makes it easy to buy and obtain any drug, especially in the last two years (Hanson et al,2012).

2.12.1 Social learning

In group settings, individuals are exposed to persons who model certain behaviors, and they receive rewards or punishments for their own behaviors from group members. When one associates with groups that define drug use as desirable and whose members model drug-related behavior, drug use by the individual is learned and rewarded (O'Brien & Vincent,2003).

2.12.2 Self-medication and inadequate medical care

Some individuals who have psychiatric conditions, such as anxiety or depression, use psychoactive substances to alleviate the symptoms they experience. Without careful management of such patients, physicians often enable chronic dependence in their own patients (O'Brien & Vincent,2003).

2.12.3 Rein forcners

Certain areas of the brain, when stimulated, produce pleasurable feelings. Psychoactive substances are capable of acting on these brain mechanisms to produce these sensations. These pleasurable feelings become rein forcners that drive the continued use of the substances. People tend to seek rewards and minimize negative consequences through their behaviors. If past behaviors have brought a response that is perceived as reinforcing, persons tend to repeat those behaviors to obtain similar rewards. Drug use may be rewarded in several ways, (Jayousi,2003) as described in the following list:

- Positive reinforcement: Persons abusing drugs and alcohol have found their use rewarded and, therefore, continue use. Without a positive reward, substance abuse would not likely continue, according to this perspective. There are many types of positive rewards that may accrue to someone using psychoactive substances, including their pharmacological effects (e.g., euphoria), social rewards, peer acceptance and esteem.

- Avoidance of pain: Behaviors also may be motivated by a need to seek relief or avoid pain. If using alcohol or other drugs helps someone who is suffering (physically or emotionally), he or she is likely to use the substance again when experiencing the same distress, and a strategy for coping with pain or stress develops that is dependent on the use of alcohol and other drugs. Some drugs produce painful withdrawal symptoms when use of them is discontinued. Persons dependent upon a drug may find that taking a dose will diminish their pain. Substance abuse also may be motivated by a desire for relief from pain, anger, anxiety or depression, and alleviation of boredom .
- Drug cues. Another aspect of reinforcement pertains to the anticipation of rewards. Certain stimuli can be associated with a drug and its rewards. These stimuli may act as triggers for drug seeking and use. Physiological responses, sometimes called cravings, may result from the introduction of a cue or stimulus. Cues vary from one individual to another, but may include being with specific people, engaging in particular activities, or going to certain places.

2.12.4 Peer factors

Drug behavior and drug-related attitudes of peers are among the most important factors which act both as enabling and reinforcing factors. Adolescents tend to increase use of drugs due to the influence of friends, and they also tend to choose friends who reinforce their own drug norms and behaviors. Adolescents who are problem drinkers usually do not feel their peer group and their parents are compatible, are more easily influenced by peers than by parents, and feel more pressure from peers for drinking and drug use (Gullotta & Adams,2005).

2.13 Major Factors of Drugs Dependence:

2.13.1 Individual Factors:

Many individual factors have been associated with adolescent drug misuse and abuse. Examples of these factors include childhood conduct disorder problems, low self-esteem; sensation-seeking poor impulse control, genetic predisposition to alcoholism, low family bonding, antisocial behavior, aggressiveness, academic failure, low commitment to school, early peer rejection, drug-using peers, alienation, early drug use, and favorable attitudes to drug use(Lynam, 1996).

Variability in acute drug effects, individual differences in the adolescent drug user, and differences in social context when the drug is ingested must be taken into account when assessing individual factors and vulnerabilities as well as developing an individualized treatment plan for each adolescent. For example, drug effects can range from decreasing anxiety seen in a group of socially anxious friends who smoke cigarettes before school in order to moderate dysphoria and disinhibition to an adolescent who gets a family message that he or she is a failure, begins drinking alcohol, and decides to kill him/herself using a father's gun. When assessing ways to assist adolescents who are abusing substances, issues associated with immediate morbidity must be addressed first and then the complex system in which the abuse occurs can be addressed (Gullotta & Adams,2005).

Psychiatric disorders and psychological symptoms may be associated with the likelihood with which an individual initiates drug use, continues drug use following the initial exposure, and/or continues to use drugs despite adverse social or health consequences. A possible determinant of drug use risk is the discriminative, reinforcing, and/or behavioral effects of a drug. In addition, the interaction of individual differences and the unique drug properties impact initial and continued use. For example, psychiatric comorbidity may impact adolescent drug use in several ways, which includes “self-medication” in association with attention-deficit/hyperactivity disorder (ADHD), nicotine use, social phobia, and alcohol use. A direct effect of nicotine is enhanced concentration and a direct effect of alcohol is decreased anxiety. Thus, these drugs would have strong reinforcing and behavioral effects for vulnerable adolescents (Jayousi, 2003).

The contributions of psychiatric disorders and/or personality traits on unique drug use choices have been examined in adults. For example, reported that normal subjects who chose methylphenidate over placebo scored higher on the extroversion and impulsivity subscales of the Eysenck Personality Inventory and the experience-seeking subscale of the sensation-seeking (SS) scale when compared to subjects who did not choose either methylphenidate or placebo. Martin and colleagues (1999) demonstrated that the interaction of conduct disorder and sensation-seeking (SS) scale was associated with the reinforcing effects of amphetamines in young adults. Sensation seeking also has been correlated with drug use in adolescents (Martin et al., 2002). Thus, it appears that drugs have unique reinforcing properties in high sensation-seekers.

Psychiatric disorders that are common among youth with substance use disorders include disruptive disorders (conduct disorder, oppositional defiant disorder, and ADHD), mood disorders (major depression and bipolar disorder), anxiety disorders (generalized anxiety disorder, social phobia, and post-traumatic stress disorder), and bulimia nervosa (O’Brien & Vincent, 2003). In addition to the general association of substance use disorders with psychiatric comorbidity, there appear to be selected disorders that have particular risk for specific substance use, which as noted above include ADHD, which has been linked to cigarette smoking, as well as social phobia and panic attacks, which have been associated with alcohol use disorders in adolescents (Zimmermann et al., 2003).

Specific disorders can be exacerbated by drug use or by drug withdrawal. For example, untreated comorbidity has been associated with treatment failure and untreated comorbidities which are likely to persist after successful substance abuse treatment. There may be a spectrum of psychiatric disorders among adolescents that if treated could decrease drug use. Table 1 presents a summary of disorders that are commonly comorbid with substance abuse in addition to pharmacological treatment strategies. It is important to emphasize that treating psychiatric disorders alone has not been associated with significant improvement in substance use and that psychiatric medications are not the first line of treatment but should be considered part of treatment (Riggs et al., 2001).

Acute drug effects and withdrawal have not received rigorous laboratory assessments in adolescents. Although drug withdrawal symptoms may be less frequent in adolescents when compared to chronic adult users, withdrawal symptoms and syndromes should be assessed and treated in the same way as adult treatment. An

exception may be nicotine dependence since there is no evidence that nicotine substitution is effective in maintaining abstinence among adolescent smokers (Hanson et al, 2003). However, the use of adolescent nicotine substitution is in the early stages of evaluation.

Early substance abuse can change the developmental trajectory of an adolescent who is undergoing dramatic physiological, social, and interpersonal changes which are likely to exacerbate preexisting psychiatric disorders. Adolescents who engage in high-risk behavior because of disinhibition and high sensation-seekers may be particularly vulnerable under the influence of disinhibiting drugs like alcohol. In general, high-risk behaviors that increase under the influence of alcohol and other drugs include aggression, violence, and risky behaviors like unprotected sex. For example, adolescents under the influence of alcohol and other drugs are more likely to be in car accidents, be raped, or drown. Marijuana use has been associated with increased risk for motor vehicle accidents, assault, and self-inflicted injuries (Gerberich et al, 2003). Although adolescents with conduct disorder may display bravado initially, adolescents with conduct disorder and depression are at highest risk for a lethal suicide attempt, particularly under the influence of an illicit drug. Individual vulnerability to depression and disinhibition may be aggravated by acute drug effects which can propel an adolescent into dangerous behavior that can include harm to self and others (Kelly et al., 2002).

2.13.2 Family Factors:

A number of familial factors have been identified that play a role in risk and resiliency to adolescent substance use and abuse. These factors include family structure, history, and relationships, as well as parenting styles and parental drug use. According to Cattarello and colleagues (1995), a factor may add to risk or resiliency depending on its direction. For example, although being in a single parent home may be a risk factor for adolescent substance abuse, having both parents at home may be a protective/resiliency factor against adolescent substance abuse. Ethnicity and gender also have been shown to play a complex role in adolescent substance use and abuse (Guo et al., 2002).

Family structure plays an important role in risk or resiliency for adolescent substance abuse. For example, in one study, students in the Miami-Dade county school district were interviewed concerning substance use and risk/resiliency factors during their middle-school years and then later (Gil et al., 2002). The results of this study demonstrate that for European Americans, but not African Americans, parental divorce significantly increased the risk for marijuana use and dependence.

The interaction and relationships within a family is another factor that can contribute to the risk for and resiliency to adolescent substance abuse (Guo et al., 2002). For example, in families with higher levels of rules and monitoring, there were significantly lower levels of drug use initiation in a sample of Seattle students which was followed over an 11-year period. The results of this study indicate that increased levels of involvement, bonding, and discipline within a family contributed to resiliency to not use drugs. Increased levels of family conflict also contribute to risk of using drugs. Other family factors that can contribute to the risk and resiliency include rules and parental expectations, since parents of adolescents who use drugs

are more likely to set unclear rules and have unrealistic parental expectations(Kelly et al., 2002).

Parenting style also can play a role in adolescent substance use. Specifically, adolescent drug use initiation or increased drug use have been associated with paternal permissiveness and maternal low attachment. When eighth- and ninth-grade students and their parents were examined on parenting style, academic achievement, tobacco use, and alcohol use, perceived parenting style significantly differed between parents and their children. In addition a child's perception of lower parental authoritativeness was associated with alcohol and tobacco use, while parent perception of parenting style was not associated with adolescent drug use (Gullotta & Adams,2005).

Parental substance use has been identified as one of the most common risk factors for adolescent substance use. For example, longitudinal data from Indianapolis students over 18 months clearly demonstrated the impact of parental substance use on adolescent substance use. Specifically, parents' tobacco and marijuana use was significantly associated with tobacco, alcohol, and marijuana use by their children. Parents' alcohol use also predicted alcohol use by their children. This effect was also increased when both parents reported using a substance (Li et al., 2002).

Gender and ethnicity also contribute to the influence of family factors on adolescent substance use (Gil et al., 2002). For African American women, family poverty was associated with lower occurrence of lifetime marijuana and cocaine use, although this relationship was not evident in African American men. As mentioned above, the number of parents at home differentially modifies the risk to use drugs, which varied by ethnicity. Another study reported that the prevalence of marijuana in the United States is lower in most minority groups, when compared to whites. However, the effects of gender upon risk and resiliency to substance use are complex and variable. For example, the higher prevalence of drug use in males may in part be accounted for by greater numbers of opportunities to use drugs for males than for females. However, research has shown that once an opportunity to use drugs has occurred, males and females do not generally differ in their likelihood of transition to drug use (Li et al., 2002).

In addition to gender, ethnicity can play a complex and variable role in risk and resiliency to use drugs. For example, African Americans report exposure to a larger number of risk factors than European Americans (Gil et al., 2002). However, risk factors to drug use within an ethnic group have at times not been predictive of actual prevalence of drug use. This difference in the predictive value of risk factors within an ethnic group may be due in part to cultural differences within particular ethnic groups(Gerberich et al, 2003).

Other family factors also have been associated with adolescent substance use and abuse; these include family relationships and history as well as parenting style and parental substance use. The direction (either positive or negative) of each of these factors may contribute to risk or resiliency, and the effects of these factors vary depending upon gender and ethnicity.

2.13.3 Social and Community Factors:

Social and community factors can have a role in risk and resiliency for adolescent substance misuse and abuse. These factors include peer attitudes toward substance use, school environment, prevention efforts, and multiple community factors like cultural norms, population mobility, neighborhood deviance, and poverty (Harrison & Narayan, 2003). Like family factors, social and/or community factors can also add to risk or resiliency, depending on the direction. For example, associating with peers who use drugs may be a risk factor for drug use; associating with peers who do not use drugs may be a resiliency factor, which “protects” against drug use. Ethnicity and gender also play a complex role in social and community factors that contribute to adolescent substance use and abuse (Guo et al., 2002). Practitioners should be aware that gender and ethnicity influence risk and resiliency to drug abuse and should thus not take a “one size fits all” approach to prevention and treatment of adolescents.

Peer attitudes and substance use can influence adolescent substance use or misuse. For example, in a sample of Seattle youth followed over 11 years, high levels of peer prosocial activity was protective against drug use initiation, while antisocial peer activity was a risk factor for drug use over time. In another longitudinal study, New York youth who associated with peers who smoked cigarettes or used marijuana were more likely to initiate marijuana use during their lifetimes. Peer influence appears to be age dependent, because in adolescents older than 12, peer attitudes and drug use were better predictors of substance use than they were for children (Sale et al., 2003). Practitioners should thus be mindful of age when considering treatment and prevention strategies.

School environment and prevention efforts can also contribute to risk and resiliency for adolescent substance use. For example, in a sample of ninthgrade Minnesota students, adolescents who actively participated in sports or other extracurricular activities were less likely to smoke cigarettes or use marijuana (Harrison & Narayan, 2003). Thus, a school environment that encourages participation in extracurricular activities may be protective against adolescent drug use. It should be noted, however, that involvement in activities was not protective against alcohol use in this study. School prevention activities also contribute to risk and resiliency for substance abuse. For example, results from a sample of rural seventh-graders from a Midwestern state showed that students involved in a Life-Skills Training (LST) program were slower to initiate substance use than students who received minimal contact. These results are consistent with other LST approaches. However, not all school prevention efforts influence risk to use substances. In fact, one study suggested that schools which used drug testing to curb drug use did not have lower rates of student self-reported drug use (Gullotta & Adams, 2005).

It should be noted that social behaviors, including drug taking, are learned through cultural influences, and are influenced by culture and community norms. In fact, describe numerous cultural/community factors, which include population mobility, neighborhood deviance, and poverty, that can influence adolescent substance use. Although a full discussion of these factors is beyond the scope of this chapter, one critical community factor that may influence adolescent substance use is neighborhood environment. (Novak & colleagues, 2002) recently reported that neighborhood environment significantly contributed to beliefs about substance use

among urban youth. That is, perceived risk of hard drug use on the part of adolescents was influenced by their residential neighborhood, which was in addition to individual variables like past experiences with drug and alcohol. Perceived risk of drug use also can contribute to adolescent substance use (Johnston et al., 2007:186).

Like family factors, gender and ethnicity also contribute to the way that social and community factors can influence adolescent substance use (Harrison & Narayan, 2003). Perry and colleagues (2003) reported a significant difference in self-reported substance use for boys following the Drug Abuse Resistance Education (DARE) Plus prevention program. However, differences were not found among girls. Clearly, gender and ethnicity are associated with risk and resiliency with regard to substance use. Consequently, practitioners should tailor prevention and treatment strategies to individuals because risk and resiliency factors vary with a person's gender and ethnicity. Thus, a number of social and community factors have been associated with adolescent substance misuse and abuse, which include peer attitudes toward drug use, school environment and prevention efforts, and other community factors like population mobility, neighborhood deviance, and poverty. The direction of these factors also may contribute to risk or resiliency and vary depending upon gender and ethnicity.

2.14 Drugs Dependence Prevention:

Drug addiction is a disease in which the relationship between host agent-environment is very strong, prevention activities might occur appropriately in any or all of the three sectors of the model at different levels.

Primary prevention aims to prevent developing new addiction cases and mainly it is directed towards the youth. These interventions include information programs, education for responsible decision making, and knowledge of risk factors, legislation and law enforcement.

From a broad perspective, when considering any drug prevention program, both protective factors and risk factors have to be considered. The following are the main principles that have to be considered when planning effective drug prevention programs:

- Prevention programs should enhance protective factors and reverse or reduce risk factors.
 - The risk of becoming a drug abuser involves the relationship among the number and type of risk factors (e.g., deviant attitudes and behaviors) and protective factors (e.g., parental support).
 - The potential impact of specific risk and protective factors changes with age. For example, risk factors within the family have greater impact on a younger child while association with drug-abusing peers may be a more significant risk factor for an adolescent.
 - Early intervention with risk factors (e.g., aggressive behavior and poor self-control) often has a greater impact than later intervention by changing a child's life path (trajectory) away from problems and toward positive behaviors.

- Although risk and protective factors can affect people of all groups, these factors can have a different effect depending on a person's age, gender, ethnicity, culture, and environment.
- Prevention programs should address all forms of drug abuse, alone or in combination, including the underage use of legal drugs (e.g., tobacco or alcohol), the use of illegal drugs (e.g., marijuana or heroin), and the inappropriate use of legally obtained substances (e.g., inhalants), prescription medications, or over-the-counter drugs.
- Prevention programs should address the type of drug abuse problem in the local community, target modifiable risk factors, and strengthen identified protective factors.
- Prevention programs should be tailored to address risks specific to population or audience characteristics, such as age, gender, and ethnicity, to improve program effectiveness (NIDA, 2007).

There are three levels of drug prevention programs, each suited to different types of drug users. Primary drug prevention programs [the very broad range of activities aimed at reducing the risk of drug use among nonusers and assuring continued nonuse] are aimed at nonusers, and the goal is to inoculate potential users against drug use. Primary prevention is often targeted at at-risk youth who may live in areas where licit and illicit types of drugs are rampant, may come from problem families, or are surrounded by drug-abusing peers(Hanson,2012).

The other two major types of drug prevention programs are secondary drug prevention [targeting at-risk groups, experimenters, and early-abuse populations to reverse the progression of abusive behaviors, similar to “early intervention”] programs-their aim is toward newer drug users with a limited history of use; and tertiary drug prevention [intervention at an advanced state of drug abuse; basically the same as drug abuse treatment] programs-their goal is to focus directly on intervention and target chemically dependent individuals who need treatment. Usually primary, secondary, and tertiary programs are used in combination because, in most settings, all three types of drug users constitute the targeted population (Gullotta & Adams,2005).

2.15 Comprehensive Prevention Programs for Drug Use and Abuse:

The harm reduction model is an approach to drug use and addiction practiced in some cities in the Netherlands and the United Kingdom. It is described by Westermeyer as an addiction model that connects “with the addicted community, by having an ‘open door policy’ that welcomes addicts to take part in services, regardless of level of motivation for change, goals or personal ideology” (Westermeyer n.d.). In a sense, it is a model that meets addicts on their own level. Westermeyer identifies three central beliefs of the harm reduction model:

- Excessive behaviors occur along a continuum of risk ranging from minimal to extreme. Addictive behaviors are not all-or-nothing phenomena. Although a drug or alcohol abstainer has a lower risk of harm than a drug or alcohol user, a moderate drinker is causing less harm than a binge drinker is; a crystal methamphetamine smoker or sniffer is causing less harm than a crystal injector.

- Changing addictive behavior is a stepwise process, with complete abstinence being the final step. Those who embrace the harm reduction model believe that any movement in the direction of reduced harm—no matter how small—is positive in and of itself.
- Sobriety simply is not for everybody. This statement requires the acceptance that many people live in horrible circumstances. Some are able to cope without the use of drugs; others use drugs as a primary means of coping. Until we are in a position to offer an alternative means of survival to these individuals, we are in no position behavior at this time, they should not be denied services. Attempts should be made to reduce to cast moral judgment. The health and well-being of the individual are of primary concern; if individuals are unwilling or unable to change addictive the harm of their habits as much as possible(Harrison & Narayan, 2003).

In its nature, harm reduction is a set of policy beliefs, essentially stating that people always have and always will perform activities, such as the abuse of drugs that cause harm. Harm reduction policy can be used in different fields to make drug abuse safer for those who became addicts, and to minimize the spread of and damage caused by addiction.

2.15.1 Community-Based Drug Prevention:

Community-based programs are very broad and take into account the community's youth, parents, businesses, media, schools, law enforcement, religious

or fraternal groups, civic or volunteer groups, healthcare professionals, and government agencies with expertise in the field of substance abuse. The primary goal of community-based prevention is to provide coordinated programs among the numerous agencies and organizations involved in prevention. Prevention requires communities to conduct a structured review of current prevention programs to determine:

- Whether the programs in place were examined and tested according to rigorous scientific standards during their development.
- Whether these programs incorporate the basic principles of prevention that have been identified in research (Guo et al., 2002).

Often, these programs set up prevention policy boards to oversee planning and implementation. Boards should include representatives from law enforcement, juvenile justice, education, recreation social services, private industry, health and mental health agencies, churches, civic organizations, and other community agencies that serve youth and families. They should also include one or several youth members. "The community can be a target group, especially when there is extensive

community denial or lack of awareness, lack of clear policies, poor law enforcement, and so on. Public awareness campaigns, political action, and similar efforts are appropriate at this level of prevention".

Community prevention programs can also direct their attention to changing the legal and social environment regarding alcohol, tobacco, and other drug supplies (ATOD) and toward youth (Center for Prevention Research and Development

[CPRD] 2000). This effort also includes individual and environmental strategies. For example, an environmental approach to reducing underage drinking might involve training clerks to insist on proper age identification when selling alcoholic beverages. An individual approach might involve education efforts, such as a media campaign, aimed at discouraging young people from drinking. Other community-based strategies include the following:

- Strengthening the enforcement of existing legal regulations of ATOD sales and use Educating merchants and servers about alcohol and tobacco sales laws.
- Regulating legislation regarding the sale of alcohol and tobacco to minors.
- Implementing use and lose laws, which allow for the suspension of the driver's license of a person younger than 21 years of age following a conviction for any alcohol or drug violation (e.g., use, possession, or attempt to purchase with or without false identification).
- Imposing regulations on location and density of retail outlets—that is, monitoring the number of unsupervised vending machines dispensing cigarettes to minors in a given community and monitoring the number of retail establishments selling alcohol and tobacco near schools(Hanson,2012).

In conclusion, community prevention emphasizes comprehensive drug abuse prevention programs that include multiple components, such as the use of media, drug education in schools, parent education, community organizations, and formulation of drug-related health policy. In essence, community drug prevention seeks to reduce drug abuse by informing, coordinating, and decreasing the level of drug use at the community level.

2.15.2 School-Based Drug Prevention:

School is the second 'family' for the teens, the healthy school, which it's first of all drug –free and violence-free, use no physical punishment, and through its curricula, teaches techniques and personal and social skills to deal effectively with demands and challenges of everyday life. These skills include decision making, problem solving, improving self-control, resistance to social pressure and stress and effective communication(Sale et al., 2003).

Education has been used extensively in the past to control the use and abuse of drugs, especially alcohol and tobacco. Drug education actually began in the late 1800s, when most states required that the harmful effects of certain drugs be taught. An example of an early educational attempt to curb or stop drug abuse is the temperance movement in the late 19th century. The Women's Christian Temperance Union (WCTU) and the Anti-Saloon League taught that alcohol consumption was harmful and contrary to Christian morality(Gerberich et al, 2003).

Years ago, when drug prevention was first attempted, most substance abuse experts thought that schools should be responsible for educating the public about the dangerous use and eventual abuse of drugs because education is school's main objective. Schools began teaching about drug use, but in the beginning, drug prevention focused on individual factors, such as the dangers of particular types of drugs, the dangers of trusting individuals who sell drugs, and other scare tactics. One problem with this approach was that students varied enormously with regard to their drug experiences (O'Brien & Vincent, 2003).

Often, the students had already tried the dangerous drugs and had experienced only pleasurable effects with few negative consequences. Their experiences occurred before their exposure to drug prevention programs that relied on negative information, which is generally known as the scare tactic approach. Many self-reported use surveys revealed that these programs were not successful. With such audiences of drug users, the warnings are short lived, not believed, or perceived as exaggerations(Martin et al., 2002).

2.15.2.1 School –based prevention strategies should:

- Strengthen norms against drug use and possession both on and off school property.
- Include interactive methods, such as peer discussion groups, and peer resistance programs relating to use of cigarettes, alcohol, marijuana and other drugs, these programs generally help students learn that the use of such drugs is not as "right" as they perceive.
- Include skills to resist drugs when offered.
- Offer school team training for teachers, administrators and other interested community people (Jayousi,2003).

2.15.2.2 Out –of school youth programs:

Summer programs and activities provide an important setting for peer experiences. They have a positive psycho-social effects teens and youth, and reduce a number of 'precursors' to drug use, such as depression, aggression, lack of self-discipline lack of school and family attachment these programs May include helping the elderly preventing crime, learning job skills, restoring historic sites, building community parks and play grounds.

Common to all those programs is their offer of ‘something to do to fill leisure time and a sense of belonging to a group. Key elements in all these programs are: Establishing prevention as a high-priority issue, choosing the right leaders and providing them with support, creating a special group identity, and gaining the support of the local community (O’Brien & Vincent, 2003).

2.15.3 Family-Based Prevention:

Primary family risk factors that predispose youth to find drugs attractive include the following:

- Chaotic home environments, particularly in which parents abuse substances or suffer from mental illnesses.
- Ineffective parenting, especially with children with difficult temperaments and conduct disorders.
- Lack of mutual attachments and nurturing.

“Results from longitudinal studies of children, particularly those children most at risk for problems, indicate that families can protect children and youth against drug use and abuse through effective family management practices that impart skills young people can use in resisting social pressures to use drugs” (NIDA 1998).

If the just listed risk factors are the primary risk factors, protective factors-the factors that can insulate against drug use-include the following:

- Strong parent-child bonds.
- Parental monitoring with clear rules of conduct within the family unit and involvement of parents in the lives of their children.
- Open communication of values within the family
- High levels of supervision and monitoring
- No inconsistent disciplining from lackadaisical to extreme enforcement of rules, and no saying one thing and then doing another
- Consistent high levels of parental warmth, affection, and emotional support.

In addition, research shows that protective family factors can moderate the effects of risk factors. The risk of associating with peers who use drugs can be offset by protective family factors, such as parent conventionality, maternal adjustment, and strong parent-child attachment.

Prevention at the family level needs to stress parent-child interaction strategies, communication skills, child management practices, and family management skills. Research has also shown that parents need to take a more active role in their children's lives. This includes talking to their children about drugs, monitoring their activities, getting to know their friends, and understanding their problems and personal concerns (NIDA 1998).

Research in recent year started focusing more on the identification of "protective factors" a result of apparent, limitations in prevention programs, concentrating too much on the reduction of risk factors which was not always possible. The strengthening of protective factors is nowadays seen to be more important than the reduction of risk factors. The concept of 'hands-on' Vs. 'hand-off' parents is the most important protective factor against drug abuse, it is believed that parents are the effective factor to keeping kids drug free. When parents are "hands-on" meaning they supervise their teenagers, and impose rules or standards of behavior, parents monitor the TV viewing, internet usage, or CD purchase, of their kids, they also know where their teen is after school and on weekends, and they closely monitor their teen's academic performance, they also give their teen a clear message about smoking (Hanson,2012).

2.16 Treating Drug Dependence:

Individuals who are addicted to drugs come from all walks of life. Many suffer from occupational, social, psychiatric or other medical problems that can make their addictions difficult to treat. Even in the absence of such complicating issues, the severity of addictions varies widely. It is essential to match treatment with the needs of the client. Further, it is valuable to intervene at the earliest possible stage of addiction with the least restrictive form of appropriate treatment. To accomplish this, it is important that treatment providers determine the severity of addiction as well as the readiness of an individual to change his or her behavior.

2.16.1 Assessing Addiction Severity and Readiness to Change:

The process of determining addiction severity can be accomplished in many ways, including the administration of standardized questionnaires. Of these, the Addiction Severity Index (ASI) is among the most widely used assessment instruments in the field of addiction. First released in the late 1970s, it is now in its fifth version with a sixth in development. The ASI is one of the most reliable and valid measurements of the magnitude and characteristics of client problems. It focuses on possible problems in six areas: medical status, employment and support, alcohol and drug use, legal status, family and social relationships, and psychiatric status. The ASI provides information that can be used to identify and prioritize which problem areas are most significant and require prompt attention (Charney et al. 2006).

When assessing and prioritizing problems, one model of individual development that is often considered is Maslow's hierarchy of needs. This theory postulates that individuals are motivated by unsatisfied needs, and that lower fundamental needs must be satisfied before higher needs can be satisfied (Hanson,2012).

These primary needs include food, drink, warmth, sleep, and shelter. These can be extended in the case of substance abusers to problems including:

- Unidentified or inappropriately managed health problems.
- Medication adherence issues (particularly in the presence of co-occurring mental or physical health disorders).
- Physical alterations due to drug and/or alcohol dependence (Stilen et al. 2007).

Once these fundamental needs are addressed, a second level of needs involving security and safety can be addressed. Simplistically, these include such issues as stability, order, law, and limits. Examples of common problem areas reflecting this level include inability for self-care, management of mental health issues, personal/public safety issues, and legal issues. If these needs are not met, individuals receiving substance abuse treatment cannot move to higher levels wherein love and belonging, self-esteem, and self-actualization (i.e., fulfilling personal potential) can be attained (Drug Facts and Comparisons 2007).

As important as assessing addiction severity and prioritizing problem areas on which to focus is consideration of a person's readiness to change his or her abuse behavior. Pioneering work by DiClemente and Prochaska (1998:76) revealed that behavioral change is a many-stage process, rather than a singular event. The stages described by DiClemente and Prochaska include:

- Precontemplation: An individual does not want to change or is not considering changing his or her behavior. The latter may be because he or she does not see a need for change.
- Contemplation: A person is considering changing his or her behavior.
- Preparation: A person is committed to a strategy for change.

