

**THE MOST COMMON RISK FACTORS ASSOCIATED WITH  
DRUG ADDICTION IN AFGHANISTAN**

By

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Submitted in Partial Fulfillment of the Requirements for the Degree of

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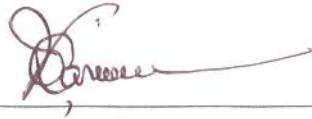
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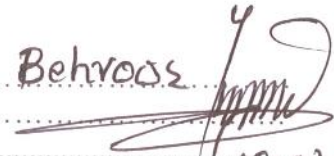
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## Table of Contents

### CHAPTER I

1.1 Introduction .....	1
1.2 Background study .....	2
1.2.1 World review of drug addiction.....	4
1.2.2 Drug addiction in low income countries.....	6
1.2.3 Drug addiction in middle and high income countries.....	7
1.2.4 Drug addiction in south asian countries (saarc states).....	8
1.3 Rational .....	10
1.4 Research question.....	11
1.5 Hypothesis .....	11
1.6 Operational definitions .....	11

### CHAPTER II

Literature study.....	14
2.1 Sociodemographic review of drug addicted persons .....	14
2.2 Historical overview of drug addiction in afghanistan.....	16
2.3 Drug addiction and gender.....	18
2.4 Accessibility to health service and rehabilitation .....	19
2.5 Government regulation and policy related to drug and drug addiction .....	22
2.6 Quality of life of persons with drug addiction.....	23

### CHAPTER III

Methodology .....	25
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3.1 Intorduction.....	25
3.2 Theoretetical framework (dependent and independent variabls).....	27
3.3 General objective .....	28
3.3.1 Specific objectives .....	28
3.4 Design of study .....	28
3.5 Study population .....	29
3.6 Study area .....	29
3.7 Study period.....	29
3.8 Sample size .....	29
3.9 Inclusion and exclusion .....	30
3.10 Sampling technique.....	30
3.11 Data collection tools .....	31
3.12 Data management and analysis process.....	31
3.13 Quality control and quality assurance.....	31
3.14 Ethical consideration.....	32

#### **CHAPTER IV**

Analysis and result of the study .....	33
4.1: demographic characteristic of drug addicted patients .....	33
4.2: individual perception and past experiences factors related to drug addiction ....	35
4.2.2 first experience of drug abuse/ drug addiction.....	36
4.2.3 Earlier history of mental illness .....	37
4.2.4 Displacement experience and seeking refuge in other countries .....	37
4.2.5 Duration of drug use .....	38
4.2.5 Pattern of drug types and its percentage used by respondents.....	39

4.2.6 Pattern of drug use among different education levels.....	39
4.3 Family conditions .....	40
4.3.1.Family welfare comparing to other families.....	40
4.3.2 Total family income in months.....	41
4.3.3 Parent’s occupations .....	42
4.3.4 Parent’s drug addiction history:.....	43
4.4 condition of living area and supply chain related factors .....	44
4.4.1 Popular types agriculture in the area of living.....	44
4.4.2 Easiness on obtaining drug from market .....	45
4.5 Drug addiction and daily problems.....	45
Aassociation of drug addiction with different age groups.....	46
Association of gender with shisha users.....	47
Association of education level and drug addiction) drug through injection) .....	58
Association of economic condition with injection type of drug addiction.....	49
Association familiar agriculture in area of living with shisha use.....	50
Association of familiar agriculture in area of living with opium use .....	50
Association of drug addiction (opium) with major life changing events (job loss) ..	51
Association of migration with shisha use .....	52
Association of migration with opium use.....	51
Association of drug addiction with migration with marijuana/ hashish .....	52

## CHAPTER V

Discussion .....	54
5.1 Demographic status.....	55
5.1.2 Gender.....	55

5.1.3 Education level .....	55
5.1.4 Economic condition .....	56
5.2 Association of drug addiction with individual perception and past experiences.	57
5.2. 1 Respondents types of drug abuse.....	57
5.3 Relationship of family conditions with drug addiction .....	58
5.3.2 Total family income in months and employment status.....	58
5.4 Association of living area and supply chain with drug addiction.....	59
5.4.1 Prevalence rate of drug addiction: .....	59
5.4.2 Supply chain (cultivation).....	60
5.4.3 Individual and family perception and past experiences.....	61

## CHAPTER VI

Conclusion and recommendations.....	62
6.1 Conclusion .....	62
6.2 Recommendations.....	62
6.2.1 Recommendation for policy makers:.....	62
6.2.2 Recommendation for families and care providers: .....	63
6.3 Strengths and limitations of this study.....	63
6.3.1 Strengths .....	63
6.3.2 Limitations.....	63
6.4 Suggestions .....	64
<b>References .....</b>	<b>64</b>
<b>Appendixes .....</b>	<b>73</b>



## List of Tables

Table 2.1 Treatment services capacity in Afghanistan .....	26
Table 3.2 Theoretical framework (dependent and independent variables).....	32
Table 4.1 Central tendency of respondents age (year).....	42
Table 4.2.5: Pattern of drug type and its percentage used by respondents.....	46
Table 4.2.6: Pattern of drug use among different education levels.....	47
Table 4.4 living area of drug addicted persons with its frequency and percentage .....	54
Table 01 Association of drug addiction with different age groups.....	55
Table 02: Association of Gender with shisha users .....	56
Table 03: Association of education level and drug addiction .....	56
Table 04: Association of economic condition with Injection type of drug addiction.....	57
Table 5: Association familiar agriculture in area of living with Shisha use .....	58
Table 6: Association of familiar agriculture in area of living with Opium use .....	58
Table 07: Association of drug addiction (Opium) with major life changing events.....	59
Table 8: Association of migration with shisha use .....	60
Table 9: Association of migration with Opium use .....	60
Table 10: Association of drug addiction with migration with Marijuana/ Hashish ...	61

## Table of Figures

Figure 1: Drug use morality rate among different European countries .....	14
Figure 4.1: Representation of age categories per gender and its percentage .....	42
Figure 4.2.1: Age distribution and its percentage of respondent's first drug addiction....	44
Figure 4.2.2: Frequency and percentage of drug addicted individual's.....	45
Figure 4.2.4: diagram of respondent's displacement experience .....	47
Figure 4.2.3: Duration of drug addiction and its percentage .....	47
Figure 4.3.1: pattern of family welfare comparing to others .....	50
Figure 4.3.2: Drug addicted person's total family income per (month).....	50
Figure 4.3. 4: Pie chart of respondents father's occupation.....	51
Figure 4.3.5: pie chart of respondent's mothers' occupations .....	52
Figure 4.4.1: Pie chart of most popular cultivation in the area of living .....	54

## Abstract

**Purpose:** Drug addiction and its abuse is a global problem. Based on recent report of 2019 world drug report illicit drug use dramatically has increased in comparing to survey of 2009, number of people using drug is increased by 30% higher this year. On the other hand, along past decades Afghanistan has appeared as leading producer of opium and number of drug addicted persons increased very fast. Based on UNODC and Ministry of Public Health of Afghanistan in 2018 around 3 million people was addicted to drug in the country, from which 1.6 million people are using drug regularly and other remaining are using in irregular based. Among those 3 million people 1 million drug user were females. This study was designed to find the most prevalent risk factors associated with fast growing number of drug addicted persons among Afghan communities.

**Method:** In this research a quantitative study, with cross sectional design was conducted in drug rehabilitation centers (July 2019- Nov 2019) located in Kabul city Afghanistan. Along interviewing process, a questionnaire was used to collect and record the data and 110 patients (80 Male, 20 Female) who admitted/ treated in drug rehabilitation centers was interviewed. The whole data collected from through designed questionnaire was analyzed by the Statistical Package for Social Science (SPSS) version 24.0 and reflected as descriptive statistic of frequency, mean, standard deviation and percentages.

**Result:** The finding revealed that peer pressure, unemployment, traditional consumption of opium as way of treatment, conflict, migration and displacement, cultivation/ farming of narcotics and most importantly life changing events such as loss of family members as result of conflict and bomb attacks highlighted as the most prevalent factors to drug addiction. The implication of this findings is to provide fundamental information regarding prevention strategy for policy makers as well as, useful method at the personal and families level related to main source of drug addiction.

**INTRODUCTION**

Drug addiction is a chronic disease where person persist to seek and use drug in an obsessive manner and are much difficult for them to control (National Institute on Drug Abuse, 2008). Drugs are chemical substances when, someone put these chemicals into their body, either by smoking, injecting, inhaling, or uptake them, they spout into the brain's communication system and interfere with the method nerve cells usually send, and receive the data and process information, as different drug has different structures, affects our body differently (Brain and Addiction, 2014). The addictive substances like opioids, cannabinoids, ethanol, cocaine, amphetamines, and nicotine induce pleasant joyous effect in the initiation phase or relieve distress and continued use induces adaptive changes in the central nervous system that lead to tolerance, physical dependence, sensitization, craving, and relapse (Cami& Farre, 2003).

Drug addiction and its abuse is a global problem. Based on recent report of 2019 world drug report illicit drug use dramatically has increased in comparing to survey of 2009, number of people using drug is increased by 30% higher this year. In 2017 there had been 271 million (5.5% of the world population) aging between 16-64 years old had been using drugs. (World Drug Report, 2019).

Continuously using of drug change mechanism of brain that makes quitting process much more complicated and worsen to leave consuming even having strong willpower for quitting, and person would face challenges like self-control and compulsive consuming of drug. This compulsive way of using is mostly causes the "Relapse" which in most cases patient following to recovery process returning back to drug consuming (Ledford& McLAUGH, 2003). As action of relapsing is mostly occurring and count a common treatment failure in drug rehabilitation but, it's not clueing that treatment is not working (National Institute on Drug Abuse,2008). Scientists and researchers through many recent

investigations have found that by consuming drug repeatedly effect the brain and have found treatment through by which people are able to get recovery and start normal life (National Institute on Drug Abuse, 2008).

Similar to many mental health disorders there are several risk factors associated with drug addiction. Persons of different age, sex, social position and economic condition can be addicted to drug, considering the context of different respected societies (Altman et al., n.d). Worldwide risk factors related to drug addiction found to be family history of drug addicted persons, mental health disorder, peer pressures, lack of family involvement, early use and taking highly addictive drugs (Drug addiction- Symptoms and causes, 2017). However, in Afghanistan as locating in a strategic geographical region, social and cultural diversities, political and economic factors, and more importantly, three decades of civil war has involved the country in critical state. Consequentially, its known there to be other factors which is resulted to rapid growing number of addicted people in the country.

In south Asian region countries (Afghanistan, Bangladesh, Bhutan, India, Nepal, and Sri Lanka) drugs are used widely among people. Commonly abused drugs are consisting of Heroin, Cannabis, Opium and pharmaceutical preparations. As well as abuse of both alcohol and tobacco with other drugs in combination seen widely in these counties (Sharma, 2009). Yet, Afghanistan with its strategic geographical location and different cultural status in the region is facing with more serious complication of drug and drug related issues (Goodhand, 1999). Problems such as low rate of employment, early consumption of drug as treatment (social believe), cultivation, process, and treat of drug (supply chain), having high number of refugees (Iran, Pakistan), more than three decade of civil war and, also strategic location of country as the hub for world's most powerful countries have engaged the country in to crisis (Common sense for drug policy: Afghanistan Update). According to latest report of Ministry of Public Health of Afghanistan (MoPH) and UNODC there are around 3 million people addicted to drug, from which 1.6 million people are using drug regularly and other remaining are using drug irregularly (UNODC, 2018). Among those numbers of addicted persons one million is consisted by women (Tolo TV, 2018; Ministry of Public Health of Afghanistan, 2018).

additionally, 9 % Afghan children aging below 14 tested positives for drug, including 2% in urban region and 11% in rural area (Afghanistan National Drug Use Survey 2015, n.d).

## **1.2 BACKGROUND STUDY**

Drug addiction and substance abuse are complicated, comprehensive and global phenomena which cost individuals, families and governments huge amounts (MoPH, 2018). Alongside the crises existed worldwide for humanity such as global warming, nuclear threat and population surge, drug addiction is one of the most threatening catastrophes and lucrative business in 21th century (World drug report, 2019). In an estimation 271 million people, or 5.5 percent of the global population aged between 15–64, had used drugs in the previous year, while 35 million people are estimated to be suffering from drug use disorders. At the same time, among the drug users Opioids continue to be the most harmful one among other types of drugs and accounting for two-thirds of the deaths attributed to drug use disorders. People who inject drugs consisted 11 million people worldwide in 2017 endure the greatest health risks. More than half of them live with hepatitis C, and approximately one in eight live with HIV (World Drug Report, 2019).

Afghanistan is not immune to this social and health problem. The UNODC provided an estimation of 509,000 households being involved in opium cultivation, which makes 14 % of the total population of Afghanistan (UNODC, 2007). In another report based on UNODC and Ministry of Public Health of Afghanistan (MoPH) in 2018 displayed that around 3 million people addicted to drug in the country, from which 1.6 million people are using drug regularly and other remaining are using in irregular based (UNODC, 2018). Among those numbers of addicted persons 1 million is consisted by women (Tolo TV, 2018; Ministry of Public Health of Afghanistan, 2018). additionally, 9 % Afghan children aging below 14 tested positives for drug, including 2% in urban region and 11% in rural area (Afghanistan National Drug Use Survey, 2015).

Since 2001 Afghanistan has been as world's top illicit opium producer (UNODC, 2011) and Its opium production supplied of 95% of European drugs also, 90% of heroin universally (Afghan Governor Wants Government To control poppy crop, 2016). In addition to production of raw illicit drugs, 93% of Non- pharmaceutical grad opiates has been produced in 2007. Based on that level of production if we count the value of amounts

which will be equal to export value of US 4billion, from which quarter of them being earned by farmers and rest been taken by district governors, insurgents, warlords and drug traffickers (UNODC, 2018). During 7 years from (1994- 2000) while Taliban banned poppy cultivation, only 200,000 families were busy with poppy farming (UNODC,2009). As of 2017, opium production provides about 400,000 job in the country, more than the Afghan National Security Forces (PolitiFact – Does Afghanistan grow more opium poppies than before, 2017).

Consuming opium as a traditional and medical role has long-standing history in the Afghanistan. Opium has been using among afghan communities as treatment medicine for various health conditions, importantly as pain killer, sedatives, and respiratory complains (UNDCP, 2011). The behavior of using opium as tradition and medical method have been handed down from generation to generation to deal with a wide range of illnesses. In fact, the Greek word “Theriaka” meaning is widely been used as “opium remedy” (Kerimi, 2000) the highest regional usage of opium as remedy has been found in northern province of Badakhshan along with Tajik border with 30% of local population. Also, in western parts of the country such as Herat and Farah high rate of opium usage among families as medicine has been reported (UNDCP, 2011).

The country as a result of three decade social and political unrest has been more affected by this phenomenon. During the past years’ substance abuse and drug addiction has led to one of huge health and social crises in the country, victimizing persons from all ages including elders, youngsters, woman and even children (UN, 2006). While this figure provided by the UNODC, as well as other mentioned reliable sources doubtlessly raises concerns about drug addiction in Afghanistan, the question remains of what factors affect rapid drug addiction among Afghan’s. Though, there are some studies done on drug and drug related issue but, there is lack of studies on drug addiction’s risk factors in Afghanistan.

### **1.2.1 WORLD REVIEW OF DRUG ADDICTION**

In a recent statement of world drug report of 2019 shown that illicit drug use dramatically has increased. Comparing to 2009 survey report, number of people using drug is increased

by 30% higher this year. According to world report of drug use by UNODC in 2017 there had been 271 million (5.5% of the world population) aging between 16-64 years old had been using drugs year before. As this number shows same amount estimated in 2016, deep view reveals that people who are using drug is escalated thirty percent (30%) higher comparing to 2009 while 210 million people were addicted to drug in previous year (World Drug Report, 2019).

Also, due to 10% growth in the entire population around the globe aging between (16-64) years old, in previous information and recent statistic reveal that people in Africa, North America, and Asia are using Cannabis. Same report released in previous years, the most widely used drug (Cannabis) had secured its place among the users, which 188 million people have used this drug in the past year. Though cannabis consumer had been increased rapidly in Asian and America, the cannabis consumer has remained steady for around a decade. In 2016, 53.4 million people globally has used opioid which is presenting 56% higher than previous estimation, which was 19.4 million people (World drug report, 2017). This result increased high for 2017 because of new survey and knowledge included from two more countries like Nigeria. Now in the Asian it's presumed that the number of past-years opioid to be higher at 29 million than previous of estimate 13.6 million in 2016. Also in Africa, data and statistic indicates that there had been a moderate increase in opioid from 2.2 million to 6.1 million. Prevalence of Alcohol and daily tobacco abuse among European countries had the highest rate in 2015(UNODC, 2018). Among adults this rate was as: heavy episodic Alcohol use 18.4%, daily tobacco smoking 15.2%, Cannabis 3.8%, Amphetamine 0.77%, Opioid 0.37% and Cocaine 0.35% (Amy Peacock et al, 2017).

Generally speaking, the opioid and other illicit drug consuming in the North America including its sub regions too has a dramatic growth. The prevalence rate for opioid use has shown that 4.0 percent of whole population has been using it. At the same time the near and Middle east, and south east Asia including its sub regions comparing to above mentioned continents has estimated with lower prevalence rate of opiate use (Opium, Morphine, Heroin) which is 1.6% of total population (CICAD- OAS, 2019). With recent data and information added form India and Nigeria, the total number of peoples presumed to be suffering from drug addiction is estimated around 35.3 million. As previous



discretion related to the whole population of the world (30.5 million) it's 15 times more than before. These statistics include all those who are using drug that in some ways they are harmful by any methods of using (World Drug Report, 2019; UNODC, 2019).

