

PREVALENCE OF SUBSTANCE ABUSE IN DIFFERENT AREAS OF KARACHI, PAKISTAN: AN EVALUATION

Collaboration with

Karachi Youth Initiative (KYI)

by

Drug Free Pakistan Foundation



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ACKNOWLEDGMENT

We wish to acknowledge to Karachi Youth Initiative (KYI), who gave us the fully funded project to Drug Free Pakistan Foundation (DFPF) for the effectiveness and best quality of research project as well as for the community development. Our special thanks to KYI for collaboration with DFPF in order to make drug free communities which will be helpful for development in the country. We would like to express our special thanks to President of New Horizons Care Center (NHCC), Mr. Muhammad Sohail Younus for his cooperation and facilitation to provide referral sources to approach volunteers, and he arranged meetings of training sessions with volunteers for data collection. We would like to appreciate his dedication, precious time, and support throughout the research project.

We express our deepest gratitude to research participants of Korangi, Layari and Sultanabad for their enthusiastic participation in the research project. All the participants showed a greater interest to participate in research, take a precious time, collaboration and support during data collection. Our special thanks goes to those participants who were seemed motivated to facilitate and support the research team during data collection. Our heartiest gratitude goes to team of volunteers who facilitate and collaborate with us during data collection. They spent special time in data collection, face different hurdles, and difficulties to approach the participants during survey. My special gratitude goes to head of teams of volunteers Mr. Gahand khan and Mrs. Shahida Baloch from layari, Mr. Zafar Abbas, Mrs. Huma Khan, and Mr. Naveed Alam from Korangi, and Mr. Rameez Raja, Mr. Nisar and their Team from Sultanabad. We are also thankful to members of each team for their coordination, collaboration and understanding.

Drug Free Pakistan Foundation

EXECUTIVE SUMMARY

This Executive Summary provides an overview of research methods and procedures. Initially, research project was scheduled in short period of time. This research project started from March, 2013 and ended with August, 2013. The total duration of the research was 6 months. Furthermore, the executive summary also provides some of the main findings of the study of prevalence of substance abuse, attitudes towards drug abuse, frequency of soft and hard drugs in Karachi (i.e. Korangi, Layari & Sultanabad), Pakistan. This study suggests a brief summary of substance abuse prevalence among three areas of Karachi and their harmful consequences on the individual's life which has also been investigated in present study. In this research, the key findings were obtained from both qualitative and quantitative aspects of study have also been presented in the result section. In all of the targeted areas the demographic characteristics (i.e. age, gender, occupation, facility, socioeconomic status and so on) were same but few of differences were found in terms of crimes and the type of substance used and these were also interpreted. In present study all aspects of the substance used were considered and discussed precisely in different sub-sections.

Few empirical studies on prevalence of substance abuse have been conducted in throughout the world and particularly in Pakistan, because substance abuse in society has become the stigma of worse image in front of others communities but the problems it takes are immeasurable. There are certain psycho social problems (i.e., crimes, health issues, unemployment, loss of productivity, deaths and accidents, family problems, educational problems, interpersonal issues poverty and overall economical burden) are developed as a result of substance abuse both in short term and long term. It also destroys the norms, morality, worth and dignity of the person well-being and effectiveness in growth of society. Prevalence of substance abuse rate in these societies mentioned that people have positive attitude toward drugs and do not aware the harmful consequences of the drugs. Most of the people are advertising the effectiveness of drugs in order to achieve their business goals. While following societies are unaware about the harmful consequences of drugs. Due to which crimes rate and unemployment is increasing and education rate is decreasing, people are feeling distress when they are deprived in the field of development but they are totally unaware about the practices which are involving the people towards drugs. Due to lack of awareness among people, they are unable to understand the underlying dynamics of substance abuse prevalence. Although different organizations are working in the field of treatment but recently they turn their attention toward drug abuse prevention. However, organizations are working over drug abuse fundamental elements to reduce or eliminate drugs from the societies. It is observed that different organizations are working to provide treatment facilities for drug addicts, but drug abuse rate and numbers of addicts in society are increasing day by day. Due to high rate of drug abuse physical and psychological problems are increasing in the society rapidly. HIV/Aids, Hepatitis, and Cancers are the diseases which are increasing due to drug abuse prevalence. By keeping this view Drug Free

Pakistan Foundation (DFPF, 2005-to recent) is working over drug abuse prevention in Pakistan. In order to assess the fundamental elements which are causing and enhancing the rate of drug abuse in the society, the research is conducted in those areas of Karachi which are more vulnerable towards drugs.

Drug abuse prevention programs have become the center of attention of those organizations who are working against drug abuse prevalence but this study is conducted 1st time in Pakistan in particular areas in order to understand the dynamics of drug abuse prevalence over broader spectrum. This study was launched to understand the dynamics of drug abuse prevalence and to design the particular strategies against drug abuse in societies. This study investigated the factors which are pushing the people to involve in drugs such as people perception and attitudes towards drugs, reasons to involve in drugs, risk factors, person beliefs and myths about drugs abuse, lack of awareness, lack of education, role of parents, company of friends, and schooling of children. Dynamics behind drug abuse prevalence are very complicated to understand for common person, because lack of awareness among societies is the one of the major stigma for working organizations. Therefore, organizations are trying to increase knowledge among individuals to reduce drug abuse rate but people are inflexible to accept change.

The major objectives of the present study were to investigate the underlying factors which are causing drug abuse prevalence in society. This study will help to design the methods of practical knowledge to reduce rate of prevalence in society. Moreover, it will help to develop particular strategies to reduce frequency of drugs abuse and to increase awareness among people. In this research project the three areas of Karachi were targeted (i.e. Korangi, Layari & Sultanabad) because the intensity of psychosocial problems (i.e. drug abuse ratio, crimes rate, illiteracy rate, & poverty) are increasing in these areas. The target population in this survey was general community members belong to all socioeconomic status, and different occupations. The purpose to conduct research in these specified areas was to investigate the prevalence of substance abuse, risk factors, reasons, identification of particular drugs use and drug zones in the areas, because tendencies of crime rate are observed high in these areas. In fact, these areas are more vulnerable toward drug abuse and crimes rate is increasing due to drugs. Initially, mapping was done of each area and then participants were targeted. The purpose sampling techniques was used to target the sample population. Further, data was collected from three areas such as Korangi, Layari and Sultanabad. The total sample was comprised of (N=3528). Furthermore, the ample was divided into Korangi (N=1421), Layari (N=930) and Sultanabad (N=1177). Participants were taken from all socioeconomic status. This study started with the review of previous literatures and formulation of research tools to investigate the target results. Survey form was formulated according to the demands of policy of research and data collection was completed.

In this study, more than four thousand participants were approached but 3528 participants completed the survey form and participants were taken from each area with following ratios such as Korangi 40.3%, Layari 26.4% and Sultanabad 33.4%. In this survey, both the males and females were included. Total males were 69.0% and females were 30.9% in the entire survey. Age range of the participants was 12-55 years. The mean age of the sample was (M= 26.70, SD=9.87). Participants' education level was categorized into Uneducated (N=518), Primary (N=713), Middle (N=704), Metric (N=952), Intermediate (N=422), Graduation (N=162) and Master level (N=67). Participants were taken from all socioeconomic status. All the participants were community members and have different occupation such as government employees were 8.9% (N=316), private employees were 16.8% (N=591), businessmen were 12.16% (N=446), labors were 24.4% (N=860), unemployed were 12.8% (N=453) and students were 24.5% (N=863).

Findings reported that in Korangi frequency of soft drugs such as Cigarette, Paan, Guttkha, Chhhalia, Shesha and Nuswar (i.e. 97.3%, 81.7, 81.3%, 89.0%, 60.9% & 23.7) were found significantly high as compared to Layari (i.e. 72.3%, 71.6%, 70.2%, 64.6%, 39.4% & 32.2%) and Sultanabad (i.e. 71.4%, 54.7%, 46.6% & 25.4%). On the other hand, it is observed that the frequency of cigarette smoking was found high in whole sample because most of the drug users started drugs from cigarette smoking, but frequency of Nuswar was found 26.6% in whole sample while frequency of Nuswar were found low due to high trends of others soft drugs but frequency of Nuswar was found high in Layari (32.2%) as compared to Korangi (23.7%) and Sultanabad (25.4%).

More findings represented that the frequency of hard drugs is seemed very shocked in the general community sample such as, alcohol use was found high (45.2%) in whole sample as compared to others hard drugs in all three target areas. Similarly, the frequencies of Charse (34.6%), Heroin (33.1%) and Cristal (34.8%) were also found significant. It is observed that the prevention of these hard drugs is linked with high degree of soft drugs uses. On the other hand, the frequency of non-prescribed medication was found 4.6% in whole sample which is less than the frequencies of others hard drugs. Findings reported that rate of alcohol use is high in Korangi (53.6%) as compared to Layari (39.7%) and Sultanabad (39.2%), while use of Cocaine (39.8%) was found high in Sultanabad as compared to Korangi and Layari.

In addition, the further findings represented that people are deprived from treatment facilities and opportunity of awareness such as, only 4.3% participants are availing the facility of treatment in the sample of 3528 while 95.7% participants are deprived from this facility. Moreover, 98.5% participants are deprived from the support of other to provide knowledge about the harmful effect of drugs. Findings reported that 97.6% people are deprived to avail opportunity of treatment from drug abuse for self as well as for his/her family members. Further results reported that 96.7% people are deprived from facility of counseling in three areas of Karachi, 94.8% people are deprived from the facility and only 5.2% people are availing this

opportunity. In addition, lack of awareness about the drugs is also high 68.7% people are deprived about the awareness, while 31.2% people are known about the drug abuse consequences but due to inflexibility of environment they are bound to abuse drugs. It is observed through the findings that 73.3% people do not stop others to abuse drugs. It indicates that there is no restriction in the society to abuse drugs. Only 26.7% people are trying to stop others but they are unable to stop due to increasing trends of drug abuse in the society.

Similarly, the psychological problems such as lack of empathy, suicidal ideation and feeling inferiors are found at high degree (68.4%, 68.0% & 67.1%). The high degree of these psychological problems is consistent with that lack of empathy in relationships that affect the person self worth and it leads towards suicidal ideation. Moreover, mood related problems were also found common and high in the entire sample such as lack of interest (65.8%), crying spells (66.7%), disturb sleep (66.2%), poor appetite (65.4%) and lack of attention (65.2%). Furthermore, psychological problems were found common in the whole sample such as sadness (59.7%), helplessness (60.4%), aggression (50.1%), irritability (50.2%), conflicts (54.7%), isolation (53.0%), fatigue (57.2%), face difficulties (55.8%), forgetfulness (50.2%), lack of trust (61.7%), disturbed most of the time (63.7%), No solution of my problems (67.4%) and Insecurity (39.8%). It is observed that the frequency of the psychological problems consistent with frequency of drug abuse in the entire sample. On the other hand, some of the problems are found high in the Layari such are Insecurity (77.9%). It is concluded that the frequency of psychological problems consistent with the psychosocial problems of the Layari.

CHAPTER I

INTRODUCTION

Some researchers reported that the prevalence of drug or substance abuse increase when the society will unaware from the risk factors such as lack of education, unemployment, peer pressure, role of company and exposure about use of drugs as the child grow up in the family. Sometime children experience or exposure, when child will observe to the drugs through sensory observation and child feels course. This curiosity lead to check its taste and significance, or some of child save the potential unconsciously in their mind and it will motivate the adolescences to take or exposure drugs when they pass through stressors. Due to which it is observed that the frequency of use of soft drugs in adolescences will be high as high in the society because children learn or experience through family or society.

The harmful effects caused by the use of drugs impact worse over individual. These effects started from the use of soft drugs and it may turn into hard drugs which lead to worse effect on the person's physical and mental health. Soft drugs such as tobacco, guttka, chalia, nuswar and shesha etc lead toward hard drugs such as alcohol, cannabis, cocaine and morphine etc. It is observed that the soft drug users when they did not feel satisfied with degree of soft drugs they quit toward hard drugs. The use of illicit drugs among individuals lead toward the immediate damages caused to developing minds and bodies, and the risk of developing addictions and behaviors which last long into adulthood. These are particular health risks factors associated which raise from soft drugs and it may lead to alcohol misuse in adolescence, which is a sensitive time for brain development. Young people with alcohol use disorders may display structural and functional deficits in brain development compared with their non-alcohol-using peers, and heavy drinking during adolescence may affect normal brain functioning during adulthood. Adolescents who drink heavily may experience adverse effects on liver, bone, growth and endocrine development (Donaldson, 2009).

Similarly, it is concluded that participants belong to those areas where drugs are commonly used the rate of drug abuse is gradually increased and high rate of substance use influence the well-

being of individual as well as society. On the other hand, the population survives in areas of common drug use they are perceived at high risk for drug addiction. Under the influence of soft drugs the children involves in soft drugs and then move toward hard drugs. Use of hard drugs in period of adolescence it may lead toward biological and psychological risk factors. The risk factors include anti-social behavior, or behavioral impairment, sexual abuse, social impairment, poor self care and management. And use of drugs it may lead toward sexually transmitted diseases (Donaldson, 2009).

Habits from adolescence can influence behavior over a lifetime, especially when addiction is triggered. For example, the first symptoms of nicotine dependence can appear within weeks or even days of starting to smoke occasionally, often before the onset of daily smoking. Early uptake of smoking is associated with subsequent heavier smoking, higher levels of dependency, a lower chance of quitting, and higher mortality (ASH 2011; Jit et al., 2009). Similarly, studies in the US have estimated that the probability to reduce drug is lower in later age but it is more common in age of adolescent (Grant, Stinson and Harford, 2001).

When users did not feel satisfied with soft drugs they develop the tendency to alcohols like drugs for higher level of body and mind satisfaction but this satisfaction is proposed by drugs for a very short period of time. While it turns into substance dependency, it reduces person efficiency and daily living functioning. It may develop into anti-social and violent behaviors among children. Further it increases their dependency on drugs in their old age and it causes some medical disease. In particular, alcohol consumption is associated with risky sexual behavior such as not using safety material during a young person's first sexual encounter; an increased likelihood of having sex and at a younger age; unprotected sex; teenage pregnancy; and the likelihood of contracting sexually transmitted diseases (Donaldson, 2009).

According to a United Nations Office on Drugs and Crime (UNODC) Report (2005), some 200 million people, or 5 percent of the world's population aged 15 - 64 have used drugs at least once in the last 12 months which is estimated that this ratio increased 15 million greater than the previous years. Likewise, according to the World Drug Report (2005), the use of illicit drugs in all nations has increased in recent years. The report goes on to note that the increasing

availability of a variety of drugs to an ever widening socio-economic spectrum of consumers is disconcerting, although the main problem at the global level continues to be opiates (notably heroine) followed by cocaine. For most of Europe and Asia, opiates accounted for 62 percent of all drug treatment sought in 2003. While 3.3 to 4.1 per cent of the global population admits to consuming drugs, the most worrisome trend for the UNDCP Executive Director is the younger and younger ages at which people are becoming addicted. In Pakistan for example, the share of those who started heroine use at 15-20 years of age has doubled to almost 24 percent. A survey in the Czech Republic showed that 37 percent of new drug users were teenagers between 15 and 19 years old. Similarly, in Egypt drug use, particular heroin use is becoming a serious problem and nearly 6 percent of secondary school students admit to having experimented with drugs”.

It is observed that rate of education is decreased at secondary and high school level in Pakistan. On the other hand student’s behaviors and interest toward studies is going to decrease. Similarly, previous researches reported that drug abuse has a negative impact on the education of secondary school students. The overall health of the user is affected negatively and behaviors which are associated with drug abuse which predispose the abuser to crime and contagious diseases including HIV/AIDS (CDC, 2000).