- Action: A person is actively attempting to change.
- Maintenance: A person has changed his or her behavior. In order to complete the process of change, this behavior must become a part of his or her lifestyle.

Determining the state of change at which an individual finds him- or herself can help providers select the best treatment plan to address a client's needs. This may help prevent the individual from refusing to accept all or parts of the treatment plan.

2.16.2 Principles of Treatment:

A variety of approaches to drug addiction treatment exist. Some include behavioral therapy, such as counseling, psychotherapy, or cognitive therapy. Others include medications ranging from treatment medications (e.g., methadone, buprenorphine, nicotine patches, and nicotine gum) to those intended to treat co-occurring mental disorders (e.g., antidepressants or mood stabilizers). The most successful drug abuse treatment programs typically provide a combination of therapies and other services to meet the needs of the individual abuser. They incorporate adequate assessment of treatment needs required not only as a direct consequence of the physiological and psychological effects of the drug, but also from indirect problems, such as the need for housing, legal, and financial services, educational and vocational assistance, and family/ child-care services. Such needs are often shaped by the gender, age, race, culture, and sexual orientation of the abuser (Hanson, 2012).

To best target treatment for an individual, the type and goals of treatment must be determined. Consideration must be given to the fact that both the type and the goals of treatment largely depend on the view one holds of addiction. For example, if the disease model is applied to addiction, total abstinence is required because this model views drug abuse as a biological condition that is largely uncontrollable. The user is perceived as ill and thus irrational about continued drug use. On the other hand, if responsible drug use is the goal, then occasional and moderate drug use can be the intended end result (Stilen et al. 2007).

Effective treatment allows addicts to stop abusing drugs, returns them to a drug-free state of existence, and transforms them into employable and productive members of society. Measures of effectiveness typically include assessing levels of family functioning, employability, criminal behavior, and medical condition. Overall, treatment of addiction is as successful as treatment of other chronic diseases such as diabetes, hypertension, and asthma.

Studies clearly show that treatment is much less expensive than continuing addiction. Treatment is also less expensive than simply incarcerating addicts. For example, the average cost for 1 full year of methadone maintenance treatment is approximately \$4700 per patient, whereas 1 full year of imprisonment costs approximately \$18,400 per person or more. It has been estimated conservatively that every \$1 invested in addiction treatment programs yields a return of between \$4 and \$7 in reduced drug related crime, theft, and criminal justice costs. With health care saving included, total savings can exceed costs by a ratio of 12:1. Major savings to the individual and society also come from significantly fewer interpersonal conflicts,

improvements in workplace productivity, and reductions in drug related incidents (NIDA, 2006).

Successful outcomes depend on retaining the person in treatment long enough to gain the full benefit. Several factors influence retention, including individual motivation to change drug using behavior and degree of support from family and friends. Pressure from employers, the criminal justice system, or extensions of the court (i.e., child protective services) can also be important. Because individual problems such as mental illness or criminal involvement decrease the likelihood of retaining patients in treatment, broadranging programs (i.e., with medical and legal

services) are important. It is also important for providers to ensure a transition to continuing care or aftercare following a patient's completion of formal treatment (NIDA 1999).

NIDA has delineated thirteen overarching principles that characterize effective addiction treatment (NIDA 1999). These tenets, similar to those described by the majority of treatment researchers and providers, include the following:

- No single treatment is appropriate for all individuals. Treatment settings, interventions, and services must be matched to each individual's particular problems and needs.
- Treatment needs to be readily available. Individuals who are addicted to drugs are often uncertain about whether to seek treatment. Hence, it is crucial that services be available as soon as an individual makes the decision to seek help for his or her addiction. Opportunities for treatment can be lost if it is not immediately available or is not readily accessible.
- Effective treatment attends to multiple needs of the individual, not just his or her drug use. To be effective, treatment must address the individual's drug use and any associated medical, psychological, social, vocational, and legal problems.
- An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that the plan meets his or her changing needs. A person undergoing treatment may require varying combinations of services and treatment components during the course of treatment and recovery. In addition to counseling or psychotherapy, medication, other medical services, family therapy, parenting instruction, vocational rehabilitation, and social and legal services may be required. Hence, continual monitoring is important.
- Remaining in treatment for an adequate period is critical for treatment effectiveness. The appropriate duration for an individual depends on his or her problems and needs. As noted earlier, research indicates that for most patients, the threshold of significant improvement is reached at about 3 months in treatment.
- Counseling (individual and/or group) and other behavioral therapies are critical components of effective treatment for addiction. In behavioral therapy, patients address issues of motivation, build skills to resist drug use, replace drug using activities with constructive and rewarding non-drug-using activities, and improve problem-solving abilities.
- Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies. Methadone, naltrexone, and nicotine patches are just some examples of medications that can

be effective treatments. For patients with mental disorders, medications (i.e., antidepressants, anxiolytics) can be especially important.

- Addicted or drug-abusing individuals with coexisting mental disorders should have both disorders treated in an integrated way. Because addictive and mental disorders often occur in the same individual, patients presenting for either condition should be assessed and treated for the co-occurrence of the other.
- Medical detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug use. Medical detoxification (that is, the process of safely managing the acute physical symptoms of withdrawal associated with stopping drug use) can be an important first step toward abstinence. However, detoxification alone is rarely sufficient to help addicts achieve long-term abstinence.
- Treatment does not need to be voluntary to be effective. Strong motivation can facilitate the treatment process. Sanctions or enticements in the family, criminal justice system, or employment setting can facilitate treatment entry and increase both retention rates and success of drug treatment interventions.
- Possible drug use during treatment must be monitored continuously. Backsliding into drug use often occurs during addiction treatment. The objective of monitoring a patient's drug and alcohol use during treatment is that it can help the patient withstand urges to use drugs. Such monitoring also can provide early evidence of drug use so that the individual's treatment plan can be adjusted. Feedback to patients who test positive for illicit drug use is an important element of monitoring.
- Treatment programs should provide assessment for HIV/AIDS, hepatitis B and C, tuberculosis, and other infectious diseases and counseling to help patients modify or stop behaviors that place them or others at risk of infection.
- Recovery from drug addiction can be a long-term process and frequently requires multiple episodes of treatment. As with other chronic illnesses, relapses to drug use can occur during or after successful treatment episodes. Addicted individuals may require prolonged and multiple episodes of treatment to achieve long-term abstinence and fully restored functioning. Participation in self-help support programs during and following treatment often is helpful in maintaining abstinence (Hanson,2012).

2.16.3 Treatment programs:

There is a number of treatment programs which varies according to the activities and strategies used to reach different goals, and to deal with different groups.

In general, there is five main modalities of treatment, in practice, treatment for substance abuse must offer two or more modalities in addition to rehabilitation, relapse prevention and aftercare services.

2.16.3.1 Detoxification:

This term means the withdrawal of the drug and toxic effects from the body of the drug dependent person. The body, which had adapted in some way to the regular administration of the abused substance, in case of abstinence, will produce a number of undesirable symptoms which the detoxification is usually regarded to manage (Jayousi,2003).

Although detoxification is a distinct treatment modality, it can be also regarded as a 'precursor' for any other treatment. Detoxification is achieved either by the abrupt cessation of drug use or by a more gradual reduction. Support and monitoring need to be provided in accordance with the risks related to withdrawal from different substances, since sudden withdrawal notably from alcohol, barbiturates and benzodiazepines, can have life-threatening consequences.

Alternatively, accelerated or rapid and ultra rapid detoxifications methods have been used to a limited extent in some countries (it is used in Palestine, Bethlehem center for drug treatment and investigations). They involve the use of general anesthesia, but there is no strong evidence that accelerated detoxification increases the chances of long term abstinence (Bearne, J., et al., 1999).

2.16.3.2 Agonist (maintenance) treatment:

These programs which called take-home methadone programs are used for opiate addicts, the use of methadone or L.A.A.M, which are a long acting synthetic opiates medication, is sufficient to prevent opiate withdrawal, block the effect of illicit opiate use, and decrease opiate craving. Addicts stabilized an adequate, sustained, orally administered dosages of methadone (or L.A.A.M) can function normally, they have normal social and legal life, and they can engage more readily in counseling and there behavioral interventions essential to recovery and rehabilitation. Effective opiate agonist maintenance programs include individual or group counseling, as well as provision of other needed medical, psychological and social services (Stilen et al. 2007).

2.16.3.3 Antagonist:

This treatment begins after medical detoxification in a residential setting; Naltrexone is given daily or three times a week for a sustained period of time. Naltrexone is a long-acting synthetic opiate antagonist which had few side effects (Jayousi,2003).

2.16.3.4 Cognitive behavioral therapy:

Cognitive-behavioral coping skills treatment is a short-term, focused approach to help cocaine dependent individuals become abstinent from cocaine and other substances. The underlying assumption is that learning processes play an important role in the development and continuation of cocaine abuse and dependence; these same learning processes can be used to help individuals reduce their drug use. Cognitive behavioral therapy attempts to help addicts recognize the situation in which they are most likely to use cocaine, avoid these situation when appropriate, and cope more effectively with arrange of problems and problematic behaviors associated with substance abuse (Hanson,2012).

2.16.3.5 Family therapy:

Addict and his family, with all the members, must be treated as a unit, with special attention in dealing with "co-dependence", this is important because of the absence of normal relations and communication between family members as a result of addiction, although these disturbed relations may have contributed to the addictive

behavior. Family therapy is an important part of treatment, particularly in eastern communities where family structure and function is more sensitive to any negative phenomena (Bearne, J., et al., 1999).

2.16.3.6 Integrating behavioral therapies with medication:

There are two reasons which make this integration necessary; first appropriate behavioral interventions can potentially interact effectively with medication, enhancing their effect. From the earliest days of methadone maintenance, many studies stressed the importance of combining psychosocial services with methadone and there has been ample literature since then to support this point of view, similarly, behavioral interventions alone are sometimes insufficient to treat many drug abusers effectively, and it's believed that medications, whether for concomitant mental or physical disorders or for drug abuse per se, have a potential for improving the effect of behavioral treatments (Gullotta & Adams, 2005).

2.17 The problem of relapse:

Drug addiction is a chronic relapsing disorder, and relapse prevention one of the critical elements of effective treatment for alcohol and other drug (AOD) abuse. Studies have shown that 54 % of all alcohol and other drug abuse patients can be expected to relapse, and that 61 percent of that number will have multiple periods of relapse. Unfortunately, high percent of addicts relapse within one month following treatment, and another percent relapse 12 months after treatment; 47 percent will relapse within the first year after treatment (Simpson, Joe and Lehman, 2001).

Although relapse is a symptom of addiction, it is preventable. A key factor in preventing relapse is improved social adjustment. In the same time, relapse is not an automatic sentence to a lifetime of substance abuse for an individual. Researches in this field indicate that approximately one-third of patients achieve permanent abstinence through their first serious attempt at recovery. Another third have brief relapse episodes which eventually result in long-term abstinence. An additional one-third has chronic relapses which result in eventual recovery from chemical addiction (Gorski, Kelley and Havens, 1998).

Several situations may lead to relapse, such as social and peer pressure or anxiety and depression. Studies have indicated that the highest proportion of high-risk situations for alcoholics involve interpersonal negative emotional states, while the highest proportion of high-risk situations reported by heroin addicts involves social pressure (Marlatt and Gordon, 1999).

Contributing Factors An understanding of some of the personal factors which may contribute to substance abuse relapse is useful in any discussion of relapse prevention. These may include:

- Inadequate skills to deal with social pressure to use substances.
- Frequent exposure to "high-risk situations" that have led to drug or alcohol use in the past.
- Physical or psychological reminders of past drug or alcohol use (e.g., drug paraphernalia, drug-using friends, money).

- over drug or alcohol use, and recurrent thoughts or physical desires to use drugs
- Inadequate skills to deal with interpersonal conflict or negative emotions.
- Desires to test personal control or alcohol (Peters, 1999).

2.18 Summary:

The Addiction substance abuse references has expanded over the past years in the areas of etiology, treatment interventions, and prevention approaches. The etiological articles embraces the importance of risk and protective factors within the public health framework. We know that certain factors have been associated with drug misuse and abuse. These factors are individual factors, which include poor school attendance, low grades, delinquency, low self-esteem; family factors, which include disorganized families, lack of family cohesion, and poor parenting; peer factors, which include peer substance use and peer problem behaviors; and social/community factors, which include inconsistent messages.

One of the first steps in understanding and helping an drug abuser is being aware of the direct effects of the drugs and the associated withdrawal symptoms. This information will help identify problems, avert medical emergencies, and will inform the next step, whether it is pharmacologically assisted withdrawal or placement on a medication that might help decrease relapse. Another key component in helping an drug abuser is knowledge about comorbidities associated with drug abuse liability. This knowledge can increase sensitivity to understand the unique problems that an drug abuser with comorbidity may encounter when experiencing the effects of a drug and/or relapsing. Key to managing the drug abuser is knowledge about acute drug effects, drug withdrawal, and comorbidity. A critical adjunct to this sensitivity is a relationship with a clinician who can assess and treat drug toxicity, drug withdrawal, and/or comorbidity.

Family factors associated with resiliency to drug use (Addictive) include consistent rules, monitoring, and increased parental involvement. Family factors which have been consistently related to risky adolescent drug use include more adverse childhood events and parental substance use. Thus, parents should take a positive and active part in the lives of their children, maintain consistent rules with follow up, not use illicit drugs, and promote no drug use. Social and community factors that have been associated with resiliency to drug use include prosocial peer interactions, participation in positive activities, and community/school prevention activities. Social and community factors related to risk to drug use include peers and communities that accept substance use. Thus, to decrease drug use among adolescents, communities should discourage drug use and encourage positive extracurricular activities. Schools should also adopt effective substance use prevention interventions.

When Drugs Dependence treatment interventions are examined, the most promising approaches target multiple domains within an adolescent's life, which include their family, an adolescent's development and maturation, adolescent peer networks, and behavioral patterns that are linked to drug abuse and other problem behaviors. More effective drug abuse treatment programs incorporate several therapeutic approaches, including individual counseling, group sessions, structure, and case management. Regardless of where drug abuser receive treatment, from a community-based program or a residential program, adolescents benefit most from

treatment when their families are active participants in the therapeutic process. For high-risk youth who require residential treatment, a modified therapeutic community has shown promise in decreasing substance use and criminality while increasing pro-social behaviors. The amount of time devoted to length of stay and aftercare are areas that warrant future attention.

Prevention interventions, which target families, schools, and communities with consistent “no use” messages are more effective, particularly when planned booster sessions are used after treatment. Rather than using didactic teaching methods and focusing on single behaviors, the hallmarks of effective prevention programs are interactive educational approaches, which include targeting multiple behaviors, specific ages, and culturally appropriate values. Finally, given the number of adolescents who continue to experiment with drugs, additional research is needed to understand better adolescence issues and to examine innovative approaches to prevent and treat drug misuse and abuse.

Chapter Three

Literature Review

Chapter Three

Literature Review

In this chapter the researcher will show the literature reviews in two main themes. In this section the researcher will expose the literature of drugs dependence and addiction, which viewed in two axes, the first axis about drugs addiction, the second about Risk factor and cause of addiction, in the end this is exposure of discussion and comments around the mental health studies:

3.1 Studies of drugs addiction:

Study conducted in Italy by Carabellese F et al. (2013) researcher conducted a retrospective study of the clinical files of four public psychiatric outpatient facilities during five years. The objectives of the research were to identify and analyze relationships between: (a) cannabis use/abuse and violent behavior and (b) cannabis use/abuse, psychopathology, and violent behavior. The study sample consisted of 1,582 subjects. The data, gathered in a dedicated database, were processed by applying univariate and multivariate analysis models. An ample volume of research evidence supports the conclusion that drug use/abuse is correlated with violent behavior. Some studies have shown that co-morbidity also appears to be predictive of violent behavior. The research evidence indicates gender differences, while socio-economic and familial factors play a role, too. Subjects who used/abused cannabis showed a high prevalence of violent behavior. Regardless of the type of psychiatric disorder, the use of cannabis appears to be an evident risk factor. Significant correlations also emerged between cannabis use/abuse and the type of violent behavior, especially self-inflicted injury. Evidence also emerged that other factors are implicated. This is consistent with the current literature proposing multi-causal explanations of violent behavior.

Another study conducted in USA by Schwarz JM and Bilbo SD (2013) Adolescence in humans represents a unique developmental time point associated with increased risk-taking behavior and experimentation with drugs of abuse. We hypothesized that exposure to drugs of abuse during adolescence may increase the risk of addiction in adulthood. To test this, rats were treated with a subchronic regimen of morphine or saline in adolescence, and their preference for morphine was examined using conditioned place preference (CPP) and drug-induced reinstatement in adulthood. The initial preference for morphine did not differ between groups; however, rats treated with morphine during adolescence showed robust reinstatement of morphine CPP after drug re-exposure in adulthood. This effect was not seen in rats pretreated with a subchronic regimen of morphine as adults, suggesting that exposure to morphine specifically during adolescence increases the risk of relapse to drug-seeking behavior in adulthood. We have previously established a role for microglia, the immune cells of the brain, and immune molecules in the risk of drug-induced reinstatement of morphine CPP. Thus, we examined the role of microglia within the nucleus accumbens of these rats and determined that rats exposed to morphine during adolescence had a significant increase in Toll-like receptor 4 (TLR4) mRNA and protein expression specifically on microglia. Morphine binds to TLR4 directly, and this increase in TLR4 was associated with exaggerated morphine-induced TLR4 signaling and microglial activation in rats previously exposed to morphine during adolescence. These data suggest that long-term

changes in microglial function, caused by adolescent morphine exposure, alter the risk of drug-induced reinstatement in adulthood.

Another study conducted by Jakubczyk A et al. (2013) in Warsaw, Poland Impulsivity is an important risk factor of severe course of alcohol dependence. However, the significance of environmental determinants of impulsivity has been underestimated. The aim of this study was to identify psychosocial factors increasing the level of impulsivity in alcoholics. Levels of impulsivity were measured in 304 alcohol-dependent patients. The stop-signal task was used to assess behavioral impulsivity, and the Barratt Impulsiveness Scale, to measure global and cognitive impulsivity. Correlations between impulsivity and psychosocial variables were examined. A significant association between level of impulsivity and severity of psychopathological symptoms was observed. Patients who reported childhood sexual or physical abuse, lower social support, and more severe course of alcohol dependence were more impulsive, especially in the cognitive domain. When entered into a linear regression analysis model, severity of alcohol dependence, psychopathology, and childhood physical abuse remained significant. These results suggest that psychosocial variables are important factors associated with high levels of impulsivity in alcohol-dependent patients.

Also there is study conducted in Rostock, Germany by Büttner (2011) were about drug abuse represents a significant health issue. The major substances abused include cannabis, opiates, cocaine, amphetamine, methamphetamine and 'ecstasy'. Alterations of intracellular messenger pathways, transcription factors and immediate early genes within the brain reward system seem to be fundamentally important for the development of addiction and chronic drug abuse. Genetic risk factors and changes in gene expression associated with drug abuse are still poorly understood. Besides cardiovascular complications, psychiatric and neurologic symptoms are the most common manifestations of drug toxicity. A broad spectrum of changes affecting the central nervous system is seen in drug abusers. The major findings result from the consequences of ischemia and cerebrovascular diseases. Except for a few observations of vacuities, the a etiology of these cerebrovascular accidents is not fully understood. The abuse of amphetamine, methamphetamine and MDMA has been related to neurotoxicity in human long-term abusers and to the risk of developing Parkinson's disease. However, whether such neurotoxicity occurs remain to be established. Systematic histological, immunohisto-chemical and morphometric investigations have shown profound morphological alterations in the brains of poly-drug abusers. The major findings comprise neuronal loss, neurodegenerative alterations, a reduction of glial fibrillary acidic protein-immunopositive astrocytes, widespread axonal damage with concomitant microglial activation as well as reactive and degenerative changes of the cerebral microvasculature. These observations demonstrate that drugs of abuse initiate a cascade of interacting toxic, vascular and hypoxic factors, which finally result in widespread disturbances within the complex network of central nervous system cell-to-cell interactions.

In addition; Chen et al (2010) aims to determine multilevel effects of school- and family-characteristics on children's alcohol purchase and to probe possible drinking experience-related heterogeneity in such links. A representative sample of 2630 4th and 6th graders in an urban region of Taiwan in 2007 was drawn via multistage probability sampling. Information about family background and individual drinking experiences

was collected via paper-and-pencil self-administered questionnaires; school neighborhood characteristics were assessed via commercial datasets of geographic information system. The study found; Roughly one in nine 10-12-year-old children ever purchased alcoholic beverages by 6th grade. Children who did not participate in after-school programs or had observed parental drinking had 2-3-fold increased risk to buy alcoholic beverages alone. Living with one or none of parents was associated with alcohol purchase in children who never drank alcohol. School contextual characteristics have salient effects on minors' alcohol accessibility from commercial sources (e.g., the density of nearby educational institutions), and certain school neighborhood effects were notably different by children's drinking experience (e.g., the density of public transportation).

Study of Karila et al., (2010) conducted in USA, this research show Methamphetamine is the second illicit drug used after cannabis in North America, Asia, Oceania. It also becomes a prominent part of the European drug scene, especially in East European countries such as Czech Republic and Slovakia. Methamphetamine addiction is a serious worldwide public health problem with many consequences and complications. Significant morbidity, including cardiovascular, infectious, pulmonary, dental diseases and other systems complications are associated with methamphetamine acute or chronic use. Cognitive disorders, psychotic and mood disorders have been reported. There is also substantial evidence that methamphetamine has an adverse impact on social relationships. Treatment of methamphetamine complications is primarily supportive and need a multidisciplinary approach. It can serve as a target to initiate a treatment for the addiction problem. The use of behavioral therapies and pharmacological agents are the best therapeutic approach.

In addition, study of Maier et al., (2010) conducted in Germany, study that drug dependence of anesthetists occurs more often than in other physicians, especially the noxious usage of common substances in anesthesiology and pain management like opioids and anesthetics. Opioids are the most frequent abusively taken medication followed by benzodiazepines, illegal drugs, Propofol and Ketamine. Determining for the behavioral pattern is the easy access to the drugs. Especially as some of the addictive-drugs (e. g. Propofol, Ketamine) are not underlying any release-control. Recent German surveys confirm the American figures. For the development of drug dependence many factors like biographic, social and genetic aspects as well as the substances and their potential itself are significant. Furthermore, the presence of many stimuli encourages the relapse-risk for addicted people despite earlier abstinence. At least 16% of all cases and 37% of the Propofol-addiction cases proceed deadly. American studies with structured therapy-, rehabilitation- and follow-up surveillance-programs show a positive prognosis for anesthetists. In Germany it requires rethinking and the establishment of comparable therapy-offers and facilities.

Study conducted in Zimbabwe by Rudatsikira et al., (2009) To estimate the prevalence and predictors of illicit drug use among school-going adolescents in Harare, Zimbabwe. uses data from the Global School-based Health Survey (GSHS) conducted in 2003 in Harare to obtain frequencies of a selected list of characteristics. We also carried out logistic regression to assess the association between illicit drug use and explanatory variables. A total of 1984 adolescents participated in the study. Most of the sample were females (50.7%), 15-year-olds (30.3%), nonsmokers and non-alcohol drinkers. Nine percent of the subjects (13.4% males and 4.9% females) reported having

ever used marijuana or glue. Males were more likely to have used marijuana or glue than females. Marijuana or glue use was positively associated with cigarette smoking, alcohol drinking and sexual intercourse. Parental supervision was a protective factor for marijuana or glue use.

Study of Sloboda et al., (2009) in USA, the study determine whether a universal school-based substance abuse prevention program, Take Charge of Your Life (TCYL), prevents or reduces the use of tobacco, alcohol, or marijuana. Used Eighty-three school clusters (representing school districts) from six metropolitan areas were randomized to treatment (41) or control (42) conditions. Using active consenting procedures, 19,529 seventh graders were enrolled in the 5-year study. Self-administered surveys were completed by the students annually. Trained Drug Abuse Resistance Education (D.A.R.E.) police officers presented TCYL in seventh and ninth grades in treatment schools. Analyses were conducted with data from 17,320 students who completed a baseline survey. Intervention outcomes were measured using self-reported past-month and past-year use of tobacco, alcohol, and marijuana when students were in the 11th grade. The results Main effect analyses show a negative program effect for use of alcohol and cigarettes and no effect for marijuana use. Subgroup analyses indicated that the negative effect occurred among nonusers at baseline, and mostly among white students of both genders. A positive program effect was found for students who used marijuana at baseline. Two complementary papers explore the relationship of the targeted program mediators to the use of alcohol, tobacco, and marijuana and specifically for students who were substance-free or who used substances at baseline.

Study of Ilhan et al.,(2008) in Turkey, this study is a survey to determine prevalence and sociodemographic correlates of drinking problems among students from five university centres in Turkey. Uses an anonymous self-administered questionnaire and the CAGE Questionnaire for alcohol use problems, 1,720 students were surveyed. Results the whole student sample 63.3% reported that they had ever tried drinking alcohol, and 48.5% had used alcohol in the past year. Sixty five percent of the students had been drinking once a month or more frequently. In multivariate analysis, male students tended to have problems with alcohol about three times more than females. living in the dormitory seemed to be protective in terms of frequent drinking, and as educational level of the parents increased, the odds of drinking at least once a month increased. Students whose mothers were illiterate or primary school graduate tended to give more positive answers to the Cut-down, Annoyed and Guilty items. The odds of giving a positive answer to the Cut-down item among those living alone was greater than the other residence groups. Predictors of positive answer to the Eye-opener item were male gender, living alone at home, and residence of the family being in a foreign country. Paternal educational level being in the illiterate/primary school category was significantly related with more positive answers to the Guilty item.

Study conducted by Bastos et al., (2008) To assess alcohol and drug use in a representative sample of the urban Brazilian population and their correlation with sexual and reproductive health. A total of 5,040 individuals from both genders, in the age group from 16 to 65 years old, were interviewed. Issues regarding drug and alcohol use and sexual behavior were assessed. Bivariate and multivariate analyses were used. The results alcohol was the most frequently used substance, with reports of regular use in the lives of 18% of interviewees. Use of illegal drugs was mentioned by 9% of the interviewees especially marijuana and snorted cocaine; injected drugs use was not

frequent. There was a decrease in snorted cocaine use and an increase in marijuana use (in the last 12 months), compared to results of a similar survey conducted in 1998. History of sexual abuse was a risk factor for drug use and regular alcohol use. Interviewees mentioning the role of religion in their background, being White, and female were less likely to use alcohol in a regular way, which is especially prevalent among elderly males. Leisure activities and absence of current religious practice were associated with drug use.

In Palestine; Omran (2006) aims at diagnosing drug addiction and addicts in Jerusalem during and its prevalence among Palestinian youth. Effects of drugs and its negative impact; addicts perceptions of themselves and consequent remedy and degree of its isomorphic results were also delineated, their appalling set of values were also laconically investigated. A stratified Sample of 230 addicts have been used as a sample of the study to see into the scope of independent variables such as age, sex, social status, income, residence, parents' education, and finally religion and then relation to addiction. To particularize measuring the range of relationship among these variables in relation to addiction, a valid and reliable (test-retest 0.89) instrument was designed accordingly with a trustee validity of (0.93). Descriptive statistics were also approbated to see into classification and analysis of the data collected. The study revealed that the majority of addicts are single adults of 22 years of age living in the city. Deviance in their behavior, low self-morale, hampered perception of self, extricated vision of solution to addiction, and a consequent inconsonance in peoples' perception to addicts were the major products of this study. The study also furnished a description for the mechanisms of drugs prevalence in addition to recommendations that are highly correlated to drug addiction.

Study conducted in USA by So et al., (2006) Two hundred and forty eight self-identified Asian-American college students participated in this study that examined the prevalence rates and sociodemographic factors of substance use among Asian Americans in college. Using a Basic Demographic Questionnaire, Family of Origin Measure, Acculturation Lifestyle Survey, and Substance Use Checklist (all instruments were in English), prevalence rates were found to be comparable to or higher than a national sample: 94.5% lifetime prevalence and 78.6% current prevalence (past 30 days) of alcohol use; and higher current prevalence (past 30 days) of illicit drug use (9.5%) and of cigarette use (22.8%) than other Asians aged 12 and older (3.5% for illicit drugs and 17.7% for cigarettes) in a national survey. Male students and those who were employed were more likely to be current users (past 30 days) of drugs in general (15%) and marijuana (13.2%), and users of wine coolers (76.0%) and cigarettes (61.1%) in their lifetime. Being born overseas, years in the U.S., and preference for American TV/movies are associated with substance use. Asian Americans are not immune from substance use (or abuse) while in college. Culture-specific prevention is necessary.

Study conducted in Brazil by Ede (2006) The study investigates the prevalence of drug consumption among secondary school students in São José do Rio Preto, São Paulo State, Southeast Brazil, and its distribution in relation to gender and grade in school. A cross-sectional survey was carried out in São José do Rio Preto. A self-applied questionnaire was answered by a proportional sample of 1,041 teenagers enrolled in 9th, 10th, and 11th grades in public schools. Lifetime consumption of psychoactive substances was: alcohol 77%, tobacco 28.7%, solvents 18.1%, marijuana 12.1%, amphetamines 3.7%, cocaine 3.3%, hallucinogens 3.1%, and crack 1.4%.

Weekly use of marijuana was the highest (2.8%), followed by solvents (1.3%). Males consumed more alcohol, marijuana, cocaine, and crack than females. Nighttime use of tobacco, marijuana, cocaine, and hallucinogens was observed. In the present study, prevalence of psychoactive substance use was observed in São José do Rio Preto at rates similar to those found in other Brazilian studies.