### **1.2.2 DRUG ADDICTION IN LOW INCOME COUNTRIES**

As the prevalence of consumption and recurring usage of drug is still not as much of developed countries however, illicit drug use showing a rapid increase among developing nations like Africa, South America, Middle East and Asia. As mostly the manufacturing process is done in developing regions, but consumers are basically from developed nations. Conversely, in some recent findings people in underprivileged area due to economic and social disparity have inclined to drug addiction (International Narcotic Control Board, 20020). As a Consequence of obtaining a no suitable infrastructure including low public health and treatment support number of addicted people to drug is likely to be increased by unmanageable condition. (WHO, 2019).

A published report by (UNODC, 2017) state that though traditional drugs such as Heroin, Cocaine and Morphine are still owning large portion of market but, synthetic drugs (Ecstasy and Meth) are on the raise. As traditional way of distributing drug along the street have a tremendous benefit for the suppliers, it's supposed that countries with underprivileged state will face to a big challenge in the future. This is to be considered that just synthetic drug alone provides around 65 billion worldwide. (BBC, 2008). The suppliers and drug mafia looks to the underprivileged regions as source of raw material supplements and it's a golden opportunity for networking to international markets. Despite of emerging mobile technology, internet and significant counter drug still in Uruguay, Saudi Arabia, Afghanistan and number of south East Asian countries still law enforcement face to serious obstacles. As synthetic drug's raw material is available with most manufacturers for chemical purpose so it has made the tracking process more difficult or even impossible for authorities (Georgios Barzoukas, 2017).

Another concerning issue related to drug addiction in poorer countries is linkage between the drug and crime. It's obvious that in such countries due to low level of employment and high rate of poverty mostly government involving with criminal cases and violence. This is easily deteriorating the condition by increasing illicit drug manufacturing, distribution,

and smuggling of drug and would definitely increase violence and, violence between theme and law enforcement (Toby Seddon, 2000). In addition to this developing nation as result of drug use and public health issues faces with some other challenges like sexually transmitted disease (HIV) Hepatitis. Rape, prostitution, sexual assault with drug use also have direct relation to worsening the condition that consequently end with prevalence of disease and drug addiction (Shafer MA, et al., 2009. As drug using and its manufacturing most the time remains covered, law enforcement as well as public health bodies are absent so, its looks much difficult to define and not easy for further control (Georgios Barzoukas, 2017).

Generally, the demand for consumption of drug among developing nations signify that drug addiction as a huge challenge the whole globe does not seem to be related solely to region, economic status or any other factors. Drug addiction is counted as global challenge which need a holistic mobilization for eradication. As a result, dissemination of primary information related to its risk factors are necessary to be learned by citizens of country including all ages in order to reduce immediate harm and long-term effects its usage prevalence. (Recovery First, 2019).

### **1.2.3 DRUG ADDICTION IN MIDDLE AND HIGH ICOME COUNTERIES**

According to UNODC and World Drug Report 2017, people in developed countries are typically consuming drug as way of entertaining and fun. However, there are a large number of people who are addicted to drug, as consequence of addiction have lost their job, family, friends and dignity among the community where they have been living. In addition to traditional type of drug consuming such as Heroin and etc. huge amount of synthetic drug have been used. “In 2017, 34.2 million American committed to DUI, 24.1 million people have been under the influence of alcohol, and 12.8 million people been under the influence of drug” (Addiction Center, 2019). Above mentioned statistic indicate that a high number of people are involved with drug and substance abuse in the United States. Including this, another report by (mail. Aegee.org) shows that drug addiction is growing rapidly in Russia, that according to a research finding there are 2.2 million alcoholic, 700.000 alcohol related death, 160.000 diagnosed with psychosis. Drug addiction is same as alcoholism and counts one of serious challenge for Russia. National

institute on drug abuse published a report that” there are 4.6 million people in Russian who use drug regularly” which indicates that there are 40% increase on the rate of drug abuse in the country (Max Roser & Hannah Ritchie, 2019).



Source: Our World in Data

Figure 1: Drug use morality rate among different European countries

Above feature demonstrates drug use mortality rates per 100, 000 persons in 2016. It indicates that Russia is a head of all other European countries and the morality rate show very high, which stands 10.2 per 100.000 people. (Our world in data, 2016).

#### **1.2.4 DRUG ADDICTION IN SOUTH ASIAN COUNTRIES (SAARC STATES)**

In south Asian countries according to existing literature and evidence, limited amount of data is available related to illegal drug, its production, consumption as well as trafficking. Comparing with other regions south Asian countries is leading in production of opium, among state members Afghanistan is the biggest producer and manufacturer of heroin (International Drug Policy Consortium, n.d). continuous eradication efforts Afghanistan in 2013 marked for third consecutive year that poppy cultivation has grown with an increase of 36% since 2012(UNODC, 2014). In India, production of Ketamine, New Psychoactive Substances (NPS), and Amphetamine Type Stimulant for local demand as

well as illicit opium cultivation specifically in North east India has increased (The Transnational Institute TNI, n.d). Manufactured illicit substance also seen in SAARC state members. Following to china, India is the second country which is seized illicit manufactured drugs like Ephedrine and Pseudoephedrine (UNODC, 2014).

Heroin produced in Afghanistan is trafficking in different countries such as eastern Europe region through Golden Crescent (Formed by Afghanistan, Pakistan, Iran), Central Asia, China, Myanmar as well as in recent time new markets in countries in Oceania and South East Asia (UNODC, 2014; International Drug Policy Consortium, n.d). As the Iranian border restriction has been increased Pakistan is now cited as an important way of heroin trafficking globally, which is about 44% of Afghan Heroin transported through its borders (INCB, 2013). The Balkan way which is crossing Iran's border is still main gate of Afghanistan heroin trafficking to the market of Russian and European regions. Also, manufactured heroin in the country is trafficking through southern border Near and Middle East, Africa pass drug in Europe (OCCRP, n.d). in the SAARC states India also has mentioned as the source of drug been trafficking to US and Canada. Indian locally produced drugs are transported to Bangladesh and Sri Lanka (World Drug Report, 2014).

Pakistan and Afghanistan are the highest prevalence of Opiate in South Asian countries at average of 1,5% adult population. Comparing between 2006 and 2016 prevalence rate of opiate increased from 0.7% to 1%. In Afghanistan, this rate is much higher than Pakistan, in urban area prevalence rate is 2.6% (UNODC, 2014; UN, 2010). Based on UNODC Cannabis is very famous and used frequently in Pakistan, the prevalence rate is 3.6%. Amphetamine is also used in Pakistan but low cases are detected. Demand in India is basically rely on local supplies only such as "Born sugar" and ATS used in different part of India. Also, report by UNODC found that prevalence of illegal drug in Maldives is very low comparing than other state member of SAARC. Cannabis prevalence increased, Opiate and alcohol are most commonly used (UNODC, n.d). in Nepal most often locally cultivated product of opium and cannabis are consumed. On the other hand, usage of ATS basically in Methamphetamine forms are most commonly used in Bangladesh. This drug is in the form of Pills which known as "Yaba" (UNODC, 2012).

Under the framework of SAARC, The SAARC Convention on Narcotic Drugs, 1990) members greatly emphasized on importance of cooperation, exchange of experience and common legal framework to confront drug problem in the state member countries. So far, due to armed conflict, insufficient budget, regional hostility and weak institution have played important role in failing the convention's aim. Practically, SAARC have not been able to play active role regarding control and prevention of drug problem in the region and been relatively failed. Excluding some international organizations who played various role in developing policies (International Drug Policy Consortium, n.d).

In south Asian countries including Afghanistan, Bangladesh, India, Nepal and Pakistan policies are clearly concentrating on harm reduction. As well as treatment for opioid and needle programs are accessible in most state countries. In a research reported by UNODC represent that state governments dedicates inadequate fund to health and rehabilitation centers which is basically resulting poor health service (UNODC, 2018). NPS's are accessible in Afghanistan, Bangladesh, India, Nepal and Pakistan. In addition to lack of satisfactory coverage of harm reduction services and high level of stigma toward addicted persons triggered an emergent barrier (Asian Harm Reduction Network, 2012). Almost in each state country demand for treatment is very high but no capacity in treatment centers is available to admit patients. Although, facilities provided by ministries of health mandated the minimum standard of care. Among states government of Afghanistan was not able to facilitate proper treatment service as a result of low national budget dedicated to health sectors. The average of dedicated amount of budget per person was up to \$1.50 in a year (Talkindrug.org, 2013).

### **1.3 RATIONAL**

Drug addiction is an excessive and fast-growing problematic in Afghanistan. So far, no comprehensive study has done to show down drug addiction's risk factors or the underlying causes to explain addiction. Consequently, drug addiction factors have remained unknown and causes are only distributed traditional assumption as well as unofficial reports presented by media. On the other hand, any studies done in other countries rather than Afghanistan is not generalizable in Afghan community because of its exceptional social, cultural, economic, political and geographical circumstances. The aim of this study is to

find the most prevalent factors that contribute to fast growing of drug addiction in Afghanistan. By finding those prevalent factors, it would be highly helpful to individuals, families, and society to mark those factors and eliminate them instead of blaming the own addicted persons. This study will also help other researchers and policy makers to use findings from this research in making proper decisions and devising responsive social policies to address drug addiction in Afghanistan.

#### **1.4 RESEARCH QUESTIOIN**

What are the most prevalent factors associated with fast growing of drug addiction in Afghanistan?

#### **1.5 HYPOTHESIS**

- Environmental factors/ Social event or characteristics (Unemployment, violence and insecurity, accessibility to drug, tradition, migration and supply chain) has a significant role in person's addiction.
- Gender factor: Men tend to be more vulnerable to drug addiction than women.

#### **1.6 OPERATIONAL DEFINITIONS**

**Addiction:** A disorder with chronic and relapsing state that characterized with uncontrollable drug seeking in spite of being harmful for health, also resulting long term change in the brain. Before the term “addicted” were using widely but recent revising term “drug user” is much appreciated.

**Amphetamine:** A type of stimulant drug by using it central nerve system (CNS) will be affected.

**Cannabis:** Alternative name for Marijuana plant that uses for medical or recreational purpose, which has addictive characteristics.

**Comorbidity:** The term refers to conditions in which more than one disease is active to the same person. Addiction to drug and other mental illness including viral infection (HIV, hepatitis) are often comorbid. As well as call co- occurring disorder.

**Dependence:** Dependence refers to state of consuming regularly prescribed or illicit drug which characterized by withdrawal symptoms while drug consuming is stopped.

**Drug abuse:** It is an old term refers to using drug unsafely. As this term can perpetuate stigma, it is not using too much now a days by professionals. Current term includes: drug use (if illicit substance used), drug misuse (if legal drug being used by person as a way misunderstanding) and addiction (while someone as a result of using drug dropped to a disorder state)

**Flashback:** A state of immediate and short- term recurrence of aspect of drug experience (feelings, sound and sight). It could happen day, week, month or even year later using drug that cause hallucination.

**Injection drug use (IDU):** The way through which someone is using drug by injecting needle. Blood-borne viruses like HIV and hepatitis can be transmitted by this method.

**Mental disorder:** A mental state that highlighted by disorganization of personality, mind and emotion that seriously impairs the psychological and behavioral functioning of an individual. Sometime referred as mental health condition.

**Opioid:** Referring to those substances that act on opioid receptors producing morphine like effects. Medically they are used as pain relief including anesthesia.

**Psychoactive:** Characteristic of substance that have specific effect on the brain and changes brain function and resulting alteration in perception, mood, consciousness, and behavior.

**Recovery:** It's a process through which a person change using substance disorder aiming to improve his/ her health and wellbeing to live self-directed with their full potentials.

**Relapse:** In the context of drug addiction, the term relapse is referring to state that a person returns to drug using after he/ she decided to stop it.

**Risk factors:** Based on NIDA definition “Factors that increases the likelihood of beginning substance use, of regular and harmful use, and of other behavioral health problems linked with usage.”

**Substance use disorder (USD):** The term is used when consumption of drug/ substance resulted to disease. Based on Fifth Edition of the Diagnostic and Statistical manual of

mental disorders (DSM- 5) SUDs are identified by clinically significant impairments in the health, social function to control over substance and are diagnosed by assessing cognitive, behavioral and psychological symptoms.

**Withdrawal:** It's the symptoms which happens following to long period of drug consumption, basically occurs when tolerance to drug has already occurred, and differ based on substance. This is to be mentioned that withdrawal symptoms can result some serious emotions like stress, vomiting, anxiety or depression including physical effects such as nausea. (NIH,2018).



**2.1 SOCIODEMOGRAPHIC REVIEW OF DRUG ADDICTED PERSONS**

Based on study related to sociodemographic background of drug addicted persons, it has been revealed that majority of people who were using drug regularly had one of the following common sociodemographic factors: specific age group, illiteracy, unemployment and lack of job opportunities. Additionally, Peer groups has important influence on initiation of drug use (Abdul Shukoor Haidary, 2015). Among the drug addicted persons age group has playing and important role (Kaicheng Huang& Jianbong Liu, 2010; Veda Mehran, 2008). In one finding the result indicated that 59.8% of drug addicted persons are between (15- 34) years old, among them 74.5% were male and 25.5% included female. (Ranjan et al., 2010). Substance abuse and addiction is greatly an issue among the youngster and adolescent males ( $P<0.05$ ). Also, a significant difference among male and female who were addicted to drug was detected ( $P<0.05$ ) at the same time there were an important association with treatment seeking behavior through visiting in rehab centers. One third (1/3) of drug addicted persons were felled down from school while they were at the secondary level stage of their education ( $P<0.05$ ) more than 50% of addicted person's parent been divorced or separated ( $P<0.05$ ). following to analyses of data there were no significant difference between religious trend and ethnicity of addicted persons found (Ghana Med et al., 2005).

A study done in 2008 by Vida Mehran related to drug addiction risk factors among females in Afghanistan found that: unemployment, accessibility to drug, specific age, previous drug use among family as well as traditional usage of drug as way of treatment are highlighted as the most common risk factors associated with drug addiction. Based on finding 67.6 % of respondents are living with lesser 60\$ income per month, due to having low-income families, reported that they are using drug as medicine purpose which is 26.93% of all, and significant association found between consumption of opium as medicine and low income. Considering above variables, 49.53% of female drug addicted persons are unemployed. They reported that families are using drug related to the following rationales: As

psychological relieve which is consist of 14.13% of respondents. Among interviewees 56.4% was consuming it as psycho- social means of overcoming difficulties and are majority of users. This method is including pleasure, curiosity, as well as dealing with grief. According to study finding people in Afghanistan consuming drugs by following three methods: eating 69%, smoking 38% and consuming drug through injection only 1%. Drug obtained through various ways such; peer groups 36.1%, obtaining drug from own land 10.65% and 4.11% stated that they have on poppy farms (Veda Mehran, 2008).

Another finding in Afghanistan showed that 11.4% of population tested positive for using drugs (laboratory test), opium with prevalence rate of 5.6% and prescribed drug was 7.6%. Among all types of drug, the positive test for opioids was more than 50% for minimum one substance only among women and children, other one third for men who was using cannabises. Individual Prevalence of drug addiction was 7.2% in men and 3.1% for women but at the national level of this prevalence was 5.1% (Linda B Cottler et al., 2014).

Also, a qualitative study conducted in 2015 among 15- 35 years old persons in Kabul city found that: accessibility to drug, absence of law enforcement, consumption of drug by other family member, unemployment, migration, exposing to massive work load marked as key sociodemographic factors of drug addiction (Abdul Shukoor Haidary, 2015).

Literacy have been another prominent factor among the drug users. In 2016 a study was done in Dhaka Bangladesh revealed that Educational qualification of 28.07% samples was up to primary level, 36.84% up to secondary level (Rahman, Ahmad, & Ali,2016). Also, another research finding result showed that 72.1% of participants have been illiterate or at least completed primary school. This displays that illiteracy dramatically accelerate number of addicted persons. Distribution of drug addicted persons in different categories literacy such as having illiterate indicate about 20% of addicted person, those who completed primary school consist of 18%, those who completed up to middle school were 25% of and few numbers of participants (8%) have been graduated from university (Transcend Recovery Community,2019). Working status and drug addiction also has significand association with each other. As the rate of unemployment decreasing, consequently more people losing their jobs and whole economic system will be deteriorating (Lampthey, 2005). However, according to a research finding conduct in

Mumbai India displayed that there is no significant relationship between socioeconomic and drug addiction (Ranjan et al., 2010).

## **2.2 HISTORICAL OVERVIEW OF DRUG ADDICTION IN AFGHANISTAN**

Afghanistan as a strategic region has the longest route with Pakistan and Iran by an important way which was well known for poppy and cannabis development and transporting when poppies were announced by Arab dealers along the silk road. Earlier to the USSR military attack in 1979 cultivation and production of poppy was in very low scale. Incensement on both cultivation and production resulted as government control loss and indirect market needs as a result of political situation in Vietnam and Laos which was the main supplier to Europe and North America. (Levinson D, Christensen K. 2002) At this point, another strategic country such as Iran had essentially diminished opium production as a result of obstruction of trade route and extreme discipline for medication related feelings by the new religious routine (Girardet, 1998). Limitations on development and refining in Pakistan in the mid of late 1990's directed to the move of these exercises to Afghanistan, bringing about the formation of new trading route into Pakistan and Central Asia (Purdy, n.d). Opium development was additionally empowered by warlord leaders in consistent clash with one another after the Russian retreat in 1989. Since, these warlords had lost funding support, alternative way was the cultivation of opium in their territories. During the Mujahidin era, opium and heroin production rose steadily with Afghanistan becoming the leading global supplier, overtaking Burma in the mid-1990 (UNODC, 2003).