Drug abuse has become the world wide issue. High rate of drug prevalence is not only in Pakistan, but it has become a national concern in Nigeria, given its impacts on education and future leadership, innovations and human resources. Secondary school students are particularly at risk given that they are in their formative years of education, career development, social skills and identity formation. Reports from education officials in Bayelsa State suggest that students are using alcohol and nicotine, in particular, at a rate that is causing concern.

The one major factor of drug abuse is the company or friendship of individuals. In educational life the most of the students involved in drugs due to company of friends. Initially, they used as fun or as fashion in later life they become more risky toward high rate of drug abuse. Similarly, National Agency for Food and Drug Administration and Control (NAFDAC) reported that 40% students abuse various types of drugs. In addition, it is observed that common trends of drug abuse are found high at secondary school students. It is widely observed that in

shopping centers and other public spaces, students who have dropped out of school because of drug abuse, can be found loitering and participating in other forms of criminal activity. Given the availability, consequences and increasing use of drugs in in Pakistan and similar findings were found in Nigeria, it is important to establish students' perception of drugs and substance abuse and how these perceptions influence their behavior when it comes to drugs and drug users. It is against this background that the current study was undertaken. This study seeks to establish student perceptions of the drug problem and to critically analyze strategies used to address the problem.

Any product other than food or water that affects the way how people feel, think, see, and behave. It is a substance that, due to its chemical nature, affects physical, mental and emotional functioning. It can enter the body through chewing, inhaling, smoking, drinking, rubbing on the skin, or injection. Drug abuse refers to the misuse of any psychotropic substances resulting in changes in bodily functions, thus affecting the individual socially, cognitively or physically. Social effects may be reflected in an individual's enhanced tendency to engage in conflicts with friends, teachers, and other school authorities. Cognitive effects can be seen in the individual's lack of concentration on academic work and memory loss (Eysenck, 2002).

It is observed that drugs absorb in the body and affect the body functions. Such as, when drug abuse trends become common in the society the decline started in students' performance, when students did not attend classes frequently, show lack of interest in study, lack of attention over study, poor interpersonal relationships, affect on health, and gradual decline in friendship relationships. It is observed through the previous studies that people start drug abuse due to perceiving negative perception about drugs and when their thought promote highly people forgot the harmful effects of drugs but focus on the satisfaction to abuse drugs (Miller, 2002; Diclemente, 2006). It refers to describe all the negative effects associated with drug abuse including ill health, violence, and conflicts with friends or school authorities, destruction of school property and academic performance. Similarly, illegal drugs refer to the substances deemed harmful to the mental and physical wellbeing of the individual by the government who seeks to control or discourage consumption by law. Such as, legal drugs refer to those such as

alcohol and tobacco that are potentially dangerous but whose consumption the government allows.

The present study focuses on interventions which are very important to reduce drug rate among communities. In fact, an attempt to reduce drugs from society is need to modify user's behavior and change their attitudes towards the misuse of drugs are referred to as interventions. These can include activities and programs put in place to address or end drug abuse. Prevention is best understood when explained in its totality which includes three levels of prevention such as primary, secondary and tertiary. Primary prevention involves preventing the initiation of psychoactive substance use or delaying the age at which use begins (UNICEF & WHO, 2006). Secondary prevention is intervention aimed at individuals in the early stages of psychoactive substance use. The goal here is to prevent substance abuse from becoming a problem thereby limiting the degree of damage to the individual (Rossi, 2000). Tertiary prevention aims to end dependence and minimize problems resulting from use/abuse. This type of prevention strives to enable the individual to achieve and maintain improved levels of functioning and health. Tertiary prevention is sometimes called rehabilitation or relapse prevention (UNICEF & WHO, 2006).

For the purposes of this study, prevention will refer to educational activities, programs or policies aimed at enabling young people to stay healthy and productive and inhabit an environment free from drug abuse. It also refers to the education of young people about the effects of substance abuse with the intention of preventing their use/abuse and enabling them to make informed decisions when faced with offers of illegal substances. Protective factors/risk factors: Research has shown that in order to prevent substance abuse, two things must happen (O'Malley, et al., 2001) factors that increase the risk of the problem must be identified, and ways to reduce the impact of those factors must be developed. Factors that help to prevent substance abuse are called protective factors and those that contribute to or increase the risk of abuse are called risk factors. Knowledge of these various factors can help those in drug prevention to better understand the dynamics of drug use and to develop strategies that will enhance the protective factors while minimizing the risk factors. Psychoactive Substance: Refers to any substance that when taken can modify perception, mood, cognition, behavior, or motor functions (UNICEF & WHO, 2006).

Drug prevention is interlinked with some effective strategies. Effective strategies refer to reduce rate of drug usage among children and adolescents. This strategy is effective with schools that are having issues related drugs. Such as substance abuse, refers to the use of all chemicals, drugs and industrial solvents that can produce dependence (psychological and physical) (Cheryl & Gert, 2003). It can also refer to repeated non-medical use of potentially additive chemical and organic substances. According to UNICEF and WHO (2006), substance abuse includes the use of chemicals in excess of normally prescribed treatment dosage and frequency, even with knowledge that they may cause serious problems and eventually lead to addiction. Secondly youth, refers to young people between 13 and 25 years of age or their activities and their characteristics. The majority of students in secondary schools are between 13 and 19 years, a stage referred to as adolescence. The term youth therefore includes this age bracket of students. Drugs and Substance Abuse Drugs are substances which when introduced into the body will alter the normal biological and psychological functioning of the body, especially the central nervous system (Escandon & Galvez, 2006). The term 'drug' in a general sense includes all substances that can alter brain functions and create dependence. UNICEF and the World Health Organization (2006) define drug abuse as the self-administration of any drug in a manner that diverts from approved medical or social patterns within a given culture. Legal or licit drugs and substances are socially accepted and their use does not constitute any criminal offence.

Drug abuse among students is dominated by the use of these legal drugs and substances. Among the illegal drugs commonly used by students are cannabis, ecstasy, heroine, mandrax and lysergic acid diethylamide (NAFDAC, 2004). Prescription and over the counter drugs are abused when taken without the specified medical condition and/or proper prescription. Some of these drugs can be mood elevators, pain killers or antidepressants. Prescription drugs include pain killers with codeine, phenorbaritone, valium, piriton and sleep control drugs. A study by Rew (2005) found that these psychoactive substances can produce feelings of surplus energy, euphoria, stimulation, depression, relaxation, hallucinations, a temporary feeling of well being, drowsiness and sleepiness. Their misuse often leads to physical or physiological addiction.

Like Pakistan the drug abuse by students in western countries is also alarming (Portner, 1998). The United States, one of the world's largest markets and a country that sets standards for

many other countries, has experienced a notable recent increase in marijuana use. This has influenced the decisions of students from other countries in terms of drug use. Many American films and magazines with young audiences sensationalize drug use. This portrayal of drugs can be highly deceiving, making youth in America and elsewhere more vulnerable to drug addiction.

Use of illicit and licit drugs is increasing among students in our communities (NAFDAC, 2008). This development is a significant concern for society and immediate attention is required. When a drug is abused it causes injury to the brain and often irreversible alterations in the central nervous systems. When psychoactive substances destroy several thousand neurons, the consequences are fatal and a number of students have died from drug overdoses. Types of Drugs and Substance Abused by Students According to the National Institute on Drug Abuse (2000), alcohol is the most abused psychoactive drug in the United States with approximately 90% of students using it before they leave high school.

Like Pakistan the others countries such Nigeria are more prone toward drug abuse, a report by NAFDAC (2008) found that alcohol is also the most commonly abused drug with about 61% of the population engaging in its use. The same report indicated that 40.9% of students were abusing alcohol in Nairobi Province and 26.3% in Central Province. According to Perkinson (2002), alcohol is a central nervous system depressant and dulls the brain making learning a difficult task. When students abuse alcohol their reasoning becomes impaired and education becomes of less priority in their life. Research by Nte (2008), found that 37% of the students in Bayelsa State were abusing tobacco products. Tobacco products are readily available in Nigeria. Research in Australia revealed that bhang smoking leads to the use of other more serious drugs. In the Bayelsa it was found out that 5.3% of the students were smoking bhang. The Effects of Drugs Abuse Drug use by students has hampered education and management in Nigerian secondary schools. In Nigeria, recent statistics suggest that one in every three secondary school students consumes alcohol. Another 8.3% smoke cigarettes while almost one in every ten (9.1%) chew Miraa. About 3% smoke bhang and use hard drugs like heroin, cocaine, mandrax and tranquilizers (The DailyTimes, 2004).

Some adverse consequences include insomnia, prolonged loss of appetite, increased body temperature, greater risk of hepatitis and HIV/AIDS infection (Perkinson, 2002), death, various forms of cancers, ulcers and brain damage. A study by Winger, Wood and Hofmann (2004) identified accelerated heartbeat, speeding in the peripheral circulation of the blood, alteration of blood pressure, breathing rate and other body functions as potential effects. Cannabis affects the hormonal and reproductive system and the regular use of cannabis can reduce male testosterone and sperm cells. Drug abuse contributes to the formation of uric acid which accelerates conditions like arthritis, gout, osteoporosis, and heart attacks, particularly those with pre-existing coronary hypertensive problems. Drug abuse also affects the brain, resulting in a major decline in its functions. Drugs can affect a student's concentration and thus interest in school and extracurricular activities. This leads to increased absenteeism and drop outs. Most psychoactive drugs affect the decision making process of students, their creative thinking and the development of necessary life and social skills. Drugs also interfere with an individual's awareness of their unique potential and thus their interest in their career development (Louw, 2001).

Self concept refers to the way an individual perceives himself or herself in a variety of areas for example academically, physically, and socially (Luow, 2001). Low self-esteem can lead to a detrimental redefinition of self-concept and this in turn can lead the student to indulge in escapist behavior such as drug and substance abuse. A study by Merki (1993) found that when the students are feeling bad about themselves or are feeling unworthy, unloved or rejected, they turn to drugs. Students are affected more by these emotions and their inability to cope given their adolescent stage of development. During this stage, identity formation is important and self-concept plays a major role (Erikson, 1974). Addiction can develop when students' insecurities combine with the influence of peers and the media. Drugs then become the social and emotional focus at the expense of other interests and activities. This gradually leads to social, emotional and physical problems and new feelings of guilt, despair and helplessness.

Drug use initiation is viewed as a multi factorial problem resulting from the interplay of interpersonal and intrapersonal etiologic factors. The use of one or more psychoactive substances is learned through a process of modeling and reinforcement from various social influences including peers, family members, and the media. Vulnerability to these influences is determined

by domain-specific cognitions, attitudes, and expectations, degree of bonding to social institutions (such as the family, school, and community), and the availability of skills for coping with drug use offers and other life situations confronting adolescents. Prevention approaches that are based on this formulation typically emphasize increasing students' awareness of the social influences promoting drug use, modifying normative expectations concerning the prevalence of drug use, and teaching skills for resisting drug use pressures (e.g., Pentz *et al.*, 1989).

Other prevention approaches also emphasize the importance of teaching general personal competence and social skills (e.g., Botvin *et al.*, 1990) in an effort to decrease motivations to use drugs and decrease vulnerability to drug use social influences. A growing empirical literature has shown that these approaches can produce short-term reductions in the frequency and amount of drug use relative to untreated controls. However, although the results of some studies suggest that these effects may erode over time (Ellickson & Bell, 1990), there is at least some evidence that with a more comprehensive and intensive approach including booster sessions, long-term prevention effects lasting until the end of high school are possible (Botvin *et al.*, 1995a, 2000; Pentz *et al.*, 1989).

Notwithstanding these accomplishments, there are sizeable gaps in the prevention research literature. One major gap stems from the fact that most of the existing research has been conducted with predominantly White middle-class adolescent populations. Economically disadvantaged, inner-city minority adolescents remain an understudied population in terms of both the etiology and prevention of drug use. Yet these adolescents may be at increased risk for alcohol/ drug use and negative consequences related to use (Barnes & Welte, 1986; Oetting & Beauvais, 1990).

The more protective factors that are present, the less likely a person are to become involved with drugs. Protective factors are identified such as attachments of people with family members and peers, and institutions such as religion and school; physical and performance capabilities that help people succeed in life; the availability of resources, within the person or the environment, that help people meet their emotional and physical needs; positive role models; and anti-drug campaigns along with guidance and counseling services. According to this model, it is

easier to understand the drug problem if risk and protective factors are considered at the same time. Probability of drug abuse is determined by these factors and this framework is useful as a way of planning interventions to prevent or treat problems related to drugs. It is important to note that the factors listed above are not exhaustive. The presence of risk and protective factors is context dependent and the proportions of their contribution depend on their intensity in given situations. Thus, it was important to examine the factors unique to students in Bayelsa State, Nigeria.

When we talk about risk factors of drugs means the factors help to increase the rate of use of drugs in society. Due to which worse effects of drugs usage emerge in children such as poor academic performance, suffer from physical and psychological illness. But risk factors can be controlled or managed through protective factors. Protective factors can awareness programs such as parents, teacher or community awareness programs. The aim awareness program is not just to increase knowledge and understanding among children about the issue but to change behavior through enhancing some of the factors which protect against substance misuse. The intended messages may vary according to the substance and age of the recipients.

Despite advances in drug abuse prevention research and a decade-long decline in the use of many substances during the 1980s, drug abuse continues to be a serious public health threat. Recent national survey data indicate that drug use among American youth has been on the rise during much of the 1990s (Johnston *et al.*, 1998). The observed increases in the prevalence of adolescent drug use appear to be rather broad-based including many different substances and affecting individuals from different social classes and regions of the country. Not surprisingly, this has prompted a renewed interest in developing more effective strategies for reducing adolescent drug use and has provided a new impetus for the identification and testing of promising approaches to drug abuse prevention. The past 20 years have seen considerable prevention research activity. During this time, progress has been made toward increasing the understanding of the etiology and developmental sequence of drug use and abuse. Progress has also been made in developing and testing a variety of prevention approaches.

The purpose of this project is to brought gradual delay among those children who are involves in soft drugs and gradually make free the community from drugs. Meanwhile, the onset of drinking or smoking may be a valuable outcome since, as described above, there are specific harms associated with early use of alcohol and tobacco. This is recognized in UK legislation making it illegal to buy alcohol and tobacco below the age of 18. Longer-term outcomes are more difficult to measure. Evaluations often therefore focus on short-term use and (particularly where little adolescences are users) intermediate measures such as knowledge, and attitudes. The prevention paradox in public health is that the benefits of an intervention or behavior change are seen at the population level.

CHAPTER II

BACKGROUND OF THE STUDY

Numerous reviews of the existing empirical evidence (Botvin, 1986; Botvin & Botvin, 1997; Flay, 1985; Goodstadt, 1986; Hansen, 1992) and metanalytic studies (Bangert-Drowns, 1988; Bruvold & Rundall, 1988; Tobler, 1986; Tobler & Stratton, 1997) have consistently supported the superiority of prevention approaches that target social influences either alone or in combination with the teaching of general personal and social skills over more traditional information dissemination approaches. The most effective approaches to drug abuse prevention are based to varying degrees on social learning theory (Bandura, 1977), communications theory (McGuire, 1964), and problem behavior theory (Jessor & Jessor, 1977) as well as on an understanding of the risk and protective factors associated with adolescent drug use (Hawkins *et al.*, 1992; Pandina, 1997). These approaches rely to a large extent on a common conceptualization of adolescent drug abuse.