Study of Lambert Passos et al., (2006) in Brazil, the aim of this investigation was to estimate the prevalence of psychoactive drug use among medical students of public universities in Rio de Janeiro, Brazil, and to identify characteristics associated with substance use. Uses a cross-sectional investigation designed to include all medical students of four universities. The final sample included 1,054 students. The results Alcohol abuse was more prevalent among male students from higher income families. Alcohol LTD use was more prevalent among male students with college-educated parents. Tobacco, cannabis and inhalant lifetime use was more prevalent among males and tranquillizer use among females. Tobacco, cannabis and tranquillizer lifetime use was more prevalent among students with divorced or dead parents. Inhalant lifetime use was more prevalent among students from higher income families. Students who had college-educated, divorced or dead parents or evidenced tobacco, cocaine or inhalant lifetime use were more prevalent among cannabis users. Male students from higher income families had higher prevalence of cocaine lifetime use.

Study of Galduróz et al.,(2005) in Brazil, the prevalence of the use in Brazil of illicit drugs, as well as of alcohol and tobacco, was determined. Further, illicit use of psychotropic medicines, and anabolic steroids were also surveyed. This study was carried out in 107 Brazilian cities with more than 200,000 inhabitants aged 12-65 years. The sampling design adopted was that of sampling per aggregates in three stages: first, the census sectors were selected; second, homes were selected among the sectors; finally, in each home, a respondent was selected in a manner independent of the interviewer. There were 8589 persons interviewed. The questionnaire utilized was that of the SAMHSA (Substance Abuse and Mental Health Services Administration) which was translated and adapted for Brazilian conditions. The lifetime use of alcohol in the 107 major cities of the country was 68.7%, which was close to numbers observed for Chile at 70.8% and the USA at 81.0%. Yet, tobacco lifetime use was 41.1% of the total, which is lower than the prevalence observed in the USA (70.5%). The data on the lifetime use of marijuana in Brazil (6.9%) approximated the findings for Colombia (5.4%), however, being much lower than that observed in the USA (34.2%) and the United Kingdom (25.0%). The prevalence of lifetime use of cocaine was 2.3%, well below the levels for the USA with 11.2% of the total population. The abuse of inhalants was 5.8% of the total, greater than that found in Colombia (1.4%) and about four times less than that in the United Kingdom with 20.0%. Among the medicaments, stimulants had a 1.5% prevalence of lifetime use, and that of benzodiazepines had similar percentages in Brazil (3.3%) and in the USA (5.8%). In this survey, only four individuals reported lifetime use of heroin, which was equivalent to about 0.04% of the sample and much lower than that in the USA with 1.2% and in Colombia reaching 1.5%. These findings will allow the implementation of public policies fitted to the situation with psychotropic drugs in Brazil.

Another study was conducted in Brazil by Dalgalarondo et al., (2004) aimed to determine which religious variables are associated to frequent or heavy use of alcohol, tobacco and drugs among adolescents in intermediate and high schools in

Campinas, Brazil. Uses a cross-sectional study using a self-report anonymous questionnaire was administered to 2,287 students from a convenience sample of seven schools: five from central areas (two public and three private schools) and two public schools from the outskirts of the city, in 1998. The study analyzes data regarding the use of alcohol, tobacco, medicines, solvents, marijuana, cocaine and ecstasy. The religious variables included in the regression analysis were: religious affiliation, church attendance, self-assessed religiousness, and religious education in childhood. For the substances, nicotine, alcohol, marijuana, cocaine, ecstasy and "abuse of medicines" a logistic regression analysis for dicotomic answer was applied. The heavy use of at least one drug during the last month was more frequent among students that did not have a religious education during childhood. The use in the last month of cocaine, ecstasy and (abuse of) medicines was more frequent among those students that had no religion (cocaine and medicines) and that did not have a religious education during childhood (ecstasy and medicines).

Study of Ljubotina D et al., (2004) in Croatia, the study examine the prevalence and possible interconnections among the frequencies of consuming various psychoactive substances in Zagreb adolescents. Also, to assess risk factors associated with the use of tobacco, alcohol, and marijuana. uses multi-dimensional, self-reporting questionnaire on a representative sample of 2,404 elementary and high school students (total age range, 13-23 years) from Zagreb, Croatia. The questionnaire was designed to explore the extent to which examinees consumed various psychoactive substances, as well as to assess their attitudes and knowledge about the substances. The results Almost 90% of all examinees experimented with alcohol at least once, 80% with tobacco, 39% with marijuana, and 9% with Ecstasy. Thirty-six percent consumed alcohol and 11% marijuana several times a month, whereas 28% smoked tobacco daily. Although there was no statistically significant difference according to sex in experimenting with psychoactive substances, day-to-day abuse was significantly more frequent among young men than women. About 43% of our examinees believed consuming marijuana should become legally permitted, 37% were against this policy, and 21% were undecided on this issue. Our results showed a high degree of interconnection among the frequencies of consuming tobacco, alcohol, and marijuana. We also found that the best predictive factors for consumption of these three substances were a history of high-risk and delinquent behavior, troubled adjustment to school, domination of hedonistic values, and poor family relations.

Study of Wu et al, (2003) To examine the association between employment status and substance use among students aged 12 to 17 years. Used Secondary analysis of data from the 1995 and 1996 National Household Surveys on Drug Abuse was conducted. The survey is a primary source of data on licit and illicit drug use among noninstitutionalized Americans aged 12 years or older. Participants are interviewed at their places of residence. Multiple logistic regression procedures yielded estimated associations. Results About one in six adolescents reported both going to school and holding a job. Approximately one-fourth of students smoked cigarettes, and one-third consumed alcohol in the past year. An estimated 1.6% of students were current heavy cigarette smokers, and 2.6% were current heavy alcohol users. One-year prevalence estimates of any illicit drug use and heavy illicit drug use were 16.7% and 1.8%, respectively. Among students employed full time, prevalence estimates increased to 9.7% for heavy cigarette smoking, 13.1% for heavy alcohol use, 38.1% for any illicit drug use, and 5.0% for heavy illicit drug use. Logistic regression analyses supported

relatively high rates of cigarette use, alcohol use, illicit drug use, and heavy substance use among working students. Mental health problems, especially externalizing behavioral syndromes, were found to coexist with the use and heavy use of substances.

3.2 Discussion of the Studies of drugs addiction:

The researcher will discuss previous studies of drug dependence and another independent changing with variable ; the first one is tools were used in these studies, the second is samples of the studies, and the third about the results of the previous studies, as the following:

Goal of the previous studies:

- Some of the study objectives of the research were to identify and analyze relationships between cannabis use/abuse and violent behavior such as (Carabellese F et al, 2013), and (Karila et al, 2010).
- But another research contain multi type of drugs addiction such as cannabis, opiates, cocaine, amphetamine, methamphetamine and 'ecstasy'. So researcher study identify characteristics associated with substance use, such as (Buttner, 2011), and (Lambert Passos et al, 2006).
- Some of research estimate the prevalence and predictors of illicit drug use among school-going adolescents such as (Rudatsikira et al, 2009), (Ilhan et al, 2008), (Ede, 2006) and (Ljubotina D et al, 2004).
- Some of the research aimed to determine multi-level effects of school- and family-characteristics on children's alcohol purchase and to probe possible drinking experience-related heterogeneity, such as (Jakubczyk A et al, 2013), (Chen et al, 2010), (Bastos et al, 2008) and (Galduroz et al, 2005).

Tools of the previous studies:

- Some of researcher gathering Information about family background and individual drinking experiences was collected via paper-and-pencil self-administered questionnaires; such as (Chen et al, 2010), and (Ilhan et al., 2008).
- Another research uses multi-dimensional, self-reporting questionnaire such as (So et al., 2006), (Ede, 2006), (Galduróz et al., 2005), and (Dalgarrondo et al., 2004).
- (Jakubczyk A et al. 2013) and (Sloboda et al., 2009) used behavioral impulsivity Scale, and the Barratt Impulsiveness Scale, to measure global and cognitive impulsivity.
- Some researcher Using a Basic Demographic Questionnaire, Family of Origin Measure, Acculturation Lifestyle Survey, and Substance Use Checklist, such as (Ilhan et al., 2008), and (So et al., 2006).

Samples of the previous studies:

- In the field of samples of the previous studies, the study samples were ranged between large samples as the study of (Chen et al, 2010), (Dalgarrondo et al.,

2004), and (Ljubotina D et al, 2004) uses About Three-thousands school students aged between 10 to 18 years old.

- Another study sample contain on two-thousands participated from addicted patients, schools student, medical staff male or Female such as (Carabellese F et al., 2013) (Lambert Maier et al., 2010), (Rudatsikira et al., 2009), (Ilhan et al.,2008), (Ede, 2006), and (Passos et al., 2006).
- However the medium samples in the studies of (Karila et al., 2010), (Rudatsikira et al., 2009), and (Ede ,2006) less than thousand patients participated.
- While; some studies have small samples as studies of (Jakubczyk A et al. 2013), (Sloboda et al., 2009), and (Omran, 2006) used about 500 patient Adults with drugs dependency patients.

Results of the previous studies:

- In the previous studies of (Carabellese F et al. 2013), and (Karila et al, 2010) Subjects who used/abused cannabis showed a high prevalence of violent behavior, Regardless of the type of psychiatric disorder, the use of cannabis appears to be an evident risk factor.
- In addition; (Rudatsikira et al., 2009), (Ilhan et al.,2008), (Omran , 2006), and (Ljubotina D et al., 2004) Founded that the best predictive factors for consumption of these three substances were a history of high-risk and delinquent behavior, troubled adjustment to school, domination of hedonistic values, and poor family relations.
- Some of the research founded the history of sexual abuse was a risk factor for drug use and regular alcohol use. Interviewees mentioning the role of religion in their background, being White, and female were less likely to use alcohol in a regular way, which is especially prevalent among elderly males. Leisure activities and absence of current religious practice were associated with drug use, such as (Schwarz JM and Bilbo SD,2013), (Chen et al, 2010), (Bastos et al., 2008), and (Ede 2006).

3.3 Studies of Risk factor and cause of addiction:

Study by Ehlers CL, Gizer IR. (2013) although tribes differ with regard to the use of alcohol and drugs, substance dependence is one of the primary sources of health problems facing Native Americans. General population studies have demonstrated that substance dependence has a substantially heritable component (approximately 50% of the risk resulting from genetic influences); however, fewer studies have investigated the role of genetics in the risk for substance dependence in Native Americans. The authors present a literature review of the evidence for a genetic component in the etiology of substance dependence in Native Americans, including studies of heritability, linkage analyses, and candidate genes. Evidence for the heritability of alcohol and drug dependence was found. Linkage analyses revealed that genes influencing risk for substance dependence and related phenotypes, such as body mass index (BMI), drug tolerance, EEG patterns, and externalizing traits, reside on several chromosome regions identified in other population samples. Overlap in the gene locations for substance dependence and BMI suggests that a common genetic substrate may exist for disorders of consumption. Studies of the genes that code for alcohol-metabolizing enzymes have not revealed any risk variants specific to Native American populations, although most Native Americans lack protective variants seen in other populations. Other candidate genes associated with substance dependence phenotypes in Native Americans include OPRM1, CRN1, COMT, GABRA2, MAOA, and HTR3-B. Substance dependence has a substantial genetic component in Native Americans, similar in magnitude to that reported for other populations. The high rates of substance dependence seen in some tribes is likely a combination of a lack of genetic protective factors (metabolizing enzyme variants) combined with genetically mediated risk factors (externalizing traits, consumption drive, and drug sensitivity or tolerance) that combine with key environmental factors (trauma exposure, early age at onset of use, and environmental hardship) to produce an elevated risk for the disorder.

Another research, Saloner B, Lê Cook B. (2013) More than one-third of the approximately two million people entering publicly funded substance abuse treatment in the United States do not complete treatment. Additionally, racial and ethnic minorities with addiction disorders, who constitute approximately 40 percent of the admissions in publicly funded substance abuse treatment programs, may be particularly at risk for poor outcomes. Using national data, we found that blacks and Hispanics were 3.5-8.1 percentage points less likely than whites to complete treatment for alcohol and drugs, and Native Americans were 4.7 percentage points less likely to complete alcohol treatment. Only Asian Americans fared better than whites for both types of treatment. Completion disparities for blacks and Hispanics were largely explained by differences in socioeconomic status and, in particular, greater unemployment and housing instability. However, the alcohol treatment disparity for Native Americans was not explained by socioeconomic or treatment variables, a finding that warrants further investigation. The Affordable Care Act could reduce financial barriers to treatment for minorities, but further steps, such as increased Medicaid funding for residential treatment and better cultural training for providers, would improve the likelihood of completing treatment and increase treatment providers' cultural competence.

In addition, Sinha R and Jastreboff AM (2013) Stress is associated with obesity, and the neurobiology of stress overlaps significantly with that of appetite and energy regulation. This review will discuss stress, allostasis, the neurobiology of stress and its

overlap with neural regulation of appetite, and energy homeostasis. Stress is a key risk factor in the development of addiction and in addiction relapse. High levels of stress changes eating patterns and augments consumption of highly palatable (HP) foods, which in turn increases incentive salience of HP foods and allostatic load. The neurobiological mechanisms by which stress affects reward pathways to potentiate motivation and consumption of HP foods as well as addictive drugs is discussed. With enhanced incentive salience of HP foods and overconsumption of these foods, there are adaptations in stress and reward circuits that promote stress-related and HP food-related motivation as well as concomitant metabolic adaptations, including alterations in glucose metabolism, insulin sensitivity, and other hormones related to energy homeostasis. These metabolic changes in turn might also affect dopaminergic activity to influence food motivation and intake of HP foods. An integrative heuristic model is proposed, wherein repeated high levels of stress alter the biology of stress and appetite/energy regulation, with both components directly affecting neural mechanisms contributing to stress-induced and food cue-induced HP food motivation and engagement in overeating of such foods to enhance risk of weight gain and obesity. Future directions in research are identified to increase understanding of the mechanisms by which stress might increase risk of weight gain and obesity.

Study of Gajewski J & Małkowska- Szkutnik A. (2012) The aim of this study was an attempt to assess relationships between joint family and peer-group relations and the frequency of binge drinking and tobacco smoking by 15-year-olds. A characteristic feature of the period of adolescence is to experiment with e.g. alcohol drinking and tobacco smoking. Both family relations and relations with peer groups can be referred to undertaking this kind of behavior by adolescents. The study was conducted in 2010/2011 within the framework of the international HBSC study (Health Behaviour in School-aged Children) on a group of 1551 people aged 15 years (49.1% boys). It was carried out in schools. Items from the HBSC questionnaire were used to assess the frequency of undertaking risky behaviors. To assess the quality of relations within the family, questions from the FDM II scale (Family Dynamics Measure II) were used, whereas an abbreviated version of the IPPA (Inventory of Parent and Peer Attachment) scale was used to assess the quality of peer relations. Three patterns of relations with family and peers were identified by the use of the cluster analysis methods (k-means method). In the group of girls the differences in the proportions in clusters reflecting the patterns of relations with the family and peers were greater than in boys. 15-year olds who had good relations with peers and poor relations with their family got drunk and smoked tobacco more often than adolescents in other clusters. The frequency of undertaking risk behavior by adolescents is associated with perceptions of social relations. Good family relations, as a protective factor, may partially reduce the negative impact of the peer group on undertaking risk behavior by adolescents. There is a need for further research to answer the question about the trends in the correspondence between the quality of family and peer relations and undertaking risk behaviors.

Study by Liang et al., (2011) aimed to investigate whether affective disorders, anxiety disorders, and alcohol use disorders may increase the risk of subsequently developing drug (non-alcohol related) dependence and/or drug (non-alcohol related) harmful use. A retrospective cohort study based on nationally representative household survey data collected from the 2007 National Survey of Mental Health and Wellbeing (MHW). The sample composed of 8,841 Australian adults aged 18-85 years who were included in the 2007 MHW survey. The results found that the participants with affective

disorders and anxiety disorders were at higher risk of drug harmful use and drug dependence and the effects did not vary by the length of time respondents had been exposed to mental disorders.

The study of All Sauod (2011) aims at identifying the factors that contributed to recidivist drugs by those addicted to it in Al- Amal Hospital in Riyadh during the second academic year 1431-1432 H. The study has answered questions: 1. What are the social factors that contribute to retaking drugs among those who relapsers in Al- Amal Hospital in Riyadh?, 2. What are the psychological factors that contribute to retaking drugs among those relapsers in Al- Amal Hospital in Riyadh?. 3. What are the environmental factors that contribute to retaking drugs among those relapsers in Al- Amal Hospital in Riyadh?. 4. What are the economic factors that contribute to retaking drugs among those relapsers in Al- Amal Hospital in Riyadh?. 5. Are there any statistic wise differences in the opinions of those under research?. The researcher has used the descriptive analytical methodology as a way in the study because it fits both the questions and aims of the study. The study is about the addicted who receive treatment in Al- Amal Hospital in Riyadh. The researcher has selected a random sample of 70 persons from the study community. The size of the sample was determined by using statistic tables. After practical application, the researcher has got 64 questionnaires ready for statistic analysis. The study has arrived to a set of results. The most important ones are: 1. The social factors that contribute to retaking drugs are: returning to bad company, avoiding problems, and not knowing how to take advantage of spare time. 2. The most important psychological factors for retaking drugs are: constant failure and frustration, the feeling of being inferior and not having self-confidence, and the inability to control oneself upon seeing drugs. 3. The most important environmental factors that help retake drugs are: no commitment from the part of the addicted to the care programs, belittling the addicted, the unavailability of enough clubs to accommodate the recovered ones, concentrating on the health side and ignoring the psychological one, the availability of the drug, and the unavailability of adequate awareness from the part of media about the dangers of drugs. 4. The most important factors that contribute to retaking drugs are the following: the financial need compels the individual to invest in promoting for drugs which obviously means retaking drugs, the availability of an alternative salary, the low cost for some drugs makes it easy to retaking it, and the availability of money enables the person to buy drugs after recovering.

The study of Dayan et al., (2010) Adolescents (12-18 years old) and young adults (18-25 years old), are more likely than older adults to drive-or agree to be driven- recklessly or while intoxicated, to use illicit or dangerous substances and to engage in both minor and more serious antisocial behavior. Numerous factors during adolescence may lead to or favor initiation of drug use, such as sensation-seeking, gregariousness and social conformity. These aspects, however, cannot be dissociated from the increased sex drive and quest for an integrated self. In the separation-individuation process, relationships with peers play many different roles: a field for experimentation, emotional support, a place for "projection" and "identification", and the possibility of finding a partner. Unsurprisingly, therefore, drug use generally takes place in a group setting. Despite evidence of heightened real-world risk-taking, laboratory studies have yet to yield consistent evidence that adolescents, when on their own, are more inclined towards risky behavior than their elders. Moreover, their comprehension and reasoning abilities in risky decision-making situations are roughly equivalent to those of adults. Structural and functional neuro-imaging studies have shown that neural circuitry

undergoes major reorganization during adolescence, particularly in those regions of the brain relating to executive functions, the self and social cognition, and that the "emotional brain" may play a role in that reorganization. Age-related decreases in gray matter volume mainly reflect a reduction in the number of synapses and the complexity of axonal ramifications. By 18-20 years old, most of the sub-cortical white matter and association pathways have reached a plateau. Risk-taking behavior and novelty-seeking may provide, with an appropriate feed-back, a mechanism to optimize brain development in adolescence.

In the same field the study by Poverty was studied in the study by Nespor et al., (2010) as one of the risk factors for substance dependence and pathological gambling. Poverty interacts with other, often more important, protective and risk factors. Healthcare facilities should take into account the social situation of their patients; for example they can provide relevant information about social services or mediate social help. Communication with patient's family or community is also beneficial. Patients, as part of their treatment, can be instructed how to handle money and debts. On the other hand charitable organizations should take into account addictive problems of their clients.

In addition, the study of Boscarino et al., (2010) Our study sought to assess the prevalence of and risk factors for opioid drug dependence among out-patients on long-term opioid therapy in a large health-care system. Using electronic health records, we identified out-patients receiving 4+ physician orders for opioid therapy in the past 12 months for non-cancer pain within a large US health-care system. We completed diagnostic interviews with 705 of these patients to identify opioid use disorders and assess risk factors. Results Preliminary analyses suggested that current opioid dependence might be as high as 26% among the patients studied. Logistic regressions indicated that current dependence was associated with variables often in the medical record, including age <65, opioid abuse history, high dependence severity, major depression and psychotropic medication use. Four variables combined (age, depression, psychotropic medications and pain impairment) predicted increased risk for current dependence, compared to those without these factors. Knowing that the patient also had a history of severe dependence and opioid abuse increased this risk substantially.

While, Boscarino et al., (2010) aimed to assess the prevalence of and risk factors for opioid drug dependence among out-patients on long-term opioid therapy in a large health-care system. Using electronic health records, we identified out-patients receiving 4+ physician orders for opioid therapy in the past 12 months for non-cancer pain within a large US health-care system. Researchers completed diagnostic interviews with 705 of these patients to identify opioid use disorders and assess risk factors. Logistic regressions indicated that current dependence was associated with variables often in the medical record, including age less than 65 years, opioid abuse history, high dependence severity, major depression and psychotropic medication use. Four variables combined (age, depression, psychotropic medications and pain impairment) predicted increased risk for current dependence, compared to those without these factors. Knowing that the patient also had a history of severe dependence and opioid abuse increased this risk substantially.

In addition; the study by Butler et al., (2010) investigate the possibility that the length of time one engages in non-medical use of prescription opioids may be

associated with abuse of other drugs, more risky drug-related behavior, and more severe functional problems. A sample of 5686 individuals who had abused a prescription opioid within the past 30 days were studied. Multiple logistic regression analyses were run to examine the impact of length of time abusing any opioid, after adjusting for several demographic variables, on route of administration (injection or injection/snorting), other drugs abused, and functioning in the areas of medical status, employment, drug and alcohol use, legal status, family and social problems, and psychiatric status. Overall findings supported the hypothesis that length of opioid abuse is associated with higher risk of drug use patterns as well as functional problems.

The study by Chen et al., (2009) examined whether the level of parent monitoring during early adolescence modified the risk of nicotine dependence associated with these genetic variants. A cross-sectional case control study of US-based community sample of 2027 subjects, we use a systematic series of regression models to examine the effect of parent monitoring on risk associated with two distinct variants in the nicotinic receptor genes *CHRNA5*. The results found that the risk for nicotine dependence increased significantly with the risk genotype of SNP when combined with lowest quartile parent monitoring.

Jurgaitiene et al., (2009) The aim was to evaluate the prevalence and trends of drug use among students of vocational schools in Klaipeda city and to establish the relationships between psychosocial factors and drug abuse. Uses two cross-sectional questionnaire surveys were carried out among first-year students of vocational schools in Klaipeda. Random samples of 912 and 342 students aged 16-19 years (representatives of Western part of Lithuania) were questioned in 2004 and 2006, respectively. Questionnaires were filled out anonymously in the classroom. Two cross-sectional questionnaire surveys were carried out among first-year students of vocational schools in Klaipeda. Random samples of 912 and 342 students aged 16-19 years (representatives of Western part of Lithuania) were questioned in 2004 and 2006, respectively. Questionnaires were filled out anonymously in the classroom. the results In 2004, 56.0% of male respondents and 42.0% of female respondents have reported any drug use during their life. The analysis of standardized data (by the place of residence) showed an increase in the prevalence of drug use during 2004-2006: up to 65.5% in boys and up to 44.0% in girls. Percentage of club drug users increased significantly in girls and exceeded the level of boys. The average number of drugs of different types used by boys changed slightly from 1.57 to 1.63 but increased significantly in girls. The use of drugs was related to school location (graduates of Klaipeda schools used drugs more frequently), communication with friends who use drugs, participation in the parties where drugs are used, alcohol use, and smoking. In 2006 survey, more significant relationship between drug use and social and behavioral factors was observed.

However, the study of Amiri et al.,(2009) the study determined the prevalence and risk factors for 3,4-methylenedioxy-methamphetamine (MDMA, "ecstasy") use among college students in Astara, a northern border city of Iran. In a cross-sectional questionnaire survey of 1226 students, the lifetime prevalence of ecstasy use was 5.6%. The lifetime prevalence of use of other drugs, mostly cannabis and opium, was 4.6%. A fifth of students (21.8%) were current cigarette smokers and 24.8% had ever used alcohol. After logistic regression, the factors influencing ever use of ecstasy were ever

use of other drugs, ever use of alcohol, current cigarette smoking and living alone or with friends. Targeted prevention programmes should be conducted in all colleges.

In addition, the study of Poorasl et al., (2007) Adolescent substance abuse potentially holds a number of negative implications for the health and well-being of the individual, including increased risk for injury and death from interpersonal violence, motor vehicle accidents, and drowning, increased probability of engaging in high risk sexual behaviors; and increased risk for suicidal ideation and behaviors. The aim of this paper is to estimate prevalence of substance abuse among the sample of 10th grade male students in Tabriz City, and to evaluate the associated factors. Of all 10th grade male students in Tabriz, Iran, 1785(13.7%) were randomly sampled. Mean age of the subjects was 16.3+/-0.87 years. A self-administered questionnaire was used to collect demographic data, substance abuse, smoking status and friends smoking. The influence of different factors on substance abuse was evaluated with a logistic regression model. Among 1785 students 226 had ever used alcohol and 36 had used drugs. The results indicate that older age , having general risk taking behavior , higher smoking stage , having self-injury , higher socioeconomic class , and ever use of illicit drugs were factors associated with student's ever use of alcohol. This study has shown low prevalence of substance abuse and determined some of its risk factors among students. More studies about adolescent population are necessary to approve the observed results of this study and thus allow for a certain generalization of the observations.

In addition, the study of Tda et al., (2006) The objective of this study is to assess the prevalence of and risk factors for the non-medical use of psychoactive medicines among students at public and private schools of Passo Fundo, Southern Brazil. A cross-sectional study was carried out using a questionnaire administered to 5,057 students from the 5th grade of elementary school to the 3rd year of high school. The questionnaire contained questions about the use of amphetamines, tranquilizers, barbiturates, anticholinergics, opioids, appetite stimulants, and anabolic steroids. Of the sample total, 7.7% had consumed tranquilizers sometime during their lives, 6.4% had used amphetamines, 2.2% had used anabolic steroids, and 1.1% had used barbiturates. Female students reported significantly greater consumption of tranquilizers and amphetamines, while anabolic steroid use was more prevalent among males. The pattern of psychoactive medicine consumption among children and adolescents students is comparable with the pattern among adults. The findings of this research suggest the need to include children and adolescents in media campaigns and other education programs to prevent the non-medical use and abuse of psychoactive medicines.

The study by Al-Jayousi (2003) this study aims at defining the drug problem in northern Palestine: types of drugs used and their availability, networks of distribution, definition of users and trends of addiction, it also examines the level of awareness of the dangers of drug use among Palestinians and their understanding of its socio-economic impacts on the one hand, and their attitudes towards addicts, on the other hand. Finally it aims to study and define risk factors and their possible effects. This research concerns the problem of drugs and drug addiction in northern Palestine. Although this problem has accrued in the last three decades and it currently represents a serious threat to our society, there are very few studies on the issue and programs related to drug awareness and rehabilitation are scant. In Palestine, there are no centers for treatment of addiction or for development of research in the field of addiction; this study proposes a few answers or solutions on how to address the problem. There is discrepancy between our

findings about the number of drug users (the percent the study found is more than 4%) and those officially declared (less than 0.5%). This makes it urgent to draw the attention of those who are directly and indirectly concerned with the issue among official bodies and the community and stress the need for a widespread awareness campaign particularly among the youth who are a most vulnerable target group.

The study by Baus et al., (2002), The study aimed to assess prevalence and risk factors associated with drug abuse among public elementary and high school students in the southern city of Florianópolis, Brazil. A descriptive cross-sectional study was carried out using a standardized questionnaire created during the 4th National Survey on Drug Abuse. The results Ever use prevalence for alcohol, marijuana, solvent drugs and amphetamines was 86.8%, 19.9%, 18.2% and 8.4%, respectively. Regular use (6 or more times per month) of alcohol, marijuana, solvent drugs and amphetamines was found in 24.2%, 4.9%, 2.5% and 2.3% of students, respectively, a higher percentage when compared to other southern states' capitals and the national average. Age, sex, social status and living with both parents were significantly associated with drug abuse. Girls were twice as likely to consume weight loss drugs and stimulants, and almost three times more likely to use tranquilizers without medical prescription. Boys were almost twice as likely to use solvent drugs. Higher social students were twice as likely to consume alcohol as those of lower social status. Cigarette and marijuana smoking, respectively, were 84% and 67% more likely among students whose parents were separated.

3.4 Discussion of the Studies of Risk factor and cause of addiction:

Goal of the previous studies:

- Some of the study objectives of the research show Evidence for a genetic component for substance dependence in Drugs dependency people such as (Ehlers CL, Gizer IR. 2013), and (Chen et al., 2009).
- But another research aimed to assess prevalence and risk factors associated with drug abuse among public elementary and high school students such as (Gajewski J and Małkowska - Szkutnik A., 2012), (Dayan et al., 2010), (Jurgaitiene et al., 2009) and (Baus et al., 2002).
- Some of research assess the prevalence of and risk factors for the non-medical use of psychoactive medicines among students at public and private schools such as (Boscarino et al., 2010), (Tda et al., 2006), (Amiri et al., 2009), and (Al-Jayousi, 2003).

Tools of the previous studies:

- Some of researcher gathering Information from the HBSC questionnaire were used to assess the frequency of undertaking risky behaviors. To assess the quality of relations within the family, questions from the FDM II scale (Family Dynamics Measure II) were used, whereas an abbreviated version of the IPPA (Inventory of Parent and Peer Attachment) scale was used to assess the quality of peer relations such as (Gajewski J and Małkowska-Szkutnik A. 2012), and (Amiri et al., 2009).