Respectively in 2002 and 2003 the opium production and cultivation reached to its lowest level records within the Taliban regime removal. Total income through opium trade was half of the legal gross domestic product, and it prove that in spite of president Karzai's command on banning opium still warlords continued cultivation of poppy to support their power and strongholds. As the opium is most lucrative business and has twelve time more than wheat, so, it was fascinated farmers in each region of countryside to start poppy cultivation (UNODC, 2004). According to UNODC survey in 2004 around 2.9% of land had been devoted for this purpose in the north zone of country, though as much as 29% is cultivated in some provinces. Also, in record of 2004 exceeded that 1999 due to drought and some other stressors. Despite, of this loss Afghanistan has produced around 87% of

the global opium supply in previous year. Such amount of growing would impact the price as gross income per cultivated hectare reduced by 64% and family gross income among poppy farmer decreased 56% based on this study finding (UNODC, 2004).

Traditionally, in Afghan communities the opium has been used as the way medication for various health issues, including pain and respiratory complaints. In addition to this opium has some traditional role and impact in some groups (UNDCP, Afghanistan Office, 2001) With that indications, still there are few estimation and studies has been done regarding opium usage in Afghanistan. Based on a finding by UNODC the highest regional usage of opium and addicted person were noted in Northern Province of Badakhshan province-Afghanistan with (20-30) % of total population. Also, in two eastern provinces such as Farah and Herat a high addicted person has been reported (UNDCP, Afghanistan Office, 2001). Based on 2001 UNODC's studies in five remote districts of 4 provinces. As the adult population of these five districts (Syed Karam, Hesarak, Azro and Khake e Jabaar) had been estimated around 120,000 people that 694 of them were using opium, 164 were using Heroin, 8514 Hashish users and 2556 were using some kind of recreational pharmaceuticals (UNODC, 2001). Since, due to limited number of interviews with drug users and key informants, these figures are only approximations' there is no official drug user registrar in Afghanistan.

According to a study finding by UNODC, interviewing one hundred (100) key informant and 200 drug users showed that most of drug users who use it as a recreational, appears to be common in Kabul city. There are nearly 6026 Heroin users, 10257 opium users, 26415 Hashish users, 15526 pharmaceutical drugs addicted and 8128 alcohol addicted within Kabul. However, as mentioned before as a result of small number of drug user have interviewed and inherent biases introduce from interviews of key informant these numbers are believed to represent conservative estimates. There are no reports officially released by government for the exact number of drug user in the urban areas (UNODC: Community Drug Profile, Kabul).

Drug such as Heroin is easy to access in Afghanistan. But there are disturbing inclinations toward injection of Heroin alone, including some combination with other substance. This

is reflecting behaviors of those who has come from other countries where injection drug usage is common. (UNODC: Community Drug Profile, Kabul). As one of drug users stated on his interview drugs are like vegetable here, very cheap and infinitely available (UNDCP Program, Islamabad. 1999). In Kabul, single use does of opium costs about (40-50) Afghanis (\$1U.S) (Afghanistan's New War. Accessed August 5, 2005). Though, prices are not stable and change with the seasonal availability of opium and heroin in the local market. Pharmaceutical opiates and other psychoactive substances can be easily obtained from the estimated 15,000 registered pharmacies or many unregistered pharmacies. People can obtain different psychoactive drugs, sedatives, pain killers and narcotics without a prescription and in unlimited quantities. As in Pakistan and India, some pharmacies are reputed to sell buprenorphine (Temgesic) and some addicts report using it, though there is no documented evidence (Strathdee S.A, et al, 2003). Needles and other injection paraphernalia are available over the counter, but their cost may be prohibitive to drug users who are most often unemployed. Pharmacies are likely to continue as a common source of drugs since the Ministry of Public Health (MOPH) does not currently have the capacity to monitor pharmacies. As well as the issue of drug using in Afghanistan seems to be increasing drastically, in addiction treatment and rehabilitation process lift very limited. The service and treatment which is providing by both government and non- government rehabilitation centers is not able to meet the demand related to that much number of addicted persons. In public sector, the national mental health institute, under the supervision of ministry of public of Afghanistan have functioning treatment and rehabilitation centers in several afghan cities. The center locating in Kabul (Mental Health institute) has only 30 treatment slots.) In a few provinces, there are branches of the Mental Health Institute providing out-patient services, such as counseling, but these do not have an in-patient facility (MoPH, 2009).

### **2.3 DRUG ADDICTION AND GENDER**

There is significant difference in drug addiction and relapse among male and female. In the context of general population, persons are varying in responding to risk factors related to addiction, including personality trait, genetic (Heinrich et al., 2016), responding to traumatic situation or abuse (Boschloo et al., 2011; Stevens et al., 2003; Kachadourian et

al., 2014; Lieberman et al., 2016), as well as sociocultural influences (Felitti et al., 1998; Macleod et al., 2013). From Psychiatrist and physicians' point of view since early 20<sup>th</sup> century, women escalate using alcohol quickly once they began (McClellan, 2011; McClellan, 2017; Kandall, 1999; Jill B Becker et al. 2017). Moreover, prevalence of drug addiction among men are likely more than women and are using nearly all types of illicit drugs (Office of Research on Women's Health (ORWH)., n.d). Among various age groups, men showed that they have higher rates of drug use and dependence rather than women (Wizemann & Pardue, 2001).

Also, another report released by department of drug demand reduction of ministry of public health of Afghanistan revealed that there are more than 3 million addicted persons available in the country, from which one million is females and one hundred thousand (100.000) are teenagers (Tolo news, 2019; Department of drug demand reduction, 2018). Generally speaking, drug addiction is a phenomenon that we cannot rely on just one factor which influence a person, it consists of both biological, cultural, environmental and personal experiences (Heinrich et al. 2016).

#### **2.4 ACCESSIBILITY TO HEALTH SERVICE AND REHABILITATION**

Substance abuse and drug addiction in rural and urban areas is the main public health problem, and coverage of service are not sufficient (Erin Pullen M.A & Carrie Oser, PhD, 2014). Drug dependence as a type of disorder can be medicated much easily and effective with relatively less amount of cost including provision of good and standardized psychological therapies (White & William, 2012). Mainly, the outcome for those who have been using heroin and other similar derivative of heroin been much successful returning to normal life and also reducing HIV infection (Moos, 2006), as a result of multiple unsafe injection, crime and death risk due to excessive usage (WHO, 2012; US Department of Health and Human Services, 2016). Though, early and on time treatment give best result for patient in returning their normal live unluckily majority of persons who need that treatment service and rehabilitation have limited access to treatment (Shazzad, et al., 2014). Recent available data indicate that a huge gap is still available in treatment service and provision of standardized rehabilitation programs in area of drug dependence (Pringle, Emptage, & Hubbard, 2006).

Worldwide about 230 million adults aging 15- 64, or in other word 5% of the adult population used an illicit drug at least once in 2010 (UNODC, 2018), including about 27 million people with sever drug problems, and there is poor health and rehabilitation services are accessible. new research and finding reveals that bad consequences of drug dependence are more adverse than before it was thought (US Department of Health and Human Services, 2016). Around the world there are about 35 million people are estimated to have drug dependence and need some serious health assistance (UNODC, 2019). Subsequently, in 2017 globally estimated that around 53 million opioids have been available there which resulted for two third of (585.000) people who died as a result of using drug. In addition to that, in 2017 worldwide 11 million people used drug through injected way, from those 1.4 million have been infected by HIV and 5.6 million with Hepatitis, comparing between 2017 and 2009 there have been 30% increases the population of people with drug dependence. Considering those number of people with drug dependence disorder, treatment service is not sufficient “based on available data, only 45% of countries are able to offer important treatment to treat dependence on heroin and other opiates and almost half the countries where treatment is available is not exceeding than one in five persons with drug use disorders benefits from the service (UNODC, World drug report, 2019). A quarter of the countries’ which identify opiates as the main drug problem do not offer the range of medications recommended by World Health Organization (WHO,2012).

According to ministry of public health of Afghanistan and UNODC report there are around 3 million people are addicted to drug including heroin and its derivatives and synthetic type of heroin, considering that number of addicted persons providing health service is very poor (UNODC, MoPH, 2018; SIGAR, 2012). Considering that statistics, government cannot provide health services and rehabilitation for those persons and government is able to provide health and rehabilitation service annually for 50 thousand people around the country, but the number of people getting addicted and those who are using drug in return are much more than the service provided by government (1TV, 2012; MoPH, 2016).

In the public health sector of Afghanistan different treatment services is provided including: inpatient, outpatient, home remedies, community-based treatment and treatment

in drug rehabilitation services (Hospitals), which has different treatment capacities (MoPH, 2018). The detailed information regarding service provided by ministry of public health of Afghanistan in two years including (2012 and 2015) showed in the following table.

Table 2.1 Treatment services capacity in Afghanistan

<b>Treatment service in Afghanistan</b>				
	Total treatment in 2012	Included		Total treatment in 2015
		Government	NGOs	
<b>Services</b>				
In-Patient	72	21	55	72
Out- Patient	32	0	32	46
Outreach	73	0	73	75
Harm Reduction	4	0	4	26
Village Based	5	0	5	0
Community Based	25	15	10	31
Aftercare	66	0	66	67
Shelter	N/A	N/A	N/A	6
<b>Treatment services for targeted population</b>				
Adults	101	31	80	131
Teenagers	20	0	20	26
Children	32	9	23	21
<b>Treatment capacity</b>				
Clinical staff	896	287	609	917
Inpatient services- Number of patients	2000	730	1270	2740
Annual capacity	13130	5840	7290	19000
Annual capacity of out-patients	8560	3340	5220	9250
Number of patients in home remedies program	460	0	460	260
Capacity of annual treatment at home	3920	0	3920	3920
Total capacity of treatment	25480	8960	16520	32170

Source: Ministry of Public Health (2012), Ministry of Counter Narcotics (2015).



## **2.5 GOVERNMENT POLICY RELATED TO DRUG**

Illicit drug and its increasingly high demand for consumption has been one of the greatest threats to humanity in recent decades, as millions of people has addicted and lost their lives (INCB, 2013). Following to crises existed for humanity such as global warming, nuclear threat and population surge, issue of drug addiction and illicit drug trafficking has been one of the most threatening catastrophes and lucrative business in recent decades (BBC, 2015). In addition to that, it is to be mention that most of the time illicit drug trafficking results to criminal organizations that their activities are against law (Simpson,2003). Due to these two points of views national and international organizations initiated a strict and comprehensive drug regulation and policy to control it (Brochu et al., 2018). As there is no “one size fits all” regulation for all countries in controlling drug, governments have to design their own regulations which fits to circumstances. In a bigger prospective their organizations and commissions who develop policies and regulations covering a broader range including: the way designed regulation can control drug, regulations which disempower organized crime, modernization of the international drug system and the challenges of implementing drug policies (Bennett & Holloway, n.d; Sands,2002). Given policies dominating different aspect of drug controlling and regulating it through a legalized channel for legal use such as medication. One of those aspect to be considered is the public health dimension (Turnbull,2019). For instance, in the year 2002 there were a rule passed by the mayor of a city in Brazil, with around 400.000 residents stopping 4800 bars and restaurants in the city to ban alcohol between 11 pm and 6 pm. After passing this law there was a dramatic decrease in crimes as the follows: Homicides decreased by 47.4%, car accident by 30%, number of attacks against women by 55% and finally the number of hospital admissions related illicit drugs and alcohol by 80% (The global commission on drug, 2018).

Government of Afghanistan also have passed a comprehensive law under the title of “Law against intoxicating drinks and drug as well as their controlling” issued in June 14, 2010. This law has 7 chapter and 67articles which is covered all area of the subject. In chapter one there is 11 articles which included all general statements and orders has discussed such as, fundamental concepts, vision of law, controlling, and activities. Second chapter which has containing 8 articles cover main topic of ruling authorities such as counter- narcotic

police, and special police stationed in boarders. Chapter 3 is discussing on investigation method, seizure and home checking. This chapter has 20 articles and discussed with details on this issue. In chapter 4 of this law a full detail of crime committed by criminals and expected punishments has detailed. Finally, chapter 5 is focusing on miscellaneous statements discussed regarding other government authorities and non-governmental departments and responsibilities. Those departments are including ministry of public health, ministry of interior affairs, ministry of higher education, ministry of education, ministry of Haj and religious affair, ministry of defense. This is to be mentioned that all above ministries and NGO's working in cooperation with ministry of anti- Narcotics (Ministry of Justice of Afghanistan, 2010).

## **2.6 QUALITY OF LIFE OF PERSONS WITH DRUG ADDICTION**

World health organization (WHO) has defined the term in an extended way as perception and understanding of own individual as of his/ her position in the setting of the society and the value of respected society where he lives in harmony to personal goals, expectation and concerns (WHO, n.d; Martha Nussbaum & Amartya Sen, n.d; Annals of Internal Medicine, 2009). Also refer to a general assessment of an individual's well-being, which is including physical, emotional, social, stress level, sexual function and self- perceived dimension of health status (Medical dictionary; Thefreedictionary, 2012). Concept of QOL is covering a bigger range of life aspects which is also depends on individuals own potential and experiences (Hassamzadeh,2018). While assessing health related quality of life overall denomination of live must be considered such as the person's personal believes, psychological state, physical health, social relationships and feature of their environment (Ponizovsky &Grinshoon, 2007; Encyclopedia Britannica, 2019).

Many research findings have showed that opiate- dependent individuals having lower quality of life than those who had been in normal state and have not been using drug. Quality of life (QoL) is considering as a fundamental index while assessing health care system (De Maeyer, Vanderplasschen, & Broekaert, 2010; Hojjati, 2012), and drug addiction possibly could have influence on quality of life (Hojjati, 2012). As result of importance of drug addiction globally, QoL of persons with addicted to drug has been attracted notable attention in new researches (Bizzarri et al., 2005). Quality of life person

with drug addiction in comparing with those who are not addict to drug were mostly (90%) moderate , and also there is no significant difference has been found between men and women in term of QoL and physical symptoms (Poniszovsky et al., 2007; Xiao et al., 2010; Hoseinifar et al., 2011; Masuad Rayani, 2014). In another research don by (Hoseinifar and colleagues, 2011) compared QoL of addicted persons with Normal perosns found that addicted people lived in the worse condition than non-addicted persons. They also reported that addicted people needed more help and support from society. Addicted people typically have many problems such as job finding, marriage and obtaining vehicle driving license (Karbakhsh & Salehian Zandi, 2007)

### 3.1 INTRODUCTION

The basic and fundamental concept of research methodology refer to a specific method or approach through which a researcher recognizes, select, process and analyze information material and evidence regarding a specific topic. This part of research paper allows the researcher to evaluate that respected study's complete validity and reliability. The methodology section of this research paper provides a comprehensive description on how data was collected as well as the process of its analyzation. Mainly there are two type of data can obtain quantitative and qualitative type of data. Qualitative data is the form of description based on language or image while quantitative type of data take the form of numbers and statistical reports.


As qualitative data has subjective and interpretivist prospective nature which is obtained through interview and face to face communication between researcher. This type of data basically involved with in depth interview which consume more time and sample size is limited with less chance to generalize the outcome to a broader population. Two popular method Unstructured interview and observation document analyses are mostly used for data collection. On the other hand, quantitative method focuses on type of data which is objectively obtained and include a large number of participants. Quantitative data deal with numbers and statistical reports through which analysis process become much accurate and easier, for this reason it appears more scientific and appeal suitable for causal and effect question to answer. As well as, this type of data can be analyzed easily by software (MS Excel, SPSS ...) and large number of populations can be included and also a good chance to generalize the outcome to a wider population. Popular method based on qualitative approach is using Questionnaire as well as organizational record among others.

In this study researcher has used quantitative method of data collection to analyze information to achieve the desired outcome. In addition, this chapter provide overall procedure and method that has conducted. Section 3.2 describes the conceptual framework including all variables used, and visualizing overall dependent and independent variables

interaction. **Section 3.3** explains the objectives of this study. **Section 3.4** gives a brief explanation on study design and study population, while **section 3.5** provides a brief explanation on study population and **Section 3.6** give information about area of study. **Section 3.7** is about period of study while **Section 3.8** defines the sample size and sampling technique. The convenience sampling has been used for this study. **Section 3.9** explains the inclusion and exclusion criteria of this study. Sample technique is explained in **section 3.10** and **section 3.11** is about the data collection tools. There is explanation about data analysis process in **Section 3.12**. **Section 3.13** provides the quality control and quality assurance information. **Section 3.14** described the process of ethical consideration used in this thesis.

### 3.2 THEORETICAL FRAMEWORK

Table 3.2: Theoretical framework (dependent and independent variables)

Independent Variable	Dependent/ Response Variable
<p><b>Sociodemographic</b></p> <ul style="list-style-type: none"> <li>• Age</li> <li>• Gender</li> <li>• Level of education</li> <li>• Economic condition</li> </ul> <p><b>Factors of addiction</b></p> <ul style="list-style-type: none"> <li>• Type of drug addiction</li> <li>• Frequency of use</li> <li>• Dose of drug</li> </ul> <p><b>Health insurance?</b></p> <ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Distance</li> <li>• Cost</li> </ul> <p><b>Personal Factors</b></p> <ul style="list-style-type: none"> <li>• Shame</li> <li>• Family</li> <li>• First experience and drug add</li> </ul> <p><b>Treatment factors</b></p> <ul style="list-style-type: none"> <li>• Prevention treatment</li> <li>• Psychological and Physical comorbidity.</li> </ul> <p><b>Supply chain</b></p> <ul style="list-style-type: none"> <li>• Working on the poppy farm</li> <li>• Easily access to drug</li> </ul>	<div style="text-align: center;">  <p><b>Drug addiction</b></p> </div>

### **3.3 GENERAL OBJECTIVE**

To identify factors associated with fast growing of drug addiction and substance abuse among person's aging between (16- 60) years old in Afghanistan.

#### **3.3.1 SPECIFIC OBJECTIVES**

- To determine association of sociodemographic background with drug addiction.
- To find occurrence rate of drug use among male and female users in this study sample.
- To determine relationship of drug addiction with economic condition.
- To determine association of environmental situations including migration with drug addiction.