Theoretical understanding about Drug Abuse

Kaplan's Self-Derogation Theory

Kaplan's theory of self-derogation plays a central role in determining drug use and abuse. Kaplan (1975, 1996) and colleagues (Kaplan and Johnson 1992; Kaplan, Robbins, and Martin 1984, 1986) reported that negative feelings and statements about oneself and the socially devaluing experiences that set it up motivate individuals to behave in ways that minimize self-derogation and maximize positive self attitudes. They propose that this explains why individuals reject the normative structure and embrace that which is "deviant" (e.g., drug use, drug peers, and drug subcultures). Cultural identity theory both compliments and enhances these premises. It proposes that negative self evaluations are part of the etiological process, but articulates a specific mechanism through which such negative self-evaluations lead to drug abuse. It is two social and largely external factors (i.e., personal and social marginalization) that help produce this identity discomfort and can lead to drug-related identity change. Kaplan and colleagues have

not delineated the same. These theoretical differences about identity or self-definition and the sources of it could account for an important risk factor that distinguishes drug users from abusers.

The most significant difference between self-derogation theory (and the other four theories discussed below) and the cultural-identity theory, however, pertains to the presence of meso- and macro-level concepts in the explanatory model. Kaplan (Kaplan and Johnson 1992; Kaplan 1996) has recently discussed more macro-level influences (e.g., social controls) on drug abuse, but his theoretical model does not yet contain specific concepts and, therefore, does not directly discuss a link between them. Finally, another major difference between the two is Kaplan's focus on "deviant" acts (see Kaplan 1996) rather than identities and identity change.

Elliott's Integrated Delinquency Model

Elliott et al. (1985) have proposed an integrated sociological theory of drug use that draws from social control theory (Hirschi 1969), strain theory (Merton 1938, 1957), and social learning theory (Akers 1977). They posit that strong bonding with "deviant" peers is the primary cause of drug use. "Deviant" peer bonding, they maintain, is a result of weak conventional bonds with parents and school, prior delinquent behavior, and social disorganization.

Cultural-identity Theory of Drug Abuse

Given the recent significance of the peer group concept in drug prevention efforts (Gorman 1996) and in etiological research (see Ennett and Bauman 1991; Kandel 1996), it makes sense to explore more about the ways in which youth peer groups influence or cause undesirable behavior in individuals. Elliott's focus on bonding with "deviant" peers differs substantially from the cultural identity theory's emphasis on drug sub-cultural groups. It is important to understand whom individuals interact with (e.g., who become their friends), because research and theory has repeatedly shown that such associations and attachments are predictors of behavior. This was part of what Bandura called "modeling"; individuals often model or do what people around them do-for example, use drugs. However, both drug users and abusers

usually report bonding with "deviant" peers (see Kandel 1996 for a discussion of the overstatement of the impact of "deviant" peers in drug research). Therefore, the overall meaning-system that the peers embody and the new definition of the self that individuals get from interacting in "alternative" youth subcultures might comprise the more important explanatory factor and may ultimately distinguish between drug use and drug abuse. For instance, Ennett and Bauman (1991) and Harton and Latane (1997) have recently noted the importance of the "social approval" function that peers play in the etiological process instead of an individual's association with them.

Hawkins and Catalano's Social Development Theory

Social development theory is also an integrated approach that combines social learning, control, and differential association theories. It has much in common with Elliott's approach, with the exception that it elaborates on the developmental processes in both pro-social and anti-social (e.g., drug use) behavior. Bonds develop between the individual and socializing agents (family, schools, religious and community institutions, and their peers) during development. An individual's behavior will, therefore, be antisocial or pro-social depending on the behavior, norms, and values of those socializing agents to which he or she is bonded. Like Kaplan's and Elliott's theories, the general model of social development theory does not specify micro, meso, and macro-level variables. Instead, Hawkins, Catalano, and colleagues focus on the individual and his or her perceptions about opportunities and interactions in the environment around them. Jessor and Jessor (1973) made an earlier observation on the possible ways in which factors outside the individual (environmental or contextual) may impact behavior. They concluded that the perceived environment was a more important predictor of individual behavior than the "actual" or "objective" one. Social development theory is in agreement on this matter.

Flay's Theory of Triadic Influence

Flay and Petraitis' (1994) theory of triadic influence (TTI) is a complex web of factors that prior research has tied to drug use. To date, TTI is the only drug use theory that acknowledges the various streams (i.e., cultural, social-situational, and interpersonal/biological)

that affect all human behavior. Furthermore, within each causal stream, Flay and colleagues identify three levels of influence-proximal, distal, and ultimate. Doing so has provided them with a theoretical model that can investigate sophisticated kinds of causal relationships. For example, mediating and moderating ones on drug use. This is a second quality of TTI that distinguishes it from the theories described above. The cultural-identity theory differs from TTI in two major ways. First, TTI does not specify which variables or relationships predict drug use versus drug abuse. Second, TTI is a theory about behavioral outcomes. It is not a statement about the drug-related identity change process that begins with no drug use for many and ends in drug abuse for some.

Modified Social Stress Model (MSSM)

MSSM refers to understand drug use guides (ESCAP 2000). The model was developed by Rodes and Jason (1988) and modified by the World Health Organization Programme on Substance Abuse (WHO/PSA) to include the effects of drugs or substances, the personal response of the individual to drugs and additional environmental, social and cultural variables. Research has shown that in order to prevent substance abuse, two things must be taken into consideration: factors that increase the risk of developing the problem must be identified, and ways to reduce the impact of these factors must be developed. This theory maintains that risk factors are those factors that encourage drug use. Factors that make people less likely to abuse drugs are called protective factors. The key to health and healthy families is increasing the protective factors while decreasing the risk factors. According to this model, if many risk factors are present in a person's life, that person is more likely to begin, intensify and continue the use of drugs. The model identifies risk factors as including a stress which refers to the school or home environment, and adolescent developmental changes. On the other hand, normalization of substance use which could be seen in terms of legality and law enforcement. But the availability, cost of drugs, advertising, sponsorship and promotion through media, as well as the cultural value attached to various drugs lead toward drug abuse.

Risk a vulnerability factors in drug abuse

Drug Abuse and Education

Teenager's substance abuse linked to some of the barriers to health and productivity such as poor performance in school, drop out of high school, sexual abuse, accidents, homicides, suicides, violence and self-injury (Steinberg, 2010; Seth et al., 2011; Marshal, Friedman, Stall, Thompson, 2009). The Center on Addiction and Substance Abuse (CASA) in United States (Anonymus, 2011) reported that at least three out of four high school students in America (75.6 percent) have used one or more addictive substances. Nearly three-quarters (72.5 percent) have drunk alcohol, nearly half (46.3 percent) have smoked cigarettes, more than a third (36.8 percent) have used marijuana and 6.4% have used cocaine. Because of social, religious, cultural and economical reasons the rate of drug is increasing in schools settings and in communities of Pakistan. Similarly, the results of one study which was conducted on 10th grade male students in Shiraz in 2003 showed that 32% of students had experienced alcohol consumption and 2.1% of them had lifetime drug abuse (Ayatollahi, Mohammadpoorasl, & Rajaeifard, 2005). Another study conducted on 10th grade male students in Tabriz in 2005 and 2006 longitudinally showed that 12.7% of students had ever used alcohol and 2.0% had used drugs. In addition, during one year follow-up, among students without experience of alcohol use, 10.1% reported using alcohol, and among students without experience of drug abuse, 2.2% reported using drugs (Mohammadpoorasl, Fakhari, Rostami, Vahidi, 2007). Tabriz is the center of East Azerbaijan Province, which based on 2006 Census, the population of this city was about 1.4 million people and about 12% of them were in age group of 14-19 years old. The aims of this paper related to the first phase of a longitudinal study about smoking and substance abuse in a large random sample of adolescents are to estimate the prevalence of substance abuse in Tabriz and to evaluate its some associated factors.

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 (Miller, Lesting, & Smith, 2001), increased probability of engaging in high risk sexual behaviors (Flisher, Ziervogel, & Charlton, 1996); and increased risk for suicidal ideation and behaviors (Stoelb, 1998). An association has

also been found between adolescent substance abuse and co-morbid psychiatric disorders, such as conduct and mood disorders (Gilrime, 2000). Adolescent substance abuse has been associated with academic performance, declining grades, absenteeism, truancy, and school drop-out (Chen, Sheth, Elliott, & Yeager, 2004). Furthermore, some other studies indicate that there is a link between substance abuse and getting involved in a crime, and a high prevalence of substance abuse among juvenile offenders (Zhang & Wiczorek, 1997).

Age

There is a strong relationship between early age and vulnerability toward drug abuse, it mean that the early age is more curious age than older so children develop the curiosity to check out drugs but in later it lead to drug abuse. Because of not yet fully development in parts of the adolescent's brain that responsible for judgment, decision making, emotion and impulse control, they are more likely than adults to take risks, including experimenting with addictive substances and engaging in dangerous behaviors while under their influence, and highly susceptible to external social influences to engage in risky behaviors (Steinberg, 2008; Steinberg, 2010; Riggs & Greenberg, 2009). The younger an individual is at the onset of the substance abuse, the more risk developing substance use disorders and continuing into adulthood. Over 90 percent of adults diagnosed with substance use disorders have experienced drug use before age 18 and half of them before age 15 (Lynskey et al., 2003)).

High rates of co-occurring mental health and substance use disorders are found in specialty geriatric psychiatry outpatient clinics and in psychiatric inpatient settings. Multiple biological, psychological, and social changes that accompany the aging process make the elderly uniquely vulnerable to substance abuse problems. These special vulnerabilities include loneliness, diminished mobility, impaired sensory capabilities, chronic pain, poor physical health, and poor economic and social supports (Bucholz et al., 1995; Sheahan, Hendricks & Coons, 1989; Schonfeld & Dupree, 1995).

Many of the acute and chronic medical and psychiatric conditions that lead to high rates of health care use by older people are influenced by the consumption of alcohol. These conditions include harmful medication interactions, injury, depression, memory problems, liver

disease, cardiovascular disease, cognitive changes, and sleep problems (Liberto, Oslin & Ruskin., 1992). The interactions between alcohol and medications are of notable importance to older populations; interactions between psychoactive medications, such as benzodiazepines, barbiturates, and antidepressants are of particular concern. Alcohol use can interfere with the metabolism of many medications and is a leading risk factor for the development of adverse drug reactions (Fraser, 1997; Onder et al., 2002). Finally, the presence of co-occurring psychiatric conditions (dual diagnosis) including comorbid depression, anxiety disorders, and cognitive impairment likely represent both a risk factor for and a complication of alcohol and medication abuse in older adults (Bartels & Liberto., 1995).

It is observed that children are more prone toward soft drugs while adolescents are vulnerable toward soft as well as hard drugs. Others factors which are associated with vulnerability of drugs abuse is improper parenting, lack of awareness and lack of education. Similarly it is observed in the target areas the children are involve in cigarette smoking, chhalia, and gutka etc. Some epidemiological studies indicated high risk in children and adolescents such as in Iran (2001) showed that there were at least 3761000 opiate abusers (opium, juice, heroin), 2547000 of which are problematic user (Yassami et al., 2002), especially by considering the fact that new drug abusers join the squad every year. The Secretary of Iranian National Committee for AIDS reported that there are approximately 3200000 addicts in Iran, 260000 of which are students (Statements of the 10th Iranian Congress on Infectious Diseases and Tropical Medicine., 2001).

Studies show that substance abuse is a developmental phenomenon that increases linearly from early to late adolescence. In addition, studies show a steady developmental increase in drug abuse through the adolescence, with tobacco, alcohol and marijuana use being relatively common (Young et al., 2002). Since drug abuse generally occurs in late adolescence and early adulthood (Mohammadpoorasl et al., 2007a), it appears the peak expression of susceptibility for addiction is during this period. It is important to understand the characteristics of adolescent substance abusers. Adolescent substance abusers are potentially at high health risks, including increased risk for injury and death from interpersonal violence, motor vehicle accidents, drowning (Miller, Lesting, & Smith., 2001), increased probability of engaging in high risk sexual

behaviors (Flisher, Ziervogel, & Charlton., 1996), and increased risk for suicidal thoughts and behaviors (Stoelb., 1998). A relationship has also been found between adolescent substance abuse and co-morbid psychiatric disorders, such as behavioral and mood disorders (Gilrume., 2000).

According to the Addict Prone Theory, certain individuals are at a high risk for drug dependency if they are exposed to certain psychoactive drugs as a result of their unhealthy personalities (Gendreau, & Gendreau., 1970: Zeinali, Vahdat, & Eisavi., 2008). Consistent with this theory, the availability-proneness theory states that drug abuse occurs when a susceptible individual is exposed to a level of availability. When availability is excessively high, the level of proneness required among users could be lower compared to in situations of low availability. Where an individual's psychological or social proneness is very high, he may become a drug abuser in situations in which availability is low (Agatsuma & Hiroi., 2004). In a series of studies (Barnes et al., 2000), introduced addiction-prone personality and reported that having addiction-prone personality traits can lead to alcohol and drugs abuse (Franke et al., 2003).

Culture and Community

Rapid social, economic and technological change may, under certain circumstances, weaken the sense of family and reduce the sense of belonging to other people, groups and places. Stability of relationships, environment and expectations is a powerful force in helping people manages their lives, especially important for children and young adults. In some societies, the classical problem of balancing discipline and control of children with nurturing support to encourage their exploration, understanding of the world and self-realization may be complicated by substance abuse problems as well as a wide range of other conditions. Families can have a powerful influence on shaping the attitudes, values and behaviour of children, but how do they compare with peers in terms of influence on drug taking?

The influence of peer groups, which is usually strong during formative years of youth, may be stronger than that of parents in some cases. Some researchers (Zeinali, Vahdat, & Eisavi., 2008) has found that friends are more similar in their use of marijuana than in any other activity

or attitude. In this situation, drug use by peers may exert a greater influence than the attitudes of parents. This researcher observed that peer and parental influences are synergistic, with the highest rates of marijuana use being observed among adolescents whose parents and friends were drug users. Other investigators, however, have found that peers have a high degree of influence only when the parents have abdicated their traditional supervisory roles (Zeinali, Vahdat, & Eisavi., 2008). Hence, parents exercising traditional family roles may be able to limit the influence of peer groups on children's attitudes towards drug use and therefore have a crucial influence on children's behaviour.

Homelessness

Although obtaining an accurate, recent count is difficult, the Substance Abuse and Mental Health Services Administration (2003) estimates, 38% of homeless people were dependent on alcohol and 26% abused other drugs. Alcohol abuse is more common in older generations, while drug abuse is more common in homeless youth and young adults (Didenko and Pankratz, 2007). Substance abuse is much more common among homeless people than in the general population. According to the 2006 National Household Survey on Drug Use and Health (NSDUH), 15% of people above the age of 12 reported using drugs within the past year and only 8% reported using drugs within the past month.

Substance abuse is often a cause of homelessness. Addictive disorders disrupt relationships with family and friends and often cause people to lose their jobs. For people who are already struggling to pay their bills, the onset or exacerbation of an addiction may cause them to lose their housing. A 2008 survey by the United States Conference of Mayors asked 25 cities for their top three causes of homelessness. Substance abuse was the single largest cause of homelessness for single adults (reported by 68% of cities). Substance abuse was also mentioned by 12% of cities as one of the top three causes of homelessness for families. According to Didenko and Pankratz (2007), two-thirds of homeless people report that drugs and/or alcohol were a major reason for their becoming homeless.

In many situations, however, substance abuse is a result of homelessness rather than a cause. People who are homeless often turn to drugs and alcohol to cope with their situations. They use substances in an attempt to attain temporary relief from their problems. In reality, however, substance dependence only exacerbates their problems and decreases their ability to achieve employment stability and get off the streets. Additionally, some people may view drug and alcohol use as necessary to be accepted among the homeless community (Didenko and Pankratz, 2007).