- Another research using self-administered questionnaire was used to collect demographic data such as (Poorasl et al., 2007), (Jurgaitiene et al., 2009), (Tda et al., 2006), (Al-Jayousi, 2003), and (Baus et al., 2002).

Samples of the previous studies:

- In the field of samples of the previous studies, the study samples were ranged more than 5000 participation such as (Liang et al, 2011), and (Tda et al, 2006), but (Jurgaitiene et al, 2009) researcher use 912 students aged 16-19 years.
- Another study sample contain about two-thousand patient such as (Chen et al, 2009), and (Poorasl et al, 2007), and researcher use A cross-sectional case control study.
- However the samples in the studies of (Dayan et al., 2010), and (Amiri et al, 2009), less than thousand patients participated.
- While; some studies have small samples as studies of (Ehlers CL, Gizer IR. (2013), (Liang et al., 2011), and (Nespor et al., 2010) used less than thousand subjects, Using electronic health records

Results of the previous studies:

- In the previous studies of (Gajewski J and Małkowska-Szcutnik A, 2012), (Dayan et al., 2010), and (Poorasl et al., 2007) Founded good family relations, as a protective factor, may partially reduce the negative impact of the peer group on undertaking risk behavior by adolescents.
- In addition; (Ehlers CL, Gizer IR, 2013), (Dayan et al., 2010), and (Jurgaitiene et al., 2009), Use of drugs was related to school location, communication with friends who use drugs, participation in the parties where drugs are used, alcohol use, and smoking, more significant relationship between drug use and social and behavioral factors.
- Some of the research founded the pattern of psychoactive medicine consumption among children and adolescent's students are comparable with the pattern among adults. The findings of these researches suggest the need to include children and adolescents in media campaigns and other education programs to prevent the non-medical use and abuse of psychoactive medicines, such as (Saloner B, Lê Cook B, 2013), (Liang et al., 2011), (Nespor et al., 2010), and (Al-Jayousi, 2003).

Chapter Four

Methodology

Chapter Four

Methodology

4.1 Introduction

This chapter presents an overview of the research methodology used for this study. Which include: study design, study population, sample, sampling process, study place, ethical consideration, study instruments, Pilot study, and data collection and data analysis.

4.2 Study design

This study is non-experimental descriptive, Analytic retrospective design. This design is good to study risk factors.

4.3 Study population

The population of this study is all addicts patients who are registered at Governmental community mental health clinics, who are estimated (1300) patients.

4.4 Sample size and sampling:

According to ministry of health office, the number of the addicts patients in governmental community mental health clinics is around (1310) male patients (Mental Health General Administration Report,2012) , distributed in four clinics in Gaza strip governorates and the number of patients according to inclusion criteria is 302 male patients. The sample size was 306 participants and was drawn by using probability systematic stratified random sample by selecting each Fourth participant on the list. 4 patient were excluded because they were alcohol addict . no female drug dependence patient registered in community mental health centers.

A systematic random sample of (306) participants, which attending and registers to treat from drugs dependence in 4 Psychiatric primary care centers in Gaza Strip.

$$n = N / \{ (\alpha)^2 * (N) \} + 1$$

n = The desired sample size

N = The size of population

α Alpha = Level of significant less or equal 0.05.

$$n = 1310 / \{ (0.05)^2 * (1310) \} + 1 = 306.43$$

4.5 Setting of the study:

It was carried out at Governmental community health centers in Gaza strip that include (addiction clinic in Gaza psychological rehabilitation center), Nusirat clinic, Khan-younis clinic and Rafah clinic).

Table (4.1)
Distribution sample with Gaza Governorate

No.	Clinic	population	Sample
1.	Addiction Clinic In Gaza Psychological Rehabilitation Center	600	143
2.	Nusirat clinic	160	36
3.	Khan-younis clinic	300	62
4.	Rafah clinic	250	61
Total		1310	302

4.6 Period of the study

The study carried out duration the period between September 2012 until April 2013.

4.7 Exclusion criteria

- All clients don't have file in Governmental community mental health centers.
- Alcoholic patients.

4.8 Ethical consideration

- Approval from Islamic university of Gaza.
- Approval from ministry of health.
- Approval consent from each participant was obtained.

4.9 Instruments of the study

Self-prepared 64 items questioner was used through theoretical presentation of the definitions of drug abuse, addiction and previous studies and inform the researcher on the factors affecting the measurements of addiction and abuse. And the views of some specialists in the treatment of addicts, researcher has benefited from phrases contained in those standards, drafted in the image fit the study sample and educational level in the sample. To reflect the reality of the lives of these patients. Work on the arbitration scale, a group of specialists in the field of mental health community, numbering 6 specialists, in addition to the language arbitrator the questionnaire of 64 items consists of three parts:

4.9.1 Personal data :

The demographic information included age, age of beginning of drug abuse, gender, marital status, number of family members, occupation before drug abuse, current occupation, residence, education and monthly income. In questioner founded from item 1 to item 10.

4.9.2 Severity of substance abuse:

The researcher put some questions to find out the degree of addiction that patients have from narcotic medications, to know what type of drugs are widespread abused by addicts, and the ways to get these drugs, and the amount of quantity of drugs . And diseases among drug addicts prevalence of blood transmitted discased. In questioner founded from item 11 to item 17.

4.9.3 Dimensions of the study:

4.9.3.1 Spiritual dimension:

The researcher in this dimension study degree of religious commitment among drug abusers, and the religious knowledge of the addicts. And to examine how the ability of religious commitment in preventing people from falling into the errors and sins. In questioner founded from item 18 to item 24.

4.9.3.2 Family status dimension:

The researcher in this dimension expert the family environment and its impact on the addicted person, their relation to the protection of family members from falling into the addiction problems. Access to the important role of the family in educating their children and caring them effectively. In questioner founded from item 25 to item 32.

4.9.3.3 Social status dimension:

The researcher in this dimension to know the degree of communication between the abuser and the social environment in which they live and the extent of the role of the social environment in increasing isolation of the addict individual, and their impact on the community members. In questioner founded from item 33 to item 39.

4.9.3.4 Psychological status dimension:

The researcher in this dimension to know the psychological problems suffered by the addict individual, and the impact of the psychological status of the patient and severity of addiction. And knowledge of psychiatric drugs and their impact on the mental health of the addicted person. In questioner founded from item 40 to item 48.

4.9.3.5 Physical status dimension:

The researcher in this dimension to know the health status of the patient before and after the addicts, and whether drugs that addict is to relieve the symptoms

of a disease, which is the purpose of feeling pleasure. In questioner founded from item 49 to item 56.

4.9.3.6 Political status and occupation influence dimension

The researcher in this dimension of knowledge of the role of the political situation of the abusers in given of these materials. And the role of the occupation in the promotion of these substances among young people, and knowledge of psychological stress in the community and know their role and influence in the spread of the phenomenon of addiction and drug abuse. In questioner founded from item 57 to item 64.(Appendix I) .

4.10 Pilot study

The researcher applied the risk factor of drug dependence scale on a 26 pilot sample from the original population of the study sample, and they were excluded from the studied sample, the following this technique was used to estimate and discuss the validity and reliability of the scale:

4.10.1 Validity

Internal consistency validity

To compute the validity internal consistency of the addiction risk factors scale; the researcher calculate the correlation coefficients of every item with the total scores its dimension, as shown in following:

Table (4.2)
Internal consistency of addiction risk factors scale
items with its dimensions

Sub- Scales	Item No	Corr. Coeff.	Sig. Level
1. Spiritual dimension	1	0.700	0.001 ***
	2	0.878	0.001 ***
	3	0.861	0.001 ***
	4	0.785	0.001 ***
	5	0.540	0.004 **
	6	0.595	0.001 ***
	7	0.720	0.001 ***
2. Family dimension	1	0.683	0.001 ***
	2	0.563	0.003 **
	3	0.481	0.013 *
	4	0.441	0.024 *
	5	0.698	0.001 ***
	6	0.593	0.001 ***
	7	0.578	0.002 **
	8	0.587	0.002 **

*p< 0.05

**p< 0.01

***p< 0.001

Follow table (4.2)

Sub- Scales	Item No	Corr. Coeff.	Sig. Level
3. Social dimension	1	0.251	0.215
	2	0.496	0.010 **
	3	0.762	0.001 ***
	4	0.683	0.001 ***
	5	0.566	0.003 **
	6	0.549	0.004 **
	7	0.560	0.003 **
	8	0.496	0.010 **
4. Psychological dimension	1	0.793	0.001 ***
	2	0.767	0.001 ***
	3	0.004	0.985
	4	0.687	0.001 ***
	5	0.748	0.001 ***
	6	0.160	0.435
	7	0.583	0.002 **
	8	0.793	0.001 ***
	9	0.469	0.016 *
	10	0.775	0.001 ***
	11	0.483	0.012 *
	12	0.216	0.289
5. Physical dimension	1	0.570	0.002 **
	2	0.493	0.010 **
	3	0.678	0.001 ***
	4	0.564	0.003 **
	5	0.740	0.001 ***
	6	0.776	0.001 ***
	7	0.716	0.001 ***
	8	0.607	0.001 ***
6. Political and occupation influence dimension	1	0.531	0.005 **
	2	0.711	0.001 ***
	3	0.724	0.001 ***
	4	0.576	0.002 **
	5	0.544	0.004 **
	6	0.578	0.002 **
	7	0.529	0.005 **
	8	0.621	0.001 ***

*p< 0.05

**p< 0.01

***p< 0.001

As shown in table (4.2); there are most of the items had good levels of Internal consistency validity, were the correlation coefficients between most of items and its dimensions significant at levels 0.05.

While the items with numbers (1) of the third dimension, and numbers (3, 6, 12) of the fourth dimension were not significant., these four items deleted. Then the final form of the scale consist of (47) items. In addition; the researcher calculate correlation coefficient between every dimension and the total scores of the scale:

Table (4.3)
Internal consistency of every dimensions
with total scores of the scale

Dimensions	Correlation coefficients	Sig. Level
Spiritual dimension	0.665	0.001 ***
Family dimension	0.789	0.001 ***
Social dimension	0.607	0.001 ***
Psychological dimension	0.673	0.001 ***
Physical dimension	0.675	0.001 ***
Political and occupation influence dimension	0.759	0.001 ***

*p< 0.05

**p< 0.01

***p< 0.001

As shown in table (4.3); there are all of dimensions had good levels of Internal consistency validity with total scores of the scale, were the correlation coefficients ranged R =(0.607 - 0.789); and significant at 0.01.

4.10.2 Reliability of the Risk factor scale

To calculate the reliability of the scale; the researcher uses the following two methods:

Split half method

Researcher calculated the reliability of the scale by using split half method (part 1 = 24 items & part 2 = 23 items); where the person's correlation coefficient was (R1 = 0.725) and by using the spearman-brown equation to correct the length of the scale, that the reliability coefficient (R2 = 0.860).

Cronbach's alpha equation

The researcher estimated the reliability of the scale by using the equation of Cronbach's alpha (No. of items= 47); where the value of alpha = (0.839). The scale measurement device is valid and reliable for data collection from the addictive patients in Gaza Strip.

Chapter Five

Data analysis & Results

5.1 Introduction:

This chapter will include the main results of the study after data collection, entry and analysis by using statistical package for social sciences (SPSS) of a sample of patients attending Community mental health centers in Gaza Strip. The researcher used many statistical tests like descriptive statistics, frequencies, percentage, means and standard deviation. In addition, differences between study variables using chi square test for categorical data, t test, and ANOVA test.

5.2 Data collection, entry, and analysis

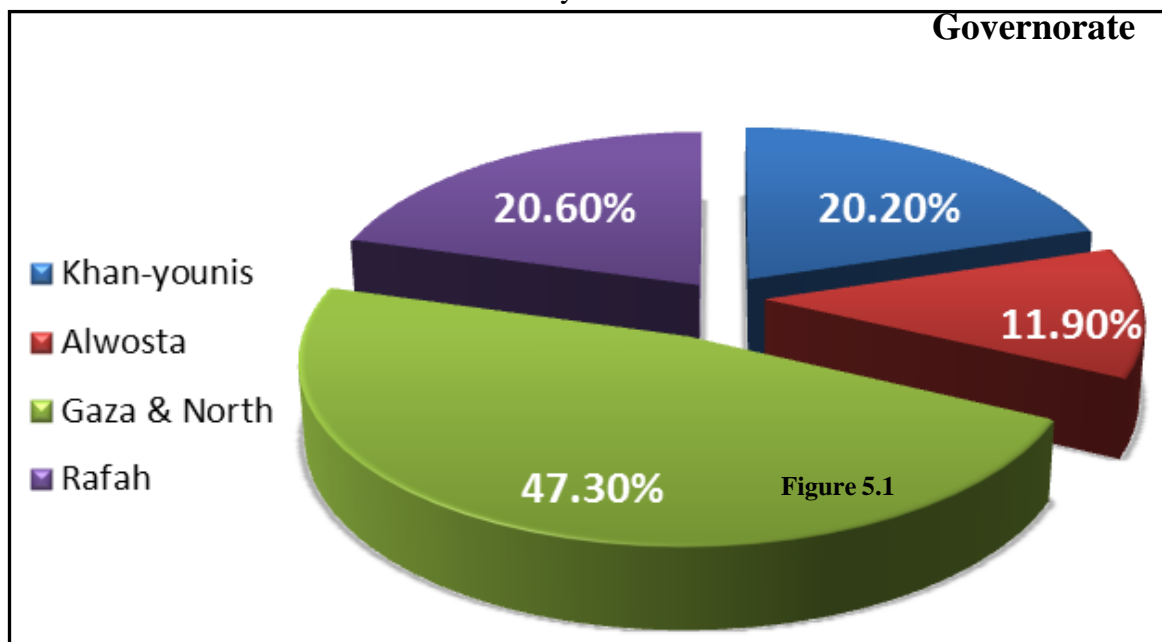
The data was collected directly from the patients by using standardized questionnaires in Governmental community mental health centers. Detailed information about the study was given to each participant using their own Arabic language and consent to participate was obtained.

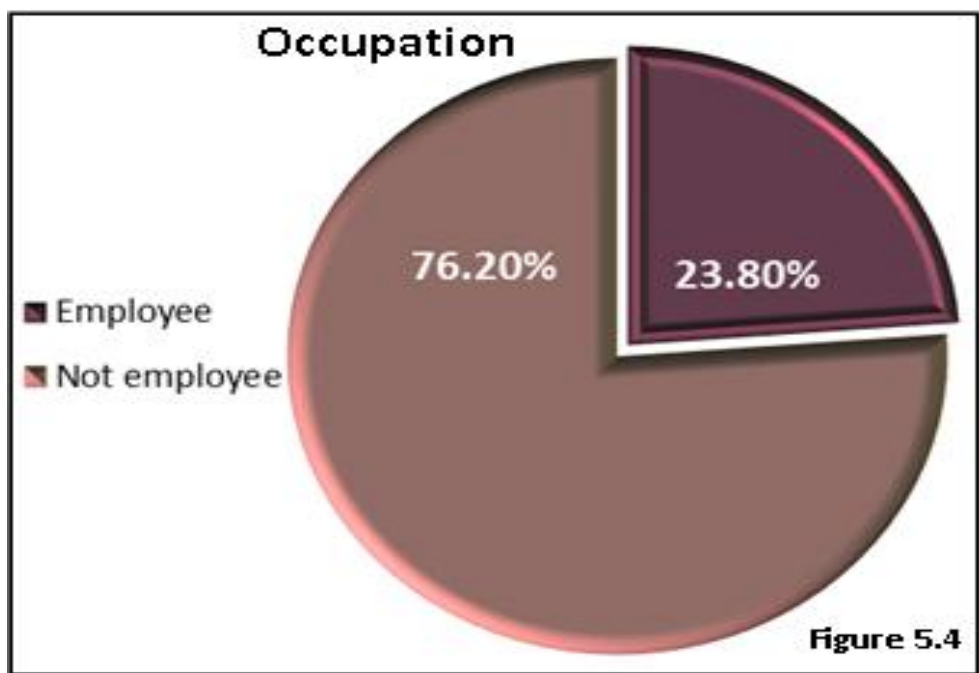
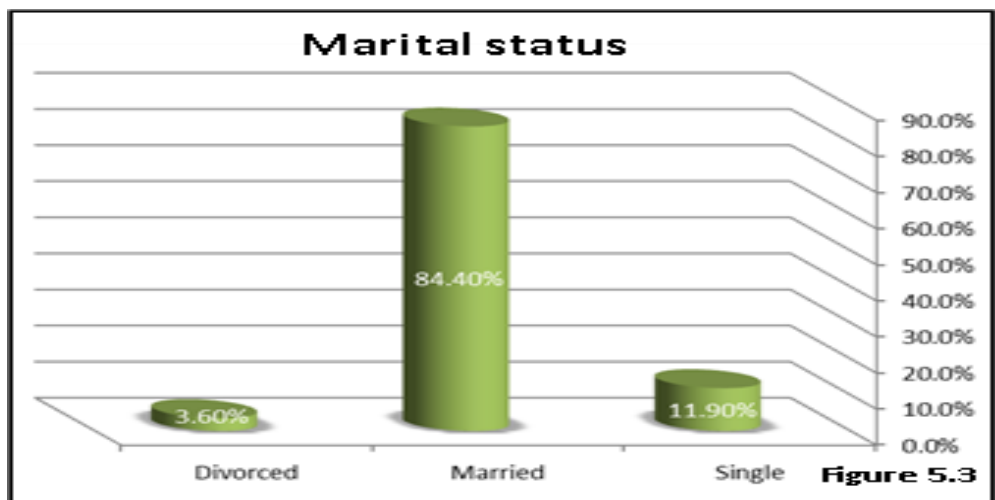
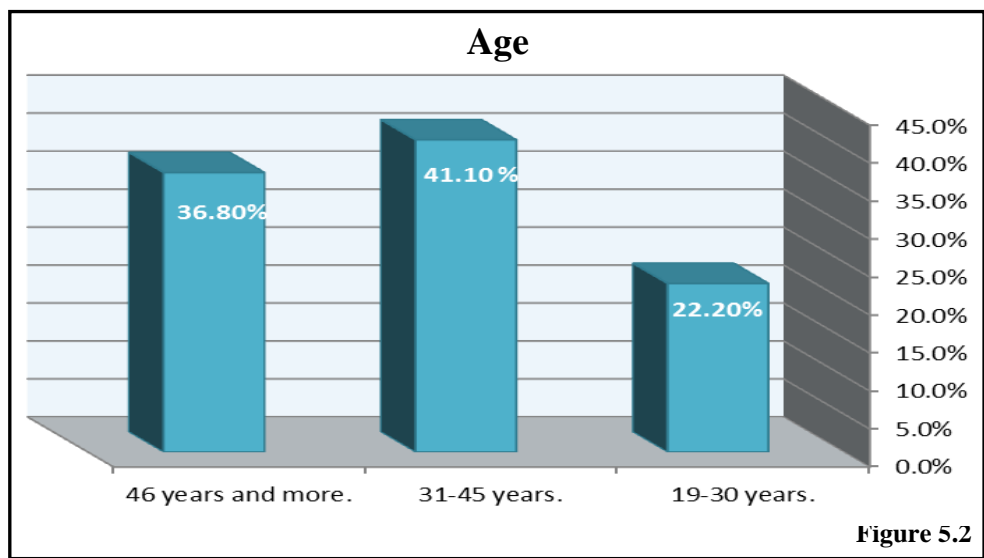
Over viewing of the questionnaire was the first step, prior to data entry; this followed by designing an entry model using the computer Statistical Package for Social Science "SPSS". The coded questionnaires were entered into the computer by the researcher. Data cleaning was done through checking out a random number of the questionnaires and through exploring descriptive statistics frequencies for all variables.

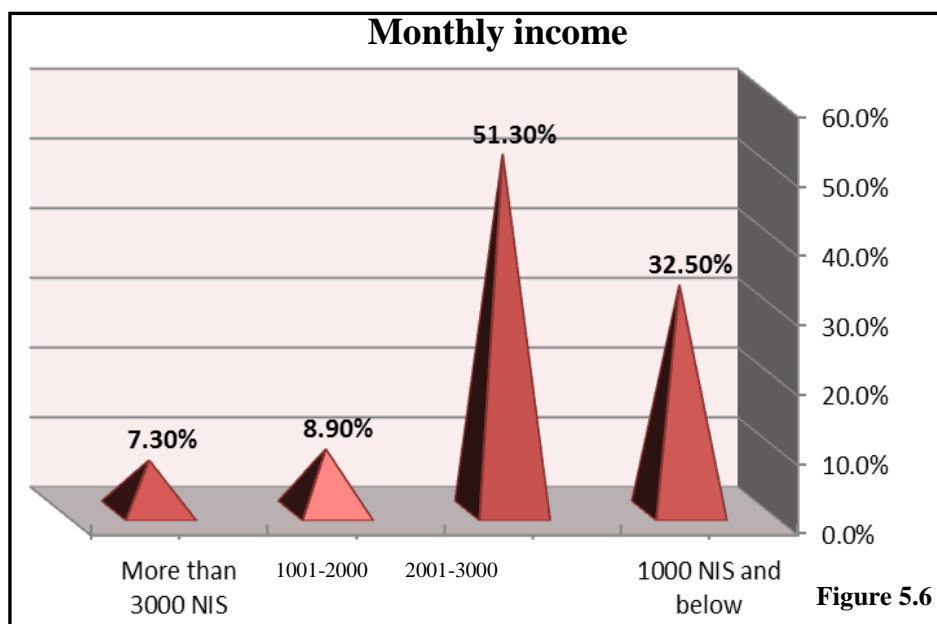
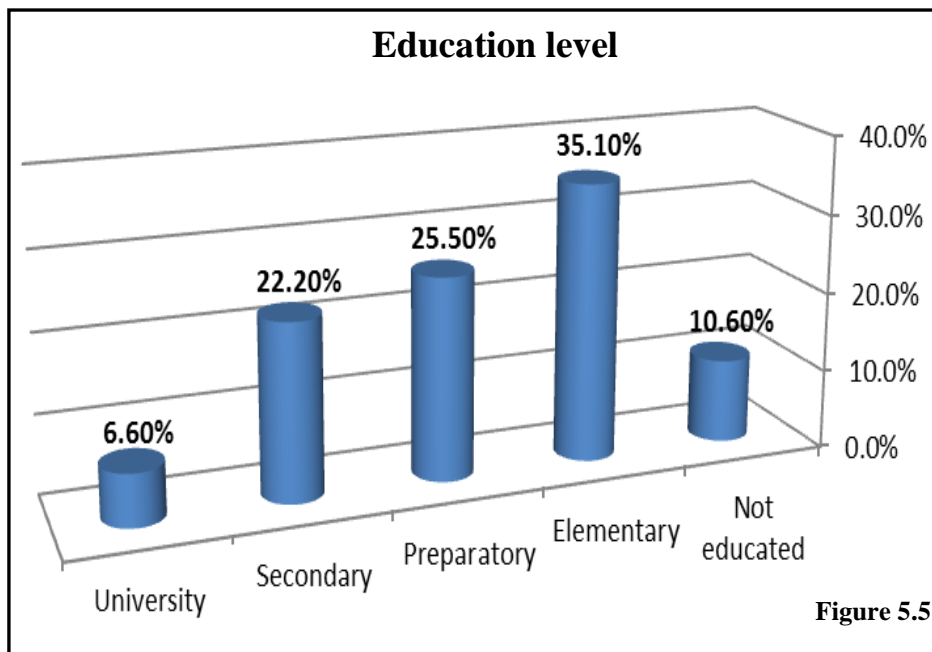
The researcher used Statistical Package for Social Science "SPSS" to analyze the research questions by using person correlation coefficient, t-test, and ANOVA. In addition; the researcher used descriptive statistics to explore frequencies of all variables. Statistically significant values are considered at P values is equal or less than 0.05.

5.3 Sociodemographic characteristic of the study sample:

The sample consist of 302 subjects, The age range from 18 to 62 years old (mean of age was 39.9, SD 10.03). According to marital status 11.9% were single, 84.4% were married, and 3.6% were divorced. According to the working status 23.8% work and 76.2% not work and depend on aids. According to educational level 10.6% were not educated, 35.1% finished the elementary schools, 25.5% finished the preparatory schools, also 22.2% finished secondary schools, and 6.6% have a university degree. according to monthly income 32.5% with monthly income 1000 NIS and less than, 51.3% with monthly income between 1001- 2000 NIS, 8.9% with monthly income between 2001- 3000 NIS 7.3% with monthly income more than 3001 NIS.

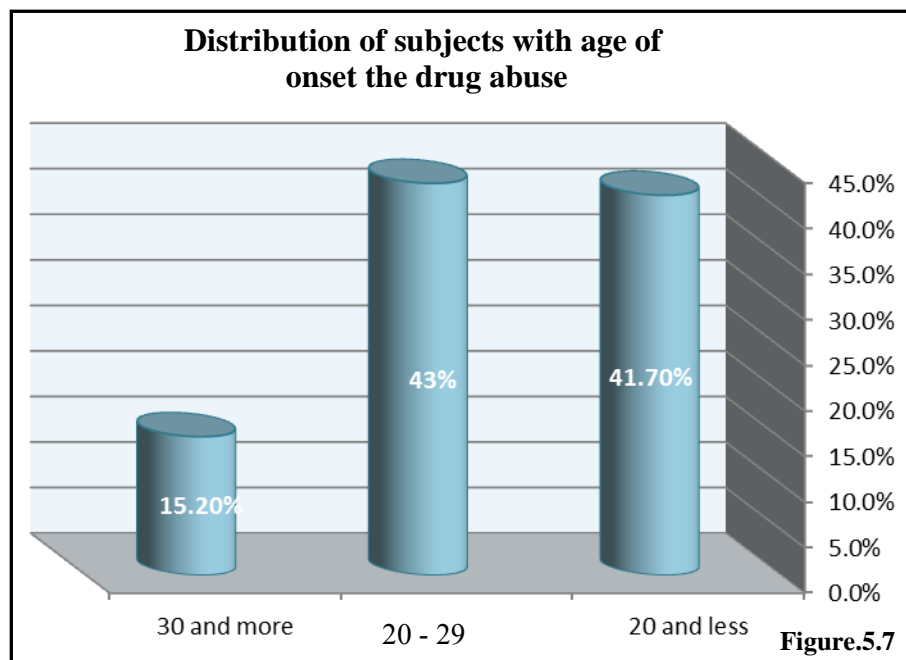






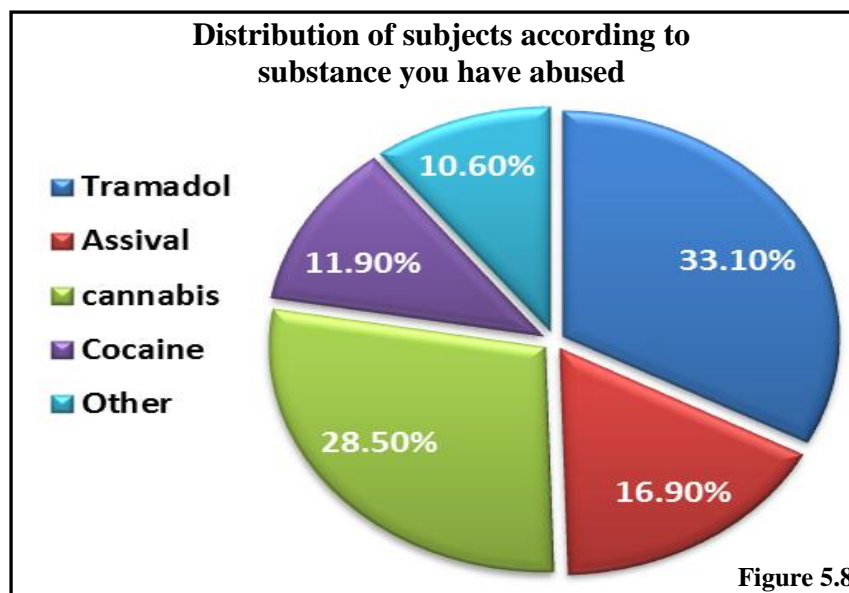
5.4 Severity of Substance Abuse

5.4.1 Age of onset of drug abuse :



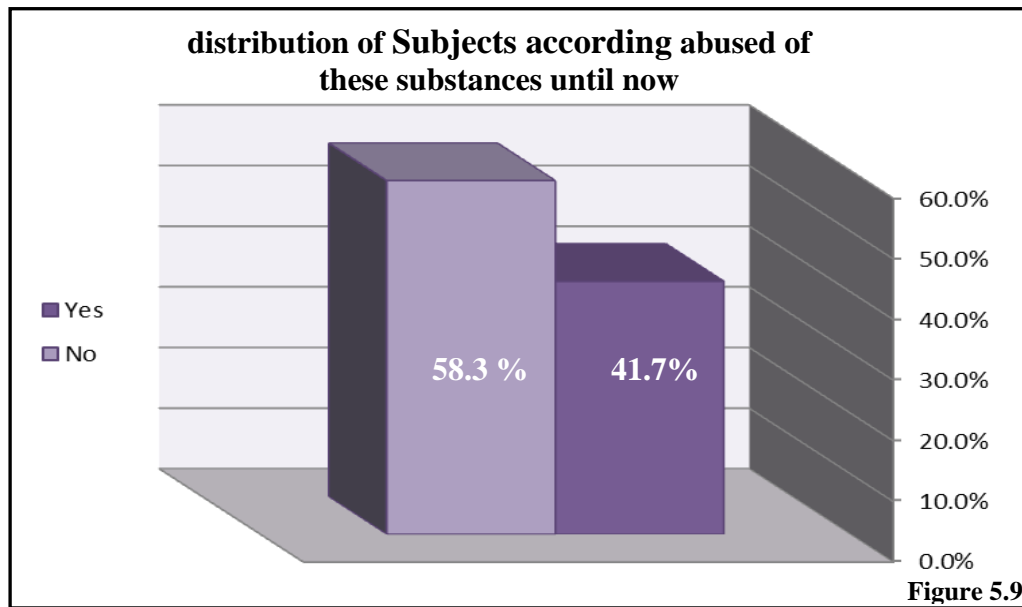
As showed in previous figure that 126 of the study sample have beginning of drug abuse since their ages with 20 years and below 41.7%, 130 of the study sample have beginning of drug abuse since their ages 21-29 years 43%, and 46 of them were since age 30 years and more 15.2%.