### **3.4 DESIGN OF STUDY**

In this research a quantitative study, with cross sectional design was conducted for those drug addicted patients who were admitted in drug rehabilitation centers from July 2019- Nov 2019 located in Kabul city Afghanistan. Researcher in this study tried to determine risk factors associated with drug addiction in Afghanistan. As the topic is related to risk factors for this research a cross sectional method is suitable and best to use. This study is a part of quantitative study which basically used to find prevalence of a disease or other topic of study in a specific part of time. Quantitative research is a type of empirical investigation that means the research focuses on verifiable observation rather than theory or logic. Most often this type of research is expressed in numbers. The researcher has represented certain observations that they have been study. Cross sectional study can be used to interpret, the odds ratio, definite risks and relative risks from prevalence's.

Research design is defined as a general framework or snapshot of method and technique selected by researcher aiming to unite different part of research in a logical and reasonable way that problem could be solved without wasting time and resource. As well as, research design offers an understanding on how to apply research by using specific methodology.

### **3.5 STUDY POPULATION**

The study population for this research contained all patients including male and female aging between (16- 60) years old who were admitted/treated in drug rehabilitation centers

from July 2019- Nov 2019 located in Kabul city. In Afghanistan still there is no such comprehensive research has done to found the most prevalent risk factors associated with drug addiction.

### **3.6 STUDY AREA**

Study area for this research is drug addiction in Afghanistan. Researcher has collected data from different drug rehabilitation centers (Ebni sena drug rehab, Jangalag rehab center and Khoshal khan drug rehabilitation center) located in Kabul. It is to be mentioned that those drug rehabilitation centers admitting patients from other hospital as well as through direct attendance of own patient in nominated centers.

### **3.7 STUDY PERIOD**

This study has been done from (July- Nov 2019).

### **3.8 SAMPLE SIZE**

As the exact population of drug addicted patient is unknown, due that case researcher has calculated sample size by using the Cochran formula. This method is conducted when researcher has no more information about population which allows us to calculate samples given an appropriate level of accuracy by considering the level of confidence and estimate of proportion of the present population. This formula can be used when we face to a large population.

$$n_0 = Z^2 pq / e^2$$

Note:

- e is appropriate level of accuracy (margin of error),
- p is estimate proportion of the entire population,
- q is 1 – p.

As we have no information about our subject, we assume maximum variability to the formula, by this we mean  $p = 0.5$ . From another side we say 95% confidence with 5% accuracy or standard of error in this study. In that case Z value of 95% confidence is equal to 1.96 per normal table. Finally, we will have:

$$[(1.96)^2 (0.5) (0.5)] / (0.05)^2 = 385$$



About 385 patients in our target population could be appropriate to give us the confidence level that we need.

As calculated number of samples is size shown in above formula was 385 persons however, due to limited time allocation for data collection, financial problem and some security issues traveling to different provinces for data collection researcher selected the sub-population which is the number of persons with drug addiction admitted in drug rehabilitation centers (located in Kabul city) from July 2019- Nov 2019 and 110 Numbers of patient participants were included in this study. All clients were selected by non-probability/purposeful sample technique that were hospitalized to the center for drug rehabilitation. Self-selection or non-response bias is one of the most common forms of bias and is difficult to manage. Participation in questionnaire must be on a voluntary basis. If only those people with strong views about the topic being researched volunteer, then the results of the study may not reflect the opinions of the wider population creating a bias.

### **3.9 INCLUSION AND EXCLUSION**

Majority of patients registered to the targeted rehabilitation centers located in Kabul city were included in this study. The data had been reviewed and recorded through the hospital's program evaluation database and a modified structured questionnaire. (Included in appendix part of this document)

**Inclusion:** age range, in-patients only, able to answer the question in questionnaire, willing to participate (informed consent signed).

**Exclusion:** severe patients with some psychological problems and some other cases that not applicable/eligible of this study this include persons out of age range.

### **3.10 SAMPLING TECHNIQUE**

Convenience/Purposive sampling method has been used in this research. Convenience sampling method is a kind of non-probability sampling technique that include the sample by selecting from that part of the population which is close and handy to use or is accessible and ease for the researcher. This method of sampling has used because researcher had no idea of numbers of patients in these centers, as well as there was limited number of drug rehab centers covered in only in Kabul city. That is why the researcher chose convenience sampling method for this study. Convenience sampling technique has several advantages

which make it desire method for collecting data such as, readiness, availability, cost effectiveness, ease of research and expedited sample collection.

### **3.11 DATA COLLECTION TOOLS**

In addition to modified structured close-ended questionnaire which was focusing on socio-demographic and economic condition the following variables had been extracted from the medical records and hospital's program evaluation database: patient age, gender, comorbid psychological conditions, and type of drug using (s), days from drug addiction to hospital admission. As well as pilot study had been used. A pilot study was conducted to enhance the reliability and validity of data collection instrument. In addition, it was necessary for the researcher to learn how to administer the instrumentation from which unnecessary errors during administration could be identified and resolved.

### **3.12 DATA MANAGEMENT AND ANALYSIS PROCESS**

The whole data collected from through designed questionnaire was analyzed by the Statistical Package for Social Science (SPSS) version 24.0 and reflected as descriptive statistic of frequency, mean, standard deviation and percentages. Researcher used chi-square test ( $\chi^2$ ) to see the association between descriptive variable such as, demographic and economic conditions, drug related information and referral method to rehabilitation center with the dependent variable.

### **3.13 QUALITY CONTROL AND QUALITY ASSURANCE**

For improving and enhancing the validity and reliability quality control and quality assurance were applied, concerning to data life cycle however, the fundamental focus of researcher was data that was accessible to collect. Quality control and quality assurance are used to explain activities which prevent errors from entering or staying in a data set. These activities ensured the quality of data before it was collected, entered or analyzed, and monitoring and maintaining the quality of data throughout the study. The researcher ensured the quality assurance in research by comprising all the methods, procedure and resources that are extend to make assurance about the maintenance and monitor with which the investigator has conducted. The researcher took responsibility to apply a clear research project. Data collector got training about how to fill the questionnaire and how to ask the question appropriately to ensure the competence of data collection. The researcher

maintained the research records according to the supervisor guideline. Samples and materials were handled and maintained carefully by the researcher.

### **3.14 ETHICAL CONSIDERATION**

Following to review of the ethical board/ committee of Bangladesh Health Profession Institute (BHPI), the academic institute of Dhaka University, department of Public Health research & clinical studies/ IRB secretary of Afghanistan also reviewed the proposal for this research and granted permission to do research. In addition to IRB review of both BHPI and (ANPHI) an extra consent letter was provided to inform interviewees about the aims and significant of the study, then if the client was agreed to participate in the study, his/ her consent had taken by the data collector. The given permission letter was shared to participants on the day of data collection aiming to inform participant about their rights and assured that all information provided will be treated as confidential material and used strictly only for this study. In addition, participant was informed that they had right to withdraw anytime for personal reasons. They also got information about their right not to respond to questions that they think it is sensitive. No personal information of clients disseminated in public and the entire documents were being confidential. All data and relevant documents maintained and shelved in a restricted area by the researcher. And data were in SPSS files anonymously. The record that gives both the name and the record number was stored in secret and only accessible by the primary researcher.

Table 4.1: Demographic characteristic of drug addicted patients

**Central tendency of age (year)**

Mean	32.71
Median	32.00
Mode	30
Std. Deviation	9.524

According to table 4.1 the average age of respondents in this study is 32.7 years old. Midpoint between lowest and highest age is 32 years, and the most frequently occurring age among them are 30 years old.

<b>Gender</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
Male	88	80
Female	22	20
<b>Marital Status</b>		
Single	44	40
Married	66	60
<b>Education level</b>		
Illiterate	56	50.9
School graduate	50	45.5
Professional Inst	2	1.8
Bachelor	2	1.8
<b>Job status before admitting to hospital</b>		
Jobless/ Unemployed	2	1.8
Formal job	6	5.5
Self-employee	58	52.7
National Army/Police	12	10.9
Farmer/ Agriculture	10	9.1
Disability/ No job	21	19.1
Currently in school	1	0.9
<b>Living status (whom with you live?)</b>		
Living with friends	7	6.7
Living with family	87	79.1
Having no permanent residence	16	14.5

Table 4.1 represents central tendency of respondents age in year. Based on respected table Mean of age is 32.71, Median is 32, Mode is 30 and Std. deviation is 9.524. Also, as the table shows among respondents 80% are male and 20% are female. Among them 44 (45%) of respondents was unmarried and 66 (60 %) of them was married. Difference in frequency between them is 22 (15%). Based on this statistic, 56 (50.9%) of persons was illiterate and 50 (45.5%) individuals was school graduate as well as, a small number of individuals with higher level of education consisted 4 (3.6%) of all. Among them 1.8% had diploma from professional institutes and (1.8%) individuals were graduated from university.

Table of job status indicate that 2 (1.8%) of total respondents had no job, 6 (5.5%) had formal job, 58 (52.7%) been self-employed, 12 (10.9%) have been member of national army/ Police, 10 (9.1%) had been working as Farmer/ agricultural business, 21 (19.1%) due to disability had no job and 1 (0.9%) of them was in school. According to above respected table, majority of drug addicted respondents had been self-employed and small number 1 (0.9%) was in school. As well as, data shows that 87 (79.1%) individuals were living with family, 16 (14.5%) of respondents had no permanent living place and 7 (6.7%) individuals was living with their friends. Based on the given statistic majority of interviewees were living with their families however, a smaller number (14.5%) told that having no place for permanent residence.

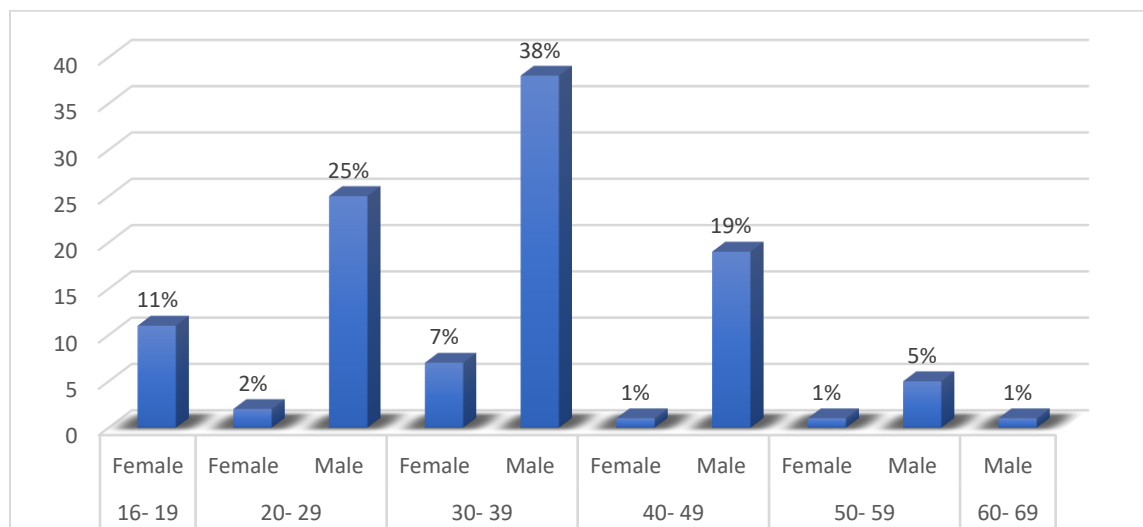


Figure 4.1: Representation of age categories per gender and its percentage

Figure 4.1 displays different age categories, gender and its percentage of drug addicted respondents. All interviewees categorized in to six age groups. For age category of (16-19) years old there is no male participants and all respondents are female which is consisting 11% of respected aging group. Among participants aging between (20- 29) years old numbers of female participants are 2% and number of male participants is 25%. For next age category which is respondents between (30- 39) years of old, containing highest number of participants 7% female and 38% male; which is in total 45% of the whole sample size. Also, based on bar chart 4.1 respondents aging between (40- 49) years old numbers of female participant are only 1% and male participants are 19%. Among age group of (50-59) 5% is male and 1% is female. Finally, among age category of (60- 69) number of females drops in 0% and numbers of male by 1%. So, the highest number of people who are addicted to drug fall in age category of (30- 39) years old which is consisting 40.9 % of all participants and peoples who are aging between (60- 69) years has the lowest number of drug addicted persons which is 1% (only male).

Table 4.2: Individual Perception and past experiences factors related to drug addiction

<b>Past life changing events</b>	<b>(N)</b>	<b>%</b>	<b>(%) of Cases</b>
Divorce/ separation	3	1.7	2.7
Change in health of a family member	11	6.3	10.0
Pregnancy	3	1.7	2.7
Fired from job	32	18.4	29.1
Death of a child, family	15	8.6	13.6
Financial problems	16	9.2	14.5
Experience of violence in childhood	50	28.7	45.5
Personal trauma or injury	9	5.2	8.2
Loss of close friend	13	7.5	11.8
Illness	22	12.6	20.0
Total	174	100.0	158.2

Table 4.2.1 represents frequency and percentage of different events that supposedly results change in life of a person in various dimensions such personal, family, and social status. According to above data set participants has responded of different events as follows: among interviewees 1.7% of respondents had experience of divorce, 11(6.3%) had experience of death or change in health of family members, 3(1.7%) cases of pregnancy, 32 (18.4%) persons had fired from their jobs, 15 (8.6%) of interviewees had experience of losing their child as well as a family member due to war as well as 16 (9.2%) percent of participants had serious financial issue. Additionally, 9 (5.2%) of participants had experienced personal trauma, 13 (7.5%) of participants have lost close friend, 22 (12.6%) had experience of illness in past years. Considering above mentioned cases there is a large number of participants 50 (28.7%) who had mentioned of violence in their childhood life.

#### 4.2.2 First experience of drug abuse/ drug addiction

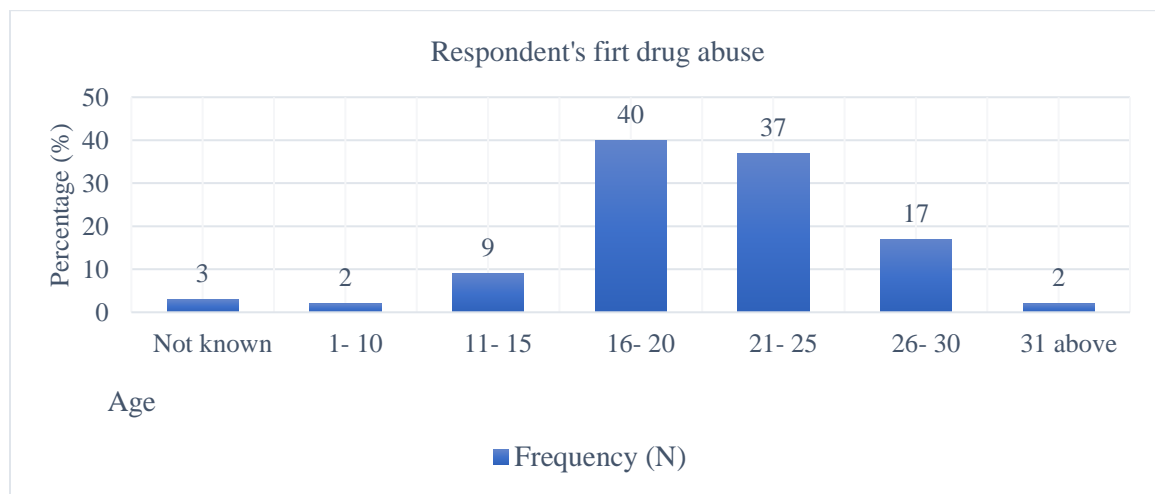


Figure 4.2.1: Age distribution and percentage of respondent's first drug addiction

The above table describe first drug abuse experiences of participants based on different age categories. According to this data set, 2.7% of participants was not remembering when they had their first experience and 1.8% participants were between 1- 10 years old while starting first drug abuse. Participants in category of (11- 15) consist of 8.2% of all interviewees and 36.4% of them belongs to age category of (16- 20) years old. For age group of (21-25) there is 33.6% of participants. According to this data representation maximum of the respondents had their first drug abuse experience aging 16- 25 years old.

### Earlier History of Mental illness

Having previous mental illness supposed to be an emergent factor to drug addiction for most of individuals. To understand this this factor among drug addicted persons, researcher has asked of interviewees as well as their spouse if they experienced any of mental problem during past years. To visualize participants response a bar chart type of graph has been used. Based on respondents 65.5% mentioned that none of them (Neither respondent nor his/her spouse) has had any sorts of mental issues. However, 3.6% of respondents said that their spouse had mental problem and 30.9% had been experiencing themselves during past years. According to mentioned data majority of respondents had no experience of mental issues but, there are 30.9% who retorted positively as having mental problems.