Breaking an addiction is difficult for anyone, especially for substance abusers who are homeless. To begin with, motivation to stop using substances may be poor. For many homeless people, survival is more important than personal growth and development, and finding food and shelter take a higher priority than drug counseling. Many homeless people have also become estranged from their families and friends. Without a social support network, recovering from a substance addiction is very difficult. Even if they do break their addictions, homeless people may have difficulty remaining sober while living on the streets where substances are so widely used (Fisher and Roget, 2009). Unfortunately, many treatment programs focus on abstinence only programming, which is less effective than harm-reduction strategies and does not address the possibility of relapse (National Health Care for the Homeless Council, 2007).

For many homeless people, substance abuse co-occurs with mental illness. Often, people with untreated mental illnesses use street drugs as an inappropriate form of self-medication. Homeless people with both substance disorders and mental illness experience additional obstacles to recovery, such as increased risk for violence and victimization and frequent cycling between the streets, jails, and emergency rooms (Fisher and Roget, 2009). Sadly, these people are often unable to find treatment facilities that will help them. Many programs for homeless people with mental illnesses do not accept people with substance abuse disorders, and many programs for homeless substance abusers do not treat people with mental illnesses.

Since substance abuse is both a cause and a result of homelessness, both issues need to be addressed simultaneously. According to Didenko and Pankratz (2007), stable housing during and

after treatment decreases the risk of relapse. Substance abuse on its own is inadequate and needs to be combined with supported housing opportunities. In addition to housing, supported housing programs offer services such as mental health treatment, physical health care, education and employment opportunities, peer support, and daily living and money management skills training. Successful supported housing programs include outreach and engagement workers, a variety of flexible treatment options to choose from, and services to help people reintegrate into their communities (National Mental Health Association, 2006). Supported housing programs that include substance abuse services would help homeless people treat their addictions and re-establish residential stability.

Gender

Gender differences in drug use and offending Research studies in Australia and abroad have found high levels of illicit drug use among offenders. Among male offenders, the most commonly used drugs include cannabis, amphetamines, heroin, ecstasy and hallucinogens (Adams et al 2008; Holloway & Bennett 2007; Makkai & Payne 2003). Among female offenders, cannabis use has generally been found to be less prevalent, while use of the ‘harder’ drugs such as heroin, amphetamines and cocaine has been more prevalent, in addition to illegal use of prescription medications such as benzodiazepines (Holloway & Bennett 2007; Johnson 2004; Loxley & Adams 2009). One theory for the gender differential in illicit drug use patterns is that women tend to use illicit drugs as a form of coping or self-medication for psychological distress (Byrne & Howells 2002). Past research has also found gender differences in male and female patterns of offending. Generally, female offenders are more likely to be involved in offences such as shoplifting, fraud and receiving stolen goods than are male offenders (Adams et al 2008; Holloway & Bennett 2007). Men are more likely to be involved in violent crimes and offences such as vehicle theft, burglary and drug-supply offences (Adams et al 2008; Holloway & Bennett 2007).

Knowledge about gender differences in pathways into addiction and crime have established that these differences are critical in delivering effective treatment to both women and men. One-fifth of all persons arrested are women, and many women who commit crimes have

substance use problems. In a random sample of women arrested for any crime, 65% tested positive for one or more of the following drugs: cocaine, opiates, marijuana, methamphetamines, or phencyclidine (National Institute of Justice, 2003). In an effort to address this issue, many women have been mandated into substance use treatment programs in both residential (including prison-based) and community-based settings. To design effective substance use treatment programs for women who enter through the criminal justice system, an understanding of the research on the unique aspects of being a female substance-abuser must first be addressed. Because most treatment programs were originally developed for men, researchers have, in recent years, more frequently cited the need to understand gender differences in the etiology of drug use, drug treatment needs, how women use treatment services, and how effective the various substance abuse treatment approaches are for women in both community and criminal justice settings. This article provides a review of various types of literature on gender differences among substance abusers to provide a context for identifying the gaps in the literature. We assess whether the empirical research on gender differences provides clear clinical implications for treatment programs. We conclude with suggestions for a research agenda that may improve our understanding of gender differences in treatment and lead to improved outcomes for substance abusing women regardless of treatment setting. We begin with a review of treatment needs of men and women identified in the literature, most of this literature not being empirically based. We then continue with a review of empirical studies of gender differences in the characteristics of substance users and follow this with a review of treatment outcome studies that include and report on both women and men. We conclude with an assessment of the relationship between the treatment needs literature and the empirical studies of gender differences and with a discussion of implications for future research.

Treatment Needs of Substance Abusing Women Much of the literature on women's treatment needs state that women substance users require specialized, gender-specific services. Recent research efforts have begun to address some important questions regarding the epidemiology and etiology of substance use among women and the design of treatment strategies for women that address their gender-specific needs. The range of treatment needs cited in this literature is wide. Some cite the type of service needed, others discuss the style of the program, and others cite the types of issues to be addressed. Comprehensive, multisystemic treatment

models have been identified as the standard of care for women substance abusers (Conners, Bradley, Whiteside-Mansell, & Crone, 2001; Substance Abuse and Mental Health Services Administration, 1997). Most notably for community-based programs, women are seen as needing ancillary services that address a wide range of needs. The services most often cited include childcare and training in parenting, assistance with transportation, medical care, educational or vocational training, and assistance with housing (Abbott, 1994; Clark, 2001; Hagan, Finnegan, & Nelson-Zlupko, 1994; Knight, Hood, Logan, & Chatham, 1999; Marsh, D'Aunno, & Smith, 2000; Stein & Cyr, 1997; Wald, Harvey, & Hibbard, 1995; Wellisch, Prendergast, Anglin, & Owen, 1993). The literature also reports a need for different treatment delivery styles for women. Women's programs are seen as more effective if the focus is on empowerment, support, skillbuilding and strength-identifying rather than on confrontation, as is the case with many programs for men (Abbott, 1994; Bloom, 1999; Finkelstein, 1996; Inciardi, Lockwood, & Pottieger, 1993; Koons, Burrow, Morash, & Bynum, 1997; LaFave & Echols, 1999; Landry, 1997; Reed, 1985). Treatment models that have been designed specifically for the treatment needs of women include models that focus on the relational orientation of women (Covington & Surrey, 1997) and feminist and empowerment models that seek to understand the behavior of substance-using women within the context of the dominant culture (Abbott, 1994; Wald et al., 1995). Models for specialized female populations have also been identified, including programs for women offenders (for a review see Welle, Falkin and Jainchill, 1998) and for pregnant substance abusers (for a review see Howell, Heiser, & Harrington, 1999).

Some believe that women do better in all-female settings because the atmosphere is more nurturing and supportive and may provide a safer environment for women to talk about issues such as physical and sexual abuse (Center on Addiction and Substance Abuse, 1996; Lockwood, McCorkel, & Inciardi, 1998; Wald et al., 1995). Female-only programs have also been found to provide a greater number of the ancillary services needed by women (Grella, Polinsky, Hser, & Perry, 1999), which may facilitate treatment enrollment and retention (Logan, Walker, Cole, & Leukefeld, 2002; Stevens, Arbiter, & Glider, 1989). In addition to women-only participants, female staff members who can serve as role models are also seen as providing a positive impact on the treatment environment (Doshan & Bursch, 1982; El-Guebaly, 1995; Koons et al., 1997; Lockwood et al., 1998; Stevens & Glider, 1994).

The types of issues to be addressed in drug treatment programs with female participants should recognize the comprehensive range of women's problems (Substance Abuse and Mental Health Services Administration, 1997). The issues most often cited include women's experiences with physical and sexual abuse (Abbott, 1994; Drabble, 1996; Kassebaum, 1999; Landry, 1997; Logan et al., 2002; Morash, Bynum, & Koons, 1998; Root, 1989), the need for vocational training (Abbott, 1994; Drabble, 1996; Gregoire & Snively, 2001; Kane-Cavaiola & Rullo-Cooney, 1991; Landry, 1997; Logan et al., 2002; Reed, 1985; Wellisch et al., 1993) and child care or parenting issues (Abbott, 1994; Doshan & Bursch, 1982; Drabble, 1996; Gregoire & Snively, 2001; Knight et al., 1999; Koons et al., 1997; Logan et al., 2002; Reed, 1985; Wallen, 1998; Wellisch et al., 1993). Women's treatment programs have also been viewed as requiring special attention to relationship issues, including those with partners (Abbott, 1994; Laudet, Magura, Furst, & Kumar, 1999; Wallen, 1998; Wellisch et al., 1993) as well as with other family members (El-Guebaly, 1995; Gregoire & Snively, 2001; Howell et al., 1999; Logan et al., 2002). Much of the literature on program needs of women substance users claim that programs have been biased towards the needs of men. As a result, there has been a growing body of conceptual research on designing programs that advocate for and include strategies to address the needs of substance-abusing women. However, much of the literature on the program needs for women do not refer to the literature on gender differences, and furthermore study just women. As noted by Anglin & Hser (1987), studying just women is as meaningless as studying just men. The purpose of this article, then, is to (1) review the research on the characteristics of men and women are substance users, (2) review the research on gender differences in substance use treatment outcomes, and (3) discuss the research implications of the findings.

IMPACT OF DRUG ON THE INDIVIDUAL'S FAMILY AND COMMUNITY

Drug Abuse and Crimes

In the 1700s and 1800s, physicians wrote (in support of the temperance movement) that substance use is not just a matter of desire or will, but indeed a presentation of a medical syndrome. In the 1960s and 1970s, there was increasing interest by professionals in more

behavioral treatment approaches, partly due to the popularity of psychoanalytic philosophy. New discoveries in molecular biology, neuropharmacology, and genetic studies have led the way in the return to a medical approach to addiction. Inherent in this article is a challenge to those who essentially wish to state that addiction is a brain disease and, as such, is only treatable by biological interventions. Certainly there are individuals of the criminogenic (substance-abusing offenders) addict population who truly have psychiatric disorders and for whom successful treatment can only occur if this pathology is appropriately addressed. This group aside, this article challenges the bias that biologic interventions are the only treatment approach for the criminal drug-abusing population. The consideration of context is central to the discussion of treating the criminogenic drug taker, or the drug taker who ends up committing a crime in support of his or her drug dependence. For example, treating clients who are addicted but not necessarily criminogenic in the community (i.e., in an environment with a prosocial atmosphere) is decidedly different from treating the same individual in the context of an antisocial environment with a set of rules, norms and values that support deviance (and also literally physical survival), such as may be found within a penal setting. This article deals with the remaining criminogenic and addicted population of inmates with what we will refer to as the co-occurring disorder of crime and addiction, regardless of which came first. Specifically, in referring to “addiction,”

Why should society even consider undertaking treating the “hopeless” criminogenic addict if all they are going to do is recidivate and end up once again incarcerated? Why should society treat *any* addict at all? The simple answer is that it costs too much not to. Looking at the leading causes of disability world wide, alcohol and drug use come in fourth place regardless of the country’s social policy (Murray & Lopez 1996). The leading cause of disability worldwide is unipolar depression (51 million, 11% of all disability). It is followed by iron deficiency anemia (the second largest cause worldwide, affecting 5% of the disabled population). The third greatest cause is falls, which affect 4% of that population. Alcohol and other drugs represent 3% to 6% of all other major causes of disability. Within this particular cause of disability, one must note that there is a difference between alcohol consumption and other drug taking. The social cost of illicit drug taking is higher than the social cost of the alcohol taking in millions of dollars. In 1990, the United States spent \$8.4 billion to treat AIDS and fetal alcohol syndrome, which both can be

attributable to alcohol, drugs and mental health disorders (ADM). It spent \$67.8 billion to fight crime associated with ADM, \$80.8 billion on ADM-related health care costs, and lost \$313.6 billion in ADM-related social costs. Loss of productivity in the U.S. attributable to alcohol and drug use and mental health problems in 1990 cost \$157 billion. These healthcare costs can not be explained by adherence to any social policy, or whether certain drugs are illegal or not and therein lay an important consideration in terms of disability and social cost.

The scientific literature points out that alcohol and other drugs have a multiplying effect on crime. A perfect and simple example is the association between crime and the availability of malt liquors. Consistently, city by city where it has been tracked areas in which there has been a greater availability of malt liquors has a higher percentage of all crimes, in particular alcohol-related violence. Epidemiological statistics indicate that 60% to 80% of all crime is related to drug (Mumola 1999). Drug arrests tripled in the 1980s, from 471,000 to 1,247,000 in 1989. It has quadrupled in the last twenty years (National Center on Addictions and Substance Abuse 1998). In California, arrests for drug sales and possession have risen from 7% of all arrests in 1983 to 24% in 1993 (National Center on Addictions and Substance Abuse 1998).

Thus, in addition to the cost of tracking illicit sales activity, a tremendous burden rests on the taxpayer for the dollars to build and maintain prisons. This becomes exceedingly poignant as prisons are increasingly used as a way of responding to this problem. As the costs of investigating, prosecuting and incarcerating addicts mount, the highest cost comes from recidivism. As Jeremy Travis, Director of the National Institute of Justice, pointed out at the 1999 National Assembly on Drugs, Alcohol Abuse and the Criminal Offender convened by the Department of Justice and General Barry McCaffrey (Director of the Office of National Drug Control Policy), half a million people are being released into the community every year from prison. Seventy percent to 80% of these individuals are judged now to have drug-related problems (i.e., are comorbid either way). Further, the great majority of them have been untreated. The statistics show that the untreated drug and alcohol users' recidivate faster than controls that are non drug users, and usually their recidivism involves crimes other than simple parole violations.

The Columbia Center for Drug Studies estimated that in the 1990s the population of inmates needing drug treatment grew significantly. In 1996, 900,000 inmates in a prison population of 1,300,000 (69%) were in need of some form of drug treatment. Yet there were little more than 100,000 inmates (7.6%) in any kind of drug treatment, and not much of that treatment was intensive. The percentage of men who are testing positive for drugs at the time of arrest in various cities ranges from 60% to 80% for any drug in major metropolises such as Los Angeles, Phoenix, San Diego, Dallas, and Miami. The percentage of women testing positive for drugs at the time of their arrest has been skyrocketing in the last eight years, and has risen to between 60% and 70%. There are some cities in which more women are arrested while under the influence of drugs than men. An example of this phenomenon is occurring with amphetamines in San Diego during the last ten years. The percentage of men testing positive for methamphetamine in San Diego was 40%, while the percentage of women testing positive for methamphetamine in San Diego was 42%. The same negative trend appears to be traveling down the developmental pipeline, according to the juvenile arrest data. Around key cities (particularly in the Southwest and Midwest, including Los Angeles, Phoenix, San Diego, San Jose, and San Antonio), the number of violent crimes associated with drug-positive arrested youth is skyrocketing (U.S. Department of Justice, National Institute of Justice 1997). The percentage of juveniles nationwide testing positive for drugs at the time of arrest is 60% to 70%. Depending on the location, the most common drug youths test positive for is marijuana (50% to 60%). However, methamphetamine and cocaine continue to gain strength: 4% to 14% of juveniles tested positive for these drugs in 1998 (National Center on Addictions and Substance Abuse 1998). This association between alcohol, drugs and crime exists outside America as well. The rates of crime have been escalating in all the developed countries, with the exception of South Korea and Japan. The crime rate in both of those industrial nations has been increasing as well, but not as rapidly as it has in the other countries. One of the most important factors contributing to such increases is the cocaine crisis. The international ADAM (Alcohol and Drug Abuse Monitoring) data reveals that in London over 60% of all arrests were associated with any drug: 10% of these arrests were for amphetamine, 40% for marijuana, close to 20% were for opiates, 10% for cocaine and (interestingly, compared to the arrest data in the U.S.) 8% were for methadone¹ (U.S. Department of Justice, National Institute of Justice 1999).