5.4.2 What are the substance you have abused:



As showed in previous figure: most of the subjects 100 were taking Tramadol 33.1%, while 86 of them were taking cannabis 14.1%, 51 of them were taking assival 16.9%, 36 of them were taking cocaine 11.9%, 29 of them were taking others 10.6%.

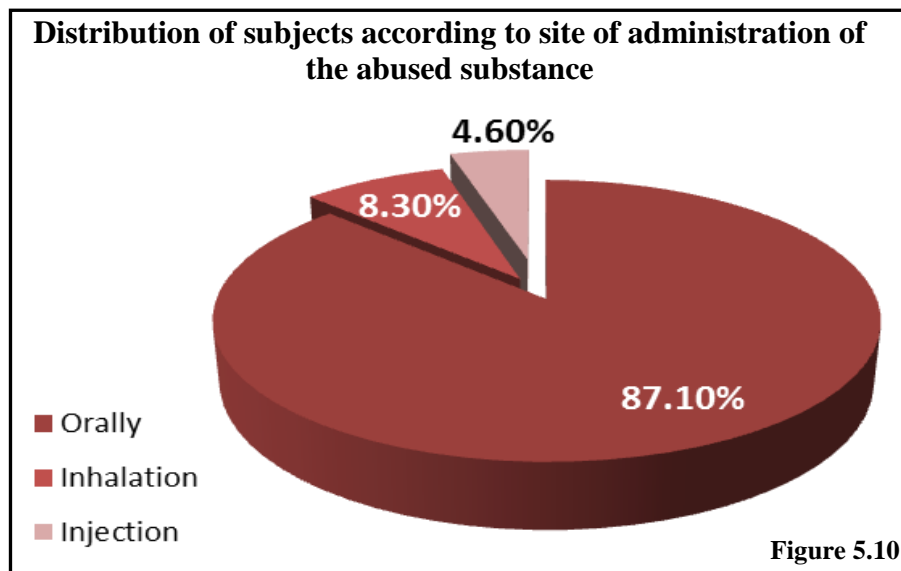
5.4.3 Have you been abused these substances until now:



As showed in previous figure: most of the subjects 176 of do not take substances 58.3%, while 126 of them were take substances until now 41.7%.

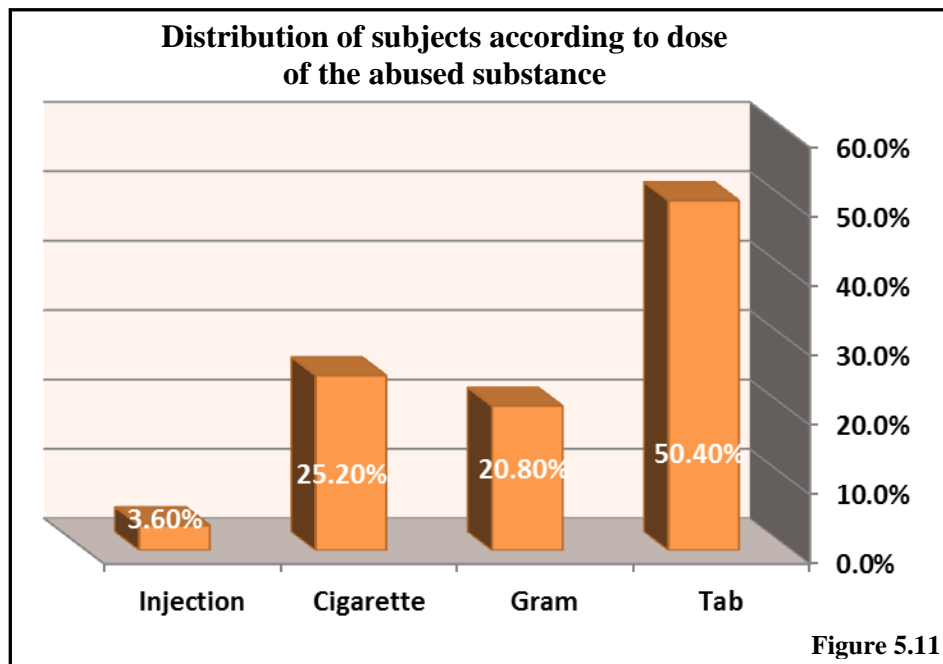
The researcher think that the percent of individuals who still addicts is less in relation to the situation the Palestinian people live under siege from the year 2006, which increased the load of stress on them. Therefor some of them goes for taken drugs. and this is ensure that about 60% of random sample of addicts is a good percent in compare with the situation the addicts lives.

5.4.4 What was the site of administration of the abused substance:



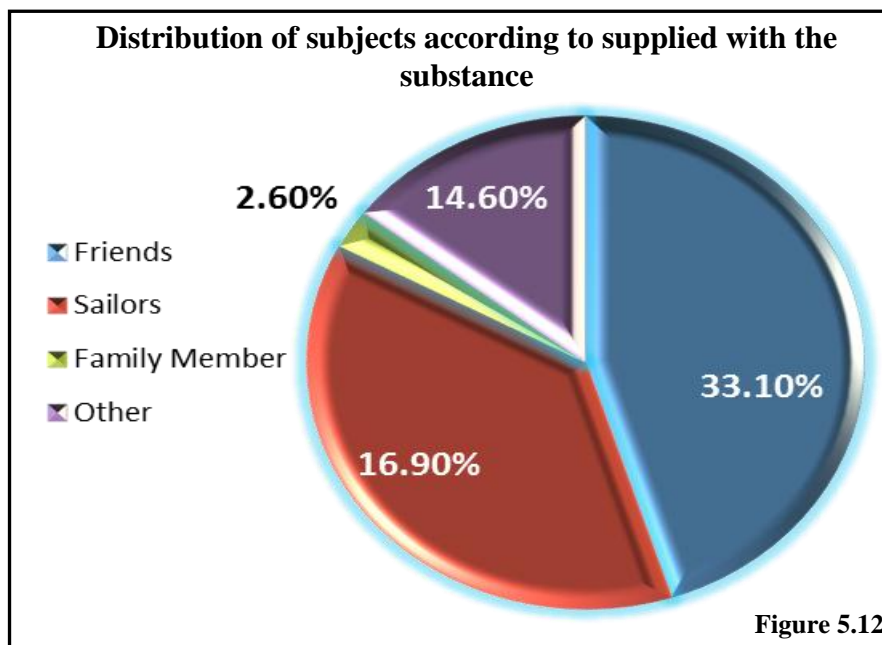
As showed in previous figure: most of the subjects 263 were taking orally 87.1%, while 25 of them were taking by inhalation 8.3%, 14 of them were taking by injection 4.6%.

5.4.5 What is the dose of the abused substance:



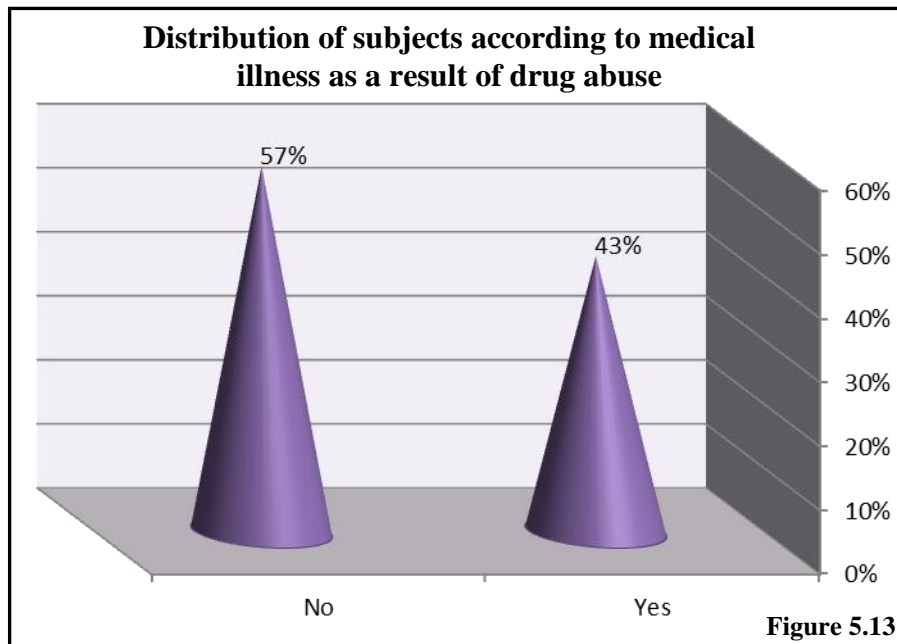
As showed in previous figure: most of the subjects 152 were taking tablet 50.4%, while 76 of them were taking cigarette 25.2%, 63 of them were taking gram 20.8%, 11 of them were taking injection 3.6%.

5.4.6 How have you been supplied with the substance:



As showed in previous figure: 136 of the subjects were supplied with the substance by friends 45%, while 114 of them were by sailors 37.7%, 8 of them were by family member 2.6%, and 44 of them by other ways 14.6%.

5.4.7 Do you have medical illness as a result of drug abuse:



As showed in previous table: 130 of the subjects had medical illness as a result of drug abuse 43%, while 172 of them had not medical illness as a result of drug abuse 57%.

5.5 Questions referring to the prevalence of Addiction risk factors scale items with its dimensions.

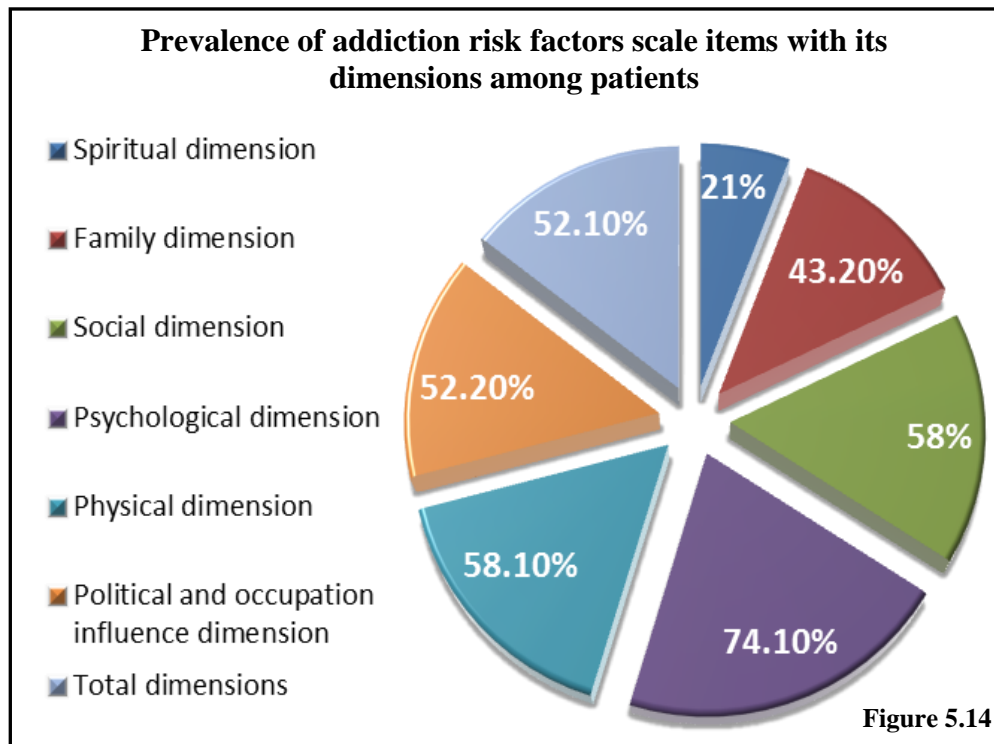


Table (5.1) Prevalence of addiction risk factors scale items with its dimensions among patients

Title	N	Mean	St. Dev.	Ratio scale %
Spiritual dimension	(7)	1.47	1.70	21.0
Family dimension	(8)	3.45	1.42	43.2
Social dimension	(7)	4.06	1.84	58.0
Psychological dimension	(9)	6.67	2.10	74.1
Physical dimension	(8)	4.65	1.93	58.1
Political and occupation influence dimension	(8)	4.18	1.47	52.2
Total dimensions	(47)	24.47	5.10	52.1

As showed in previous figure and table that: Risk Factors of drugs dependence Among People in Gaza Strip is 52.1% , where the ratio scales plays the role of this step. Where the highest risk Spiritual dimension 21%, Psychological dimension 74.1%, and Social dimension and Physical dimension 58%, then Political and occupation influence dimension 52.2%. While the lowest risk factors are the Family dimension 43.2%.

5.6 Questions referring to differences in addiction risk factors scale items with its dimensions according to socio- and demographic.

5.6.1 Differences in addiction risk factors scale items with its dimensions according to age:

In order to investigate the difference in addiction risk factors scale items with its dimensions according to the age of the study sample, the researcher demonstrate one-way ANOVA analysis.

Table (5.2) One-way ANOVA comparing addiction risk factors scale items with its dimensions according to age

Variable	Age/ year	Means	Source of Variance	Sum of Squares	Df	Mean Square	F- Value	P. Value
Spiritual dimension	30 years & less	4.90	Between Groups	52.10	2	26.05	9.510	*** 0.000
	31- 45 years	5.46	Within Groups	819.07	299	2.74		
	46 years and more	6.00	Total	871.17	301			
Family dimension	30 years & less	3.61	Between Groups	2.84	2	1.42	0.704	// 0.495
	31- 45 years	3.46	Within Groups	604.01	299	2.02		
	46 years & more	3.35	Total	606.85	301			

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

Follow table (5.2):

Variable	Age/ year	Means	Source of Variance	Sum of Squares	Df	Mean Square	F- Value	P. Value
Social dimension	30 years and less	3.81	Between Groups	43.22	2	21.61	6.643	*** 0.002
	31- 45 years	3.76	Within Groups	972.59	299	3.25		
	46 years and more	4.56	Total	1015.80	301			
Psychological dimension	30 years & less	6.64	Between Groups	0.08	2	0.04	0.009	// 0.991
	31- 45 years	6.66	Within Groups	1325.14	299	4.43		
	46 years & more	6.68	Total	1325.22	301			
Physical dimension	30 years & less	4.34	Between Groups	16.53	2	8.26	2.225	// 0.110
	31- 45 years	4.56	Within Groups	1110.27	299	3.71		
	46 years & more	4.94	Total	1126.79	301			
Political & occupation influence dimension	30 years & less	3.67	Between Groups	21.97	2	10.99	5.250	** 0.006
	31- 45 years	4.30	Within Groups	625.73	299	2.09		
	46 years & more	4.34	Total	647.70	301			
Total dimensions	30 years & less	26.97	Between Groups	377.49	2	188.75	7.586	*** 0.001
	31- 45 years	28.19	Within Groups	7439.53	299	24.88		
	46 years & more	29.87	Total	7817.02	301			

* $p \leq 0.05$

** $p \leq 0.01$

*** $p \leq 0.001$

The previous table shows that: there was a significant difference in addiction risk factors scale items with its dimensions according to the age ($p \leq 0.001$, 0.01) of the study sample in Spiritual dimension , Social dimension , Political and occupation influence dimension , Total Risk Factors of drugs dependence Among People in Gaza Strip.

5.6.2 Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to Age.

Table (5.3) Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to Age

Variable	Age	30 years and less	31 - 45 years
Spiritual dimension	31 - 45 years	0.564	
	46 and more	*1.105	*0.540
Social dimension	31 - 45 years	0.048	
	46 and more	*0.753	*0.801
Political and occupation influence dimension	31 - 45 years	*0.627	
	46 and more	*0.671	0.044
Total Risk Factors of drugs dependence Among People in Gaza Strip	31 - 45 years	1.223	
	46 and more	*2.904	*1.680

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with its dimensions according to age was between the group of (46 years and more) age a side and the two groups of (30 years and less, and 31-45 years), in favor to the group of (46 years and more). That means addiction risk factors scale items with its dimensions among the group of (46 years and more) were significantly higher than other groups of the study sample.

5.6.3 Differences in addiction risk factors scale items with its dimensions according to age of beginning of drug abuse :

To investigate the difference in addiction risk factors scale items with its dimensions according to the age of beginning of drug abuse, the researcher demonstrate one-way ANOVA analysis.

Table (5.4) One-way ANOVA comparing addiction risk factors scale items with its dimensions according to age of beginning of drug abuse

Variable	Age of beginning of drug abuse	Means	Source of Variance	Sum of Squares	Df	Mean Square	F-value	P. Value
Spiritual dimension	20 and less	5.25	Between Groups	19.27	2	9.64	3.382	* 0.035
	21 - 29	5.68	Within Groups	851.90	299	2.85		
	30 and more	5.89	Total	871.17	301			
Family dimension	20 and less	3.74	Between Groups	48.58	2	24.29	13.010	*** 0.000
	21 - 29	3.50	Within Groups	558.27	299	1.87		
	30 and more	2.54	Total	606.85	301			

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

Follow table (5.4):

Social dimension	20 and less	4.10	Between Groups	0.93	2	0.46	0.137	0.872
	21 - 29	4.00	Within Groups	1014.88	299	3.39		
	30 and more	4.13	Total	1015.80	301			
Psychological dimension	20 and less	6.79	Between Groups	6.15	2	3.07	0.697	// 0.499
	21 - 29	6.65	Within Groups	1319.08	299	4.41		
	30 and more	6.37	Total	1325.22	301			
Physical dimension	20 and less	4.78	Between Groups	7.55	2	3.78	1.009	// 0.366
	21 - 29	4.65	Within Groups	1119.24	299	3.74		
	30 and more	4.30	Total	1126.79	301			
Political and occupation influence dimension	20 and less	4.58	Between Groups	48.53	2	24.26	12.108	*** 0.000
	21 - 29	3.72	Within Groups	599.17	299	2.00		
	30 and more	4.35	Total	647.70	301			
Total dimensions	20 and less	29.24	Between Groups	118.21	2	59.11	2.296	// 0.102
	21 - 29	28.20	Within Groups	7698.81	299	25.75		
	30 and more	27.59	Total	7817.02	301			

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

The previous table shows that: there was a significant difference in addiction risk factors scale items with its dimensions according to the age of beginning of drug abuse ($p \leq 0.001$, 0.05) of the study sample in Spiritual dimension, family dimension, Political and occupation influence dimension, Among People in Gaza Strip.

5.6.4 Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to age of beginning of drug abuse.

Table (5.5) Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to age of beginning of drug abuse

Variable	age of beginning	20 and less	21 - 29
Spiritual dimension	21 - 29	0.439	
	30 and more	0.645	0.207
Family dimension	21 - 29	0.238	
	30 and more	*1.195	0.957
Political and occupation influence dimension	21 - 29	*0.856	
	30 and more	0.232	*0.625

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with its dimensions according to age of beginning of drug abuse was between the group of 30 and more and (20 and less, 21 - 29), in favor to the group of 20 and less People.

That means addiction risk factors scale items with its dimensions among the group of 20 and less patients were significantly higher than other groups of the study sample.

5.6.5 Differences in addiction risk factors scale items with its dimensions according to the Number of family members :

To investigate the difference in addiction risk factors scale items with its dimensions according to the Number of family members, the researcher demonstrate one-way ANOVA analysis.

Table (5.6) One-way ANOVA comparing addiction risk factors scale items with its dimensions according to Number of family members

Variable	Number of family members	Means	Source of Variance	Sum of Squares	Df	Mean Square	F-value	P. Value
Spiritual dimension	4 and less	5.17	Between Groups	16.26	2	8.13	2.843	// 0.060
	5 - 8	5.46	Within Groups	854.91	299	2.86		
	9 and more	5.80	Total	871.17	301			
Family dimension	4 and less	4.22	Between Groups	38.91	2	19.46	10.243	*** 0.000
	5 - 8	3.30	Within Groups	567.94	299	1.90		
	9 and more	3.27	Total	606.85	301			
Social dimension	4 and less	4.02	Between Groups	3.26	2	1.63	0.482	// 0.618
	5 - 8	3.97	Within Groups	1012.54	299	3.39		
	9 and more	4.20	Total	1015.80	301			
Psychological dimension	4 and less	7.04	Between Groups	9.11	2	4.56	1.035	// 0.357
	5 - 8	6.60	Within Groups	1316.11	299	4.40		
	9 and more	6.57	Total	1325.22	301			
Physical dimension	4 and less	5.00	Between Groups	51.91	2	25.95	7.220	*** 0.001
	5 - 8	4.19	Within Groups	1074.89	299	3.59		
	9 and more	5.04	Total	1126.79	301			
Political and occupation influence dimension	4 and less	3.67	Between Groups	33.63	2	16.82	8.188	*** 0.000
	5 - 8	4.05	Within Groups	614.07	299	2.05		
	9 and more	4.57	Total	647.70	301			
Total dimensions	4 and less	29.11	Between Groups	238.61	2	119.30	4.707	** 0.010
	5 - 8	27.57	Within Groups	7578.42	299	25.35		
	9 and more	29.45	Total	7817.02	301			

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

The previous table shows that: there was a significant difference in addiction risk factors scale items with its dimensions according to the Number of family members ($p \leq 0.001$, 0.01) of the study sample in Family dimension, Physical dimension, Political and occupation influence dimension, Total Risk Factors of drugs dependence Among People in Gaza Strip.

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with family dimension according to Number of family members was between the group of (4 and less) Number of family members a side and the two groups of (5-8, 9 and more), in favor to the group of (4 and less).

5.6.6 Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to the Number of family members.

Table (5.7) Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to the Number of family members

Variable	Number of family members	4 and less	5 - 8
Family dimension	5 - 8	*0.921	
	9 and more	*0.954	0.034
Physical dimension	5 - 8	*0.809	
	9 and more	0.036	*0.845
Political and occupation influence dimension	5 - 8	0.385	
	9 and more	*0.905	*0.520
Total Risk Factors of drugs dependence Among People in Gaza Strip	5 - 8	1.545	
	9 and more	0.335	*1.880

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with Physical dimension according to Number of family members was between the group of (5-8) Number of family members a side and the two groups of (4 and less, 9 and more), in favor to the groups of (4 and less, 9 and more).

The differences of means of addiction risk factors scale items with, Political and occupation influence dimension, and Total Risk Factors of drugs addiction was between the group of (9 and more) Number of family members a side and the two groups of (4 and less, 5-8), in favor to the groups of (4 and less, 5-8).

5.6.7 Differences in addiction risk factors scale items with its dimensions according to Occupation before drug abuse:

To investigate the difference in addiction risk factors scale items with its dimensions according to the Occupation before drug abuse, the researcher demonstrate one-way ANOVA analysis.

Table (5.8) One-way ANOVA comparing addiction risk factors scale items with its dimensions according to Occupation before drug abuse

Variable	Occupation before drug abuse	Means	Source of Variance	Sum of Squares	Df	Mean Square	F-value	P. Value
Spiritual dimension	Student	5.86	Between Groups	72.02	3	24.01	8.951	*** 0.000
	unemployed	4.39	Within Groups	799.15	298	2.68		
	worker	5.63						
	official	6.33	Total	871.17	301			
Family dimension	Student	4.68	Between Groups	48.07	3	16.02	8.546	*** 0.000
	unemployed	3.24	Within Groups	558.78	298	1.88		
	worker	3.37						
	official	3.10	Total	606.85	301			

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

Follow table (5.8):

Social dimension	Student	4.04	Between Groups	45.29	3	15.10	4.636	** 0.003
	unemployed	3.24	Within Groups	970.51	298	3.26		
	worker	4.14						
	official	4.95	Total	1015.80	301			
Psychological dimension	Student	6.64	Between Groups	42.21	3	14.07	3.268	* 0.022
	unemployed	6.32	Within Groups	1283.01	298	4.31		
	worker	6.85						
	official	5.48	Total	1325.22	301			
Physical dimension	Student	4.04	Between Groups	40.14	3	13.38	3.670	* 0.013
	unemployed	4.63	Within Groups	1086.65	298	3.65		
	worker	4.83						
	official	3.62	Total	1126.79	301			
Political and occupation influence dimension	Student	3.46	Between Groups	25.15	3	8.38	4.012	** 0.008
	unemployed	3.90	Within Groups	622.55	298	2.09		
	worker	4.35						
	official	3.90	Total	647.70	301			
Total dimensions	Student	28.71	Between Groups	437.77	3	145.92	5.893	*** 0.001
	unemployed	25.73	Within Groups	7379.26	298	24.76		
	worker	29.17						
	official	27.38	Total	7817.02	301			

* $p \leq 0.05$

** $p \leq 0.01$

*** $p \leq 0.001$

The previous table shows that: there was a significant difference in addiction risk factors scale items with its dimensions according to the Occupation before drug abuse ($p \leq 0.001, 0.001, 0.05$) of the study sample in all dimensions and Total Risk Factors of drugs dependence Among People in Gaza Strip.

5.6.8 Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to Occupation before drug abuse.

Table (5.9) Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to Occupation before drug abuse

Variable	Occupation	Student	unemployed	worker
Spiritual dimension	unemployed	*1.467		
	worker	0.225	*1.242	
	official	0.476	*1.943	0.701
Family dimension	unemployed	*1.435		
	worker	*1.311	0.124	
	official	*1.583	0.149	0.273
Social dimension	unemployed	0.792		
	worker	0.101	*0.893	
	official	0.917	*1.709	0.816

Follow table (5.9):

Psychological dimension	unemployed	0.326		
	worker	0.211	0.537	
	Official	1.167	0.841	*1.378
Physical dimension	unemployed	0.598		
	worker	0.799	0.201	
	Official	0.417	1.015	1.216
Political and occupation influence dimension	unemployed	0.438		
	worker	*0.885	0.447	
	Official	0.441	0.002	0.444
Total Risk Factors of drugs dependence Among People in Gaza Strip	unemployed	2.983		
	worker	0.460	*3.443	
	Official	1.333	1.649	1.794

Scheffee statistical test was done and indicated; the differences of means of addiction risk factors scale items with all dimension according to Occupation before drug abuse was between the groups of unemployed and worker with other groups, in favor to the group of unemployed and worker.

That means addiction risk factors scale items with its dimensions among the group of unemployed and worker were significantly higher than other groups of the study sample.

5.6.9 Differences in addiction risk factors scale items with its dimensions according to marital status:

To investigate the difference in addiction risk factors scale items with its dimensions according to the marital status, the researcher demonstrate one-way ANOVA analysis.

Table (5.10) One-way ANOVA comparing addiction risk factors scale items with its dimensions according to marital status

Variable	Marital status	Means	Source of Variance	Sum of Squares	Df	Mean Square	F-value	P. Value
Spiritual dimension	single	4.722	Between Groups	61.37	2	30.68	11.329	*** 0.000
	married	5.718	Within Groups	809.80	299	2.71		
	divorced	3.909	Total	871.17	301			
Family dimension	single	3.917	Between Groups	9.04	2	4.52	2.260	// 0.106
	married	3.384	Within Groups	597.81	299	2.00		
	divorced	3.545	Total	606.85	301			

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

Follow table (5.10):

Social dimension	single	4.472	Between Groups	16.49	2	8.24	2.467	// 0.087
	married	4.047	Within Groups	999.32	299	3.34		
	divorced	3.091	Total	1015.80	301			
Psychological dimension	single	5.944	Between Groups	21.50	2	10.75	2.465	// 0.087
	married	6.757	Within Groups	1303.72	299	4.36		
	divorced	6.909	Total	1325.22	301			
Physical dimension	single	3.972	Between Groups	21.97	2	10.99	2.973	// 0.053
	married	4.718	Within Groups	1104.82	299	3.70		
	divorced	5.273	Total	1126.79	301			
Political and occupation influence dimension	single	3.972	Between Groups	20.90	2	10.45	4.985	** 0.007
	married	4.259	Within Groups	626.80	299	2.10		
	divorced	2.909	Total	647.70	301			
Total dimensions	single	27.000	Between Groups	208.01	2	104.00	4.087	* 0.018
	married	28.882	Within Groups	7609.02	299	25.45		
	divorced	25.636	Total	7817.02	301			

* $p \leq 0.05$

** $p \leq 0.01$

*** $p \leq 0.001$

The previous table shows that: there was a significant difference in addiction risk factors scale items with its dimensions according to the marital status ($p \leq 0.001$, 0.01) of the study sample in Spiritual dimension, Political and occupation influence dimension , Total Risk Factors of drugs dependence Among People in Gaza Strip.

5.6.10 Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to marital status.

Table (5.11) Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to marital status

Variable	marital status	single	married
Spiritual dimension	married	*0.995	
	divorced	0.813	*1.809
Political and occupation influence dimension	married	0.287	
	divorced	1.063	*1.350
Total Risk Factors of drugs dependence Among People in Gaza Strip	married	1.882	
	divorced	1.364	3.246

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with its dimensions according to marital status was between the group of married and (single, divorced) , in favor to the group of married patients.

That means addiction risk factors scale items with its dimensions among the group of married patients were significantly higher than other groups of the study sample.