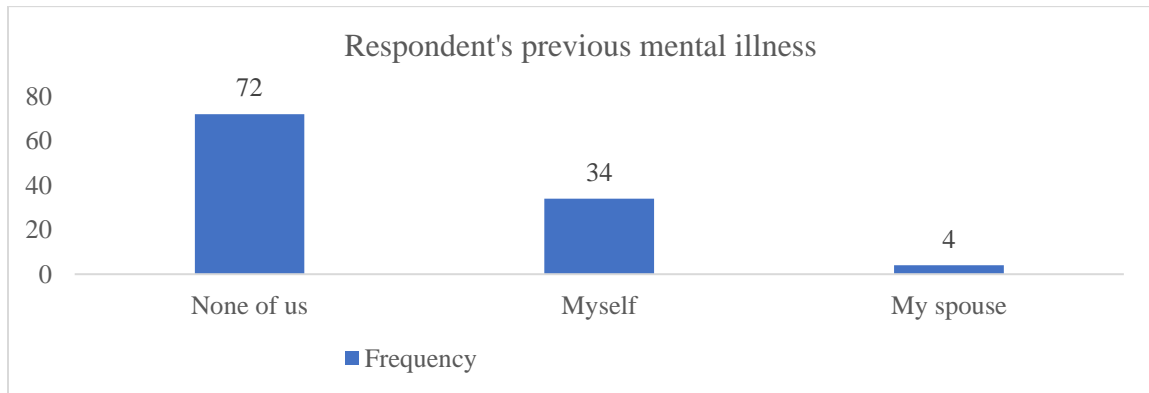


Figure 4.2.2: Frequency and percentage of drug addicted individual's past mental history

### Displacement experience and seeking refuge in other countries

Figure 4.2.4 shows drug addicted person's internally displaced or migration experiences to other countries. This section categorized interviewees responses into different groups such as: Internally displaced persons (displaced to other district or province inside the country), external displaced persons and finally those who had no displacement experience. In the last category there were some individuals who were not originally from Afghanistan and settled there due to marriage with an afghan spouse.

According to interviewees 54.5% have migrated out of Afghanistan before they become addicted to drug. 10.9% of respondents said that they have displaced from original place of residence to other district or province due to insecurity and armed conflict between



government and Taliban. Among the respondents 31.8% told that they had no displacement experience neither inside of country nor overseas.

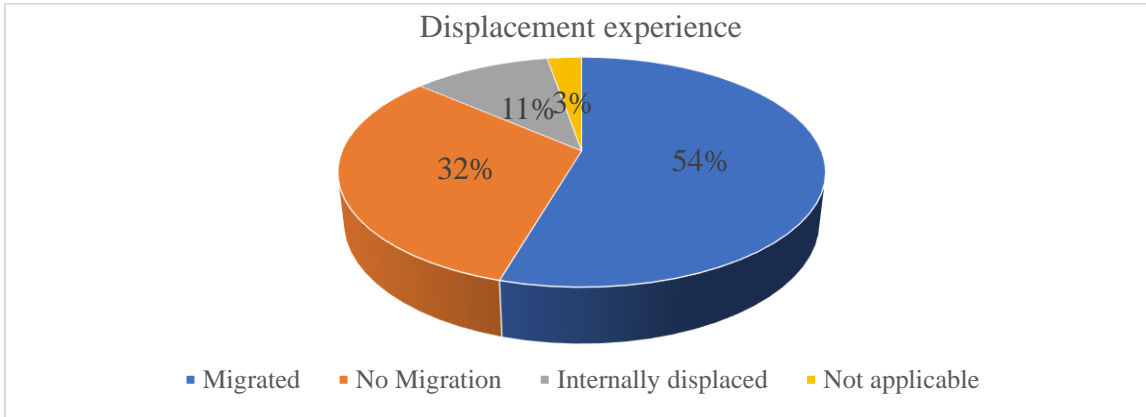


Figure 4.2.4: diagram of respondent’s displacement experience

**Duration of drug use**

Figure 4.2.4 shows respondent’s duration of drug addiction based on year. As there was different experience of drug consumption period for each respondent so, for convenience of calculation researcher has categorized participants experience into four distinct groups. Based on this research data set following data found: people who were using drug less than

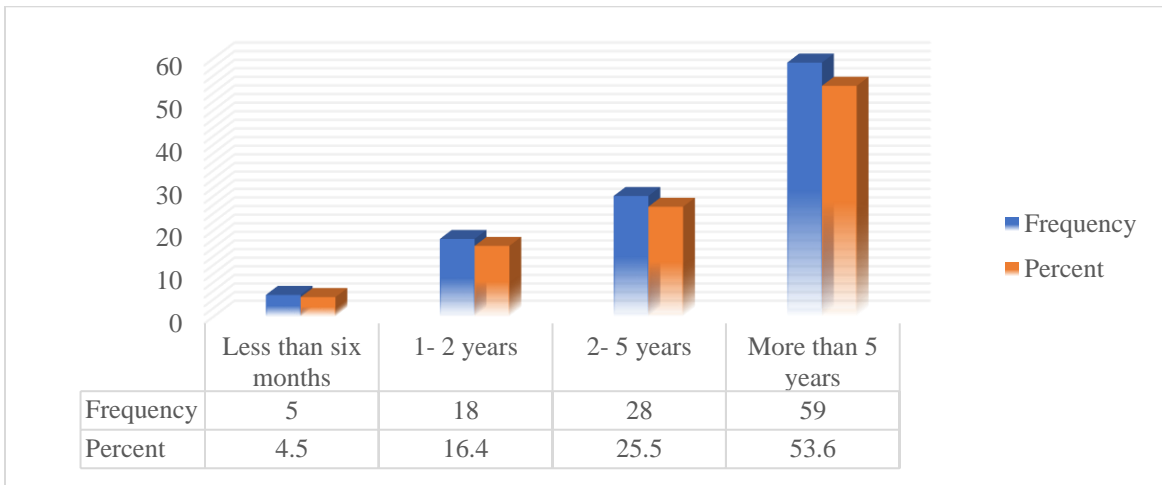


Figure 4.2.3: Duration of drug addiction and its percentage

six months before admitting to respected rehab center consist of total 4.5% of participants. For those group of participants who were using drug regularly between (1-2) years consists 16.4% and people who are categorized between (2-5) year making 25.5% of total

respondents. Individuals who are using drug more than 5 years are more in percentage rather than other groups, and constitute 53.6% of whole participants.

Table 4.2.5: Pattern of drug types and its percentage used by respondents

Drug types	Responses		Cases (%)
	N	Percent (%)	
<b>Opium</b>	88	30.1	80.0
<b>Hashish/Marijuana</b>	66	22.6	60.0
<b>Shisha</b>	64	21.9	58.2
<b>Drug through injection</b>	74	25.3	67.3
<b>Total</b>	292	100.0	265.5

Table 4.2.5 represent pattern of drug types and its percentage among drug addicted persons. According to table opium with 30.1% is the most frequently used drug among drug addicted people and drug through injection is the second most popular type of drug among addicted persons and is consisting of 22.6% of all. Following to opium, drug through injection, Marijuana/ Shisha ranked with 22.6 % and 21.9%.

Table 4.2.6: Pattern of drug use among different education levels

Education level	Opium users		Hashish user		Shisha user		Drug through injection	
	N	%	N	%	N	%	N	%
Illiterate	48	85.7	38	67.9	32	57.1	44	78.6
School graduate	35	72.9	25	50.0	29	58.0	27	54.0
Professional Institute graduate	2	100	2	100.0	2	100.0	2	100.0
Bachelor	0	0	1	50.0	1	50.0	1	50.0
<b>Total</b>	<b>85</b>	<b>80.6</b>	<b>66</b>	<b>60.0</b>	<b>64</b>	<b>58.2</b>	<b>74</b>	<b>67.3</b>

Above table 4.2.6 show numbers of cases and its percentage among different education level. Based on this table level of education grouped in 4 different categories such as: Illiterate, School graduate, Professional institute graduate and Bachelor degree. Among illiterate group n=48 (85.7%), school graduate n= 35 (72.9%), professional institute n=2 (100%) and bachelor degree n=2 (100%) was using opium. However, in illiterate group n= 38 (67.9%) is illiterate, n= 25 (50%) are school graduate, n= 2 (100%) professional institute and n= 1 (50%) are having bachelor degree who are using Hashish. This table indicate that number of persons with low level of education is higher in different types of drug use and this number decrease while level of education is increasing among respondents.

### 4.3 Family Conditions

Table 4.3.1 Distribution of family member

<b># of family members</b>	<b>Frequency (N)</b>	<b>Percent (%)</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
1-3	16	14.5	14.5	14.5
4-6	46	41.8	41.8	56.4
7-10	29	26.4	26.4	82.7
10>	19	17.3	17.3	100.0
Total	110	100.0	100.0	

Table 4.3.1 shows distribution of family members of drug addicted people. Based on this table minimum number of family is 1 and maximum is 16 individuals. For convenience of calculation all family members grouped into four different categories. Among those categories 41.8% of drug addicted persons are having 4-6 family members and 17% of respondents told they are living in a family with more than 10 members. Also, respondents who are living with (1- 3) family members consisting 14.5% and, those who are living in a family with (3- 10) member are consisting 26.4% of total participants.

### Family welfare comparing to other families

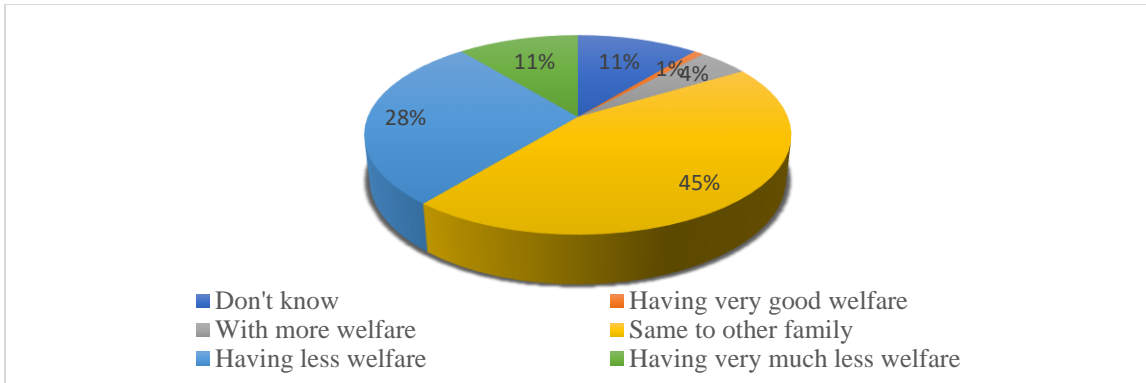


Figure 4.3.1: Pie chart of family welfare comparing to others

Figure 4.3.1 (pie chart) is showing drug addicted people family welfare comparing to other families. For this purpose, all responses have categorized into six various categories. Among all participants 44.5% of them told that they are enjoying same facilities and welfare comparing to other families. Second category of respondents (28.2%) mentioned that they have access to lesser welfare comparing to other families living around as well as, 10.9% mentioned that they have very much less facilities. Only 1% of participants told they were experiencing a better family welfare comparing to others.

### Total family income in months

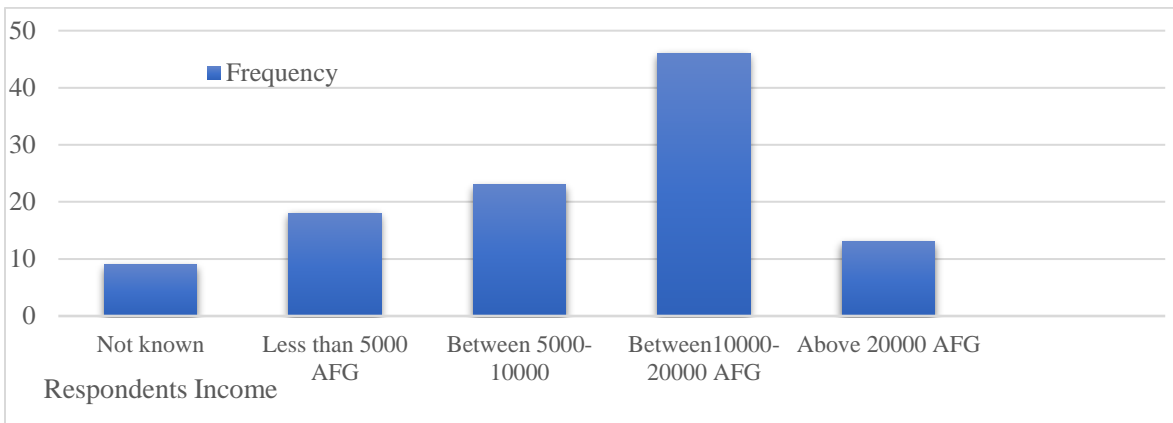


Figure 4.3.2 displays Drug addicted person’s total family income per (month)

The above figure represents patient’s family income with its percentage. In this study for convenience of calculation and analysis, all family incomes are categorized into five groups

listed as: families with less than 5000, between (5000\_ 10000), between (10000- 20,000) and those who has salary more than 20,000 Afghani. According to its Bar graph, majority of families 41.8% had income between 10,000- 20000 Afghani and those who had earning more than 20,000 are the least and constitute 11.8% of all.

**Parent’s Occupations**

**Father’s Job:**

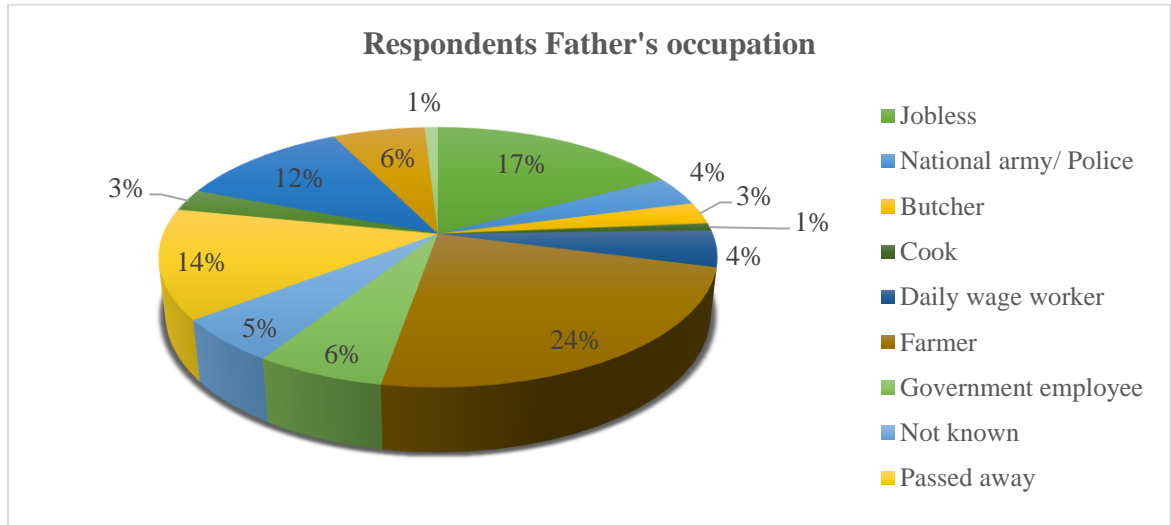


Figure 4.3. 4: Pie chart of respondents father’s occupation

According to data set shown in above pie chart 4.3. 4, 24% of drug addicted respondents fathers has been busy with farming and agriculture and 17% self-employed. Beside other respected occupations as presented based on percentage, a large number of them (17%) were unemployed.

**Mother’s Occupations:**

In below pie chart based on respondents’ answers 68% of drug addicted persons mothers been busy as housewife rather than doing job outside of home. Meanwhile, 17% of them were passed away during respondents’ early childhood. As well as to in addition of above-mentioned numbers, 2% was busy as teacher and small percentages with different business outside of home.

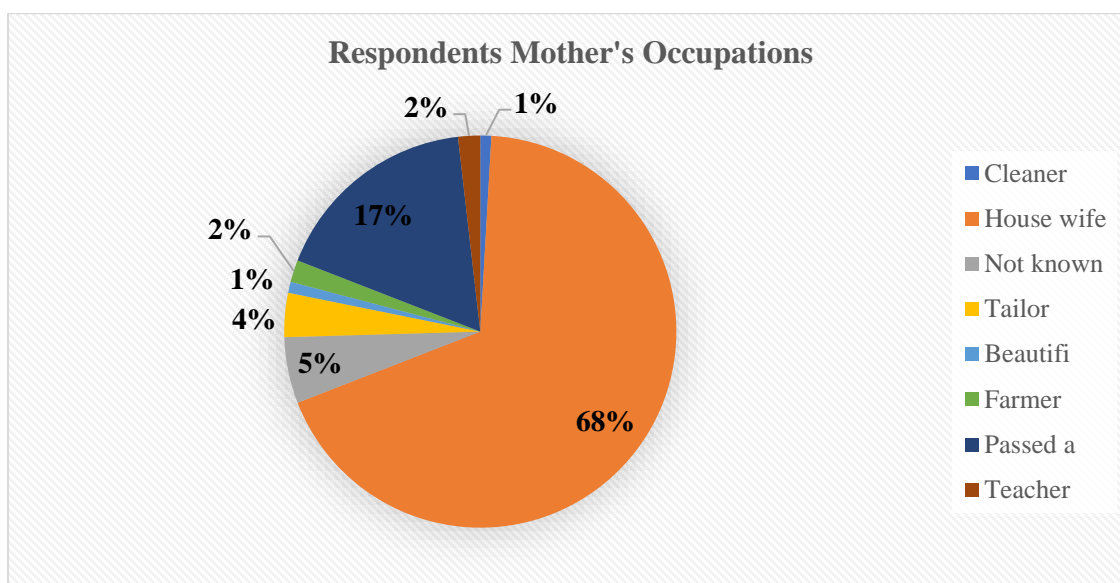


Figure 4.3.5: pie chart of respondent's mothers' occupations

#### Parent's drug addiction history:

Table 4.3.5: Dichotomy group tabulation of parent's drug addiction history

Cases	N	%	Cases (%)
My parent is not using drug	86	73.5	78.2
My mother	11	9.4	10.0
My father	14	12.0	12.7
My step parent	2	1.7	1.8
The one who raised me	4	3.4	3.6
Total	117	100.0	106.4

Table 4.2.5 represent drug addicted persons parents and close family members previous drug addiction history. Among all response n=86 (73.5%) of drug addicted parent as well as their close families having no drug addiction habit in the past. However, n= 11 (9.4%) told their mother had been using drug and, n= 14 (12%) of respondent's father, n= 2 (1.7%) told of their step parent and n= 4 (3.6%) percent of interviewees told the one who raised them had been using addicted to drug.