So, the question may be, which comes first, crime or drug use? The answer is both. Many recent studies and interviews with offenders suggest that in approximately two-thirds of clients, criminal behavior precedes the onset of drug taking. This is particularly true when disruptive behavior with elements of violence has been observed in early childhood. In the remaining one third of these offenders, the drug taking came first. Many studies indicate that in 50% of youth, criminal behavior comes first, in 25% of youth the onset of drug taking precedes the first criminal act, and in the remaining 25%, substance use and criminal behavior started simultaneously. This process may evolve in one of several different ways: (1) people become deeply invested in drug taking and then become criminal as a way of supporting that drug taking, or (2) those who were minimally invested in the criminal behavior later used drugs and after a while became literally “addicted” to both. These individuals have a lifestyle addiction—an adrenal cortex stimulation due to crime—just as they do to the excitement of acquiring and consuming drugs. Speaking from the treatment perspective, the sequence of involvement does not direct treatment options. In terms

One of the most prominent risk factors and direct pathways to problem substance use is delinquency. Delinquency may first lead to substance use and then to problem drug taking, or may lead directly to problem drug taking. The literature also documents that one of the major forces at work in this pathology is cognitive distortion (Farabee et al. 1995). A person’s inability to really understand the inputs that are occurring around him/her may lead to drug use, and that may further lead to aggression. Aggression may then feed back and lead to drug use; both of them being affected by the pharmacologic dimensions of drug taking, distorted thinking, and aggression. Further risk factors for problem drug taking include other co morbid conditions, such as depression and conduct disorder.

The psychological factors that contribute to and characterize criminality are numerous. They include: manipulation, impulsivity, low tolerance for frustration, the propensity and the need for danger or thrill seeking, poor consequential thinking, poor option generation, poor use of leisure time, affiliation in terms of social identity with the criminal class, easy dissatisfaction or boredom with conventional activity (i.e., the need for more excitement or adrenal dependence),

Economic Compulsive Violence

The economic compulsive dimension of violence considers economic crime committed to obtain funds to purchase drugs for personal use that has a component of violence. Drug users who engage in economic crime are not driven to act out violently. Their sole purpose in committing a crime is to secure money for drugs. The violence is generally the result of some extraneous event(s), such as the perpetrator's nervousness, unexpected reaction of the victim(s), intervening of bystanders, and the presence of weapons on either the perpetrator and/or victim.

Heroin and cocaine are the most relevant drugs in this category, because they are expensive and used in a compulsive manner. However, a number of studies conducted in the US have shown that drug users who engage in acquisitive crime tend to select criminal activities that are non-violent, notably when non-violent alternatives exist.⁸ This is especially true of heroin addicts.⁹ Many of these studies have indicated that acquisitive crime committed by drug users frequently include prostitution, shoplifting, theft of unattended property, car break-ins, drug dealing and fraud.¹⁰ Generally, a drug user's choice of criminal activity is guided by a number of factors. These factors include the amount of cash or value of the acquired good, the likelihood of success and avoidance of capture, potential involvement of bystanders, and the urgency for currency. It is often the case that the victims of economic compulsive violence are people living in the same area as the perpetrator, or in areas of frequent drug dealing. It is not at all unusual for victims themselves to be engaged in drug dealing or other illicit activities. It is also true that the perpetrator of economic compulsive violence can also be a victim.

Systemic Violence

The systemic dimension of violence is violence that is intrinsic to the lifestyles and business methods of those in the illicit drug market. Systemic violence can occur at the simplest level of transaction, such as a dispute between two users sharing a drug and violence ensues when one thinks the other is taking more than his or her share. Goldstein provides other examples of systemic violence:

1. disputes over territory between rival drug dealers
2. assaults and homicides committed within drug dealing hierarchies as a means of enforcing normative codes
3. robberies of drug dealers and the violent retaliation by the dealer or the dealer's overseer
4. elimination of informants
5. punishment for selling adulterated or fake drugs
6. punishment for not paying one's debts
7. disputes over drugs or drug paraphernalia
8. robbery related to the social ecology of the cropping/ production areas

Systemic violence is plainly the result of legislating the profitable economic activity of drug dealing as illegal. The consequence of such legislation is that the economic activity of drug dealing goes underground creating a black market. The function of a black market is to circumvent regulation of a proscribed economic activity. As a result, the demanders and suppliers in a black market are denied access to established legal institutions to resolve disagreements, collect debts, control the quality of goods, or impose some order or regulation on the market. Overall, the illicit drug market is a US\$ 100 billion a year transnational industry.¹¹ Clearly, this is a lucrative economic activity, thus the competition for a share of the market at all levels is very intense. It is because of this competition for market share that the incidence of violence is so acute. It is not unusual in the illicit drug market for entrepreneurs, or suppliers, to resort to intimidation, extortion, bribing, physical violence or whatever is necessary to maintain and expand market share. This translates into territorial disputes between rival dealers, assaults and homicides committed to enforce normative codes within a drug dealing operation, robberies of drug dealers, executions of police informants, retaliations for selling adulterated or bogus drugs, and assaults and homicides to collect drug-related debts.¹² It is also the unfortunate situation, that the very activity of dealing in illicit drugs is a work programme. Drug dealing provides employment for those who are unemployed and undereducated.

This has been observed in large cities in the US, especially in the inner city areas. For example, in the 1980s, the expansion of illicit drug sales in New York City paralleled the decrease in legitimate economic opportunities.¹³ Because of the low level of skills and resources

needed to enter the market, there are many candidates. Since the dealers have little control over the bottom line price of the illicit drugs they sell, the competition for buyers is fierce.¹⁴The successful dealer either attracts buyers from the competition or eliminates it. This leads to the competition arming themselves for protection, thus the potential for violence escalates. Victims of systemic violence are typically those involved in the illicit drug trade, both suppliers and demanders. There are, however, victims of systemic violence who are not involved in the trade. Included here are the people caught in the crossfire of shoot outs between rival drug dealers or between drug dealers and the police. This was the case in 1993 in Washington, DC, when four people were killed during shoot-outs in separate incidents on the same day.¹⁵ One of the victims was a four year old child. There are also victims of systemic violence who are family and/or friends of drug dealers or traffickers who are physically assaulted or executed by other dealers or traffickers over distribution disputes. Establishing the incidence of systemic violence is confounded by many factors. Victims of systemic violence, who are part of the drug market, tend not to report the crime to the police because of the potential risk of arrest for engaging in the illegal act of purchasing or selling illicit drugs. If the police insist on questioning the victim, (s)he may lie about the details or deny her or his victimisation altogether. Victims of systemic violence who are not connected with the illicit drug trade will not necessarily know the reason for being assaulted. If they do know the reason, they are often disinclined to report it to the police for fear of reprisal. Another countenance of systemic violence is the viciousness of the violence. Hospital emergency rooms will occasionally identify distinct patterns of injury related to drug dealing such as drug runners who appear with gunshot wounds to the legs and knees.¹⁶ Another style of assault described by De La Rosa is 'pithing'. Pithing is the intentional cutting of the victim's spinal cord. This leaves the victim alive, but paraplegic. It is also not unusual for disputes between traffickers to escalate to the point that assassins are hired to kill a

Drug abuse and Unemployment

The social consequences of illicit drug use and alcohol abuse present society and policy makers with a complex and difficult problem, the solutions to which are not well supported with readily available data. There is widespread concern about the connection between drug use and acquisitive crime, and the extent of the external health-related and labour market costs that are

most likely associated with alcohol and drug abuse. This latter concern has stimulated a lot of academic interest in recent years, not least because of the emergence of large social surveys that yield sufficient information to analyse these problems in some detail. For example, the relationship between alcohol consumption and labour market outcomes has received a lot of attention in the empirical literature (French, & Zarkin., 1995; Hamilton, & Hamilton., 1997; Heien., 1996).

In addition, there is a growing body of empirical research that has considered the relationship between illicit drug use and wages or labour supply. What is intriguing about this research is that in allowing for drug use and labour market outcomes to be determined endogenously, there is a tendency to find a positive relationship between the two variables. We first see this result in Kaestner (Kaestner., 1991), Kaestner used data from the US National Longitudinal Survey of Youth (NLSY) and found that once endogeneity of drug use and wages was taken into account, increased frequency of illicit drug use (in this case cocaine or marijuana) was associated with higher wages. This result, consistent across gender and age groups, was also supported by Gill and Michaels (1992) and Register and Williams (1992) who used the same data but slightly different approaches to control for the self-selection of individuals into drug use and the labour market. Kaestner's (1994A) follow-up work, using two waves of the NLSY, lent further support to these findings, although the longitudinal estimates suggested that the relationship between drug use and wages tended to vary according to the type of drug and individual. Kaestner (1994b) also found that his longitudinal estimates did not support a systematic effect of drug use on labour supply. The possibility of a 'family' of different wage-drug use relationships was given further support by Kandel *et al* (1995), who found that the positive relationship disappeared as the cohort of NLSY respondents got older. In particular, whereas Kandel *et al.* found a positive relationship between drug use and wages for NLSY respondents in their twenties, for those later on in their career the relationship was negative.

Curiously, using the same data Burgess and Propper (1988) were not able to replicate this result, finding that soft drug use has no impact on the earning of men in their twenties or thirties. Finally, Zarkin *et al* (1998b) using data from the US National Household Survey on Drug Abuse (NHSDA) found that there was little evidence to support a negative impact of drug use on hours of labour supplied. However, although Zarkin *et al.* find that this result holds when subsequent

NHSDA samples were treated to the same analysis, one must bear in mind that hours of labour supplied does not necessarily reflect the impact of drug abuse on actual employment. In this paper we use data from the British Crime Survey (BCS) to explore the drug use-labour market outcomes relationship in a British context. We pay particular attention to the impact of early hard and soft drug use on current employment status and occupational attainment. This approach is new to the literature as we consider the current labour market status of the individual and his or her occupational attainment as jointly determined with current drug use. To explore these issues we proceed as follows. In the next section we provide a brief discussion of the current data set, following which we set out our empirical methodology. In doing this we highlight an observational deficiency that stems for the current BCS questionnaire design.

Substance abuse is widely considered to be one of society's ills, for its private and social impacts on health and criminal activity. There is, however, a growing area of research into the relationship between substance abuse and labour market outcomes. The impact of alcohol consumption on earnings has received particular attention in recent years, but there is also concern about the effects of illicit drug use on labour market outcomes, an issue originally highlighted by Culyer _1973. The negative consequences of drug use for the physical and psychological well being of individuals can lead to chronic absenteeism and frequent spells out of the labour market. This reduced labour market experience of drug users will ultimately result in a lower aggregate level of human capital accumulation, tending to reduce overall productivity and hence, living standards _Kaestner, 1994a.. Thus, assuming that workers receive the value of their marginal product as pay, then the reduced productivity level of drug users would manifest itself through lower wages. Moreover, psychological or physical dependence implies that these impacts are not simply an optimal private decision in the long term. Although the negative relationship between illicit drug use and productivity seems plausible, there has been recent work questioning this view. Modern research recognises that single-equation models suffer from bias arising from the simultaneity of drug use and wages, and from the existence of unobserved heterogeneity. These bring into question the direction of causality in a wage equation which has a measure of drug use as an explanatory variable. The endogeneity issue is clear if we think of drugs as a normal consumption good, the level of which is determined in response to market wages and non-labour income. If, however, we also assume that drug use has a negative impact

on an individual's wage, then this implies simultaneous causation between drug use and wages. The heterogeneity problem arises because unobserved attributes that affect wages or employment outcomes are quite likely to overlap with the characteristics that influence an individual's choice to take drugs. For example, the unobserved characteristic could be a high rate of time preference, causing individuals to select high-paying jobs without consideration for investment in human capital, but also, according to Becker and Murphy (1988), making them more likely to take drugs. The purpose of this paper is to address these issues that have been raised in a US context, using data from the UK. To do this, we use data from the British Crime Survey (BCS) and estimate a joint model covering past and current drug use together with unemployment and occupational attainment. The BCS sample spans a greater age range than previously used US data, so we are also able to consider the lifespan perspective of illicit drug use (Kandel et al., 1995). In Section 2, we discuss the relevant literature in this area, including that which focuses on the impact of alcohol abuse on labour market outcomes. We then consider the BCS data set, its advantages and shortcomings, and the sample properties. In Section 4, we develop our empirical model and present our estimation results in Section 5.

Drug Abuse and attainment

There is a growing body of empirical evidence in the labour economics literature that suggests that once endogeneity is accounted for, one rarely finds a significant negative relationship between substance abuse and wages. Kaestner (1991), using data from the NLSY, finds that, if anything, increased frequency of illicit drug use in this case, cocaine or marijuana, is associated with higher wages. This result, consistent across gender and age groups, was found using a Heckman two-stage estimate of a wage equation. Likewise, Gill and Michaels (1992), and, using the same data as Kaestner but slightly different approaches to control for the self-selection of individuals into drug use and the labour market, find very similar results. These findings echo the results that have been found for the relationship between alcohol and wages. For example, Berger and Leigh (1988), using data from the US Quality of Employment Survey and taking account of self-selection, found that drinkers receive higher wages, on average, compared to non-drinkers. More recent work has recognised a non-linear relationship between alcohol consumption and wages. For example, using different sources of Heien (1996).

MacDonald and Shields (2000). present results that support a quadratic relationship between drinking intensity and wages.¹ In each case, alcohol consumption is shown to have an increasingly positive association with wages up to a point, after which there is a rapid drop-off in earnings for heavy drinkers compared to moderate drinkers. There is, however, some research that questions this general view. As a follow-up to previous results, Kaestner (1994b). presents cross-sectional and longitudinal estimates using two waves of the NLSY. The cross-sectional results are generally consistent with the previous studies, but the longitudinal estimates only provide partial support for the positive relationship between drug use and wages. The results suggest that the wage–drug use relationship varies according to the type of drug and individual; e.g., a positive relationship between cocaine use and wages for females, but a negative relationship between marijuana use and wages for males. Moreover, Kandel et al. (1995). suggest that the relationship between drug use and wages will vary with the stage of an individual’s career. Using a follow-up cohort of the NLSY, they find a positive relationship between drug use and wages in the early stages of an individual’s career, but a negative relationship later on in the career, in the mid-thirties.. However, Burgess and Propper (1998), using the same data source, are not able to replicate this finding. In their analysis, they consider the effects of early life behavior, such as drug and alcohol consumption. and later life outcomes, including productivity. Their results suggest that adolescent alcohol and soft drug use have little or no effect on the earnings of men in their late twenties or thirties, although they do find that early hard drug use has a significant negative impact.

Drugs and physical health

Substances commonly associated with drug abuse-related deaths are cocaine, heroin (and other opiates), barbiturates and amphetamines (and amphetamine derivatives). Benzodiazepines, hallucinogens, cannabis and other substances are less frequently implicated. Combinations of drugs and alcohol were frequently noted. Although commonly used, the term "overdose" is misleading since different reactions, such as hypersensitivity, may be the real mechanism of death in some cases rather than an acute intoxication effect due to excessive amounts of the drugs. Availability, cost, chemical contents of the drugs (e.g. adulterants), preexisting and

potentially life-threatening health problems and patterns of use are all factors that may play key roles in determining whether harmful effects occur in any individual case. The most widely used controlled drug, cannabis, could be associated with some fatal accidents despite its low acute toxicity. Concerning chronic use, there may be greater risks of damaging the lungs by smoking cannabis than tobacco.

Drugs abuse and Mental Health

Experience of abuse It has been suggested that understanding women's involvement in the criminal justice system as offenders must also involve recognition of their frequent status as victims (White & Habibis 2005). Past research has found that a significant proportion of female offenders have a history of physical and sexual abuse as an adult and/or child victim (Johnson 2004). Mouzos and Smith (2007) found that female detainees were more likely than males to have experienced at least one incident of physical confrontation with an intimate partner at some point in their lives (81% vs 56%).