5.6.11 Differences in addiction risk factors scale items with its dimensions according to the Residence:

To investigate the difference in addiction risk factors scale items with its dimensions according to the residence, the researcher demonstrate one-way ANOVA analysis.

Table (5.12) One-way ANOVA comparing addiction risk factors scale items with its dimensions according to residence

Variable	Residence	Means	Source of Variance	Sum of Squares	Df	Mean Square	F-Value	P. Value
Spiritual dimension	City	5.584	Between Groups	8.59	2	4.30	1.489	// 0.227
	camp	5.573	Within Groups	862.58	299	2.88		
	village	4.900	Total	871.17	301			
Family dimension	City	3.512	Between Groups	1.01	2	0.51	0.250	// 0.779
	camp	3.427	Within Groups	605.84	299	2.03		
	village	3.300	Total	606.85	301			
Social dimension	City	4.176	Between Groups	45.86	2	22.93	7.068	*** 0.001
	camp	4.159	Within Groups	969.95	299	3.24		
	village	2.600	Total	1015.80	301			
Psychological dimension	City	6.728	Between Groups	2.58	2	1.29	0.292	// 0.747
	camp	6.586	Within Groups	1322.64	299	4.42		
	village	6.900	Total	1325.22	301			
Physical dimension	City	4.872	Between Groups	21.92	2	10.96	2.966	// 0.053
	camp	4.401	Within Groups	1104.87	299	3.70		
	village	5.200	Total	1126.79	301			
Political and occupation influence dimension	City	4.464	Between Groups	24.04	2	12.02	5.764	** 0.003
	camp	3.904	Within Groups	623.65	299	2.09		
	village	4.500	Total	647.70	301			
Total dimensions	City	29.336	Between Groups	142.74	2	71.37	2.781	// 0.064
	camp	28.051	Within Groups	7674.28	299	25.67		
	village	27.400	Total	7817.02	301			

* $p \leq 0.05$

** $p \leq 0.01$

*** $p \leq 0.001$

The previous table shows that: there was a significant difference in addiction risk factors scale items with its dimensions according to the residence ($p \leq 0.001$, 0.01) of the study sample in Social dimension, Political and occupation influence dimension.

5.6.12 Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to residence.

Table (5.13) Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to residence

Variable	residence	City	camp
Social dimension	camp	0.017	
	village	*1.576	*1.559
Political and occupation influence dimension	camp	*0.560	
	village	0.036	0.596

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of Social dimension with its dimensions according to residence was between the group of village side and the two groups (city, camp) , in favor to the residence group of city, camp patients. And in Political and occupation influence dimension according to residence was between the group of city and camp , in favor to the residence group of city patients.

5.6.13 Differences in addiction risk factors scale items with its dimensions according to educational level:

To investigate the difference in addiction risk factors scale items with its dimensions according to the educational level, the researcher demonstrate one-way ANOVA analysis.

Table (5.14) One-way ANOVA comparing addiction risk factors scale items with its dimensions according to educational level

Variable	Educational level	Means	Source of Variance	Sum of Squares	Df	Mean Square	F-value	P. Value
Spiritual dimension	Elementary	5.585	Between Groups	31.53	4	7.88	2.788	* 0.027
	Preparatory	5.766	Within Groups	839.64	297	2.83		
	Secondary	4.955		871.17	301			
	University	5.750	Total	8.14	4	2.03		
Family dimension	Elementary	3.283	Between Groups	598.72	297	2.02	1.009	// 0.403
	Preparatory	3.519	Within Groups	606.85	301			
	Secondary	3.612		53.19	4	13.30		
	University	3.200	Total	962.62	297	3.24		
Social dimension	Elementary	3.906	Between Groups	1015.80	301		4.103	** 0.003
	Preparatory	4.532	Within Groups	52.19	4	13.05		
	Secondary	3.522		1273.03	297	4.29		
	University	4.900	Total	1325.22	301			

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

Follow table (5.14):

Psychological dimension	Elementary	6.623	Between Groups	51.56	4	12.89	3.044	* 0.018
	Preparatory	6.870	Within Groups	1075.23	297	3.62		
	Secondary	7.075		1126.79	301			
	University	5.400	Total	20.58	4	5.14		
Physical dimension	Elementary	4.679	Between Groups	627.12	297	2.11	3.561	** 0.007
	Preparatory	4.688	Within Groups	647.70	301			
	Secondary	5.134						
	University	3.450	Total	228.27	4	57.07		
Political and occupation influence dimension	Elementary	4.189	Between Groups	7588.75	297	25.55	2.236	// 0.057
	Preparatory	4.247	Within Groups	7817.02	301			
	Secondary	4.149		31.53	4	7.88		
	University	3.300	Total	839.64	297	2.83		
Total dimensions	Elementary	28.264	Between Groups	871.17	301		2.233	// 0.065
	Preparatory	29.623	Within Groups	8.14	4	2.03		
	Secondary	28.448		598.72	297	2.02		
	University	26.000	Total	606.85	301			

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

The previous table shows that: there was a significant difference in addiction risk factors scale items with its dimensions according to the educational level (p≤ 0.001,0.001,0.05) of the study sample in Spiritual dimension, Social dimension, Psychological dimension, and Physical dimension .

5.6.14 Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to educational level.

Table (5.15) Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to educational level

Variable	educational level	Elementary	Preparatory	Secondary
Spiritual dimension	Preparatory	0.181		
	Secondary	0.630	0.811	
	University□	0.165	0.016	0.795
Social dimension	Preparatory	0.470		
	Secondary	0.540	*1.010	
	University□	0.838	0.994	0.368
Psychological dimension	Preparatory	0.248		
	Secondary	0.452	0.205	
	University□	1.223	1.470	*1.675
Physical dimension	Preparatory	0.009		
	Secondary	0.455	0.446	
	University□	1.229	1.238	*1.684

Post Scheffee statistical test was done and indicated; the differences of means of addiction risk factors scale items with Social dimension according to educational level was between the groups of secondary and preparatory, in favor to the group of elementary education of patients; and with Psychological dimension according to educational level was between the groups of secondary and university, in favor to the group of secondary education of patients.

5.6.15 Differences in risk factors scale items with its dimensions according to the working status:

Table (5.16) Independent t-test comparing means risk factors according to working status

Variable	Working N =72		Not working N =230		T- value Df= 300	P. Value
	Mean	SD	Mean	SD		
Spiritual dimension	5.69	1.53	5.48	1.75	0.922	// 0.357
Family dimension	3.10	1.09	3.57	1.49	2.461	*0.014
Social dimension	4.93	1.55	3.79	1.84	4.754	***0.000
Psychological dimension	5.65	2.39	6.98	1.89	4.867	***0.000
Physical dimension	4.46	2.14	4.71	1.87	0.958	// 0.339
Political and occupation influence dimension	3.96	1.50	4.24	1.45	1.442	// 0.150
Total dimensions	27.79	4.54	28.77	5.25	1.430	// 0.154

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

As shown in the previous table; there were no significant differences in Family, Social, Psychological dimension according to the working status ($p > 0.001$, 0.05) of the study sample; and differences in Family, Psychological dimension for not work group, and in differences in Social dimension for working group.

5.6.16 Differences in addiction risk factors scale items with its dimensions according to monthly income:

To investigate the difference in addiction risk factors scale items with its dimensions according to the monthly income, the researcher demonstrate one-way ANOVA analysis.

Table (5.17) One-way ANOVA comparing addiction risk factors scale items with its dimensions according to monthly income

Variable	Monthly income	Means	Source of Variance	Sum of Squares	Df	Mean Square	F-value	P. Value
Spiritual dimension	1000 NIS & below	5.071	Between Groups	60.99	3	20.33	7.477	*** 0.000
	1001-2000	5.581	Within Groups	810.18	298	2.72		
	2001-3000	5.889		871.17	301			
	More than 3000 NIS	6.818	Total	25.58	3	8.53		
Family dimension	1000 NIS & below	3.265	Between Groups	581.27	298	1.95	4.372	* 0.005
	1001-2000	3.665	Within Groups	606.85	301			
	2001-3000	3.593		43.32	3	14.44		
	More than 3000 NIS	2.636	Total	972.49	298	3.26		
Social dimension	1000 NIS & below	3.776	Between Groups	1015.80	301		4.425	* 0.005
	1001-2000	3.981	Within Groups	16.67	3	5.56		
	2001-3000	4.889		1308.55	298	4.39		
	More than 3000 NIS	4.909	Total	1325.22	301			
Psychological dimension	1000 NIS & below	6.653	Between Groups	13.63	3	4.54	1.265	// 0.286
	1001-2000	6.826	Within Groups	1113.16	298	3.74		
	2001-3000	6.037		1126.79	301			
	More than 3000 NIS	6.364	Total	16.00	3	5.33		
Physical dimension	1000 NIS & below	4.929	Between Groups	631.70	298	2.12	1.216	// 0.304
	1001-2000	4.523	Within Groups	647.70	301			
	2001-3000	4.296		156.19	3	52.06		
	More than 3000 NIS	4.727	Total	7660.83	298	25.71		
Political and occupation influence dimension	1000 NIS & below	4.000	Between Groups	7817.02	301		2.516	// 0.058
	1001-2000	4.148	Within Groups	60.99	3	20.33		
	2001-3000	4.370		810.18	298	2.72		
	More than 3000 NIS	4.909	Total	871.17	301			
Total dimensions	1000 NIS & below	27.694	Between Groups	25.58	3	8.53	2.025	// 0.110
	1001-2000	28.723	Within Groups	581.27	298	1.95		
	2001-3000	29.074		606.85	301			
	More than 3000 NIS	30.364	Total	43.32	3	14.44		

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

As showed in the previous table; there was a significant difference ($p \leq 0.001$, 0.05) in addiction risk factors scale items dimensions Spiritual, Family, Social according to the monthly income of the study sample.

5.6.17 Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to monthly income.

Table (5.18) Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to monthly income

Variable	monthly income	1000 NIS and below	1001-2000	2001-3000
Spiritual dimension	1001-2000	0.509		
	2001-3000	0.818	0.308	
	More than 3000 NIS	*1.747	*1.238	0.929
Family dimension	1001-2000	0.399		
	2001-3000	0.327	0.072	
	More than 3000 NIS	0.629	*1.028	0.629
Social dimension	1001-2000	0.205		
	2001-3000	*1.113	0.908	
	More than 3000 NIS	1.134	0.928	0.020

Scheffee statistical test was done and indicated; the differences of means of addiction risk factors scale in Spiritual dimensions according to monthly income was between the two groups of monthly income more than 3000 NIS and the groups of monthly income 1000 NIS and below, 1001- 2000 NIS, in favor to the groups of monthly income more than 3000 NIS of patients; and in Family dimensions according to monthly income was between the group of monthly income more than 3000 NIS and the group of monthly income 1001- 2000 NIS, in favor to the groups of monthly income 1001- 2000 NIS of patients, and in Social dimensions according to monthly income was between the group of monthly income 1000 NIS and below and the group of monthly income 2001- 3000 NIS, in favor to the groups of monthly income 2001- 3000 NIS of patients .

5.6.18 Differences in addiction risk factors scale items with its dimensions according to Governorate:

In order to investigate the difference in addiction risk factors scale items with its dimensions according to the Governorate of the study sample, the researcher demonstrate one-way ANOVA analysis.

Table (5.19) One-way ANOVA comparing addiction risk factors scale items with its dimensions according to Governorate

Variable	Educational level	Means	Source of Variance	Sum of Squares	Df	Mean Square	F-value	P. Value
Spiritual dimension	Khan-younis	5.06	Between Groups	85.21	3	28.40	10.770	*** 0.000
	Alwosta	6.08	Within Groups	785.96	298	2.64		
	Gaza& North	5.92						
	Rafah	4.75	Total	871.17	301			
Family dimension	Khan-younis	3.35	Between Groups	4.07	3	1.36	0.671	// 0.571
	Alwosta	3.47	Within Groups	602.78	298	2.02		
	Gaza& North	3.39						
	Rafah	3.67	Total	606.85	301			

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

Follow table (5.19):

Social dimension	Khan-younis	3.22	Between Groups	92.31	3	30.77	9.930	*** 0.000
	Alwosta	3.67	Within Groups	923.49	298	3.10		
	Gaza& North	4.62						
	Rafah	4.10	Total	1015.80	301			
Psychological dimension	Khan-younis	7.16	Between Groups	44.88	3	14.96	3.482	* 0.016
	Alwosta	7.10	Within Groups	1280.34	298	4.30		
	Gaza& North	6.50						
	Rafah	6.15	Total	1325.22	301			
Physical dimension	Khan-younis	4.65	Between Groups	11.12	3	3.71	0.990	// 0.398
	Alwosta	4.24	Within Groups	1115.68	298	3.74		
	Gaza& North	4.77						
	Rafah	4.74	Total	1126.79	301			
Political and occupation influence dimension	Khan-younis	4.40	Between Groups	46.98	3	15.66	7.768	*** 0.000
	Alwosta	3.84	Within Groups	600.72	298	2.02		
	Gaza& North	4.50						
	Rafah	3.54	Total	647.70	301			
Total dimensions	Khan-younis	27.84	Between Groups	359.38	3	119.79	4.787	*** 0.003
	Alwosta	28.39	Within Groups	7457.64	298	25.03		
	Gaza& North	29.71						
	Rafah	26.95	Total	7817.02	301			

*p≤ 0.05

**p≤ 0.01

***p≤ 0.001

The previous table shows that: there was a significant difference in addiction risk factors scale items with its dimensions according to the Governorate (p≤ 0.001 , 0.05) of the study sample in Spiritual dimension , Social dimension , Psychological dimension, Political and occupation influence dimension, and Total Risk Factors of drugs dependence Among People in Gaza Strip.

5.6.19 Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to Governorate.

Table (5.20) Scheffe statistical test comparing addiction risk factors scale items with its dimensions according to Governorate

Variable	Governorate	Khan-younis	Alwosta	Gaza& North
Spiritual dimension	Alwosta	*1.015		
	Gaza& North	*0.858	0.157	
	Rafah	0.309	*1.324	*1.167
Social dimension	Alwosta	0.444		
	Gaza& North	*1.400	*0.955	
	Rafah	0.876	0.432	0.524
Psychological dimension	Alwosta	0.061		
	Gaza& North	0.663	0.602	
	Rafah	1.011	0.951	0.349
Political and occupation influence dimension	Alwosta	0.554		
	Gaza& North	0.107	0.661	
	Rafah	*0.856	0.302	*0.963
Total Risk Factors of drugs dependence Among People in Gaza Strip	Alwosta	0.551		
	Gaza& North	1.867	1.317	
	Rafah	0.891	1.441	*2.758

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with Spiritual dimension according to Governorate was between the group of (Alwosta) Governorate a side and the two groups of (Khan-younis, Gaza& North), in favor to the group of (Alwosta).

the differences of means of addiction risk factors scale items with Social dimension , Psychological dimension, Political and occupation influence dimension, and Total Risk Factors of drugs addiction was between the group of (Gaza& North) Governorate a side and other groups, in favor to the group of (Gaza& North).

That means addiction risk factors scale items with its dimensions among the group of (Gaza& North) were significantly higher than other groups of the study sample.

Chapter Six

Discussion, Conclusion & Recommendation

6.1 Introduction:

The problem of addiction is a social problem affecting society as a whole, and therefore must share all relevant official and popular in finding a solution, and allow a democratic front of scientific research for the causes of the phenomenon to include all fields which diverge problem. That the phenomenon of multiple aspects (social, economic and political) has led to the existence and spread in the community as a whole must work in earnest to resolve these dilemmas multifaceted suffered by the citizens of the housing and the provision of appropriate work and democratic freedoms and others to purify the atmosphere and rid it of impurities that encourages a lot of phenomena and moral and behavioral diseases, including bad phenomenon of drug abuse.

The drug of the most important problems of national urgency that dissipates wealth and soul and all the forces of construction, a phenomenon declination as out rules of conduct and ethical standards approved by the community, whether this recognition from the legal aspect, religious or cultural Although global problem of drug abuse and variables social, they have a local image specific to each community separately as it is a problem with the dimensions of nationalism linked to political history and legislative branches of the country, is also linked to its heritage and traditions and its social, moral and cultural The danger of drug abuse in the negative effects of the incident on the abuser and not only this, but also on the communities themselves. Hence, the treatment of any addict needs to be an integrated team of physical doctor and psychiatrist, cleric and social worker, taking into account the social and cultural dimensions of around addicts.

6.2 Discussion results of Demographic and clinical characteristics of the study sample:

In this study The sample consist of 302 subjects, The age range from 18 to 62 years old (mean of age was 39.9, SD 10.03). According to marital status 11.9% were single, 84.4% were married, and 3.6% were divorced. According to the working status 23.8% work and 76.2% not work and depend on aids. According to educational level 10.6% were not educated, 35.1% finished the elementary schools, 25.5% finished the preparatory schools, also 22.2% finished secondary schools, and 6.6% have a university degree. according to monthly income 32.5% with monthly income 1000 NIS and less than, 51.3% with monthly income between 1001- 2000 NIS, 8.9% with monthly income between 2001- 3000 NIS 7.3% with monthly income more than 3001 NIS.

6.3 Discussion results of Severity of Substance Abuse:

6.3.1 Discussion results of Age of Beginning of drug abuse

That 126 of the study sample have beginning of drug abuse since their ages with 20 years and below 41.7%, 130 of the study sample have beginning of drug abuse since their ages 21-29 years 43%, and 46 of them were since age 30 years and more 15.2%.

This result was supported by many previous studies (Bastos et al., 2008), (Galduróz et al., 2005), and (Boscarino et al., 2010), which shown have beginning of substance abuse among students collage and after graduated from university.

But another research shown the adolescent age conceder dangerous period, because this age separated between children and adulthood. In this age started adolescents to knowledge environment and simulator another people or friend, this result is approved by study of (Dayan et al., 2010), (Rudatsikira et al., 2009), (Poorasl et al., 2007) and (Omran, 2006).

Hanson et al (2012) said the adolescent From ages 13 through 18, are more likely to experience heightened psychological, social, and biological changes. Often, such internal and external changes are manifested by emotional outbursts The adolescent's body is stretching, growing, and sometimes appearing out of control due to the hormonal changes of puberty.

Teenagers are uncertain and confused about not knowing who or what they are becoming. They are often confused as to their worth to family, peers, society, and even to themselves (Kantrowitz and Wingert 1999). Adding to the frustration of growing up, the cultural status of adolescents is poorly defined. They find themselves trapped in a "no-man's land" between the acceptance, simplicity, and security of childhood, and the stress, complexities, expectations, independence, and responsibilities of adulthood. Not only do adolescents have difficulty deciding who and what they are, but adults are equally unsure as to how to deal with these transitional human beings. While the grown-up world tries to push adolescents out of the secure nest of childhood, it is not willing to bestow the full membership and rights of adulthood upon them (Kantrowitz and Wingert 1999).

6.3.2 Discussion results of Have you been abused these substances until now:

Most of the subjects 176 of do not take substances 58.3%, while 126 of them were take substances until now 41.7%.

The researcher think that the percent of individuals who still addicts is less in relation to the situation the Palestinian people live under siege from the year 2006, which increased the load of stress on them. Therefor some of them goes for taken drugs. and this is ensure that about 60% of random sample of addicts is a good percent in compare with the situation the addicts lives.

This result was supported by (Carabellese F et al. 2013), (Büttner, 2011), (All Sauod, 2011), this research founded the good situation and increased live level inhibitor to return to addicts. But another research show the cause of addicts back to genetic factor such as (Ehlers CL, Gizer IR. 2013), (Chen et al., 2009) and (Poorasl et al., 2007).

6.3.3 What was the site of administration of the abused substance:

Most of the subjects 263 were taking orally 87.1%, while 25 of them were taking by inhalation 8.3%, 14 of them were taking by injection 4.6%.

One of the most common and convenient ways of taking a drug is orally. This type of administration usually introduces the drug into the body by way of the stomach or intestines. Following oral administration, it is difficult to control the amount of drug that reaches the site of action. In this study founded orally is main route of addiction and next is inhalant. This result was supported by (Jakubczyk A et al,2013), (All Sauod (2011), (Bastos et al., 2008),and (Wu et al,2003). But in another research founded inhalant and smoking is main route of addiction such as (Ehlers CL, Gizer IR., 2013), (Liang et al., 2011), and (Tda et al., 2006).

6.3.4 What is the dose of the abused substance:

Most of the subjects 152 were taking tablet 50.4%, while 76 of them were taking cigarette 25.2%, 63 of them were taking gram 20.8%, 11 of them were taking injection 3.6%.

This result was supported by many previous studies (Büttner, 2011), (Amiri et al., 2009), (Dalgarrondo et al.,2004) and (Ljubotina D et al., 2004). This research Showed a high degree of interconnection among the frequencies of consuming tablet, and cigarette smoking. We also found that the best predictive factors for consumption of these substances were a history of high-risk and delinquent behavior, troubled adjustment to school, domination of hedonistic values, and poor family relations.

6.3.5 How have you been supplied with the substance:

150 of the subjects were supplied with the substance by friends 45%, while 114 of them were by sailors 37.7%, 8 of them were by family member 2.6%, and 44 of them by other ways 14.6%.

Friends, often unwittingly “enable” the maintenance and progression of addiction by making excuses for addicts, literally and figuratively bailing them out, taking up the slack, denying and minimizing their problems, and otherwise making it possible for addicts to avoid facing the reality and consequences of what they are doing to themselves and others. Although these friends may be motivated by simple naïveté, embarrassment, or misguided protectiveness, there are often hidden gains in taking up this role, known pop popularly as “codependency”. Varieties of cultural and organizational factors also operate in the workplace or school that allow denial of the existence or severity of abuse or dependency. This triad of personal denial, peer and kin denial and codependency, and institutional denial represents a formidable impediment to successful intervention and recovery.

This research founded the friends have effects on another friends, which is consistent with the studies (Schwarz JM and Bilbo SD,2013) (Jurgaitiene et al., 2009), (Poorasl et al., 2007), and (Al-Jayousi, 2003), except study of (Bastos et al., 2008) and (Ede, 2006) which found family member to effects on people to take drugs.

6.3.6 Do you have medical illness as a result of drug abuse:

Most of the 130 of the subjects had medical illness as a result of drug abuse 43%, while 172 of them had not medical illness as a result of drug abuse 57%.

This result considered to be dangerous on generations, because more than half percent on sample addicts without any disease, may be escape from actual situation. The

adolescent and another people need good environment, good service, good education, and need good life to prevent the thought in drugs addiction.

In vegetative country such as Arabic country and American Latin the results found that the participants with affective disorders were at higher risk of drug harmful use and drug dependence and the effects did not vary by the length of time respondents had been exposed to mental disorders such as (Liang et al., 2011), (All Sauod, 2011), and (Tda et al., 2006).

6.4 Discussion results of question 1: What is the major risk factors for drugs dependence among people In Gaza Strip.

Risk Factors of drugs dependence Among People in Gaza Strip is 52.1% , where the ratio scales plays the role of this step. Where the highest risk Spiritual dimension 21%, Psychological dimension 74.1%, and Social dimension and Physical dimension 58%, then Political and occupation influence dimension 52.2%. While the lowest risk factors are the Family dimension 43.2%.

The present study confirmed the importance of the religious factor in reducing addiction, where he belonged to the families of addicts religiously committed, but family and social factors surrounding the person all negatively affect the general situation of the addict. The results for the factors of family low as less factors, but social factors were somewhat high, which in turn increased the psychological pressure of the person is addicted, and thus increased the physical ailments he has, and should not marginalize the political situation in which they live the Palestinian people, and the role of the occupation in the dissemination of these drugs among young people, all of these factors are community factors pushing people to search for alternatives to escape from the reality in which they live.

Agreement with the results of the study (Carabellese F et al., 2013), (Jakubczyk A et al. 2013), (Gajewski J & Małkowska- Szkutnik A. 2012), (Liang et al., 2011) and (Nespor et al., 2010), Found these studies to leisure of religious and pressure of domestic society with psychological pressure and physical all adversely affect the serpents anyone, which makes a person trying to find other ways to escape reality, who lives in, and by the potential of any person who may be the easiest way is to addiction.

6.5 Discussion results of question 2:What is the prevalence of types of drugs dependence among the study sample in the Gaza Strip.

Most of the subjects 100 were taking Trammal 33.1%, while 86 of them were taking cannabis 14.1%, 51 of them were taking assival 16.9%, 36 of them were taking cocaine 11.9%, 29 of them were taking others 10.6%.

In our study there is differences between results in distribution of substance, according type of drugs and rout of addiction. In Gaza strip consider trammel and assival more easy access and take to the drugs. This study founded trammel high percent, next type is assival in distribution of subjects. This result was supported by (Maier et al., 2010) and (Butler et al., 2010), and contrast to the result of (Carabellese F et al. 2013), (Karila et al., 2010) which shown cannabis first drug used in united states and Italy.

In a study by Kandel et al. (2001), when parents had used marijuana at some time in their lives, their teen children were 40% more likely to have used the drug in their lifetime than teens whose parents had never used marijuana. Moreover, when parents had used marijuana in the past year, their children were twice as likely to have used in the same time period than were teens whose parents had not used in the past year. This same study also found that when parents had used marijuana in the past year, their teen children were more likely to have used marijuana in the past year when compared with the children of parents who had used at some time in their life, but not in the last year. Similarly, parental use of other drugs, such as alcohol, nicotine, and cocaine, was also found to have an impact on their teen children's use of marijuana. More importantly, the perceived risk of use is the most important influence on teen marijuana/ use. In the Kandel et al. (2001) study, it was found to be five times more important than parental use.

6.6 Discussion results of question 3: Is there relationship between Age and risk factors for drugs dependence drugs dependence among the study sample in the Gaza Strip.

There was a significant difference in addiction risk factors scale items with its dimensions according to the age ($p \leq 0.001$, 0.01) of the study sample in Spiritual dimension , Social dimension , Political and occupation influence dimension , Total Risk Factors of drugs dependence Among People in Gaza Strip.

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with its dimensions according to age was between the group of (46 years and more) age a side and the two groups of (30 years and less, and 31-45 years), in favor to the group of (46 years and more). That means addiction risk factors scale items with its dimensions among the group of (46 years and more) were significantly higher than other groups of the study sample.

The Age of the most important factors that reach the human to the stage of addiction if the concern for the individual at some point, considered adolescence stages grave at the age of the individual, and if the neglect person where it resorted to interested in another place, in addition to that stage of youth physiological changes occur in the human body, these changes may lead to the emergence of individual differences in temperament, thus resort to drug abuse. The study proved that all the factors affecting persons who are less than 45 years old, according to the study sample. confirmed the result of the study (Liang et al., 2011), (Boscarino et al., 2010), (Bastos et al., 2008), (Galduróz et al., 2005).

6.7 Discussion results of question 4: Is there relationship between age of onset of drugs dependence and risk factors for drugs dependence among the study sample in the Gaza Strip:

There was a significant difference in addiction risk factors scale items with its dimensions according to the age of beginning of drug abuse ($p \leq 0.001$, 0.05) of the study sample in Spiritual dimension , family dimension, Political and occupation influence dimension, Among People in Gaza Strip.

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with its dimensions according to age of beginning of drug abuse was between the group of 30 and more and (20 and less, 21 - 29) , in favor to the group of 20 and less People.

That means addiction risk factors scale items with its dimensions among the group of 20 and less patients were significantly higher than other groups of the study sample.

This result was supported by many previous studies (Karila et al., 2010), (Bastos et al., 2008) and (Ede (2006) ,Where these studies found that factors teenagers resort to addiction than others, and this underlines the importance of the age group to those who are under the age of twenty. Different ideas between youth and love of tradition makes teenagers be an easy victim to fall into addiction. In addition to that experimentation love exists between the culture of adolescents and this is another important reason call attention to this age group of children.

But in other studies in different countries and found that the spread of adduction among older age groups, they offer various awareness programs to alert young people from falling into the dangers of addiction. In addition, these countries offer full care for those who are at the age of adolescence and try to solve their problems and even provide different ways to entertain them. They are interested in them because they believe that building societies start from young. In this study (Gajewski J & Małkowska- Szkutnik A. 2012), (Sauod ,2011), Dayan et al., (2010), and (Jurgaitiene et al., 2009).

6.8 Discussion results of question 5: Is there relationship between size of family and risk factors for drugs dependence among the study sample in the Gaza Strip.

There was a significant difference in addiction risk factors scale items with its dimensions according to the Number of family members ($p \leq 0.001$, 0.01) of the study sample in Family dimension, Physical dimension, Political and occupation influence dimension, Total Risk Factors of drugs dependence Among People in Gaza Strip.

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with family dimension according to Number of family members was between the group of (4 and less) Number of family members a side and the two groups of (5-8, 9 and more), in favor to the group of (4 and less).

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with Physical dimension according to Number of family members was between the group of (5-8) Number of family members a side and the two groups of (4 and less, 9 and more), in favor to the groups of (4 and less, 9 and more).

The differences of means of addiction risk factors scale items with, Political and occupation influence dimension, and Total Risk Factors of drugs addiction was between the group of (9 and more) Number of family members a side and the two groups of (4 and less, 5-8), in favor to the groups of (4 and less, 5-8).

The results of this study agree with (Jakubczyk A et al. 2013), (Chen et al 2010) and (Rudatsikira et al., 2009), Where these studies confirmed that addiction is linked closely linked to the number of family members, so that the greater the number of family members whenever factors, which calls for a person to resort to addiction, and the differences were in favor of a number of family members (4 and less, 5-8), This is a convincing result for the reality in which we live, where more responsibilities by the father, or any member of the family. This is for the Palestinian community, which increases the life of the pressures and responsibilities towards the community.