#### 4.4 Condition of living area and supply chain related factors

##### Security condition of living place:

Place of living	Frequency	Percent
Living in conflicted region	42	38.2
Living in secure region	68	61.8

Table 4.4.1 respondents living area of drug addicted persons with frequency and percentage. Among participants n= 42 (38.2%) of respondents were living in conflicted region of country where government has no absolute control on those areas. However, remaining part of respondents n= 68 (61%) declared that they were living in secure area of country.

##### Popular types agriculture in the area of living

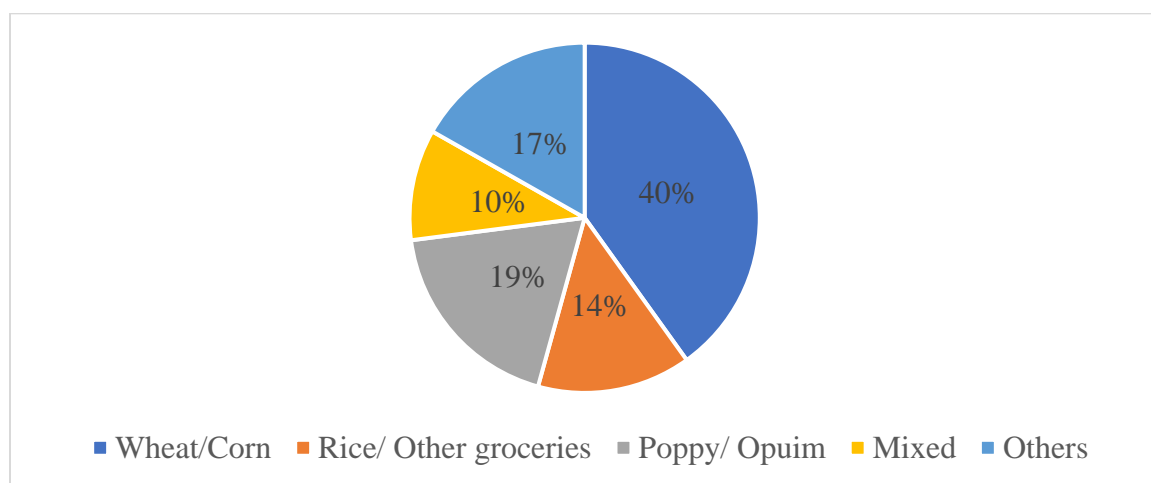


Figure 4.4.1: Pie chart of most popular cultivation in the area of living

Figure 4.4.1 respondents' drug addicted participants popular sort of agriculture at their living region. Based on data set recorded by respondents displaying that 40% of farmers were cultivating their land wheat and corn, 14% rice including other groceries, 10. 19% were farming mixed of different mentioned plants based on markets need, as well as 16.67% told of other plants rather than above mentioned types. On the other hand, 18.52

% of respondents said that they cultivated Poppy and other intoxicant related plants on their lands.

### **Easiness on obtaining drug from market**

Table 4.4.2: Respondents replay on easiness of obtaining drug from market

<b>Responses</b>	<b>Frequency (N)</b>	<b>Percent (%)</b>
Not known	6	5.5
relatively difficult	46	41.8
Very easy	24	21.8
Very difficult	26	23.6
Relatively easy	8	7.3

Table 4.4.2 represent the easiness of obtaining drug from market. For the purpose of finding best result, structure of questionnaire was designed to be able to categorize responses from very easy to very difficult. As well as an exceptional response was also developed for those who certainly unable to categorize or rate this part. In overall, 21.8% of drug addicted respondents said it was very easy and 7.3% said it was relatively easy process to obtain drug from market. Yet, 41.8% told it was relatively difficult and for the rest 23.6% of them this process has been very difficult.

### **4.5 Drug addiction and daily problems**

Table 4.5.1: Represents daily issue as result of drug addiction

<b>Daily issues as result of drug addiction</b>	<b>Frequency (N)</b>	<b>Percent (%)</b>
Feeling guilty while using drug	99	90.0
Feeling tired and experiencing flashback	86	78.2
Drug addiction resulted to a family problem	89	80.9
Drug addiction created an issue in the workplace	81	73.6
Being victimized/ faced serious conflict	68	61.8
Committed illegal activities for receiving drug	47	42.7
Being arrested as result of receiving drug illegally	31	28.2
Faced to health issue	60	54.5



According to above table among respondents n= 99 (90%) reported that they were feeling guilty while using drug, 78.2% told that due to drug addiction they are feeling tired and experiencing flash back and most importantly 80% of respondents said that drug addiction caused family problem for them. As well as, 73.6% had problem in workplace, 61.8% of interviewees being victimized, 42.7% of them committed crim and engaged with illegal activities, 28.2% arrested by police and 54.5% told that as result of drug addiction faced with serious health issues.

Table 4.5.2: Association of drugs and different age groups

Drug types		Age Groups				df	Chi square test P-value
		26- 30	31- 35	36- 40	40 above		
		N	N	N	N		
Opium	Yes	8	11	19	50	3	0.233
	No	5	3	5	8		
Marijuana	Yes	5	11	13	37	3	0.168
	No	8	3	11	22		
Shisha	Yes	3	11	13	37	3	0.022
	No	10	3	11	22		
Drug through injection	Yes	7	9	18	40	3	0.619
	No	6	5	6	19		

Table 4.5.2 displaying cross tabulation and chi square test between drug addiction and different age categories. Cross tab is a kind of table which demonstrate relationship among two or more variables. It helps a researcher to understand how categorical data are related to each other. While a regular table just shows relationship among categorical data, cross tab table shows the relations as well as probability table. Others just call it multi-dimensional table because of ability for summarizing and structuring a large amount of data into a smaller table by showing possibilities, too. It also can show frequencies and percentages for columns, rows and total cells.

Moreover, when we use cross tab, we have an optional test for testing the independency of categorical variable to know whether it is happened by relationship among variables or it

occurred accidentally. For this purpose, we use chi-square test to identify if there is any significant different among expected result and real one? In a study there are some hypotheses which expresses observations into classified categories or we can say null hypothesis. It gives us some possibilities that our observation may fall into similarities or corresponding categories. The goal of chi-square test is to determine how the result of our observation may put the null hypothesis correct. For this purpose, the researcher tended to use the cross tabulation and chi-square test for finding independency within several categorical variable as well as relationship between them. In the table 4.5.2 association of drug addiction with different age group has showed. Among drug users, opium is consumed the most, specifically among age group of 31-40 years old. In the chi- square test, the P-value for Opium is 0.233, Marijuana 0.168, Shisha 0.022 drug through injection is 0.619 (P= 0.05) it is concluded that among different type of drug, Shisha has significant association with age.

Table 4.5.3: Association of Gender with shisha type of drug users

Gender		Shisha		Total	df	Chi square test P-value
		Yes	No			
Male	N	30 (34.1)	58 (65.9)	88 (100)	1	0.001
Female	N	16 (72.7)	6 (27.3)	22 (100)		
Total	N	46 (41.8)	64 (58.2)	110 (100)		

(): Indicates percentage

Table 4.5.3 demonstrate cross tabulation of gender with Shisha type of drug use. Based on this table most of Shisha user are men which is 65.9% of all and 27.3% is female. The chi-square test 0.001 ( $p = 0.05$ ) illustrates that there is a significant relation between gender and Shisha type of drug consumption means that 6 out of 22 females used shisha (27,3%) and 58 out of 88 males used shisha (65,9%). Shisha addiction is dependent to gender.

Table 4.5.4: Association of education level and drug addiction (Drug through injection)

Educational Level		Drug through injection		Total	df	Chi square test P-value
		Yes	No			
Illiterate	N	12 (21.4)	44 (78.6)	56 (100)	3	0.037
School graduate	N	23 (46)	27 (54)	50 (50)		
Professional institute	N	0 (0.0)	2 (100)	2 (100)		
Bachelor	N	1 (50.0)	1 (50.)	2 (100.)		
Total	N	36 (32.7)	74 (67.3)	110 (100)		

(N): Indicates percentage

Table 4.5.4 describe association of drug through injection with level of education among drug addicted respondents. Based on this table, among illiterate group 78.6% are using drug through injection, school graduate 54%, Professional institute graduate n= 2 (100%), Bachelor n=1 (50%) is using drug as way of injection. The chi- square test 0.037 (p = 0.05) shows that there is significant relation between education level and using drug through injection. With this consideration, education level is associated with drug addiction (consumption of drug through injection).

Table 4.5.5: Association of economic condition with Injection type of drug addiction

Total family income (AFN)		Drug through injection		Total	df	Chi square test P-value
		Yes	No			
Not known	N	1 (11.1)	8 (88.9)	9 (100)	4	0.000
Less than 5000 AFN	N	1 (5.6)	17 (94.4)	18 (100)		
Between 5000- 10000 AFN	N	4 (17.4)	19 (82.6)	23 (100)		
Between 10000- 20000 AFN	N	25 (54.3)	21 (45.7)	46 (100)		
Above 20000 AFG	N	4 (30)	9 (69.2)	13 (100)		
Total	N	35 (32.1)	74 (67.9)	110 (100)		

Table 4.5.5 presents cross tabulation and chi- square test between drug addiction and family income of drug addicted individuals. For this purpose, whole range of interviewees income categorized in to different group intervals. Among group of respondents who are earning between (5- 10) thousands 82.6% are using drug through injection, those who are earning

between (10- 20) thousands 45.7% are addicted to using drug through injection and, those who are earning more than 20 thousand 69.2% of them are addicted to drug as means of injection. The chi- square test 0.000 ( $p = 0.05$ ) shows that there is significant relation between total family incomes and drug addiction through injection. Considering this, family income is dependent to drug addiction; as much as family income lowering on that much there is high chance to get addicted to drug.

Table 4.5.6: Association familiar agriculture in area of living with Shisha use

Most familiar agriculture type in the area of living		Shisha type of drug use		Total	df	Chi square test P-value
		Yes	No			
Wheat and corn	N	14 (32.6)	29 (67.4)	43 (100)	4	0.058
Rice and other groceries	N	6 (37.5)	10 (62.5)	16 (100)		
Poppy	N	12 (60)	8 (40)	20 (100)		
Mixed	N	8 (72.7)	3 (27.3)	11 (100)		
Others	N	6 (33.3)	12 (66.7)	18 (100)		
Total	N	46 (42.6)	62 (57.4)	110 (100)		

() Indicates percentage (%)

Table 4.5.6 presents cross tabulation and chi- square test between familiar agriculture in area of living with Shisha use. For this purpose, whole range of interviewees popular agriculture at the area of living categorized in to different group intervals. Among group of respondents who are cultivating whet and corn are 64. The chi- square test 0.058 ( $p = 0.05$ ) shows that there is significant relation between familiar agriculture in area of living and Shisha type of drug addiction. Considering this, a large number of family are cultivating whet and corn and other remaining are consist of rice and mixed of different plants. Among them some families are dependent to drug addiction poppy cultivation.

Table 4.5.7: Association of familiar agriculture in area of living with Opium use

Most familiar agriculture type in the area of living		Opium use		Total	df	Chi square test P-value
		Yes	No			
Wheat and corn	N	10 (23.3)	33 (76.7)	43 (100)	4	0.022
Rice and other groceries	N	1 (6.3)	15 (93.8)	16 (100)		
Poppy and other opium plant	N	3 (15)	17 (85)	20 (100)		
Mixed	N	6 (54.5)	5 (45.5)	11 (100)		
Others	N	2 (11.1)	16 (88.9)	18 (100)		
Total	N	20.4%	79.6%	100.0%		

In the table 4.5.7 association of common type of agriculture in the area of respondents has studied with drug addiction. To find the association between this two variables, the common types of agriculture has categorized into five different classes. Following to chi-square tests 0.058, 0.022 ( $p = 0.05$ ), degree of freedom ( $df = 4$ ) the result shows that there is a significant association is available between interviewees common agriculture types in the area of living with Opium and Shisha use accordingly. In other word, types of agriculture are dependent to drug addiction and is one of risk factors.

Table 4.5.8: Association of drug addiction (Opium) with major life changing events (Job loss)

Fired from job		Opium		Total	df	Chi square test P-value
		Yes	No			
Yes	N	19 (24.4)	59 (75.6)	78 (100)	1	0.059
No	N	3 (9.4)	29 (90.6)	32 (100)		
Total	N	22 (20)	88 (80)	110 (100)		

Table 4.5.8 represent relationship of job loss with drug addiction (Opium use). Losing job is supposed as one of immediate social and personal change in and individual's life. Due to this reason, for finding association between respondent's experience of losing his/ her

job with intention to opium use researcher has used cross tabulation and chi square test. the chi- square test 0.059 ( $p = 0.05$ ) with degree of freedom ( $df= 1$ ) was found. Based on specified P value it concluded that there is significant association is available between person experience of job loss and opium use. In other word, those who had experience of job loss showed more intention to opium use and is found as risk factor to drug addiction.

Table 4.5.9: Association of migration with shisha use

Migration experiences		Shisha type of drug use		Total	df	Chi squire test P-value
		Yes	No			
Yes, migrated out of Afghanistan	N	18 (30)	42 (70)	60 (100)	3	0.016
No migration experiences	N	17 (48.6)	18 (51.4)	35 (100)		
Due to war have displaced from own place of living	N	9 (75)	3 (25)	12 (100)		
Not applicable	N	2 (66.7)	1 (33.3)	3 (100)		
Total	N	46 (41.8)	64 (58.2)	110 (100)		

Table 4.5. 9: Association of migration with Opium use

Migration experiences		Opium type of drug use		Total	df	Chi squire test P-value
		Yes	No			
Yes, migrated out of Afghanistan	N	9 (15)	51 (85)	60 (100)	3	0.038
No migration experiences	N	7 (20)	28 (80)	35 (100)		
Due to war have displaced from own place of living	N	6 (50)	6 (50)	12 (100)		
Not applicable	N	0 (0)	3 (100)	3 (100)		
Total	N	22 (20)	88 (80)	110 (100)		

Table 10: Association of drug addiction with migration with Marijuana/ Hashish

Migration experiences		Opium type of drug use		Total	df	Chi square test P-value
		Yes	No			
Yes, migrated out of Afghanistan	N	17 (28.3)	43 (71.7)	60 (100)	3	0.049
No migration experiences	N	18 (51.4)	17 (48.6)	35 (100)		
Due to war have displaced from own place of living	N	7 (58.3)	5 (41.7)	12 (100)		
Not applicable	N	2 (66.7)	1(33.3)	3 (100)		
Total	N	44 (40)	66 (60)	110 (100)		

Table 4. (8,9,10) represent association of different types of drug addiction with respondent's migration experiences. In the chi-square tests 0.016, 0.038, 0.049 ( $p = 0.05$ ), degree of freedom ( $df = 3$ ) the result shows that there is a significant association is available between interviewees migration experience and Opium, Hashish, Shisha use accordingly. In other word, migration experiences are dependent to drug addiction and is one of risk factors associated with drug addiction.

## **5.1 Demographic status**

**5.1.1 Age:** Among the drug addicted persons age group has playing an important role (Kaicheng Huang & Jianbong Liu, 2010; Veda Mehran, 2008; Ghana Med et al., 2005). In one finding the result indicated that 59.8% of drug addicted persons been between (15- 34) years old, among them 74.5% were male and 25.5% included female. (Ranjan et al., 2010). In this study as drug addicted people were from different age group for instance drug addicted people between (16- 39) years old was highlighted more than other age group with moderate association to drug addiction. Among drug addicted people 20% were female and 80% were male. Also, based on chi-square test  $P = 0.065$  and  $P > 0.05$  so, it is concluded that a moderate association is available between age and drug addiction. On literature part prevalence of drug addiction among men were likely more than women and it is said that men are using almost all types of drug rather than women (Wizemann & Pardue, 2001). In this study researcher also found that the same result is true; in other words based on analyses of data the percentage between male drug user and female drug user is (male 80% and female 20%). This is maybe because men are more exposing to outsider world rather than women; also, it is true among Muslim community more specifically, in Afghan society that female are having no complete liberty to go outside of home or doing job. As well as, in most community's people are more sensitive and cautious to female rather than male.

### **5.1.2 Gender**

In the literature section a study by Ghana Med et al found that Substance abuse and addiction is greatly an issue among the youngster and adolescent males, in which the P value was ( $P < 0.05$ ). Also, a significant difference among male and female who were addicted to drug was detected ( $P < 0.05$ ) at the same time there were an important association with treatment seeking behavior among male and female (Ghana Med et al., 2005). Moreover, prevalence of drug addiction among men are likely more than women and are using nearly all types of illicit drugs (Office of Research on Women's Health,



ORWH). Among various age groups, men showed that they have higher rates of drug use and dependence rather than women (Wizemann & Pardue, 2001). Additionally, in the literature a study by Heinrich et al, 2016 found that there is a significant difference in drug addiction and relapse among male and female; it indicates that male drug addicted persons are more tended to become addicted and use drug again after receiving rehabilitation rather than women. Generally, persons are varying in responding to risk factors related to addiction, including personality trait, genetic (Heinrich et al., 2016), responding to traumatic situation or abuse (Boschloo et al., 2011; Stevens et al., 2003; Kachadourian et al., 2014; Lieberman et al., 2016), as well as sociocultural influences (Felitti et al., 1998; Macleod et al., 2013).

According to this study findings gender and drug addiction are dependent and statistically a significant association was found between these two variables. The chi-square test 0.006 ( $p = 0.05$ ) shows that there is significant relation between gender and drug addiction. It means that gender is dependent to drug addiction; being male is more vulnerable to become addicted to drug rather than female which is same as (Ghana Med et al., 2005; Wizemann & Pardue, 2001) findings. Additionally, according to data analysis it is found that most of drug addicted persons are using opium, of 83% male and 68.2% of the female addicted persons in the study sample. Relapsing process could be as result of various factors such as personality, genetic, skill of person responding to traumatic situation similar to (Boschloo et al., 2011).