Further evidence for the high levels of abuse experienced by female offenders comes from comparing the results of an Australian female prisoner study (Johnson 2004) with a survey of Australian women in the community who participated in the *International Violence Against Women Survey* (Mouzos & Makkai 2004). Female prisoners were more likely than women in the general population to report having experienced sexual violence before 16 years of age (37% vs 18%), to have experienced physical violence as a child that was perpetrated by parents (30% vs 18%) and to have experienced physical violence as an adult (68% vs 48%). Importantly, numerous studies have found that experiences of abuse are often associated with the development of anxiety disorders, such as post-traumatic stress disorder, which can then lead to abuse victims self-medicating with illicit drugs and other substances (Byrne & Howells 2002; Johnson 2004; Logan et al 2006; Najavits, Weiss & Shaw 1997). Compared with research on prior experiences of abuse and how this relates to drug use and offending, the relationship between drug use, offending and mental health is relatively under-researched and studies which also incorporate gender differences are few. Australian studies have found that prisoners experience mental health problems at considerably higher levels compared with the general

population In a review of the mental health status of NSW prisoners, it was found that 74 percent had experienced a psychiatric disorder in the previous year compared with 22 percent of people in the general population (Butler & Allnut 2003).

In particular, it has been found that female prisoners are more likely than male prisoners to suffer from psychiatric disorders (Butler & Allnut 2003). Among female prisoners participating in the *Drug Use Careers of Offenders* study, 60 percent reported experiencing mental health problems while growing up and 34 percent reported having received a diagnosis for a mental health problem (Johnson 2006). Furthermore, the prevalence of mental health problems was higher among women prisoners dependent on drugs compared with non-dependent women prisoners. While the coexistence of drug dependence and mental illness has been found in both prisoners and people in the community, Mullen (2001) points out that this does not necessarily indicate a causal relationship. There are few Australian studies which have investigated the relationship between drug use and offending and also examined the combined role of mental health and experience of child abuse on this relationship. Furthermore, very few studies have examined gender differences in this relationship, despite the implications this has for informing policies regarding the complex treatment needs of offenders who may have issues with drug/alcohol use, mental health and experiences of child abuse. In addition, the majority of studies are based on prison populations; therefore their applicability to offenders who are not incarcerated is unclear.

CHAPTER III

OBJECTIVES OF THE STUDY

The objective of this research project was to investigate the prevalence of substance abuse among different age groups belong to different areas of Karachi (i.e., Lyari, Korangi & Sultanabad). Substance abuse cause different problems in society such as poverty, unemployment, violations and crimes. These areas such as, Lyari, Korangi and Sultanabad are more vulnerable toward substance abuse. Further, study highlights the demographic factors and their association in drugs abuse. Following are the objectives which are formulated such as;

1. To explore the demographic characteristics which cause substance abuse in society
2. Explore the frequency of soft and hard drugs in these areas
3. To identified the resources/availability of drugs in society
4. Drug abuse trends in society enhance drug addiction in society
5. To explore and compare the frequency of use of drugs abuse in target areas
6. To identify the inflation rate of drugs abuse according to occupation in the targeted areas
7. To explore frequency of psychological problems in target areas
8. To explore the tendency of drug abuse in socioeconomic status
9. Effects of drug abuse on students education
10. Explore the reasons which cause drug addictions
11. To explore what age group is more prone for drug abuse prevention

RESEARCH QUESTIONS

Question statement is raised by keeping view the demographic characteristics of the present population which is overwhelming in substance abuse. Similarly, previous literature is supported that demographic variables such as age, education, socioeconomic status, and company/environment and drugs mafia are more vulnerable factors to drug prevention. After reviewing these elements following research questions are formulated such as;

1. There is high prevalence of soft drugs in all target areas
2. Soft drugs leads toward hard drugs in society
3. Unemployed are at high risk to take drugs
4. Workload/labours are more prone towards drug abuse
5. Middle socioeconomic perceived high frequency of drug abuse as compared to others
6. Lack of awareness about drugs leads towards drug abuse
7. Lack of education among people increase rate of drug abuse in society
8. Adolescents are more prone toward drug abuse as compared to others
9. High rate of drug abuse influence students education
10. High prevalence of drugs abuse increase high rate of violations and crimes in society
11. High frequency of psychological problem leads toward drug abuse.
12. Easily availability of drugs enhance the rate of drug abuse in society
13. Lack of facility increase the rate of prevalence of drug abuse
14. All the participants belong to target areas perceived low level of sexual knowledge

CHAPTER IV

METHOD

Participants

The target population of this survey was comprised of Korangi, Layari and Sultanabad. The purpose to conduct research in these specified areas, that these areas have more drugs zones and more prone toward drugs abuse. Due to which high rate of crime is observed there. In fact these areas are vulnerable toward drug addictions and rate of crimes is increasing there. Initially, mapping was done of each area and then participants were targeted. The purpose sampling techniques was used to target the sample population. The total sample of this survey was comprised to 3528 participants. Further, data was collected from three areas such as Korangi, Layari and Sultanabad. The total sample was comprised of (N=3528), and it divided into Korangi 40.3% (N=1421), Layari 26.4% (N=930) and Sultanabad 33.4% (N=1177). In this survey, both the males and females were included. Total males were 69.0% and females were 30.9% in the survey. Age range of the participants was 12-55 years old. The mean age of the sample was (M= 26.70, SD=9.87). Participants' education level was categorized into Uneducated (N=518), Primary (N=713), Middle (N=704), Metric (N=952), Intermediate (N=422), Graduation (N=162) and Master level (N=67). Most of the participants were Muslim 90.4% (N=3191), Christian were 9.5% (N=334) and Hindu were 0.1% (N=3). Participants were taken all socioeconomic status. All the participants were community members and have different occupation such as government employees were 8.9% (N=316), private employees were 16.8% (N=591), businessmen were 12.16% (N=446), labors were 24.4% (N=860), unemployed were 12.8% (N=453) and students were 24.5% (N=863). Total sample were taken from birth order from one to eight.

Research Tools

Self prepared Survey Form by the researcher was used to assess drug abuse ratio in the target areas of Karachi (i.e. Korangi, Layari & Sultanabad). Whole Survey Form includes seven

major domains which were administered on the participants to receive in depth information. The detail of the major domains is given below;

Part-1

Demographic Information

Demographics information was used to investigate the personal information of the participants such as, age, religion, education, place of birth, gender, family structure, home status, marital status, numbers of family members, and numbers of children, siblings, earning members, numbers of addicts at home, occupation, monthly expenses, socioeconomic status, and daily expenses on drugs. Furthermore, information was taken related to daily activities, company of friendship, drugs zones, availability of drugs, crimes in society, and health related problems.

Part-2

Information about Drug Abuse

Part two of Survey Form comprised of 16 items. This part of Survey Form identifies the level of drug abuse and use of drugs (Soft & Hard Drugs) in the community. Furthermore, it includes the resources which drug users use to achieve drugs. Methods of drug use and illness due to drug abuse in the community. This part also measures the effects of drugs on the children education, drug zones, facility resources, availability resources of drug abuse in the community. In addition, the reasons which increase the level of drug abuse in community. It also measures the risk factors and places which give birth to drug abuse.

Part-3

Awareness and Knowledge about Drugs

Part three measures the level of awareness among the community members regarding drugs abuse. This part also identifies that what are the facilities which are available in the areas such as, treatment opportunity, awareness programs, prevention programs, consequences of drug

abuse, counsel the community to stop drugs, and take the responsibility to stop others to use drugs.

Part-4

For Individual below Age 18 Years

This part measures the academic performance of students in the current as well as previous class. Either academic performance of students is at satisfactory level, average level or dissatisfactory level. This part also measures the role of parents in children education. In addition, students interest towards study and parents attention toward children education.

Part-5

Sexual Trends and Sexual Behaviors

This part identifies the sexual trends and sexual behaviors in the community. Item one and tow included to assess cases of rape or sexual harassment and explanation of the events. Furthermore, nine items measures the awareness among community persons regarding sexual knowledge, sexual awareness, precaution during sex, and awareness about sex partner, illness due to sex and drugs, and knowledge about the diseases.

Part-6

Participants Relationships with others

Part six measures the frequency of drug abuse in the circle of participants such as children, women, men, relative and friends. It also assesses how many people are using drugs in the circle of participants. This part also measures the level of drug abuse among community members and what are the drugs which are frequently used in the areas.

Part-7

Psychological Problems among Individuals with drug abuse

The last part of the Survey Form assess the frequency of psychological problems, which are common among the community individuals and what are the risk factors which push the person toward drug abuse. This part focuses on the symptoms of depression, anxiety, memory problems and stressors in the life of drug users.

Procedure

Initially, Karachi Youth Initiative (KYI) coordinates with Drug Free Pakistan Foundation (DFPF) to launch project in the areas of Karachi (i.e.Korangi, Layari & Sultanabad). The purpose of this project was to work over drug abuse prevention in these areas that drug abuse, crimes rate and unemployment is increasing in these areas day by day. For the welfare of these societies Drug Free Pakistan Foundation launch research project in Korangi, Layari, and Sultanabad with the collaboration of Karachi Youth Initiative. Research procedures started with the mapping of these areas in order to data collection. Then Survey Form as formulated by the panel of researchers and some others experts.

After completion of Survey Form, the focus group as conducted in order to find out the effectiveness of the Form. In next step, the groups of volunteers were approached from these communities in order to data collection. Three research teams were formulated for data collection. Later on, the panel of researchers provided training to all three teams for data collection.

The teams of volunteers approached the participants and briefly describe the participants about the significance of the survey and its importance. Further, to assure the participants that your information will remain confidential. All the information that you are providing about yourself and it will remain secure and it will not disclose to anyone. In fact, the purpose of this information is evaluating the problems which you are facing day by day in surrounding. This survey is totally in the favor of you that we are trying to observe the problems which are

affecting the growth of society peace and effectiveness. You will not be paid by the organization in case of participation in research. There are no benefits for you to participate in research, although your participation will help the authorities to understand the nature of problems overviewed by the researchers and agencies. Briefing will make sure the participant is motivated to participate in research, when they will be able to understand the aims and objectives of this research project against drug prevention. Researcher will assure the participants that you have a chance to quit from the research at any time, when you will feel little level of discomfort or distress during research. After consent from the participants, researcher will give the form and it will be asked to read the form carefully and if you are agreed you will sign the below for willingness to participate in research.

Initially, a team of volunteers met the participants and motivated the person for participation. A brief interview was conducted with the participants in order to get the history regarding involvement in drugs or history related to his/her problems. After that demographic form will be given to the participants in order to obtain personal information from the participants.

Then survey form was filled. At the end of completion of survey form participants were acknowledged and highly appreciated for their cooperation and coordination. After collection of the data, the data was sorted out and recruited by the research supervisor. The incomplete forms were discarded and complete forms were referred for scoring procedures. After scoring procedures the data was referred to excel sheet. Researcher also provides the proper training to the data entry teams. After data entry the data was transferred to SPSS, Vol.17 for statistical analysis.

Furthermore, researcher frequently visits the teams of volunteers and checks them during the data collection. Most of the important problems were encountered in the areas where people were not ready to participate in the research as participants. Team of volunteers faces a lot of difficulties and threats during the data collection. It is observed during the data collection, one participant out of three was ready to fill out the form but two of three were not ready to participate in the survey due to lack of awareness about research and their effectiveness.

Statistical Analysis

Descriptive statistics (mean, standard deviations, variance, and standard error of the mean, confidence intervals) were computed through Statistical Package for Social Sciences (SPSS, Vol. 17).

Ethical consideration

Approval of the study would be obtained from the organization authorities. In the process of study we would adhere to four key ethical principles: respect for the person's rights and dignity, competence, responsibility and integrity.

CHAPTER V

RESULTS AND DISCUSSION

The total sample of the survey was comprised of (N=3528) participants. Further, sample was divided into three areas such as, Korangi 40.3% (N=1421), Layari 26.4% (N=930) and Sultanabad 33.4% (N=1177). In this survey, males were 69.0% and females were 30.9% in the entire sample. Sample age range was 12-55 years. The mean age of the sample was $M= 26.70$, $SD=9.87$. Participants in the survey were taken from different educational level such as, Uneducated (N=518), Primary (N=713), Middle (N=704), Metric (N=952), Intermediate (N=422), Graduation (N=162) and Master level (N=67). All the participants were community members and have different occupation such as government employees were 8.9% (N=316), private employees were 16.8% (N=591), businessmen were 12.16% (N=446), labors were 24.4% (N=860), unemployed were 12.8% (N=453) and students were 24.5% (N=863).

Furthermore, the findings reported that frequency of soft drugs was high in the area of Korangi (i.e. Cigarette=97.3%, Paan=81.7%, Guttka=81.3%, Chhalia=89.0%, Shesha=60.9% & Nuswar=23.7%), in Layari (i.e. Cigarette= 72.3%, Paan=71.6%, Guttka=70.2%, Chhalia=64.6%, Shesha=39.4% & Nuswar= 32.2%) and in Sultanabad (i.e. Cigarette =71.4%, Paan=54.7%, Guttka=46.6%, Chhalia=, Shesha= 46.6% & Nuswar=25.4%). On the other hand, the frequency of hard drugs was found also interpretable in Korangi (i.e. Charse=47.9%, Heroin=41.6%, Afeune=33.4%, Alcohol=53.6%, Cristal=45.8%, Cocaine=13.1%, Injection=11.8% & Un-prescribed Medication=4.9%), in Layari (Charse=22.5%, Heroin=24.5%, Afeune=24.7%, Alcohol=39.7%, Cristal=33.8%, Cocaine=26.6%, Injection=8.80% & Un-prescribed Medication=5.70%) and in Sultanabad (i.e. Charse=28.3%, Heroin=29.6%, Afeune=21.7%, Alcohol=39.2%, Cristal=22.4%, Cocaine=39.8%, Injection=5.5% & Un-prescribed Medication=3.6%).

It was observed that the frequency of cigarette smoking was found high in whole sample because most of the drug users started drugs from cigarette smoking, but frequency of Nuswar was found 26.6% in whole sample while frequency of Nuswar were found low due to high trends of others soft drugs but frequency of Nuswar was found high in Layari (32.2%) as compared to Korangi (23.7%) and Sultanabad (25.4%).

More findings represented that the frequency of alcohol use was found high (45.2%) in whole sample as compared to others hard drugs in all three target areas. Similarly, the frequencies of Charse (34.6%), Heroin (33.1%) and Cristal (34.8%) were also found significant. It is observed that the prevention of these hard drugs is linked with high degree of soft drugs uses. On the other hand, the frequency of non-prescribed medication was found 4.6% in whole sample which is less than the frequencies of others hard drugs. Findings reported that rate of alcohol use is high in Korangi (53.6%) as compared to Layari (39.7%) and Sultanabad (39.2%), while use of Cocaine (39.8%) was found high in Sultanabad as compared to Korangi and Layari

In addition, the further findings represented that only 4.3% participants are availing the facility of treatment in the sample of 3528 while 95.7% participants are deprived from this facility. Moreover, 98.5% participants are deprived from the support of other to provide knowledge about the harmful effect of drugs. Findings reported that 97.7% people are deprived to avail opportunity of treatment from drug abuse for self as well as for his/her family members. Findings reported that 97.6% people are deprived from this facility in three areas of Karachi, 94.8% people are deprived from the facility and only 5.2% people are availing this opportunity. In addition, lack of awareness about the drugs is also high 68.7% people are deprived about the awareness, while 31.2% people are known about the drug abuse consequences but due to inflexibility of environment they are bound to abuse drugs. It is observed through the findings that 73.3% people do not stop others to abuse drugs. It indicates that there is no restriction in the society to abuse drugs. Only 26.7% people try to stop others but they are unable to stop due to increasing trends of drug abuse in the society.