But other studies have found no correlation between drug addiction and family size, such as (Gajewski J & Małkowska- Szkutnik A. 2012), (All Sauod, 2011), and (Butler et al., 2010), These studies have found no link between drug addiction and the number of family members, where we find that the study population was in an environment that provides for the individual all the comforts of a free education and the provision of housing and the provision of income economist and these things are all that will show the results in the studies

6.9 Discussion results of question 6: Is there relationship between Occupation before drug dependence and risk factors for drugs dependence among the study sample in the Gaza Strip:

The previous table shows that: there was a significant difference in addiction risk factors scale items with its dimensions according to the Occupation before drug abuse ($p \leq 0.001, 0.001, 0.05$) of the study sample in all dimensions and Total Risk Factors of drugs dependence Among People in Gaza Strip.

Scheffee statistical test was done and indicated; the differences of means of addiction risk factors scale items with all dimension according to Occupation before drug abuse was between the groups of unemployed and worker with other groups, in favor to the group of unemployed and worker.

That means addiction risk factors scale items with its dimensions among the group of unemployed and worker were significantly higher than other groups of the study sample.

Each person has psychological and social pressures, and the work affects the lives of individual rights, either increases its production in the society in which they live or adversely affect him, making it vulnerable to psychological and social problems. And work better and better its social product whenever more to the welfare of the individual so that his thinking towards improving life for the better forever. But hard work, and not to work increases the risk of resorting to drugs to escape from reality and this is what indicated by this study, And agreed with the study (All Sauod, 2011), (Dayan et al., 2010), (Chen et al., 2009) and (Al-Jayousi , 2003)

6.10 Discussion results of question 7: Is there relationship between marital status and risk factors for drugs dependence among the study sample in the Gaza Strip:

There was a significant difference in addiction risk factors scale items with its dimensions according to the marital status ($p \leq 0.001$, 0.01) of the study sample in Spiritual dimension, Political and occupation influence dimension , Total Risk Factors of drugs dependence Among People in Gaza Strip.

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with its dimensions according to marital status was between the group of married and (single, divorced) , in favor to the group of married patients.

That means addiction risk factors scale items with its dimensions among the group of married patients were significantly higher than other groups of the study sample.

Different personal and social responsibilities of the married person from the other. Social habits customs and traditions of the Palestinian society a bit stiff, which liberated the non-married person. The a look of the Palestinian society to the responsibilities of the pair afford it more than on the endurance, which increases the psychological pressures for the has a, has proved of the study that the drug addiction is the more between the married couples than others. It may also be due to the myths sawmill in the community about the impact of substance abuse on sexual capacity. Which weakens some people fall into the problem of addiction. This result was supported by (Boscarino et al., 2010), (Bastos et al., 2008), (Galduróz et al., 2005).

6.11 Discussion results of question 8: Is there relationship between place of residence and risk factors for drugs dependence among the study sample in the Gaza Strip:

There was a significant difference in addiction risk factors scale items with its dimensions according to the residence ($p \leq 0.001$, 0.01) of the study sample in Social dimension, Political and occupation influence dimension.

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of Social dimension with its dimensions according to residence was between the group of village side and the two groups (city, camp) , in favor to the residence group of city, camp patients. And in Political and occupation influence dimension according to residence was between the group of city and camp , in favor to the residence group of city patients.

The Researcher see that the place of residence effects on the person on drugs addiction, people who live in cities different from those who live in villages and the population of grouted area more than the population of remote area where the results of the population of city and camp, where the number of population of city and camp is greater than the number of village. Psychological, social and educational support with the population of city and camp is greater than the population of village.

This result was supported by many previous studies (Gajewski J & Małkowska-Szkutnik A., 2012), (Sloboda et al., 2009), (Ilhan et al., 2008) and (Omran (2006) founded this study countryside not distribution addictions between peoples.

6.12 Discussion results of question 9: Is there relationship between educational level and risk factors for drugs dependence among the study sample in the Gaza Strip:

There was a significant difference in addiction risk factors scale items with its dimensions according to the educational level ($p \leq 0.001, 0.001, 0.05$) of the study sample

in Spiritual dimension, Social dimension, Psychological dimension, and Physical dimension .

Scheffee statistical test was done and indicated; the differences of means of addiction risk factors scale items with Social dimension according to educational level was between the groups of secondary and preparatory, in favor to the group of elementary education of patients; and with Psychological dimension according to educational level was between the groups of secondary and university, in favor to the group of secondary education of patients.

Studies have confirmed that education has a positive effect on drug addiction so that the greater the level of education whenever lack proportion of drug addiction, but that drug addiction is common among people with low education. This was confirmed by this study. Where the researcher finds that the educational level of the factors that significantly affect the functionality of the individual. This is because the level of education can be considered as a function or an indication of the experiences of the individual, it is obvious that those experiences available to individuals to help them to have a positive role in the family and society, and to identify a specific behavior within the framework of the circumstances and situations that pass by, but may affect the social environment and habits and traditions of the society so that society usually affect the ideas of his sons and the nature of the lifestyle.

This result was supported by many previous studies such as (Gajewski J & Małkowska- Szkutnik A. (2012), (Chen et al, 2010), (Rudatsikira et al., 2009), (Bastos et al., 2008) and (Omran, 2006) This study has shown low prevalence of substance abuse and determined some of its risk factors among students.

6.13 Discussion results of question 10: Is there relationship between Current occupation and risk factors for drugs dependence among the study sample in the Gaza Strip:

There were no significant differences in Family, Social, Psychological dimension according to the working status ($p > 0.001, 0.05$) of the study sample; and differences in Family, Psychological dimension for not work group, and in differences in Social dimension for working group.

Researcher believes that the nature of the work of the individual under the general situation experienced by the Palestinian community, it is not of great importance, but more importantly, to find an individual source of income making enables all others and sufficient to meet its needs, making unemployment recipe widespread among young people, and even become everyone looking for any work regardless of its nature whether it is suitable or not.

Some of research founded the financial need compels the individual to invest in promoting for drugs which obviously means retaking drugs, the availability of an alternative salary, the low cost for some drugs makes it easy to retaking it, and the availability of money enables the person to buy drugs after recovering. (All Sauod , 2011), (Boscarino et al., 2010), and (Tda et al., 2006).

6.14 Discussion results of question 11: Is there relationship between family income and risk factors for drugs dependence among sample in the Gaza Strip:

There was a significant difference ($p \leq 0.001, 0.05$) in addiction risk factors scale items dimensions Spiritual, Family, Social according to the monthly income of the study sample.

Scheffee statistical test was done and indicated; the differences of means of addiction risk factors scale in Spiritual dimensions according to monthly income was between the two groups of monthly income more than 3000 NIS and the groups of monthly income 1000 NIS and below, 1001- 2000 NIS, in favor to the groups of monthly income more than 3000 NIS of patients; and in Family dimensions according to monthly income was between the group of monthly income more than 3000 NIS and the group of monthly income 1001- 2000 NIS, in favor to the groups of monthly income 1001- 2000 NIS of patients, and in Social dimensions according to monthly income was between the group of monthly income 1000 NIS and below and the group of monthly income 2001- 3000 NIS, in favor to the groups of monthly income 2001- 3000 NIS of patients .

This result was supported by (Jakubczyk A et al., 2013), (Boscarino et al., (2010), (Bastos et al., (2008), and (Galduróz et al.,(2005). The economic level an essential role in the emergence of cases of drug addiction, individuals with the economic level low (poor) suffer from pressures much greater than the pressures on individuals with a high level (rich), fall in their income and their inability to satisfy the needs psychological, social and spiritual, it increases the possibility of the emergence of isolation and frustration, Undoubtedly that stressful events and multi increase the possibility of bad the situation of psychological and physical of the individual, Valises and neglect occur under the conditions of life stressful, and I have found studies that economic pressures and lack of resources leads to the inability of man and his inability to carry out its responsibilities, leading to their sorting to alcoholism.

6.15 Discussion results of question 12: Is there relationship between governorate of residence and risk factors for drugs dependence drugs dependence among the study sample in the Gaza Strip:

There was a significant difference in addiction risk factors scale items with its dimensions according to the Governorate ($p \leq 0.001, 0.05$) of the study sample in Spiritual dimension , Social dimension , Psychological dimension, Political and occupation influence dimension, and Total Risk Factors of drugs dependence Among People in Gaza Strip.

Post –hoc analysis using Scheffe statistical test was done and indicated; the differences of means of addiction risk factors scale items with Spiritual dimension according to Governorate was between the group of (Alwosta) Governorate a side and the two groups of (Khan-younis, Gaza& North), in favor to the group of (Alwosta).

the differences of means of addiction risk factors scale items with Social dimension , Psychological dimension, Political and occupation influence dimension, and Total Risk Factors of drugs addiction was between the group of (Gaza& North) Governorate a side and other groups, in favor to the group of (Gaza& North).

That means addiction risk factors scale items with its dimensions among the group of (Gaza& North) were significantly higher than other groups of the study sample.

Different result with each other, where studies have found differences in addiction by residential areas, whether a village or town or camp, both border areas close to the occupation, where the increase of addiction in the southern regions which are a few areas populated, and is the large areas, in the sense that the authority of the Security where a few somewhat, and drug dealers engaged in the drug trade without censorship.

6.16 Conclusion:

Tramadol abuse was the most common type of drug dependence in Gaza strip . the most risk factors that precipitate drug dependence was psychological factor .

6.17 Recommendation

6.17.1 General recommendation :

- The formation of a specialized committee of all official and popular (health, social, economic, jurists, intellectuals, institutions, popular clubs, professional associations and Women's ... etc.) in order to participate in the disclosure of the real causes of the problem and develop solutions collectively.
- Emphasis on the role of the family in creating economic and social conditions and health on the basis of parenting and sound ethics protect them from the requirement to fall into drug abuse and other social diseases.
- To provide educational programs and sound awareness of the dangers of drug abuse and its negative effects on the individual and society.
- To encourage exercises for all members of society, and the renovation programs for physical education . And attention to occupy the leisure time of young people in a meaningful way through the expansion of the establishment of clubs and youth centers and provide oversight conscious.
- On media increase the dose of programs that aim to show the aspects of the problem of substance abuse and its negative effects on the individual and the community .
- Treatment of drug addiction and rehabilitation approaches, increase and update clinics eligible for treatment in coordination with relevant agencies, and seriousness in dealing with cases of addiction and the required material and human support.
- Abusers must be treated patients, not criminals and providing psychiatric and vocational training centers and outreach, to win them over careers provide them with

the conditions of their living material and their family members after the treatment period.

- Tighten controls on the manufacture of narcotic pills and chemicals, which are frequently used, and tighten sanctions on companies. activating the role of oversight bodies trading narcotic drugs at the Ministry of Health.
- Eliminate the problem of unemployment suffered by hundreds of young people by providing equal opportunities to work. And can contribute to NGOs in helping young people to carry out productive projects.
- Maintenance and deepening of political values in the hearts of the members of the society and preservation of opportunists and the need to deepen the political participation of individuals within the community.
- Development of life skills to participate in social activities, sporting and cultural variety, and full awareness of the damage drugs.
- The existence of family ties strong, and the existence of good social relationships based on care and values of good, and dissemination of social culture that condemns drug use .

6.17.2 specialist recommendation

General directorate for prevention of drug abuse

- Provision of qualified man power .
- Logistic & financial support consisted with the magnitude of the tasks .
- Preparing training & rehabilitation plan for the employee based on updated knowledge & experiences .
- Cooperation with the legal representatives to arrest psychoactive drug traders .
- Legislative council needs to reevaluate the legal punishments for trading with psychoactive drugs to be more firm and restrictive .
- Psychoactive drugs traders should not get benefit from the law that permit the prisoners to be liberated when they spent two third of the convicted period.

Instructions related to governance & education :

- Concentrated educational camp gains focused on parents , mosques , community leaders and media .
- Educational programs should be included in the ministry of education activities .

- Coordination with the community institution to confront drug addiction .
- Coordination with the academic institutions to confront drug addiction .

Recommendations related to the weaning and treatment program :

- Establishing treatment and rehabilitation centers in coordination with ministry of health , social affairs & interior .
- Treatment & rehabilitations centers should be distributed in all areas of Gaza Strip with adequate financed resources & qualified man power .
- Consilolation of government & nongovernment efforts related to treatment .

References

References

1. AAPM (2001): **Definitions Related to the Use of Opioids for the Treatment of Pain.**, American Academy of Pain Medicine, the American Pain Society, and the American Society of Addiction Medicine.
2. Achord, J. L.(1999):**Alcohol and the Liver.**” Scientific American and Medicine.
3. Akers, R. L. (1992) “**Problems in the Sociology of Deviance: Social Definition and Behavior.**” Social Forces.
4. All saud, A.(2011): **factors that contributed to recidivist drugs by those addicted to it in Al- Amal Hospital in Riyadh**, Al Emam Mohammwd ben saud Islamic University, Riyadh.
5. American Psychiatric Association (APA).(2000) **Diagnostic and Statistical Manual of Mental Disorders**, 4th ed., revised (DSM-IV-TR). Washington, DC: American Psychiatric Association,
6. Amiri ZM, Shakib AJ, Moosavi AK. (2009): **Prevalence and risk factors of ecstasy use among college students in Astara**, Islamic Republic of Iran, Department of Community Medicine, School of Medicine, Guilan University of Medical Sciences, Rasht, Islamic Republic of Iran.
7. Anthony JC. (2003): **Epidemiology of drug dependence.** In: Galanter M, Kleber HD, eds. Textbook of Substance Abuse Treatment. 3rd ed. Washington, DC: The American Psychiatric Press, Inc.
8. Appelt, G. (1999): “**Weight Control Products.**” In **Handbook of Nonprescription Drugs**, 10th ed., edited by T. Covington, 339–349. Washington, DC: American Pharmaceutical Association.
9. Baldauf, S. (2006): “**Vanished Behind the Counter.**” US News and World Report.
10. Bastos FI, Bertoni N, Hacker MA; **Grupo de Estudos em População, Sexualidade e Aids.** (2008) Drug and alcohol use: main findings of a national survey, Brazil, Laboratório de Informações em Saúde, Instituto de Comunicação e Informação Científica e Tecnológica em Saúde, Fundação Oswaldo Cruz, Rio de Janeiro, RJ, Brazil.
11. Bauman, A. & Phongsavan, P. (1999). **Epidemiology of substance use in adolescence:** prevalence, trends and policy implications. Drug and Alcohol Dependence.

12. Baus J, Kupek E, Pires M. (2002): **Prevalence and risk factors associated with drug use among school students**, Brazil, Departamento de Psicologia, Universidade Federal de Santa Catarina, Florianópolis, SC, Brasil.
13. Bearns, J., Gossop, M., and Strang, J., (1999). **Drug Abuse. Drug and Alcohol Review**.
14. Belluck, P. (2003) “**Methadone, Once the Way Out, Suddenly Grows as a Killer Drug.**” The New York Times.
15. Boscarino JA, Rukstalis M, Hoffman SN, Han JJ, Erlich PM, Gerhard GS, Stewart WF. (2010): **Risk factors for drug dependence among out-patients on opioid therapy in a large US health-care system**, Center for Health Research, Geisinger Health System, Danville.
16. Burns, D. B.(1997) “**The Web of Caring: An Approach to Accountability in Alcohol Policy.**” In Designing Alcohol and Other Drug Prevention Programs in Higher Education. U.S. Department of Education. Newton, MA: Higher Education Center for Alcohol and Other Drug Prevention.
17. Butler SF, Black RA, Serrano JM, Wood ME, Budman SH. (2010): **Characteristics of prescription opioid abusers in treatment: prescription opioid use history, age, use patterns, and functional severity**, Inflexxion, Inc., Newton, Massachusetts, USA.
18. Büttner A. (2011): **Review: The neuropathology of drug abuse. Institute of Forensic Medicine**, University of Rostock, Rostock, Germany. Neuropathol Appl Neurobiol.Feb;37(2):118,34.,<http://www.ncbi.nlm.nih.gov/pubmed/20946118>
19. Buxton, I. (2006): “**Pharmacokinetics and Pharmacodynamics.**” In **The Pharmacological Basis of Therapeutics**, 11th ed., edited by L. Brunton, J. Lazo, and K. Parker, 1–39. New York: McGraw-Hill.
20. Carabellese F, Candelli C, Martinelli D, La Tegola D, Catanesi R. (2013): **Cannabis use and violent behaviour: a psychiatric patients cohort study in Southern Italy, Sezione di Criminologia e Psichiatria Forense, Università di Bari, Italy**, [PubMed - indexed for MEDLINE]
21. Center for Prevention Research and Development (CPRD) (2000): **Research Based Approaches in the Community Domain**. Champaign, IL: University of Illinois Urbana Champaign.

22. Charney, D., S. Mihic, and R. Harris (2006): **“Hypnotics and Sedatives.”** In **The Pharmacological Basis of Therapeutics**, 11th ed. Edited by L. Brunton, J. Lazo, and K. Parker, New York: McGraw-Hill.
23. Chen LS, Johnson EO, Breslau N, Hatsukami D, Saccone NL, Grucza RA, Wang JC, Hinrichs AL, Fox L, Goate AM, Rice JP, Bierut LJ. (2009): **Interplay of Genetic Risk Factors and Parent Monitoring in Risk for Nicotine Dependence**, Department of Psychiatry, Washington University, St. Louis, Missouri.
24. Chen, K.H.; Chen, C.Y.; Liu, C.Y.; Lin. Y.C.; Chen, W.J.& Lin. K.M. (2010): **Multilevel influences of school and family on alcohol-purchasing behaviors in school-aged children**. Division of Mental Health and Addiction Medicine, National Health Research Institutes, Miaoli, Taiwan. www.ncbi.nlm.nih.gov/Pubmed.
25. Cheron, J. M. (2001): **Symbolic Interactionism: An Introduction, an Interpretation, an Integration**, 7th ed. Englewood Cliffs, NJ: Prentice-Hall.
26. Clayton, R.W. (1999): **Transitions in drug use: Risk and protective factors** In M.D. Glantz & R.W. Pickens (Eds.), *Vulnerability to Drug Abuse*. Washington, DC: American Psychological Association.
27. Clinard, M. B., and R. F. Meier. (2001): **Sociology of Deviant Behavior**, 8th ed. Fort Worth, TX: Harcourt Brace Jovanovich.
28. Dal Pizzol Tda S, Branco MM, Carvalho RM, Pasqualotti A, Maciel EN, Migott AM. (2006): **Non-medical use of psychoactive medicines among elementary and high school students in Southern Brazil**, Instituto de Ciências Biológicas, Universidade de Passo Fundo, Passo Fundo, Brazil.
29. Dalgalarondo P, Soldera MA, Corrêa Filho HR, Silva CA. (2004): **Religion and drug use by adolescents**, Departamento de Psicologia Médica e Psiquiatria.
30. Damir Ljubotina, Jadranko Gali, Vlado Juki, (2004): **Prevalence and Risk Factors of Substance Use among Urban Adolescents**, Department of Psychology, Zagreb University Faculty of Philosophy; and 1Vrapèe Psychiatric Hospital, Zagreb University School of Medicine, Zagreb, Croatia, Corotian Medical Journal.
31. Dayan J, Bernard A, Olliac B, Mailhes AS, Kermarrec S. (2010): **Adolescent brain development, risk-taking and vulnerability to addiction**, Inserm-

EPHE-Université de Caen/Basse-Normandie, Unité U923, GIP Cyseron, CHU Côte de Nacre, Caen, France.

32. DiClemente, C. C., and J. O. Prochaska (1998): **“Toward a Comprehensive, Transtheoretical Model of Change.”** In **Treating Addictive Behaviors: Processes of Change**, edited by W. R. Miller and N. Heather. New York: Plenum Press.
33. Drasbek, K., J. Christenen, and K. Jensen. (2006): **“Gamma-hydroxybutyrate - A Drug of Abuse.”** *Acta Neurologica Scandinavia*.
34. Drug Facts and Comparisons. (2005): St. Louis, MO: Walters Kluwers
35. Ehlers CL, Gizer IR. (2013) : **Evidence for a genetic component for substance dependence in Native Americans**, Department of Molecular and Integrative Neurosciences, the Scripps Research Institute, La Jolla, CA, USA. [PubMed - indexed for MEDLINE] PMID: PMC3603686
36. EL-Buhaisi O H, (2010): **The psychological impact of Political Violence on Palestinian Adolescents and Coping Strategies in Gaza Strip**, Al-Quds University, Gaza.
37. Ersche, K.D.; Turton, A.J.; Pradhan. S.; Bullmore, E.T. & Robbins TW. (2010): **Drug addiction endophenotypes: impulsive versus sensation-seeking personality traits.** Department of Psychiatry, University of Cambridge, Cambridge, United Kingdom. <http://www.ncbi.nlm.nih.gov/pubmed/20678754>.
38. Eshkevari, L., and J. Heath. (2005): **“Use of Acupuncture for Chronic Pain: Optimizing Clinical Practice.”** *Holistic Nursing Practice*.
39. Fleckenstein, A.(2000): **“Pharmacological Aspects of Substance Abuse.”** In Remington: *The Science and Practice of Pharmacy*, 20th edition, edited by A. Gennaro, Baltimore, MD: Lippincott Williams & Wilkins.
40. Fleming, M., S. Mihic, and R. Harris (2006): **“Ethanol.”** In **The Pharmacological Basis of Therapeutics**, 11th ed., edited by L. Brunton, J. Lazo, and K. Parker. New York: McGraw-Hill.
41. Fodale, V.(2006):**“Killer Fentanyl: A Lesson from Anesthesiology.”** *Lancet*.
42. Frosch, W. A. (1999):**“An Analytic Overview of the Addictions.”** In *The Addictions: Multidisciplinary Perspectives and Treatments*, edited by H. Milman and H. Shaffer. Lexington, MA: Lexington Books/D.C. Heath.

43. Gajewski J, Małkowska- Szkutnik A. (2012): **Family and peer factors related to alcohol abuse and smoking by 15-year-old youth**, Instytut Matki i Dziecka, Warszawa, [PubMed - indexed for MEDLINE].
44. Galduróz JC, Noto AR, Nappo SA, Carlini EA. (2005): **Household survey on drug abuse in Brazil: study involving the 107 major cities of the country—** 2001, Universidade Federal De São Paulo, Departamento De Psicobiologia, Brazil.
45. Gardner, E. (1998): “**Cannabinoid Interaction with Brain Reward Systems: The Neurobiological Basis of Cannabinoid Abuse.**” In Marijuana/Cannabinoids, Neurobiology and Neurophysiology, edited by L. Murphy and A. Bartke. Boca Raton, FL.
46. General director of mental health Report (2010): Annual Health Report, Gaza. Palestine.
47. General director of mental health Report (2012): Annual Health Report, Gaza. Palestine.
48. Gerberich, S.G., Sidney, S., Braun, B.L., Tekawa, I.S., Tolan, K.K., & Quesenberry, Jr, C.P. (2003): **Marijuana use and injury events resulting in hospitalization.** Annals of Epidemiology.
49. Giacaman, R., Khatib, R., Shabaneh, L., Ramlawi, A., Sabri, B., Sabatinelli, G., Khawaja, M., and Laurance, T. (2009): **Health status and health services in the occupied Palestinian territory.** The Lancet, 373, 837_849.
50. Gil, A.G., Vega, W.A., & Turner, R.J. (2002): Early and mid-adolescence risk factors for later substance abuse by African Americans and European Americans. Public Health Reports.
51. Goldman, H. H. (2000): **Review of the general psychiatry**, 5th Edition, Baltimore, Maryland, New York.
52. Goldstein, F. (1995): “**Pharmacological Aspects of Substance Abuse.**” In Remington’s Pharmaceutical Sciences, 19th ed., edited by A. R. Gennaro, Easton, PA: Mack.
53. Gorski, T. T., Kelley, J. M. and Havens, L., (1998): **An overview of addiction, relapse, and relapse prevention.** In Relapse prevention and the substance-abusing criminal offender (An executive briefing). Technical Assistance Publication Series 8. Rockville, MD: Center for Substance Abuse Treatment.

54. Gourlay, G.(2004):“**Advances in Opioid Pharmacology.**” Supportive Care for Cancer.
55. Gullotta TP, Adams GR, (2005): **Handbook of adolescent behavioral problem** .evidence –based approaches to prevention and treatment.
56. Guo, J, Hill, K.G., Hawkins, J.D., Catalano, R.F., & Abbott, R.D. (2002): **A developmental analysis of sociodemographic, family, and peer effects on adolescent illicit drug initiation.** Journal of the American Academy of Child and Adolescent Psychiatry.
57. Gutstein, H., and H. Akil. (2006): “**Opioid Analgesics.**” In **The Pharmacological Basis of Therapeutics**, 11th ed. Edited by L. Brunton, J. Lazo, and K. Parker, New York: McGraw-Hill.
58. Hanson, G. R., and T. K. Li. (2003): “**Public Health Implications of Excessive Alcohol Consumption.**” Journal of the American Medical Association .
59. Hanson, Glen R. Venturelli, Peter J. Fleckenstein, Annette E. (2012): **Drugs and Society**, Jones and Bartlett Publishers, LLC.
60. Hanson, K., Allen, S., Jensen, S., & Hatsukami, D. (2003): **Treatment of adolescent smokers with the nicotine patch.** Nicotine and Tobacco Research.
61. Harrison, P.A., & Narayan, G. (2003):**Differences in behavior, psychological factors, and environmental factors associated with participation in school sports and other activities in adolescence.** Journal of School Health.
62. Heitzeg, N. A. Deviance (1996): **Rulemakers and Rulebreakers.** Minneapolis, MN: West Publishing.
63. Interim Report (2003): **Mental and state of the state’s health.**, Oklahoma State Board of Health., Oklahoma State Board of Mental Health and Substance Abuse Services.
64. J K Aronson (2009): **Meyler’s Side Effects of Psychiatric Drugs**, Elsevier B.V. All rights reserved.
65. Jakubczyk A, Klimkiewicz A, Mika K, Bugaj M, Konopa A, Podgórska A, Brower KJ, Wojnar M. (2013): **Psychosocial predictors of impulsivity in alcohol-dependent patients**, [PubMed - indexed for MEDLINE] PMID: PMC3534849
66. Jayousi, Ahmad Farid Saed (2003): **Ahmad Farid Saed, Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Public Health**, Faculty of Graduate Studies, at An-Najah National University, Nablus, Palestine.

67. Johnston, L. D., P. M. O'Malley, J. G. Bachman, and J. E. Schulenberg (2007): **Monitoring the Future, National Survey of Results on Drug Use, Secondary School Students.** NIH Publication, Bethesda, MD: National Institute on Drug Abuse.
68. Johnston, L.D., O'Malley, P.M., & Bachman, J.G. (2003): **Monitoring the Future National Results on Adolescent Drug Use.**
69. Jurgaitiene D, Zaborskis A, Sumskas L. (2009): **Prevalence of drug use among students of vocational schools in Klaipeda city,** Lithuania, in 2004-2006, Klaipedos universitetas, H. Manto 84, 92294 Klaipeda, Lithuania.
70. Karberg, J. C. and D. J. James. Bureau of Justice Statistics (BJS) (2002): **Special Report,** Substance Dependence, Abuse, and Treatment of Jail Inmates, Washington, DC: U.S. Department of Justice, Office of Justice Programs.
71. Karila L, Petit A, Cottencin O, Reynaud M. (2010): **Methamphetamine dependence: Consequences and complications,** Hôpital universitaire Paul-Brousse, centre d'enseignement, de recherche et de traitement des addictions, Villejuif, France.
72. Karila, L.; Petit, A.; Cottencin, O. & Reynaud, M. (2010): **Methamphetamine dependence: Consequences and complications,** Presse Medicale, Dec 2010;39(12).
73. Kelly, T.M., Cornelius, J.R., Lynch, K.G. (2002): **Psychiatric and substance use disorders as risk factors for attempted suicide among adolescents:** a case control study. Suicide and Life Threatening Behaviors.
74. Khantzian, E. J. (1998): "**Addiction as a Brain Disease.**" American Journal of Psychiatry .
75. Kim-Cohen, J., T.E. Moffitt, A. Taylor, et al.(2005): **Maternal depression and children's antisocial behavior: nature and nurture effects.** Arch. Gen. Psychiatry., 62.
76. Koob, G. (2000): "**Drug Addiction**" Neurobiology of Disease.
77. Kreek, M., S. Schlussman, G. Bart, K. Laforge, and E. Butelman (2004): **"Evolving Perspectives on Neurobiological Research on the Addictions: Celebration of the 30th Anniversary of NIDA."** Neuropharmacology, supplement.
78. Lambert Passos SR, Alvarenga Americano do Brasil PE, Borges dos Santos MA, Costa de Aquino MT.(2006): **Prevalence of psychoactive drug use among**

medical students in Rio de Janeiro, Dept. of Epidemiology, Evandro Chagas Clinical Research, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil.