### **5.1.3 Education level**

According to previous studies one third of drug addicted persons were dropped from school while they were at the secondary level stage of their education ( $P < 0.05$ ) more than fifty percent of addicted person's parent are divorced or separated ( $P < 0.05$ ) and, there were no significant difference between religious trend and ethnicity of addicted persons (Ghana Med et al., 2005). In 2016 a study was done in Dhaka Bangladesh revealed that Educational qualification of 28.07% drug addicted persons were up to primary level, 36.84% up to secondary level (Rahman, Ahmad, & Ali, 2016). Also, another research finding result showed that 72.1% of participants have been illiterate. This display that absence of literacy in community dramatically accelerate number of addicted persons.

Finally, another research found that among drug addicted people lack of literacy specify 20% of addicted person, those who completed primary school consist of 18%, Middle school were 25% and few numbers of participants (8%) have been graduated from university (Transcend Recovery Community, 2019).

Comparison of result from this finding is different than findings from literature as followings: According to this study (50.9 %) of drug addicted persons are illiterate and they are unable to read and write which is less than Transcend Recovery Community-2019 result and almost similar to research findings done by Rahman et al, 2016 in Dhaka Bangladesh. In this finding 45.5 % of drug users is retaining school diploma and are able to read and write, however according to Transcend Recovery Community this percentage was 33% which is less than this finding. Based on given research finding 8% of drug addicted people had graduated from university but, in this study, researcher found that only 1.8 % of drug users have education level higher than school such as professional institute diploma and bachelor degree. The chi-square test  $P = 0.037$  ( $P = 0.05$ ) shows that there is statistically a significant relation between education level and drug addiction through injection. With this consideration, education level is associated with to drug addiction; people with low level of education tended to be more addicted to drug. As this finding result is different than Transcend Recovery Community, 2019; Rahman et al, 2016). This difference could be as result of cultural diversity, prospective of respected society as well as high rate of unemployment.

#### **5.1.4 Economic condition**

Based on previous study findings done by Vida Mehran in 2008 in relation to drug addiction with economic condition found that 67.6 % of drug addicted people in Afghanistan is living with less than \$ 60 income per month. In addition to this, as result of having low income they are failed to provide medicine and other primary health care for family members including children so, respondents reported that they are using drug as medicine purpose. Also, some families are using opium as way of treatment and relieving of tiresome as a traditional behavior. So, researcher has founded there has been a significant association between consumption of opium and income in that study and revealed that 49.53% of female drug addicted persons are not employed additionally to say that, not only

self-unemployment was as risk factor but also other family members were suffering as being joblessness (Veda Mehran, 2008).

In this study it is found that among drug addicted persons in Afghanistan majority of them (41.8%) including other family income resource was between 10,000- 20,000 AFN) and 45% of them had income lesser than 10,000 AFN per month. The chi-square test 0.047 ( $p = 0.05$ ) shows that there is significant relation between total family incomes and drug addiction. Considering this, family income shows a relationship to drug addiction; as much as family income lowering on that much there is high risk of getting addicted to drug. Data analysis show that total family income is more than previous research but, it is still very low because in questionnaire it has been asked total family income not his/ her own respondent as well as according to finding the average family members of Afghan family is around 7 persons so it's not covered all expenses. So, they also reported that using drug such as opium as way of treatment and relieving stress.

## **5.2 Association of drug addiction with Individual Perception and past experiences**

**5.2. 1 Respondents types of drug abuse:** According to study finding drug addicted persons in Afghanistan consuming drugs by the following three methods: eating 69%, smoking 38% and consuming drug through injection only 1%. Among them 36.1% of drug user stated that they obtaining drug by friends and peer group also, 87.73% told that obtaining drug was very easy for them. Among them 10.65% said that they obtaining drug from their own land. In addition to this, 4.11 % told that they have been working on the poppy field. At the same study researcher also found that 26.93% of respondents are consuming opium as way of treatment. They reported that families are also consuming drug as psychological relieve 14.13% of all (Veda Mehran, 2008).

In this study researcher found that 79.1 % of drug addicted persons are using opium, 60% are using Hashish/ Marijuana, 58% consuming Shisha and, 67.3 % using drug through injection. Accordingly, it found that consuming drug through injection is in higher position.

On the other hand, 29.1% of drug addicted person mentioned that obtaining drug was very easy for them and for 65.4% of respondents it's been difficult to obtain drug. It shows that for majority of drug addicted persons getting drug had been easy in the past however, based

on this study finding this percentage reduced by 29.1%. this maybe because of government strict rule as well as arresting numbers of drug dealers by police in last few years back in the country.

### **5.3 Relationship of Family Conditions with drug addiction**

#### **5.3.1 Total family income in months and employment status**

In the literature part based on research finding conduct in Mumbai India displayed that there is no significant relationship between socioeconomic and drug addiction (Ranjan et al., 2010). However, another study found that working status and drug addiction has significant association with each other, as much as the percentage of employment declining, consequently large number people failing to provide livelihood for their family and mostly they are starting to consume drug to relief distress and reduce the pressure (Lamprey, 2005). In this research it's found that among drug addicted people 41% of them earning between 10- 20 thousand AFN per month. The chi- square test 0.047 ( $p = 0.05$ ) shows that there is significant relation between total family incomes and drug addiction is existing. Considering this, family income is dependent to drug addiction; as much as family income dropping on that much there is high risk of getting addicted to drug. Data analysis show that total family income is more than previous research but, it is still very low because in questionnaire it has been asked total family income not his/ her own respondent as well as according to finding the average family members of Afghan family is around 7 people so it's not covered all expenses; same as Lamprey, 2005 findings. Also, according to respondents' answers regarding their own family welfare in comparing to other family; 44.5% mentioned that there is no difference between their families and, having same welfare. However, 28.2% mentioned that their family welfare is in lower condition rather than other families. The chi- square test 0.870 ( $p = 0.05$ ) shows that there is no significant relation between family living quality (welfare) and drug addiction. In other word, having good or poor family welfare has not any association with drug addiction, a person in any living state can be addicted to drug.

#### **5.3.2 Drug addiction, quality of life and its consequences:**

Quality of life of person with drug addiction in comparing with non-drug addicted person was (90%) moderate, and also there is no significant difference has been found between

men and women in term of QoL and physical symptoms (Poniszovsky et al., 2007; Xiao et al., 2010; Hoseinifar et al., 2011; Masuad Rayani, 2014). In another research done by (Hoseinifar and colleagues, 2011) compared QoL of addicted persons with Normal persons found that addicted people lived in the worse condition than non-addicted persons. They also reported that addicted people needed more help and support from society. Addicted people typically have many problems such as job finding, marriage and obtaining vehicle driving license (Karbakhsh & Salehian Zandi, 2007).

According to this study findings among respondents (n= 99) 90% reported that they were feeling guilty while using drug, 78.2% told that due to drug addiction they are feeling tired and experiencing flash back and most importantly, 80% of drug addicted persons said that action of their addiction caused some serous family problem for them, as well as, 73.6% mentioned that while attend in workplace being annoyed or teased by his/ her co- workers, 61.8% of drug addicted interviewees told that they are being victimized. Among drug addicted 42.7% of them committed crim and engaged with illegal activities, as well as 28.2% arrested by police and 54.5% told that as result of drug addiction faced with serious health issues. Based on these factors its concluded that drug addicted persons in Afghan society having low quality of life same as research was done by Hoseinifar and colleagues, 2011 which is different than study findings by (Poniszovsky et al., 2007; Xiao et al., 2010; Hoseinifar et al., 2011; Masuad Rayani, 2014) that has been told there is no association between drug addiction and quality of life.

#### **5.4 Association of living area and supply chain with drug addiction**

##### **Prevalence rate of drug addiction:**

In literature part based on findings of (Linda B Cottler et al., 2014) 11.4% of Afghan papulation was tested positive for using drugs (laboratory test), among them the most common type of drug was opium with prevalence rate of (5.6%). Also, consumption of prescribed drug was common among respondents with (7.6%) rate of prevalence. Among all types of drug, the positive test for opioids was more than 50% for minimum one substance only among women and children, other one third for men who was using cannabises. Individual prevalence of drug addiction was 7.2% in men and 3.1% for women but at the national level of this prevalence was 5.1%. Here according to this study,

researcher found that among all drug addicted persons in Afghanistan the highest number was among opium user with 79.1% and Marijuana/ Hashish was 60%. Following to opium and Hashish, Shisha was using by 58.2% as well as drug through injection was comprising 67.3% of all. Findings in study is close to (Linda B Cottler et al., 2014).

### **Supply chain (cultivation)**

According to literature, a research result published by Vida Mehran in 2008, showed that drug addicted persons are providing their need from various ways with relatively easy trace from provider. As well as, 10.65% of addicted population were obtaining drug from their own land, 4.11 % told that they have been working on the poppy field, remaining parts was obtaining through various conduits such as friends and peer group (Veda Mehran, 2008). Basically, those drugs (Opium) were consuming by following three methods such as eating, smoking and consuming through injection. Data analysis from this research revealed that 18.52 % of respondents said that they have been cultivating Poppy on their lands either being as land owner or farmer. Following to application of chi- square test with degree of freedom (df= 16) P- value= 0.011. chi- square test 0.011 ( $p = 0.05$ ) with degree of freedom (df= 16) was found. Based on specified P value it concluded that there is a significant relation is available between drug addiction and most common agriculture type in the area of living. Type of cultivation in the area of living of drug addicted persons was an important risk factor.

### **5.2.3 Displacement experience and Security condition of living place**

Afghanistan as a country which is affected by 3-decade civil war and political instability with poor economic condition has the largest number of migrants in different countries around the world, this high number of migrants is supposed to be as one of risk factor to drug addiction. According to this research it's found that there is significant association is available between drug addiction and migration. Based on interviewees 54.5% of drug addicted persons have migrated out of Afghanistan before they become addicted to drug and, 10.9% of respondents said that they have displaced from their original place of residence to other district/ province due to insecurity and gunfight between government and Taliban. Among the respondents 31.8% told that they had no displacement experience

neither inside of country nor overseas. In the chi- square test 0.03 and likelihood ratio 0.053 ( $p = 0.05$ ), degree of freedom ( $df= 3$ ) the result shows that there is significant association is available between displacement of drug addicted person with getting addicted with drug. In other word, migration to other countries as well as internally displacement has relation with drug addiction and is one of risk factors.

### **Individual and family Perception and past experiences**

For understanding various aspect of the issue researcher has investigated different personal and family events that may cause to drug addiction such as divorce, death of family member, loss of job etc. the chi- square test 0.456 ( $p = 0.05$ ) with degree of freedom ( $df= 36$ ) was found. Based on specified P value it is concluded that there is no significant association is available between respected major events and drug addiction. In other word, having good or poor family welfare has not depend with drug addiction, a person in any living state can be addicted to drug.

**6.1 Conclusion**

The main objective of this study was to find the most common risk factors associated with drug addiction in Afghanistan. In this study samples have been taken from various drug rehabilitation centers located in Kabul- Afghanistan, including male and female who were aging between (16-60) years old. According to this research analysis majority of addicted people was aging between (30- 39) years old and mean of age was 32.71 which is slightly different than previous findings (16- 34 year) in the literature. Analysis of data revealed that a significant relation is between gender and drug addiction; in other word 80% of addicted persons were male and 20% were female. Among drug addicted people 60% were married and 40% were single. Also, significant association were found between level of education and using drug through injection, and following to data analysis it is found that more than 50% of addicted persons are illiterate. In addition to these factors, migration to neighboring countries, types familiar agriculture such as cultivation of poppy in the region, major life changing event such as job loss, as well as using drug as way of medication among afghan families was found as the most common risk factors associated with drug addiction in the country.

**6.2 Recommendations**

As drug addiction is associated with both personal and social factors, as result its recommended to be considered in two categories as:

those found elements would help individual, families, and society to think differently on the issue of addiction rather than blaming addicted person. This study will also help policy makers to develop a good policy to eradicate the source of addiction and make rehabilitation program accessible for all those who are in needs. In addition to that, this finding will also be helpful for the policy makers for their future planning and we are hoping to enhance the outcome of rehabilitation services and the QOL of drug addicted persons among afghan community.



This study is going to find the initial and basement data for further studies like case control or experimental researches.

### **6.2.1 Recommendation for policy makers:**

- Improve and facilitate a comprehensive treatment centers for drug addicted persons in all over of country.
- Providing professional skill training for drug addicted persons as way of earning as well as to prevent relapse process.
- Increase the economy condition of drug addicted persons by increasing job opportunity.
- Providing insurance for addicted persons and cover the rehabilitation costs for them.

### **6.2.2 Recommendation for families and care providers:**

- Providing safe and peaceful environment for addicted member of family rather than blaming and accusing him/her.
- Integration of addicted family member into various activities.
- Creating a collaborative rehabilitation team including all related professions for every drug related hospital and rehab centers.
- Conducting discussion sessions with patients and their families before and after treatment process

## **6.3 Strengths and Limitations of this study**

### **6.3.1 Strengths**

- This study attempted to identify the factors associated with drug addiction in Afghanistan.
- This study is going to find the initial and basement data for further studies like case control or experimental researches even policy making.

### **6.3.2 Limitations**

- The main limitation was absence of a standard questionnaire to examine the elements and factors related to drug addiction.

- No enough literature was available to discuss in national context due to lack of researches in this area in Afghanistan.
- Finally, limited resources to conduct a comprehensive interview in different region of country.
- Less number of drug addicted women was ready to fill the questionnaire

#### **6.4 Suggestions**

for future researches This study presented the factors associated with drug addiction in Afghanistan. However, there were several gaps within this study which would as follow:

- Investigate about related issue in entire country.
- Study in initial consequence and long-term effect of addicted persons.

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## Appendixes



د افغانستان اسلامي جمهوري دولت  
د عامي روغتيا وزارت  
د صحي خدمتونو د وړاندي کولو معينه  
د معالجوي طب عمومي رياست  
د مخدره توکو غوښتنې د کمښت برنامې  
د اداري مديريت

تاريخ: ۱۳۹۸، ۷، ۱۳

Ministry of Public Health  
Deputy Minister for Health Care  
Services Provision  
G D of Curative Medicine  
National Drug Demand Reduction  
Program  
Admin section



دولت جمهوري اسلامي افغانستان  
وزارت صحت عامه  
معييت عرضه خدمات صحي  
رياست عمومي طب معالجوي  
برنامه ملي کاهش تقاضای مواد مخدر  
مديريت اداري

شماره: ۶۰۹۱۵۷

### به مرکز 100 بستر تداوی معتادین مواد مخدر زنان و اطفال خوشحال خان!

به اساس مکتوب شماره 506110 مورخ 1398/7/10 ریاست محترم عمومی انسیتیوت ملی صحت عامه، اسامه محترم محمد عظیم بهروز محصل پروگرام ماستری رشته توانبخشی مجدد کشور بنگلادیش، میخواهد تحقیق علم خویش را تحت عنوان بررسی کیفیت زندگی افراد معتاد به مواد مخدر (زنان و مردان) در جامعه افغانستان مراکز تداوی معتادین مواد مخدر 100 بستر و 50 بستر رایان و اطفال خوشحال خان و هم مرکز 40 بس نوجوانان سرپل برنامه ملی کاهش تقاضای مواد مخدر انجام دهند.

بناءً در زمینه جمعآوری معلومات و ارقام مورد ضرورت، موصوف را همکاری همه جانبه نموده ممنون ساز؛ در ختم برنامه دفتر مرکزی را کتباً اطمینان دهید.

با احترام

دوکتور شاد پور یوسف

رئیس برنامه ملی کاهش تقاضای مواد مخدر

کاپی به:

مرکز 50 بستر زنان و اطفال خوشحال خان

مرکز 40 بستر نوجوانان پل سرخ

National Demand Reduction Program  
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برنامه ملی کاهش تقاضای مواد مخدر  
وزیر محمد اکبر خان، ناحیه دهم، کابل، افغانستان  
شماره تماس: 070-4419054  
وب سایت: www.moph.gov.af

## Institutional Review Board (IRB) Letter



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)  
**Bangladesh Health Professions Institute (BHPI)**  
(The Academic Institute of CRP)

Ref.

Date: 06/07/2019

CRP-BHPI/IRB/07/19/1307

To,  
Mohammad Azim Behrooz  
M.Sc. in Rehabilitation Science (MRS)  
Session 2018-2019, Student ID: 181180118  
BHPI, CRP-Savar, Dhaka-1343, Bangladesh

**Subject: Common Risk Factors Associated with Drug Addiction in Afghanistan.**

Dear Mohammad Azim Behrooz  
Congratulations,

The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above mentioned thesis, with yourself, as the principal Investigator. The following documents have been reviewed and approved:

S.N.	Name of Documents
1.	Thesis Proposal
2.	Questionnaire
3.	Information sheet and consent form.

The study involves answering a questionnaire to address **Common risk factors associated with drug addiction in Afghanistan** that takes about 20 to 25 minutes to answer. Since, there is no likelihood of any harm to the participants. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 2.00pm on 17<sup>th</sup> February 2019 at BHPI.

The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,

*Millat Hossain*

Mohammad Millat Hossain  
Assistant Professor, Dept. of Rehabilitation Science  
Member Secretary, Institutional Review Board (IRB)  
BHPI, CRP-Savar, Dhaka-1343, Bangladesh

সিআরপি-চাপাইন, সাজার, ঢাকা-১৩৪৩, বাংলাদেশ, ফোন : ৭৭৪৫৪৬৪-৫, ৭৭৪১৪০৪ ফ্যাক্স : ৭৭৪৫০৬৯

CRP-Chapain, Savar, Dhaka-1343, Tel : 7745464-5, 7741404, Fax : 7745069, E-mail : contact@crp-bangladesh.org, www.crp-bangladesh.org

CS Scanned with CamScanner

## Informed Consent

**Dear Participant,**

I invite you to participate in a research study entitled: “Common risk factors associated with drug addiction in Afghanistan”. I am currently enrolled in the (*MRS 5<sup>TH</sup> Batch*) at Bangladesh Health Profession Institute (BHPI) under supervision of Dhaka University, and am in the process of writing my thesis for the master’s degree.