Similarly, the psychological problems such as lack of empathy, suicidal ideation and feeling inferiors are found at high degree (68.4%, 68.0% & 67.1%). The high degree of these psychological problems is consistent with that lack of empathy in relationships effect the person self worth and it leads towards suicidal ideation. Moreover, mood related problems were also found common and high in the entire sample such as lack of interest (65.8%), crying spells (66.7%), disturb sleep (66.2%), poor appetite (65.4%) and lack of attention (65.2%). Furthermore, psychological problems were found common in the whole sample such as Sadness (59.7%), Helplessness (60.4%), Aggression (50.1%), Irritability (50.2%), Conflicts (54.7%),

Isolation (53.0%), Fatigue (57.2%), Face difficulties (55.8%), Forgetfulness (50.2%), Lack of trust (61.7%), Disturbed most of the time (63.7%), No solution of my problems (67.4%) and Insecurity (39.8%). It is observed that the frequency of the psychological problems consistent with frequency of drug abuse in the entire sample. On the other hand, some of the problems are found high in the Layari such are Insecurity (77.9%). It is concluded that the frequency of psychological problems consistent with the psychosocial problems of the Layari.

Table-1

Descriptive Statistics (Percentages) of Areas, Age, Education, Gender, Family Structure, and Marital Status of the entire sample in Karachi

Demographic Variables	Categories	Frequencies	Percentages	Cumulative Percents
Aras				
	Korangi	1421	40.3	40.3
	Layari	930	26.4	66.6
	Sultanabad	1177	33.4	100.0
	Total	3528	100.0	100.0
Age				
	12-18	773	21.9	21.9
	19-25	1173	33.2	55.2
	26-34	823	23.3	78.5
	35-40	386	10.0	89.4
	40>	373	10.0	100.0
	12-55	3528	100.0	100.0
Education				
	Uneducated	518	14.7	14.7
	Primary	713	20.2	34.9
	Middle	704	20.0	54.8
	Metric	952	27.0	81.8
	Intermediate	422	12.0	93.8
	Graduation	162	4.6	98.4
	Master	57	1.6	100.0
	0-16	3528	100.0	100.0
Gender				
	Male	2439	69.1	69.1
	Female	1089	30.9	100.0
	Total	3528	100.0	
Family Structure				
	Joint	1887	53.5	53.5
	Nuclear e	832	23.6	77.1
	Portion	809	22.9	100.0
	Total	3528	100.0	
Marital Status				
	Single	1809	51.3	51.3
	Married	1514	42.9	94.2
	Divorce	56	1.6	95.8
	Separation	54	1.5	97.3
	Widow	95	2.7	100
	Total	3528	100.0	

Table-2***Descriptive Statistics (Percentages) of Home Status, Occupation, Monthly Income, and Birth Order of entire sample in Karachi***

Demographic Variables	Categories	Frequencies	Percentages	Cumulative Percents
Home Status				
	Own	2600	73.1	73.1
	Rent	658	18.6	91.7
	Self-paid	147	4.2	95.9
	Others Paid	145	4.1	100.0
	Total	3528	100.0	
Occupation				
	Govt. employees	315	8.9	8.9
	Private	591	16.8	25.7
	Businessmen	446	12.16	38.3
	Labors	860	24.4	62.7
	Unemployed	453	12.8	75.5
	Students	863	24.5	100.0
	Total	3528	100.0	
Monthly Income				
	Less than earning	960	27.2	27.2
	More than earning	897	25.4	52.6
	Equal earning	1069	30.3	82.9
	Borrow others	602	17.1	100.0
	Total	3528	100.0	
Birth Order				
	1 st	856	24.3	24.3
	2 nd	747	21.2	45.4
	3 rd	591	16.8	62.2
	4 th	344	9.8	71.9
	5 th	239	6.8	78.7
	6 th	259	7.3	86.1
	7 th	195	5.5	91.6
	8 th	297	8.4	100.0
	Total	3528	100.0	

Table-3

Descriptive Statistics (Percentages) of tendencies/trends of drug abuse according to Time Spend, Socioeconomic Status, Occupations, Age at Drug Abuse, Illness, and Monthly Expenses on Drug Abuse among entire sample in Karachi

Tendencies of Drug Abuse in the Entire Sample	Categories	Frequencies	Percentages	Cumulative Percents
Time Spend	No activities	1724	48.9	48.9
	With friends	842	23.9	72.7
	Play activities	103	2.9	75.7
	Job	502	14.2	89.9
	Business/shop	357	10.1	100.0
	Total	3528	100.0	
Tendency of Drugs in SES	Low SES	621	17.6	17.6
	Middle SES	1775	50.3	67.9
	High SES	1132	32.1	100.0
	Total	3528	100.0	
Tendency in Occupation	Govt. employees	176	5.0	5.0
	Private	189	5.4	10.3
	Factory workers	302	8.6	18.9
	Labor	1096	31.1	50.0
	Business	241	6.8	56.8
	Unemployed	1524	43.2	100.0
	Total	3528	100.0	
Age at Drugs Abuse	Never drug uses	359	10.2	10.2
	7-14 Years	375	10.6	20.8
	15-20 Years	1979	56.1	76.9
	21-25 Years	705	20.0	96.9
	26 Years & Above	110	3.1	100.0
	Total	3528	100.0	
Illness	Physical	1176	33.3	
	Psychological	1003	28.4	
Daily Expenses on Drugs	Less 50	772	21.9	21.9
	50-150	1043	29.6	51.4
	151-400	1305	37.0	88.4
	401-2000	408	11.6	100.0
	0-2000	3528	<i>M=205.77</i>	<i>SD=234.303</i>

Table-3 shows that the participants have no activities perceived the tendencies of drug abuse were found high (48.9%) as compared to those who performs any daily activity. On the others hand, the tendency of drug abuse of participants who spends most of their time with friends were found 23.9%, while the participants perform daily play activities were found minor tendency of drugs (2.9%). It is observed that the participants who are involved in any type of activity of daily life the tendency of drug abuse as found low, while the participants who did not have any activity of life they are at high risk towards drug abuse.

Table 3 represented that the tendency of drug abuse were found high among the unemployed (43.2%) and labors (39.6%) as compared to government employees (5.0%), private (5.4%), and businessmen (6.8%) in the entire sample. The analysis reveals that unemployed people perceive more stress and they are prone toward drug abuse. On the other hand, workers and labors are also involved in drugs due to reduce their workload to build of efficiency in body to use drugs.

Table 3 represented the daily expenditures of participants utilize in substance abuse. The findings reported that the daily expenses for substance of per participant ($M=205.77$, $SD=234.303$). It is observed that the entire sample of 3528 participants belong to Korangi, Layari and Sultanabad in Karachi, Pakistan. This entire sample utilize amount of Rs=725957 for daily drug expenses, a very huge amount which is utilized to fulfill the need of drug addiction rather than the basic needs. Qualitative analysis reveals that these areas are not paying their attention on the harmful effects of spending a huge amount on drugs. Currently, these areas are at high level of financial crisis and psycho social problems. If they will not noticing about the money the next generation of these areas will turn into severe financial crises, crimes, illiteracy and unemployment.

Table 3 reported that the age between 15-20 years were found very risky age for drug addiction in the entire sample. Findings reported that 56.1% participants started to take drugs between ages 15-20 years and 20.0% participants started to take drugs between 21-25 years of age. The entire sample reported that most of the participants started to abuse drugs between ages

of 15-25 years. This age is very prone for drug addictions such findings also consist with previous researches.

Table-4

Descriptive Statistics (Percentages) of Students Academic Performance and role of parents in children education in sample of 774 students in Karachi

Role of Students and parents in study	Categories	Frequencies	Percentages	Cumulative Percent
Students' performance in Current class	Dissatisfactory Level	420	54.3	54.4
	Average Level	174	22.5	76.9
	Satisfactory Level	179	23.1	100.0
	Total	774	100.0	
Students' performance in previous class	Dissatisfactory Level	309	39.9	39.9
	Average Level	196	25.3	65.2
	Satisfactory Level	269	34.8	100.0
	Total	774	100.0	
Students interest towards study	Dissatisfactory Level	341	44.1	44.1
	Average Level	168	21.7	65.8
	Satisfactory Level	265	34.2	100.0
	Total	774	100.0	
Parents attention towards students	Dissatisfactory Level	345	44.6	44.6
	Average Level	139	18.0	62.5
	Satisfactory Level	290	37.5	100.0
	Total	774	100.0	

Table-4 represented that students academic performance in the current class were found high at dissatisfactory level (54.3%) as compared to students' dissatisfactory level (39.0%) of study performance in the previous class. Similarly, the survey findings reported that students interest toward study were found high at dissatisfactory level (44.1) as compared to average (21.2%) and satisfactory level (34.2%) in the entire sample of (N=774) students. In contrast, the parents' average level of pay attention over children education as found 18.8% and parents' satisfactory level of pay attention over children education was found 37.5% and parents' dissatisfactory level of pay attention over children education was found 44.6% which is high as compared to average and satisfactory level. The survey findings reported lack of parents' attention over children is consistent with students' dissatisfactory level of educational performance and

students' interest towards study. On the other hand, drug abuse prevalence is found high in the entire sample. It is observed that students performance influence by the drug addiction in the society. Due to which students' performance is gradually decreasing and students involvements in drugs is increasing. High rate of drug abuse in the society effect on education, and lack of education cause lack of awareness in society, when people use drugs without any fear of illness and psychosocial stressors.

Table 2.1

(a) Descriptive Statistics (Percentages) of Soft Drugs in the entire sample of (Korangi, Layari & Sultanabad) of Karachi

Soft Drugs	Korangi		Layari		Sultanabad		Total	
	N	%	N	%	N	%	N	%
Cigarette	1383	97.3	672	72.3	841	71.4	2895	82.1
Paan	1161	81.7	666	71.6	924	80.0	2769	78.5
Guttka	1165	81.3	660	70.2	930	81.0	2760	78.1
Chhalia	1264	89.0	601	64.6	644	54.7	2508	71.1
Shesha	866	60.9	366	39.4	547	46.6	2072	58.7
Coffee/Nuswar	337	23.7	301	32.2	299	25.4	937	26.6

Table-2.1 (a) represents that in Korangi frequency of soft drugs such as Cigarette, Paan, Guttka, Chhalia, Shesha and Nuswar (i.e. 97.3%, 81.7, 81.3%, 89.0%, 60.9% & 23.7) were found significantly high as compared to Layari (i.e. 72.3%, 71.6%, 70.2%, 64.6%, 39.4% & 32.2%) and Sultanabad (i.e. 71.4%, 54.7%, 46.6% & 25.4%). On the other hand, it is observed that the frequency of cigarette smoking was found high in whole sample because most of the drug users started drugs from cigarette smoking, but frequency of Nuswar was found 26.6% in whole sample while frequency of Nuswar were found low due to high trends of others soft drugs but frequency of Nuswar was found high in Layari (32.2%) as compared to Korangi (23.7%) and Sultanabad (25.4%).

Table 2.1

(b) Descriptive Statistics (Percentages) of Hard Drugs in the entire sample of (Korangi, Layari & Sultanabad) of Karachi

Hard Drugs	Korangi		Layari		Sultanabad		Total	
	N	%	N	%	N	%	N	%
Charse	680	47.9	209	22.5	333	28.3	1222	34.6
Heroin	591	41.6	228	24.5	349	29.6	1168	33.1
Afeune	474	33.4	230	24.7	256	21.7	960	27.2
Alcohol	762	53.6	369	39.7	462	39.2	1593	45.2
Cristal	651	45.8	314	33.8	264	22.4	1229	34.8
Cocaine	186	13.1	247	26.6	410	39.8	843	23.9
Injection	168	11.8	82	8.80	65	5.5	315	8.9
Medicines	69	4.9	53	5.70	42	3.6	164	4.6

Table 2.1 (b) represented that the frequency of alcohol use was found high (45.2%) in whole sample as compared to others hard drugs in all three target areas. Similarly, the frequencies of Charse (34.6%), Heroin (33.1%) and Cristal (34.8%) were also found significant. It is observed that the prevention of these hard drugs is linked with high degree of soft drugs uses. On the other hand, the frequency of non-prescribed medication was found 4.6% in whole sample which is less than the frequencies of others hard drugs. Low frequency of non-prescribed medication is due to high trends of others hard drugs, because others hard drugs are easily available in these areas but people are difficulty to approach medication. Findings reported that rate of alcohol use is high in Korangi (53.6%) as compared to Layari (39.7%) and Sultanabad (39.2%), while use of Cocaine (39.8%) was found high in Sultanabad as compared to Korangi and Layari. It is concluded that the prevalence of hard drugs in very high and it increasing due to factors of easily availability of drugs and common use of drugs in the society. High frequencies of soft drugs are also the factor to enhance the prevalence of hard drugs in the society. It is observed that the users of hard drugs were also involved in soft drugs. Soft drugs are the gate way to hard drugs in the entire sample. It is concluded that the frequencies of hard drugs in the entire sample is an indication of high rate of drug addiction in these areas in coming few years. This frequency of hard drugs abuse is an indicative of high risk of drug addiction, and it identified that the society is at high risk of drug addiction in recent few years.

Table 2.2

Descriptive Statistics (Percentages) of Source of Purchasing Drug in the entire sample of (Korangi, Layari & Sultanabad) of Karachi

Source of purchase drug	Korangi		Layari		Sultanabad		Total	
	N	%	N	%	N	%	N	%
With friends	718	51.2	565	60.8	301	25.6	1393	39.5
By shops	809	56.9	437	47.0	574	48.7	1819	51.6
Self approach	854	60.1	441	47.4	732	62.1	1741	49.3
Snatching	544	38.3	188	20.2	118	10	849	24.1
Stealing	665	46.8	270	29.0	167	14.2	1101	31.2
By conflicts	375	26.4	208	22.2	122	10.4	7.2	19.9
Others	50	3.5	91	9.8	20	1.7	161	4.6

Table 2.2 represented that in Korangi and Sultanabad 60.1% and 62.1% people self approach the drugs due to availability of drugs and no restriction or fear to purchase drug openly in the areas. Entire sample reported that 51.6% people purchase drugs from shop, which is also an indicative of easily availability of drugs in the areas. The next important factors of drug abuse in the society are the common trends of substance abuse among the company of friends. The resource to approach drugs through friends are very common in Korangi and Sultanabad (i.e. 51.2% & 60.8%), because drug abuse trends are common in friends in these areas, while in Sultanabad this trend is at low frequency (25.6%) because this trend is shift into common availability of drugs at shops (62.1%). One of the most important factors is friendship and it plays a significant role in society to involve the individuals in substance abuse. On the other hand, in the entire sample 24.1% cases were found that they achieve drugs once a time in life through snatching and 31.2% stealing cases were found in the whole entire sample which is collected from Korangi, Layari and Sultanabad. It is observed that easily availability of drugs at shops, no restriction to purchase drugs, and use of drugs as a common trend among friends increase the frequency of drug abuse prevalence. These trends push the people toward trends of stealing, and snatching. Therefore, most of the people involves in these trends and they have no need to approach drugs through others factors. Only 4.6% participants of whole entire use the others resources to approach drugs which is not significant due to the easily availability of drugs at shop, self purchase and among friends.