79. Landis, B., and S. Bryant. (1999): **“Mental Health Disorders.” In Pharmacotherapeutics, a Primary Care Clinical Guide**, edited by E. Youngkin. Stamford, CT: Appleton & Lange.
80. Li, C., Pentz, M.A., & Chou, C.P. (2002): **Parental substance use as a modifier of adolescent substance use risk**. Addiction.
81. Liang, W.; Chikritzhs T. & Lenton, S. (2011): **Affective disorders and anxiety disorders predict the risk of drug harmful use and dependence**. National Drug Research Institute, Curtin University, Perth, Western Australia, Australia., www.ncbi.nlm.nih.gov/Pubmed.
82. Liska, A. E., and S. F. Messner. (1999): **Perspectives on Crime and Deviance**. Upper Saddle River, NJ: Prentice Hall.
83. Ljubotina D, Galić J, Jukić V. (2004): **Prevalence and risk factors of substance use among urban adolescents**: questionnaire study, Department of Psychology, Zagreb University School of Medicine, Zagreb, Croatia.
84. Lynam, D. (1996): **The early identification of chronic offenders**: Who is the fledgling psychopath? Psychological Bulletin.
85. Maier C, Iwunna J, Soukup J, Scherbaum N. (2010): **Addicted anaesthetists, Schmerztherapie am Berufsgenossenschaftlichen Universitätsklinikum Bergmannsheil (Bochum)**. Christoph.
86. Marin Institute Alcohol Policy. (2007): **“Health Care Costs of Alcohol.”** Available http://www.marininstitute.org/alcohol_policy/health_care_costs.htm.
87. Marlatt GA, Baer JS, Donovan DM, Kivlahan DR (2003): **"Addictive behaviors: etiology and treatment"**. Annu Rev Psychol.
88. Marlatt, G.A., & Gordon, J.R., (1999): **Relapse Prevention**. New York: Guilford Press.
89. Martin C.A., Kelly T.H., Rayens M.K., Brogli B.R., Brenzel A., Smith J.W., & Omar H.A. (2002): **Sensation Seeking, Puberty, and Nicotine, Alcohol and Marijuana Use in Adolescence**. Journal of the American Academy of Child and Adolescent Psychiatry.
90. Martin C.A., Kelly T.H., Rayens M.K., Brogli B.R., Brenzel A., Smith J.W., & Omar H.A. (2002): **Sensation Seeking, Puberty, and Nicotine, Alcohol and**

- Marijuana Use in Adolescence.** Journal of the American Academy of Child and Adolescent Psychiatry.
91. Mathias, R.(2004): “**Rate and Duration of Drug Activity Play Major Roles in Drug Abuse,** Addiction and Treatment.
 92. McAfee, Robert E.; Hortensia Amaro , Gaurdia Banister, Dianne Cleaver, Walter Dickey, Peter Edelman, Mary Jane England, Stephanie Tubbs Jones, Thomas Merrigan, Ricard Ohrstrom , Lloyd Smith & Charleta Tavares, (1998): **Treatment for Addiction:** Advancing the Common Good., Report of the Join Together National Policy Panel on Addiction Treatment and Recovery.
 93. Meng, Y., M. Dukat, D. Bridgen, B. R. Martin, and A. H. Lichtman (1999): “**Pharmacological Effects of Methamphetamine and Other Stimulants via Inhalation Exposure.**
 94. Ministry of health MOH, (2010): Annual Report of Ministry Of Health In Palestine, Gaza.
 95. MOH (2006) **Annual Report 2005, Palestinian Ministry of Health,** Palestine.
 96. Mohammad Poorasl A, Vahidi R, Fakhari A, Rostami F, Dastghiri S. (2007): **Substance abuse in Iranian high school students,** Tabriz University of Medical Sciences, Department of Public Health, Health and Nutrition Faculty, Tabriz, E. Azarbayjan, Iran.
 97. Mooney, Gavin H. (2005): **Addictions and social compassion, Drug and Alcohol Review,** (March 2005), 24, 137 – 141.
 98. Narconon. (2007) “**FAQ About Marijuana.**” Narconon of Southern California. Available www.addictionca.com/FAQmarijuana.htm.
 99. Nathan, K., W. Bresnick, and S. Battei. “**Cocaine Abuse and Dependence.**” CNS Drugs 10 (1998).
 100. National Institute on Alcohol Abuse and Alcoholism (NIAAA) (2002): “**Changing the Culture of Campus.**” **Alcohol Alert .**
 101. National Institute on Drug Abuse (NIDA) (1999): **Principles of Drug Addiction Treatment,** National Institutes of Health Publication .
 102. National Institute on Drug Abuse (NIDA).(2007): “**An Individual Drug Counseling Approach to Treat Cocaine Addiction**”.
 103. National Institute on Drug Abuse (NIDA) (2006): “**Info Facts: Treatment Approaches for Drug Addiction**”. Available <http://www.drugabuse.gov/infofacts/treatmeth.html>.

- 104.Nespor K, Capková J, Csémy L. (2010): **Addictive diseases and poverty**, Psychiatrická léčebna Bohnice.
- 105.Novak, S.P., Reardon, S.F., & Buka, S.L. (2002): How beliefs about substance use differ by socio-demographic characteristics, individual experiences, and neighborhood environments among urban adolescents. **Journal of Drug Education.**
- 106.O'Brien, C. .(2006): **"Drug Addiction and Drug Abuse"** In The Pharmacological Basis of Therapeutics, 11th ed., edited by L. Brunton, J. Lazo, and K. Parker. New York; McGraw-Hill.
- 107.O'Brien, K.M., & Vincent, N.K. (2003): **Psychiatric comorbidity in anorexia and bulimia nervosa: nature, prevalence and casual relationships**. Clinical Psychology Review.
- 108.Office of National Drug Control Policy (ONDCP). (2002): **Drug Data Summary. Drug Policy Information Clearinghouse**, Rockville.
- 109.Omran, Mohammad (2006): **Drug Addiction in Jerusalem & Suggestions to Limit its Prevalence.**, An-Najah University Journal for Research - Humanities, Volume 20, Issue 1, 2006 , pp 167-200 .
- 110.Ozgür İlhan I, Yildirim F, Demirbaş H, Doğan YB. (2008): **Alcohol use prevalence and sociodemographic correlates of alcohol use in a university student sample in Turkey**, Alcohol and Substance Abuse Treatment Unit, Ankara University Faculty of Medicine, Ankara, Turkey.
- 111.Palestine national authority, ministry of justice, Public Prosecution.(2013):Gaza strip.
- 112.Payne, J. (2006): **"Report: Go Easy on Sleeping Pills."** Washington Post, Available <http://www.washingtonpost.com/wp-dyn/content>.
- 113.Peters, R.H. (1999): **Relapse prevention approaches in the criminal justice system**. In Relapse prevention and the substance-abusing criminal offender (An executive briefing) (Technical Assistance Publication Series 8). Rockville, MD: Center for Substance Abuse Treatment.
- 114.Quirk SW (2009): **"Emotion concepts in models of substance abuse"**. Drug and Alcohol Review 20 (1).
- 115.Reisine, T., and G. Pasternak (1995):**"Opioid Analgesics and Antagonists."** In The Pharmacological Basis of Therapeutics, 9th ed., edited by J. Hardman and L. Limbird. New York: McGraw–Hill,

- 116.Riggs, P.D., Mikulich, S.K., & Hall, S. (2001): **Effects of Pemoline on ADHD, antisocial behaviors and substance use in adolescents with conduct disorder and substance use disorder.** In College on Problems of Drug Dependence: 63rd Annual Scientific Meeting. Rockville, M.D.: National Institute on Drug Abuse.
- 117.Rudatsikira E, Maposa D, Mukandavire Z, Muula AS, Siziya S. (2009): **Prevalence and predictors of illicit drug use among school-going adolescents in Harare**, Zimbabwe, Department of Global Health, Loma Linda University, School of Public Health, Loma Linda, California.
- 118.Sadock JB and Sadock VA,: (2007): **synopsis of psychiatry behavioral sciences clinical psychiatry** (10th ed) Lippincott williams and wilkins.
- 119.Sale, E., Sambrano, S, Springer, J.F., & Turner, C.W. (2003): **Risk, protection, and substance use in adolescents: A multi-site model.** Journal of Drug Education.
- 120.Saloner B, Lê Cook B. (2013): **Blacks and Hispanics are less likely than whites to complete addiction treatment**, largely due to socioeconomic factors, University of Pennsylvania, Philadelphia, PA, USA, PubMed - in process] PMID:PMC
- 121.Schwarz JM, Bilbo SD. (2013): **Adolescent morphine exposure affects long-term microglial function and later-life relapse liability in a model of addiction**, Department of Psychology and Neuroscience, Duke University, Durham, North Carolina 27705, USA.
- 122.Silva Ede F, Pavani RA, Moraes MS, Chiaravalloti Neto F. (2006): **Drug abuse prevalence among secondary school students in São José do Rio Preto,São Paulo State**, Brazil, Faculdade de Medicina de São José do Rio Preto, Brazil.
- 123.Simpson, D.D., Joe, G.W., Lehman, W.E.K., and Sells, S.B. (2001): **Addiction careers: Etiology, treatment, and 12-year followup outcomes.** Journal of Drug Issues.
- 124.Sinha R and Jastreboff AM (2013): **Stress as a Common Risk Factor for Obesity and Addiction**, Society of Biological Psychiatry. Published by Elsevier Inc.
- 125.Sloboda Z, Stephens RC, Stephens PC, Grey SF, Teasdale B, Hawthorne RD, Williams J, Marquette JF (2009): **The Adolescent Substance Abuse Prevention Study: A randomized field trial of a universal substance abuse prevention program**, Institute for Health and Social Policy, The University of Akron.

126. Smith, D., E. Milkman, and S. Sunderwirth. (2005): **“Addictive Disease: Concept and Controversy.”** In Addictions: Multidisciplinary Perspectives and Treatments, edited by H. Milkman and H. J. Shaffer. Lexington, MA: Lexington Books/ D.C. Heath..
127. So DW, Wong FY. (2006): **Alcohol, drugs, and substance use among Asian-American college students, Department of Psychology**, Howard University, Washington, USA.
128. Solomon, S. (2002): **“A Review of Mechanisms of Response to Pain Therapy: Why Voodoo Works.”** Headache.
129. Steward, P., and G. Sitarmiah. (2003): **“America’s Heartland Grapples with Rise of Dangerous Drug.”** The Christian Science Monitor.
130. Stilen, P., D. Carise, N. Roget, and A. Wendler (2007): Treatment Planning M.A.T.R.S. Utilizing the Addiction Severity Index (ASI) to Make Required Data Collection Useful. Kansas City, MO: Mid-America Addiction Technology Transfer Center in residence at the University of Missouri-Kansas City.
131. Substance Abuse and Mental Health Services Administration (SAMHSA) (2007): **Results from the 2006 National Survey on Drug Use and Health: National Findings.** Rockville, MD: Substance Abuse and Mental Health Services Administration.
132. Syvertsen, J. L. (2008): **“Some Considerations on the Disease Concept of Addiction.”** In The American Drug Scene: An Anthology, edited by J. A. Inciardi and K. McElrath,. New York: Oxford University Press.
133. UNRWA Health Department, (2006): **Annual report of the UNRWA services at all fields.** Head Quarter Amman Jordan.
134. Way, W., H. Fields, and E. L. Way.(1998): **“Opioid Analgesics and Antagonists.”** In **Basic and Clinical Pharmacology**, 7th ed., edited by B. Katzung, Stamford, CT: Appleton & Lange.
135. Westmaas, J., and T. Brandon. (2004): **“Reducing Risk in Smokers.”** **Current Opinions on Pulmonary Medicine.**
136. WHO (2004): **Plan on the organization of mental health services in the occupied Palestinian territory** (WHO Final Report).
137. WHO, West Bank and Gaza Office (2006): **Community mental health development in the occupied Palestinian territory: a work in progress with WHO.**

138. World Health Organization (WHO). (1998) **“Trends in Substance Use and Associated Health Problems.”** Trends in Substance Use.
139. Wu LT, Schlenger WE, Galvin DM. (2003): **The relationship between employment and substance use among students aged 12 to 17**, Center for Risk Behavior and Mental Health Research, Research Triangle Institute, Research Triangle Park, North Carolina.
140. Yamaguchi, R., Johnston, L.D., & O'Malley, P.M., (2003): **Relationship between student illicit drug use and school drug-testing policies.** Journal of School Health.
141. Zimmermann, P., Wittchen, H.U., Hofler, M., Pfister, H., Kessler, R.C., & Lieb, R. (2003): **Primary anxiety disorders and the development of subsequent alcohol use disorders:** a 4-year community study of adolescents and young adults. Psychological Medicine.
142. Zocchi, A., et al. (2003) : **“Dopamine Responsiveness to Drugs of Abuse: A Shell-Core Investigation in the Nucleus Accumbens of the Mouse.”** Synapse .

Annexes

Annex I

نموذج الموافقة على المشاركة بالدراسة

تهدف هذه الاستبانة إلى جمع البيانات اللازمة حول:

"العوامل الخطيرة التي تؤدي إلى الاعتماد على العقاقير في قطاع غزة"

أرجو من حضرتكم التعاون في تعبئة هذه الاستبانة والتي هي جزء من دراستي لتكملة رسالة الماجستير في الصحة النفسية المجتمعية / الجامعة الإسلامية - كلية التربية.

في حال موافقتك المشاركة في البحث فأرجو التوقيع بالموافقة على ذلك وسيكون لك الحق في الانسحاب متى شئت, علما بأن إجاباتك ستعامل بكامل السرية وستستخدم في أغراض البحث العلمي فقط, ولا داعي لذكر اسم المشترك على الاستبانة.

- إذا وافقت على المشاركة في البحث, نرجو وضع علامة (X)

شكرا لتعاونكم

الباحث: إبراهيم حسن ربيع

Annex II

"استبانة"

"تهدف هذه الاستبانة للتعرف على العوامل الخطيرة التي تؤدي إلى

الاعتماد على العقاقير في قطاع غزة"

Risk Factors Of Drugs Dependence Among People in Gaza Strip

استكمالاً لدرجة الماجستير في الصحة النفسية المجتمعية

نرجو عليكم التكرم بقراءة العبارات بدقة، ثم وضع علامة (x) في المكان الذي يتناسب معك.

ولكم جزيل الشكر

علماً بأن :

1. المعلومات سرية ولن يطلع عليها سوى الباحث

2. المعلومات لأغراض البحث العلمي فقط

3. لا يوجد عبارات خطأ وأخرى صحيحة

4. لا تعطي اختياريين لعبارة واحدة

5. أجب على جميع العبارات

الباحث

إبراهيم حسن ربيع

أولاً: البيانات الشخصية

1. العمر: () سنة
2. العمر عند التعاطي: () سنة
3. الجنس: () ذكر () أنثى
4. الحالة الاجتماعية: () أعزب () متزوج () مطلق () أرمل
5. عدد أفراد الأسرة: () فرد
6. مكان السكن: () مدينة () مخيم () قرية
7. مستوى التعليم: () لا يقرأ ولا يكتب () ابتدائي () إعدادي () ثانوي () جامعي () دراسات عليا
8. المهنة الحالية: () تعمل () لا تعمل
9. المهنة قبل التعاطي: () طالب () عاطل عن العمل () عامل () موظف () تاجر
- () أخرى.....
10. دخل الأسرة الشهري: () شيكل.

ثانياً: حدة تعاطي المخدرات

11. ما اسم المادة أو المواد التي سببت لك الإدمان:
12. هل أنت مستمر في التعاطي الآن. () نعم () لا
13. ما هي الطريقة التي تستخدمها في تعاطي المخدرات
() بالفم () بالاستنشاق () بالحقن () أخرى حدد.....
14. ما هي الجرعة التي تتعاطى فيها
15. كم جرعة تتناول في اليوم () جرعة ، أو في الأسبوع () جرعة
16. كيف توفر المادة المخدرة
() أصدقاء () تاجر () الأسرة () أخرى.....
17. هل تعرضت لأمراض نتيجة تعاطي المخدرات؟ () نعم () لا

ثالثاً: أبعاد الدراسة

1. البعد الروحاني

لا	نعم	البند	
		هل أنت من عائلة متدينة؟	18.
		هل أنت ملتزم بالواجبات الدينية ؟	19.
		هل تؤمن بحرمة المخدرات؟	20.
		هل تؤدي الصلوات الخمس ؟	21.
		هل تصوم شهر رمضان؟	22.
		هل تلقيت توجيهات دينية من خلال الأسرة؟	23.
		هل تعلم أن ما كثيره مسكر فقليله حرام؟	24.

2. البعد الأسري

لا	نعم	البند	
		هل تتلقى تشجيع من أحد أفراد الأسرة على تناول المخدرات؟	25.
		هل يوجد شخص في الأسرة يتعاطى المخدرات غيرك؟	26.
		هل يوجد مشاكل داخل الأسرة؟	27.
		هل تربطك علاقة قوية مع أحد أفراد الأسرة؟	28.
		هل يهتم أحد من أفراد الأسرة فيك؟	29.
		هل أنت معتمد على أفراد الأسرة؟	30.
		هل كان زواجك بالإكراه؟	31.
		هل تعيش داخل أسرة ممتدة؟	32.

3. البعد الاجتماعي:

لا	نعم	البند	
		هل علاقتك مع أقاربك جيدة؟	33.
		هل يوجد لديك القدرة على بناء علاقات اجتماعية؟	34.
		هل يوجد لديك القدرة على حل المشكلات؟	35.
		هل تشارك أهالي الحي في منطقتك في أعمال تطوعية؟	36.
		هل تشارك الجيران في المناسبات الاجتماعية؟	37.
		هل تميل إلى العزلة الاجتماعية؟	38.
		هل يشاكك أحد عندما تتعرض لمشكلة طارئة؟	39.

4. البعد النفسي

لا	نعم	البند	
		هل يوجد لديك مشاكل نفسية؟	40.
		هل سبق لك أن تعالجت عند طبيب نفسي؟	41.
		هل تشعر بغياب الهدف	42.
		هل تعتقد أن المخدرات تزيد القوة الجنسية لديك؟	43.
		هل تفضل الجلوس وحيداً؟	44.
		هل شعرت يوماً بالفشل في الحياة؟	45.
		هل شعرت بالقلق؟	46.
		هل شعرت أنك موجود بدون هدف؟	47.
		هل تشعر بالعجز	48.

5. البعد الجسماني

لا	نعم	البند	
		هل كنت تشكو من مشاكل جسدية قبل التعاطي؟	49.
		هل حدث لديك مشاكل جسدية بعد التعاطي ؟	50.
		هل حدث لديك مشاكل جسدية عندما تتأخر في تناول الجرعة ؟	51.
		هل سبق لديك أن تعالجت عند طبيب بسبب المشاكل الصحية؟	52.
		هل تؤثر مشاكلك الصحية على قدرتك على العمل أو النشاط اليومي؟	53.
		هل سبق أن وصف لك طبيب عقاقير مخدرة هدف علاجي؟	54.
		هل استخدمت أي عقاقير مخدرة على مسؤوليتك و بدون وصفة طبية؟	55.
		هل تعالجت لمرض عضال كالقلب أو السرطان أو غيره؟	56.

6. البعد السياسي ودور الاحتلال

لا	نعم	البند	
		هل الاحتلال له دور في نشر المخدرات في مجتمعك؟	57.
		هل تعرضت للضرب أو الاعتقال من قبل الاحتلال؟	58.
		هل اعتقلت من قبل الاحتلال وأجبروك على تعاطي المخدرات؟	59.
		هل تعرضت لضرب عنيف من قبل الاحتلال أدى ذلك إلى تعاطيك المخدرات ؟	60.
		هل هناك رقابة شديدة من قبل وزارة الداخلية على مروجي المخدرات ومتعاطيها؟	61.
		هل الحصول على المادة المخدرة سهل	62.
		هل ترى أن العقوبة من قبل المسؤولين رادعة للكف عن التعاطي؟	63.
		هل ترى أن وجود الأنفاق يلعب دوراً سلبياً في نشر المخدرات؟	64.

Annex III

Risk Factors of Drugs Dependence Questioner

Firstly : personal data

1. Age () year.
2. Age of Beginning of drug abuse () year.
3. Gender male () female ()
4. Social status single () married () divorced () widowed ()
5. Number of family members () members
6. Residence : city () camp () village ()
7. Educational status : illiterate () primary school () preparatory school ()
secondary school () university () higher studies ()
8. Occupation before drug abuse : student () unemployed () worker () official ()
merchant () others ()
9. Current occupation : employed () unemployed ()
10. Monthly family income : () NSI

Secondly :- severity of substance abuse

11. What are the substance you have abused?
.....
12. Have you been abused these substances until now ? yes () no ()
13. What was the site of administration of the abused substance?
Orally () inhalation () injection () others () specify
14. What is the dose of the abused substance ?.....
15. How many time have you abused the substance?
Daily () dose weekly () dose
16. How have you been supplied with the substance ?
Friends () sailors () family member () other ()
17. Do you have medical illness as a result of drug abuse ? yes () no ()

3 Dimensions of the study :-

1. Spiritual dimension

	Item	yes	No
18	Are you from religious family?		
19	Are you committed to the religious rituals?		
20	Do you believe that the narcotic substance is religiously prohibited?		
21	Do you pray five times a day?		
22	Do you fast in Ramadan?		
23	Do you have religious instructions from your family?		
24	Do you believe that if the small amounts of substance lead to mind loss. A large amount is religiously prohibited.		

2. Family status dimension

	Item	yes	No
25	Does any family member encourage you to abuse drugs?		
26	Is there an other family member abused narcotics ?		
27	Is there family problems?		
28	Do you have a close relationship with any member?		
29	Is there any family member take care of you?		
30	Are you dependant on your family members?		
31	Did you married by force?		
32	Do you live in extended family?		

3. Social status dimension

	Item	yes	No
33	Do you have a good relationship with your neighbors?		
34	Do you have a good relationship with your neighbors?		
35	Are you able to establish social relationships?		
36	Are you able to solve problems?		
37	Do you share in voluntary works in your district?		
38	Do you share your neighbors in the social situation?		
39	Do you have social isolation?		
40	Do you receive support from others when you have urgent problems?		

4. Psychological status dimension

	Item	yes	No
41	Do you have psychological problems?		
42	Have you been treated by a psychiatrist?		
43	do you have a desire to take risks?		
44	Do you feel that you have no goal?		
45	do you believe that narcotic drugs increase your libido?		
46	Do you prefer to stay alone?		

47	Did you feel with failure in your life one day?		
48	Did you feel anxious?		
49	Did you feel hopeless?		
50	Did you feel exist without any goal?		
51	Did you feel helpless?		
52	Did you receive any psychotropic medication without doctor order?		

5. Physical status dimension

	Item	yes	No
53	Did you have physical complaint before substance abuse?		
54	Do you have physical complaint after substance abuse?		
55	Did you have physical complaint when you delay the substance abuse?		
56	Did you have been treated by a physician because of physical problems?		
57	Do your health problems affect on your occupational status or activity of daily living?		
58	Did you have a prescribe from a physician of narcotic drugs?		
59	did you use any narcotics without doctor order?		
60	Did you treated for major medical disease as heart failure or cancer etc.....		

6. Political status and occupation influence dimension

	Item	yes	No
61	Has the occupation a role in distributing narcotics in your society?		
62	Have you been physically abused or arrested by the occupation?		
63	Have you been arrested by occupation and forced to take narcotics?		
64	Did you take narcotics after sever physical assault by occupation ?		
65	Do you be live there is strict scrutiny on the narcotics sailors and users?		
66	Do you easily get the narcotics drug?		
67	Do you think the legal punishment by government is sever enough to prevent dug abuse?		
68	Do you believe that tunnels play a role in distribution o narcotics?		

Annex IV

List of Trustees

No	Name	Title	Degree
1.	Emad A. Habboub	Msc	Supervisor in psychiatric hospital.
2.	Ayesh Sammour	Msc	General director of mental health in Palestinian .
3.	Ragheb Abu lyla	Msc	Matron of psychiatric hospital.
4.	Habib Al Hwagry	PHD	Head of psychologists in MOH.
5.	Ismael Abu Rkhab	MP	Training officer in psychiatric hospital.
6.	Ibrahim Shameea	PHD	University college of applied sciences.

Annex V

A table showing the extent of the worsening drug in the Gaza Strip in 2012

Items								
Area	Cook grams	cannabis	Tramal pills	banjo seeds	banjo Plant	HE pill banjo	other drugs	Tools of abuse
North	1	2008	92932	20	34	1009	5	9
Gaza	45	3659	53833	649	73	178	379	11
Mid-Zone	0	2601	11277	0	118	0	145	3
Khan Younis	0	2250	25251	20	21	34	2	10
Rafah	0	14726	173483	73	334	9	786	4
Total	46	25324	35677	767	580	1230	1317	37

Source / General Administration of anti-drug, first-quarter statistics for 2012

Annex VI

Table (1)

Sociodemographic characteristics of the study sample

Variables	Class	Frequency	Percentage
Governorate	Khan-younis	63	20.9
	Alwosta	51	16.9
	Gaza & North	127	42.1
	Rafah	61	20.2
Age	19-30 years.	67	22.2
	31-45 years.	124	41.1
	46 years and more.	111	36.8
Marital status	Single	36	11.9
	Married	255	84.4
	Divorced	11	3.6
Occupation	Employee	72	23.8
	Not employee	230	76.2
Education level	Not educated	32	10.6
	Elementary	106	35.1
	Preparatory	77	25.5
	Secondary	67	22.2
	University	20	6.6
Monthly income	1000 NIS and below	98	32.5
	1001-2000	155	51.3
	2001-3000	27	8.9
	More than 3000 NIS	22	7.3

Table (2):

Distribution of subjects with age of onset the drug abuse

Title	Frequency	Percent
and less20	126	41.7
21 – 29	130	43.0
and more30	46	15.2
Total	302	100%

Table (3)

Distribution of subjects according to substance you have abused

Title	Frequency	Percent
Trammal	100	33.1
Assival	51	16.9
Cannabis	86	28.5
Cocaine	36	11.9
Other	29	10.6
Total	302	100%

Table (4)

Subjects according distribution of abused these substances until now

Title	Frequency	Percent
Yes	126	41.7
No	176	58.3
Total	302	100%

Table (5)

Distribution of subjects according to site of administration of the abused substance

Title	Frequency	Percent
Orally	263	87.1
Inhalation	25	8.3
Injection	14	4.6
Total	302	100%

Table (6)

Distribution of subjects according to dose of the abused substance

Title	Frequency	Percent
Tab	152	50.4
Gram	63	20.8
Cigarette	76	25.2
Injection	11	63.
Total	302	100%

Table (7)

Distribution of subjects according to supplied with the substance

Title	Frequency	Percent
Friends	136	45.0
Sailors	114	37.7
Family Member	8	2.6
Other	44	14.6
Total	302	100%

Table (8)

Distribution of subjects according to medical illness as a result of drug abuse:

Title	Frequency	Percent
Yes	130	43.0
No	172	57.0
Total	302	100%

Annex VII

Palestinian National Authority

Ministry of Health

Mental Health General Administration



السلطة الوطنية الفلسطينية

وزارة الصحة

الإدارة العامة للصحة النفسية

Date: 29/02/2012

الرقم:

حفظهم الله،،،

السادة / المدراء الطبيين للمراكز

حفظهم الله،،،

السادة / المدراء الإداريين للمراكز

السلام عليكم ورحمة الله وبركاته،،،

الموضوع / تسهيل مهمة الباحث

بخصوص الموضوع أعلاه يرجى تسهيل مهمة الباحث الحكيم/ إبراهيم حسن ربيع رقم وظيفي

204713 الملتحق ببرنامج ماجستير الصحة النفسية بالجامعة الإسلامية و عنوان البحث:

Risk Factors Of Drugs Dependence Among People in Gaza Strip

حيث سيقوم الباحث بالاطلاع على ملفات المرضى والاستعانة بالطواقم الفنية في عيادات الصحة النفسية المجتمعية وأخذ نتائج التحاليل اللازمة لبحثه، كما سيقوم بتعبئة الاستبيانات لعينة من المرضى وذلك حيث لا يكون يتعارض مع مصلحة العمل في المراكز ويكون ضمن أخلاقيات البحث العلمي دون تحمل المراكز والمرضى بالمراكز أي أعباء من إجراء هذا البحث.

وتفضلوا بقبول فائق الاحترام والتقدير،،،

د. عايش سمور

مدير عام الصحة النفسية

الرجاء - تسهيل المهمة

(القرار لسيادتك: 1)

د. عمر حمدان البهناوي
Dr. Omar H. El-Buhaisi
أخصائي ومجستير الصحة النفسية
ترخيص Lic. 119/98

(الإجراء: 1)

فلسطين - غزة - شارع العيون - مستشفى الطب النفسي تليفون: 08.2879845

Email : g.d.o.mental_health_gaza@hotmail.com

Annex VIII

بسم الله الرحمن الرحيم



Faculty of Nursing

هاتف داخلي: 2700

الجامعة الإسلامية - غزة
The Islamic University - Gaza

كلية التمريض

الرقم... ج س ع/7-2013 Ref
12 رجب 1434 هـ
التاريخ... 22 مايو 2013 Date

الأخ الفاضل / مدير الإدارة العامة لمكافحة المخدرات حفظه الله ،،
السلام عليكم ورحمة الله وبركاته،،

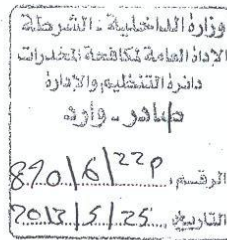
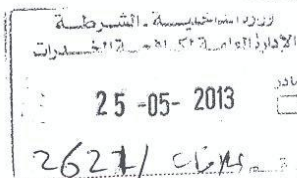
الموضوع/ تسهيل مهمة طالب لأجل البحث

أرجو التكرم بالعمل على تسهيل مهمة طالب ماجستير الصحة النفسية المجتمعية/علوم تمريض الطالب/ إبراهيم حسن حسين ربيع من كلية التمريض لأجل البحث، وذلك كمتطلب بحثي لرسالة الماجستير، فيما لا يتعارض مع سياسة مؤسستكم الموقرة.

شاكرين لكم حسن تعاونكم،،

رئيس المجلس الأكاديمي لبرنامج
ماجستير الصحة النفسية المجتمعية / علوم تمريض

د. يوسف إبراهيم الجيش



صورة ل:

جواز / 181885-9

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كبرياء مساعدة
إشارة: طابع، إيف
إشارة: طابع، إيف