Your participation in this research project is completely voluntary. You may decline altogether, or leave blank any questions you don’t wish to answer. There are no known risks to participation beyond those encountered in everyday life. Your responses will remain confidential and anonymous. Data from this research will be kept under lock and key and reported only as a collective combined total. No one other than the researchers will know your individual answers to this questionnaire.

If you agree to participate in this project, please answer the questions on the questionnaire as best you can. It should take approximately (*15- 20 minutes*) to complete.

Thank you for your assistance in this important endeavor.

Sincerely yours,

## Questionnaire on drug addiction's risk factors

PRINT NAME:

DATE:

1. What is your age?

\_\_\_\_\_

2. What is your gender?

Male

Female

Other

3. What is your marital status?

Single, never married

Married

Widowed

Divorced

Separated

4. What is the highest level of education you have received?

No official *education*

High school graduate

Some college/AA degree/Technical school  
training

College graduate/ Higher level

5. How many people are currently living in your household, including yourself?

\_\_\_\_\_ Number of people

\_\_\_\_\_ Of these people, how many are children?

\_\_\_\_\_ Of these people, how many are adults?

\_\_\_\_\_ Of the adults, how many bring income into the household?

6. Did you work for pay outside the home (before admittance to this hospital)?
- I had a formal job
  - I was working on the farm and agriculture business
  - Self-employment
  - Army/ Police
  - Disabled or retired and not looking for work
  - Currently in school
7. What is your total combined family income for the past 12 months, from all sources, wages, public assistance/benefits, help from relatives, alimony, and so on?
- Less than 5000
  - Afg (5000- 20,000)
  - Afg (20,000- Higher)
  - Don't know
8. How would you manage your personal expensive?
- Government funding
  - Private insurance
  - Self-pay, out of pocket
  - Family and friends
9. Please describe the place (home) where you live.
- I live with friends
  - I live with family
  - I have no permanent residence
  - I live in a conflicted zone of the country (Taliban territories)
10. What type of cultivation( farming) is popular in your area of living?
- Wheat and corn
  - Rice and other Groceries
  - Poppy and hashish
  - Others
11. Have you experienced any of the following during the past years?



- Divorce
- Change in health of a family member
- Fired from job
- Financial problems
- Illness
- Separation from spouse
- 
- Pregnancy
- Death of a child, family
- Personal trauma or injury
- Losing of close friend

12. When you were a child, were you ever hit, pushed, whipped, beaten, punched, slapped or burned in a way that resulted in injuries being left on your body?

- Yes
- No
- I don't know if this ever happened to me

13. As an adult, have you ever been physically abused, assaulted or battered?

- Yes
- No

14. How old were you the first time you used /addicted to drug?

Enter age:

- \_\_\_\_\_
- Refused
  - Don't know

15. Do you abuse drug more than one drug?

- Yes
- No

16. Do you ever feel bad or guilty about yourself being a drug user?

- Yes
- No

17. Have you ever had "blackout" or "flashback" as a result of drug use?

- Yes
- No

18. Has drug use created problem between you and your family?  
Yes   
No
19. Have you been in trouble at work because of drug use/ addiction?  
Yes   
No
20. Have you gotten into fight, serious argument, victimized ... when under the influence of drug?  
Yes   
No
21. Have you engaged into illegal activities in order to obtain drug?  
Yes   
No
22. Have you been arrested for possession of illegal in order to obtain drug?  
Yes   
No
23. Have you been involved in treatment program before?  
Yes   
No
24. Have you had medical problem as a result of drug use (Memory loss, Hepatitis, Convulsion, Bleeding ...)?  
Yes   
No
25. During the time that you smoked hashish or other drug, how many joints or pipes would you usually smoke in a day?  
1 per day   
2 per day   
3-5 per day   
Six or more per day   
Refused   
Don't Know

26. How difficult do you think it would be for you to get drug if you wanted?

- Impossible
- Fairly difficult
- Very easy
- Very difficult
- Fairly easy
- Don't Know

27. How much do you think PEOPLE RISK harming themselves (physically or in other ways), if they addicted to drug?

- No risk
- Moderate risk
- Slight risk
- Great risk
- Don't know

28. What is/was your parent's occupation?

Mother's Occupation \_\_\_\_\_  
Father's Occupation \_\_\_\_\_

29. Did your parents' abuse drug (Heroin, Marijuana, Hashish, cigarette or other forms of substances when you were a child?

- No one were using drug
- Mother
- Stepparent(s)
- The person(s) who raised me

30. If substance use has been a family problem, how have you dealt it? (*Check all that apply*)

- It has not been a family problem
- I confronted the abusers
- It has not bothered me
- I confided in trusted friend or my spouse

- I educated myself on the subject
- The family member is in recovery
- I sought consoling
- it's still difficult for me/  
I have not told anyone

Others

---



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31. Have you and/or your spouse or partner ever been hospitalized in a psychiatric facility?

- Yes, self
- Yes, spouse or partner
- No

32. Does anyone in your family have a history of mental illness? (*Check all that apply*)

- |                   |            |             |           |               |
|-------------------|------------|-------------|-----------|---------------|
| Self              | Mother     | Brother(s)  | Aunt(s)   | Cousin(s)     |
| Spouse or Partner | Father     | Sister(s)   | Uncle(s)  | In-law(s)     |
| Son(s)            | Stepmother | Grandmother | Niece(s)  | I am not sure |
| Daughter(s)       | Stepfather | Grandfather | Nephew(s) | Other(s):     |
- 

33. How well off is your family compared to other families in your Province/region? *ESP*

- Very much better off
- Much better off
- About the same
- Less well off
- Don't know
- Much less well off
- Very much less well off

34. If you needed help from a counselor or therapist, what were your reasons? (*Check all that apply*)

- |                       |                       |        |            |
|-----------------------|-----------------------|--------|------------|
| No counseling/therapy | Drug/Alcohol problems | Stress | Depression |
|-----------------------|-----------------------|--------|------------|

Relationship problems	Job related problems	Family problems	Traumatic event
School problems	Eating Disorder	Parenting problems	Others _____

35. Do you have experience of displacing from your region or you ever have been out of country seeking refuge?

- I have migrated out of Afghanistan
- I have not been out of Afghanistan
- I have not displaced from my original residence
- I have displaced due to conflict other than place of my residence

36. For how long have you been using drug (Cocaine, Opium, Morphine, Glass, injection drug, and other derivatives?)

- Less than six months
- 1-2 years
- 2-5 years
- More than 5 years

37. What kind of drug are you using?

- Opium
- Hashish
- Crack/ Shisha
- Consumption of drug through injection

38. Have you been involved in a treatment program specifically related to drug use?

- Yes
- No

39. Have you had medical problems as a result of your drug use (e.g. memory loss, hepatitis, convulsions, bleeding, etc.?)

- Yes
- No

**Note:**

For popups of developing this questionnaire the following standard questionnaire has been used:

**1. ESPAD**

This questionnaire is part of an international study on substance use among European students. It will be answered by more than 100 000 students in over 35 countries. The study is called ESPAD.

2. DAST\_10

3. WHO\_Drug Assessment Questionnaire

Dari version of questionnaire

پرسشنامه عوامل مرتبط با اعتیاد در افغانستان

نام:	تاریخ
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1. چند ساله هستید؟ .....
2. جنسیت: ۱. مرد ۲. زن
3. حالت مدنی: ۱. مجرد ۲. متاهل ۳. از همسر جدا شده ام
4. درجه تحصیل: ۱. بیسواد ۲. فارغ دوازدهم ۳. دیپلوم از انستیتوت های حرفوی تخنیکي ۴. لیسانس / تحصیلات بالاتر
5. به شمول خودت، چند نفر در فامیل زنده گی می کنید؟

مجموعاً \_\_\_\_\_ نفر

شان اطفال \_\_\_\_\_

نفر شان کلان سالان \_\_\_\_\_

نفر شان دارای عایدات هستند. \_\_\_\_\_

6. آیا قبل از بستری شدن درین مرکز/ شفاخانه کدام جای مصروف کار بودید؟

1. مصروف کار اداری بودم
  2. وظیفه شخصی داشتم
  3. در چوکات اردوی ملی بودم
  4. مصروف کار های رزاعتی/ دهقانی بودم
  5. به دلیل معلولیت دنبال وظیفه نبودم
  6. فعلا در مکتب هستم
7. عایدات مجموعی شامل تمام منابع (دستمزد، معاش، کمک های اجتماعی، کمک های دوستان و اقارب ...) فامیل تان در دوازده ماه اخیر چه قدر بوده است؟
1. کم تر از ۵۰۰۰ هزار افغانی
  2. در حدود (۵۰۰۰ الی ۱۰۰۰۰) هزار افغانی
  3. در حدود (۱۰۰۰۰ الی ۲۰۰۰۰) هزار افغانی
  4. بالاتر از ۲۰۰۰۰ هزار افغانی
  5. نمی دانم
8. فعلا که درین مرکز بستری هستید مصارف شخصی خود را چگونه تامین می کنید؟
1. از طریق کمک دولت
  2. از طریق بیمه خصوصی
  3. پرداخت شخصی
  4. کمک های دوستان و اقارب
9. لطفا در مورد محل بود و باش یا جای که زنده گی می کنید معلومات دهید.
1. من با دوستان خود زنده گی می کنم
  2. با فامیل زنده گی می کنم
  3. جای بود و باش دایمی ندارم
10. در جاییکه که شما زنده گی می کنید/ می کردید از نظر امنیتی چگونه بود؟
1. خانه من در جای نا امن کشور می باشد.
  2. در جاییکه ما زنده گی می کنیم از نظر امنیتی خوب نیست
11. در جاییکه شما زنده گی می کنید معمولا چه نوع کشت و رزاعت رواج دارد، مردم چه چیز می کارند؟
1. گندم و جواری

2 . برنج و دیگر حبوبات

3 . کوکنار ، چرس و دیگر نباتات نشه آور

4 . دیگر

12. آیا در چند سال گذشته یکی ازین موارد را تجربه کرده اید؟

1 . طلاق

2 . جدایی از همسر

3 . وضع حمل

4 . تحولات صحی اعضای فامیل

5 . وفات طفل یا یکی از اعضای فامیل

6 . از دست دادن وظیفه

7 . آسیب یا جراحت های شخصی

8 . مشکلات مالی

9 . مریضی

10 . از دست دادن دوست صمیمی

13. در آوان کودکی، ایا کدام وقتی کتک، سیلی کاری، ویا با قهر و غضب مواجه شده اید که باعث جراحت در بدن تان شده باشد؟

1 . بلی

2 . نخیر

3 . درست نمی دانم اگر گاهی چنین اتفاقی برابم رخ داده باشد.

14. اولین بار چند ساله بودید که از مواد مخدر استفاده کردید/ معتاد شدید؟

1 . .....ساله بودم

2 . نمی خواهم به کسی شریک کنم

3 . به یادم نیست

15. آیا شما بیشتر از یک نوع مواد مخدر را استفاده می کنید؟

1 . بلی

2 . نخیر

16. آیا شما گاهی به دلیل استفاده از مواد مخدر احساس گناه می کنید؟

1 . بلی

2 . نخیر



17. آیا شما به دلیل استفاده از مواد مخدر و اعتیاد تان گاهی دچار خمودی ویا تجسم خاطرات گذشته تان (فلش بک) شده اید؟

1. بلی

2. نخیر

18. آیا استفاده از مواد مخدر و اعتیاد باعث ایجاد مشکل بین شما و فامیل تان شده است؟

1. بلی

2. نخیر

19. آیا شما بدلیل اعتیاد به مواد مخدر در محل کار دچار مشکل بوده اید؟

1. بلی

2. نخیر

20. آیا شما زمانیکه تحت تاثیر استفاده از مواد مخدر بوده اید درگیر بحث های جدی، جنگ، ویا قربانی هم چنین حالات شده اید؟

1. بلی

2. نخیر

21. آیا شما بخاطر بدست آوردن مواد مخدر به فعالیت های غیر قانونی دست زده اید؟

1. بلی

2. نخیر

22. آیا شما بخاطر بدست آوردن غیر قانونی مواد مخدر باز داشت/ گرفتار شده اید؟

1. بلی

2. نخیر

23. آیا شما به دلیل سوء استفاده از مواد مخدر دچار مشکل صحتی (از دست دادن حافظه، هیپاتیت، تشنج، خونریزی ...) شده اید؟

1. بلی

2. نخیر

24. زمان که شما از مواد مخدر استفاده می کردید، روزانه بطور اوسط چند وصله/ پایپ می کشیدید ؟

1. روز یک وصله

2. دو وصله در یک روز

3. سه الی ۵ وصله در روز

4. شش ویا بیشتر از ان در یک روز

5. نمی خواهم با کسی شریک کنم

6. نمی دانم

25. اگر شما بخواهید/میخواستید مواد مخدر را بدست بیاورید، چقدر فکر می کنید برای تان مشکل خواهد بود؟

1. نا ممکن

2. نسبتاً مشکل

3. خیلی آسان

4. خیلی مشکل

5. نسبتاً آسان

6. نمی دانم

26. شما چقدر فکر می کنید مردم با معتاد شدن خطر آسیب (فیزیکی و دیگر خطرات) را بالای خود شان وارد می کند؟

1. کدام خطری وجود ندارد

2. خطرات نسبی مواجه می شود

3. با خطرات کم روبرو می شود

4. با خطرات برزگ مواجه می شود

5. نمی دانم

27. شغل (وظیفه) والدین تان چه بود / است ؟

وظیفه مادر:

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-

وظیفه پدر:

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-

28. آیا والدین تان هم از مواد مخدر(هیرویین، چرس، هشیش، سگرت، ویا انواع دیگره مواد مخدر) استفاده می کرد؟

1. کسی از والدینم از مواد مخدر استفاده نمی کرد/ کند

2. مادرم از مواد مخدر استفاده می کند.

3. پدرم از مواد مخدر استفاده می کند.

- 4 . والدین خوانده ام از مواد مخدر استفاده می کند
- 5 . کسی که مرا بزرگ کرده از مواد مخدر استفاده می کرد
- 29. اگر سو استفاده از مواد مخدر یک مشکل فامیلی بود، پس شما چگونه با آن برخورد می کردید؟**

- 1 . استفاده از مواد مخدر در فامیل، برای من یک مشکل نبوده است
- 2 . استفاده از مواد مخدر در فامیل برایم آزار دهنده نبود
- 3 . با استفاده کننده مواد مخدر مقابله می کردم
- 4 . به صورت محرمانه با دوستان نزدیک/ همسر خود می گفتم
- 5 . روی هم چنین موضوع آگاهی حاصل می کردم
- 6 . برای حل مشکل، در جستجوی مشوره بودم
- 7 . تا کنون برایم مشکل است، و به کسی نگفته ام
- 8 . دیگر:

**30. همسر، یا خودت گاه در آسایشگاه های روانی بستری شده اید؟**

- 1 . بلی، خودم
- 2 . بلی، همسر
- 3 . نه، هیچ یکی از ما بستری نشده ایم

**31. آیا کسی در فامیل تان سابقه مرضی روانی دارد؟**

خودم	مادر	برادر	عمه	پسرماما/کاکا
همسر	پدر	خواهر	کاکا	خویشاوند همسر
پسر	مادر اندر	مادربرز گ	خواهر دختربرادر/ خواهر	پسربرادر/ خواهر
دخترم	پدر اندر	پدرکلان	مطمین نیستم	دیگر

**32. رفاه و آسایش فامیل خودرا مقایسه با دیگر فامیل ها در ولایت ویا محل که زندگی می کنید چگونه ارزیابی می کنید؟**

- 1 . خیلی با رفاه و اسایش
- 2 . با رفاه بیشتر

3 . با دیگر فامیل ها یکسان است

4 . با رفاه کمتر

5 . با رفاه خیلی کمتر

6 . نمی دانم

33. در گذشته اگر شما نیاز به کمک مشاور ویا درمانگر میداشتید، دلیل اش چه می بود؟

1 . مشوره نمی گرفتم

2 . بخاطر مشکلات مواد مخدر

3 . استرس

4 . دیپریشن

5 . مشکلات زناشویی.

6 . مشکلات فامیلی

7 . مشکلات مرتبط با وظیفه

8 . رویداد های آسیب را

9 . مشکلات مکتب

10 . اختلال خوراک

11 . مشکلات والدین ....

34. آیا شما تجربه بیجا شدن از محل اصلی تان دارید، و یا اینکه خارج از کشور گاه جستجوی پناهنده

گی کرده اید؟

1 . من خارج از افغانستان مهاجرت کرده ام

2 . من تجربه بیجا شده گی ویا مهاجرت خارج از افغانستان را ندارم

3 . من بدلیل جنگ و نا امنی از مکان اصلی خود بیجای شده ام

35. برای چند مدت شما از مواد مخدر (کاکوین، تریاک، مورفین ، شیشه ، زرقیات و دیگر مشتقات ان)

استفاده می کرده اید؟

1 . کمتر از شش ماه

2 . یک الی دو سال

3 . دو الی پنج سال

4 . بیشتر از پنج سال

36. کدام نوع مواد مخدر استفاده می کنید؟

1 . تریاک

2 . حشیش

3 . شیشه

4 . از مواد مخدر بشکل زرقی

5 . دیگر مشتقات مواد نشه آور

37. آیا شما قبلا بخاطر استفاده از مواد مخدر برای تداوی در همین شفاخانه ویا مراکز دیگر بستری شده

اید ؟

1 . بلی

2 . نخیر

تشکر بابت همکاری تان!