Table 2.3

Descriptive Statistics (Percentages) of participants' source of time spending and relationship with drugs the entire sample of (Korangi, Layari & Sultanabad) of Karachi

Time Spending	Frequencies	Percentages	Cumulative Percent
At home/friends	2566	72.7	72.7
Play activities	103	2.9	75.7
Job	502	14.2	89.9
Business/shop	357	10.1	100.0
Total	3528	100.0	

Table 2.3 represented that most of the people spend their time at home or with friends (72.7%) and only 2.9% participants spends their time in play activities. Moreover, 14.2% people spent their time on job and 10.1% people spend their time at business activities. The findings reported that the time with friends and at home are very important for the individual that person learn both of them. Environment of home and company of friends play a significant role in person perception towards society trends. Due to which if the individuals are more involves in company of rinds and time at home and both the factors are suffering from drug abuse environments. Therefore, drug abuse trends are very common in these areas that the society environment is very important for the individual.

Table 2.4

Descriptive Statistics (Percentages) of reasons to start drugs in the entire sample of (Korangi, Layari & Sultanabad) of Karachi

Reasons to start Drugs	Frequencies	Percentages	Cumulative Percent
Not Mention and Never Used drugs	1735	49.2	49.2
Due to Sadness	11	.3	49.5
Bad environment at home	101	2.9	52.4
With company friends	653	18.5	70.9
As fun	664	18.8	89.7
In a gathering	71	2.0	91.7
Relaxation of mind	53	1.5	93.2
Own wish	80	2.3	95.5
Peer pressure	31	.9	96.3
Satisfaction	23	.7	97.0
Taste	30	.9	97.8
Tension	76	2.2	100.0
Total	3528	100.0	

Table 2.4 represents the reasons to start drugs, the entire sample reported that 49.2% people never used/not mention the reason to take drugs, while the 18.8% participants started to take drug due to enjoy with drug or as fun and 18.5% participants started drug with the company of friends. These findings consistent with the Table 2.3 that most of the participants spend their time with company of friends or at home. Both the places are full of drug trends and drug involvements.

Table 2.5

Descriptive Statistics (Percentages) of Method of Drug abuse in the entire sample of (Korangi, Layari & Sultanabad) of Karachi

Methods of Drug uses	Korangi		Layari		Sultanabad		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Injection	230	16.2	156	16.8	158	13.4	544	15.4
Cigarette	708	50.0	378	40.6	438	37.2	1523	43.2
Eat/Chew	847	59.6	470	50.5	766	65.0	2083	59.0
Inhale	229	16.1	371	39.9	293	24.9	893	25.3
Through cigarette	82	5.8	144	15.5	42	3.6	268	7.6
Others	260	18.3	216	23.2	79	6.7	555	15.7

Table 2.5 represents the methods to abuse drugs, the findings reported that 59.0% participants chose the method of eat/chew, but this method of taking drugs is more common in Sultanabad (65.0%). On the other hand, 43.2% participants are using the methods of taking hard drugs through cigarette smoking, these findings consistent with high degree of cigarette smoking in table of soft drugs. The way of taking drugs through inhale is more common in Layari (39.9%) as compared to Korangi and Sultanabad.

Table 2.6

Descriptive Statistics (Percentages) of Risk Factors to involve in drugs in the entire sample of (Korangi, Layari & Sultanabad) of Karachi

Risk factors to increase drug abuse	Korangi		Layari		Sultanabad		Total	
	N	%	N	%	N	%	N	%
Drug addiction								
Poverty	944	66.4	434	46.7	381	32.2	1764	50.0
Poor Parent's attention	1005	70.7	300	32.3	278	23.6	993	28.1
Effect of society	470	33.1	391	36.7	389	33.0	1200	34.0
Lack of awareness	1133	79.1	267	28.7	354	30.0	2616	74.1
Easy drugs Availability	1293	91.0	572	61.5	909	77.2	2774	78.6
No legal check and balance	154	10.8	315	33.9	421	35.7	890	25.2
Rate of crimes	1332	93.7	666	71.6	749	63.6	2747	77.9
Poor Image due to use of drugs	1267	89.2	307	33.0	522	44.3	983	27.5
Drug trends in society	1346	94.7	736	79.1	804	68.3	2885	81.8
Effect on Health	1368	96.3	774	83.2	1014	86.1	2600	73.7
Drugs shopkeepers are in the favor of increase drugs in society?	1323	93.1	716	77.0	986	83.7	2456	69.6

Table 2.6 represents the opinions of participants about the risk factors to take drugs. This table provides the information which is according to the participants' knowledge, perception and awareness about drugs. In Korangi 96.3% people reported that use of drugs is affecting of the health of people these findings also consistent with the findings of Layari (83.2%) and Sultanabad (86.1%). Participants reported that health problems have been become common in these areas due to drug abuse prevalence. In addition, 94.7% participants reported that drug addiction is spreading due to common trends of drug addiction in the society. While 93.1% participants reported that sub stance abuse is due to availability of drugs and drug dealer are promoting this trends in the society for their earning purpose. These findings also consist with easily availability of drugs resources. While on the other hands, findings of Layari and Sultanabad are less in understanding than the Korangi, it means that Lack of awareness level is seemed to be high in these two areas. Further findings are very interesting that in Korangi 89.2% people reported that person perceives poor self image due to involve in addiction but this awareness rate is very low in Layari (33.0%) and Sultanabad (44.3%). It is observed that participants of Layari and Sultanabad have low level of awareness about the effect of drug

addiction on person well-beings. Further, the above table mentioned that the participants of Korangi perceive high level of awareness as compared to Layari and Sultanabad. While these findings contradict with table 2.1.a of soft drugs that soft drugs are used at high frequency in Korangi however they have awareness. The analysis reveals that people of Korangi have awareness about drugs but society environment is stricter on participants to reduce drugs. But these findings consistent with table 2.11 that availability of drugs is high in Korangi as compared to Layari and Sultanabad.

Table 2.7

Descriptive Statistics (Percentages) of factors to abuse drugs in the entire sample of (Korangi, Layari & Sultanabad) of Karachi

Factors to Abuse Drugs	Korangi		Layari		Sultanabad		Total	
	N	%	N	%	N	%	N	%
Easy availability	1368	96.3	724	77.8	905	76.8	2997	84.9
Reduce distress	1242	87.4	652	70.1	691	58.7	2583	73.3
Just for enjoyment	1283	90.3	590	63.4	820	69.6	2693	76.5
Curiosity	1248	87.8	496	53.3	741	62.9	2485	70.4
Lack of education	1155	81.3	516	55.5	708	60.1	2379	67.4
Lack of awareness	1163	81.8	588	63.2	773	65.6	2523	71.5
Use of elders	1296	91.2	661	71.1	903	76.7	2860	81.1
Ratio in females	524	36.4	375	37.5	396	34.1	1390	39.4
Company of friends	1210	85.2	480	51.6	640	54.3	2330	66.0
Trends in schools	601	42.3	362	39.0	533	45.2	1497	42.4
Availability of drug at home	523	36.8	331	35.6	545	46.3	1398	39.6
Just for time pass	796	56.0	385	38.5	397	33.7	1551	44.0

Table 2.7 focuses on the availability, reasons to use drug, and lack of awareness in society. Findings reported that drugs are easily available in these areas 84.9% participants reported from the entire sample. While availability of drugs is high in the Korangi areas, it is observed that the soft drugs Cigarette, paan, Gutkka, and Chhalia are easily available in the areas and dealer sale it then without any hesitations. It is observed that easily availability soft drugs is the common factors for the participants to shift into hard drugs when they did not feels satisfies with dose of soft drugs. Previous researches reported that soft drugs are the gate way to hard drugs. The soft drugs findings consistent with findings of hard drugs in the communities. It means that if the frequency of soft drugs will be high the frequency of hard drugs will increase.

It is observed that most of participants started to use drugs due to reduce the level of distress. The findings reported that 73.3% participants use drugs due to reduce their level of distress. Very interesting findings of drug abuse in the initial stage is use of drug just as enjoyment 76.0% participants reported that they start soft drugs as enjoyment. In the entire sample 70.4% participants reported that they use drugs due to curiosity. 67.4% participants reported that they use to start drugs due to lack of education and 71.5% participants in the entire sample reported that they start to use drugs due to lack of awareness. In addition, 81.1% reported

that they use to started drugs due to common use in elder in company of friends and family. These trends of drug abuse were found common in company of friends (66.0%), school (42.4%), and drug availability at home (39.6%) and just for time pass (44.0%). It is concluded that the trends are more common in the Korangi area. On the others hand, these factors such as lack of education, lack of awareness, and common factors are the major factors to lead drug abuse in society.

Table 2.8

Descriptive Statistics (Percentages) of effect of Deprivation of facilities and Lack of Knowledge of drugs in the entire sample of (Korangi, Layari & Sultanabad) of Karachi

Deprivation and lack of Knowledge	Korangi		Layari		Sultanabad		Total	
	Avail	Deprived	Avail	Deprived	Avail	Deprived	Avail	Deprived
Are you availing treatment facility?	6.7	93.3	2.6	97.4	2.6	97.4	4.3	95.7
Any financial support?	0.4	99.6	2.4	97.6	2.1	97.9	1.5	98.5
Any treatment opportunity in area?	2.4	97.6	3.5	96.5	1.3	98.7	2.3	97.7
Any counseling program about drugs?	3.3	96.7	1.9	98.1	1.8	98.2	2.4	97.6
Any drug prevention program in past?	7.4	92.6	3.9	96.1	3.8	96.2	5.2	94.8
Anyone awareness about drug abuse?	43.1	56.9	30.9	69.1	17.5	82.5	31.2	68.7
Are you stopping others to use drugs?	24.2	75.8	33.3	66.7	24.4	75.3	26.7	73.3
Are you using Condoms during sex?	1.7	96.8	4.1	95.9	12.5	87.5	3.1	96.9
Are you aware about HIV/Aids?	3.2	96.8	2.6	97.4	4.1	95.9	2.6	97.4
Are you did sex with person with HIV/Aids?	0.3	99.7	7.1	92.9	1.9	98.1	3.5	96.5
Are you aware about sexual knowledge?	8.3	91.7	5.4	94.6	4.7	95.3	8.2	91.2
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table-2.8 represented that only 4.3% participants are availing the facility of treatment in the sample of 3528 while 95.7% participants are deprived from this facility. The qualitative analysis reported that there are limited resources to provide information/facilities of treatment of participants they are involved in drug abuse either they are abusing soft or hard drugs. The facility of providing treatment of drug abuse is considered at very low level in three areas. Moreover, 98.5% participants are deprived from the support of other to provide knowledge about the harmful effect of drugs. Due to high trends of drug abuse in the society participants are unaware about harmful consequences of drugs, it is observed through the findings of survey. In addition, there are no treatment opportunities such as hospital and rehabilitation center and others institutions which they are working against the drugs. Findings reported that 97.7% people are

deprived to avail opportunity of treatment from drug abuse for self as well as for his/her family members. It's a huge stigma for the society which is enhancing the trends of drug abuse in the society rapidly.

Furthermore, counseling is very important when population would be unaware about the harmful consequences of something. Likewise drug abuse in the areas but people is unawares about the consequences of drugs in the later age. In certain situation counseling facility is very important for the well-being of the person and society, but findings reported that 97.6% people are deprived from this facility in three areas of Karachi. At this level the prevention programs are very important to reduce drug abuse in the society, but findings reported that 94.8% people are deprived from the facility and only 5.2% people are availing this opportunity. In addition, lack of awareness about the drugs is also high 68.7% people are deprived about the awareness, while 31.2% people are known about the drug abuse consequences but due to inflexibility of environment they are bound to abuse drugs. It is observed through the findings that 73.3% people do not stop others to abuse drugs. It indicates that there is no restriction in the society to abuse drugs. Only 26.7% people try to stop others but they are unable to stop due to increasing trends of drug abuse in the society.

Moreover, people are also unaware about the sexual education. The survey findings reported that 96.8% participants were unaware about the use of condoms. It consistent with high rate of drug abuse in the society and few participants perform sexual relationships with partners suffering from HIV/Aids and 97.4% participants reported that they are unaware about the HIV/Aids. It considered that people are unaware about the safety measures during the intercourse. Due to which they are suffering from physical and psychological illness.

It is concluded that high degree of drug abuse in these areas is causing psycho social problems, but societies are unaware about the harmful effects of drugs. There is no insight among the population about the drug abuse prevalence and sexual knowledge. Due to which most of the people started drug abuse due to feeling of satisfaction and reduce stressors. Most of them believe that drug help them to reduce distress and stressors of life. Lack of knowledge is influencing the people to involve in drugs.

Table 2.9

Descriptive Statistics (Percentages) of Psychological Problems in the entire sample of (Korangi, Layari & Sultanabad) of Karachi

Psychological problems	Korangi		Layari		Sultanabad		Total	
	N	%	N	%	N	%	N	%
Sadness	828	58.3	525	56.6	753	63.9	2106	59.7
Helplessness	928	65.3	477	51.3	726	61.6	2130	60.4
Lack of empathy	1082	76.1	547	58.8	785	66.6	2413	68.4
Aggression	776	54.6	439	47.2	552	46.9	1767	50.1
Irritability	704	49.5	452	48.6	617	52.2	1772	50.2
Lack of interest	1059	74.5	543	58.4	718	61.0	2320	65.8
Conflicts	855	62.3	471	50.0	575	48.8	1930	54.7
Isolation	849	59.7	445	47.8	580	49.2	1873	53.0
Feeling inferior	1051	74.0	532	57.2	784	66.6	2366	67.1
Fatigue	875	61.6	472	50.8	672	57.0	2019	57.2
Crying spells	1081	76.1	527	56.7	745	63.2	2352	66.7
Disturb sleep	1107	77.9	524	56.3	703	59.7	2334	66.2
Poor appetite	1096	77.1	539	58.0	613	57.1	2308	65.4
Face difficulties	881	62.2	455	48.9	635	53.9	1970	55.8
Lack of attention	1095	77.1	497	53.4	711	60.4	2302	65.2
Forgetfulness	853	60.0	395	42.2	524	44.5	1771	50.2
Lack of trust	996	70.1	454	48.8	727	31.7	2178	61.7
Disturbed most of the time	998	69.5	494	53.1	767	65.1	2248	63.7
No solution of my problems	979	68.9	582	62.6	818	69.4	2378	67.4
Suicidal ideation	1018	71.6	576	61.9	805	68.3	2398	68.0
Insecurity	592	41.7	725	77.96	440	37.4	1404	39.8

Table-2.9 represents the psychological problems among three areas of Karachi. The whole entries sample findings reported that the psychological problems such as lack of empathy, suicidal ideation and feeling inferiors are found at high degree (68.4%, 68.0% & 67.1%). The high degree of these psychological problems is consistent with that lack of empathy in relationships effect the person self worth and it leads towards suicidal ideation. It correlates with psychosocial problems of the society. The findings consistent with table 4 that parents does not pay attention over children and their education. Due to which children suffer from problems and

they turn their attention towards drugs. Comparatively such problems are found high in Korangi as compared to Layari and Sultanabad.

Moreover, mood related problems were also found common and high in the entire sample such as lack of interest (65.8%), crying spells (66.7%), disturb sleep (66.2%), poor appetite (65.4%) and lack of attention (65.2%). It is observed that following problems are found in similar ration in all areas. It is concluded that the mood related symptoms were found common in these areas and participants opinion to reduce distress are consistent with them. Drug abuse is the major factors to create mood related symptoms while people did not understand the reasons but they lead to drug abuse to reduce distress.

The overall results show the presence of psychological problems such as Sadness (59.7%), Helplessness (60.4%), Aggression (50.1%), Irritability (50.2%), Conflicts (54.7%), Isolation (53.0%), Fatigue (57.2%), Face difficulties (55.8%), Forgetfulness (50.2%), Lack of trust (61.7%), Disturbed most of the time (63.7%), No solution of my problems (67.4%) and Insecurity (39.8%). It is observed that the frequency of the psychological problems consistent with frequency of drug abuse in the entire sample. On the other hand, some of the problems are at higher level in Layari such are Insecurity (77.9%).

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