SOCIO-ECONOMIC EFFECTS OF METHAMPHETAMINE ON THE ADDICTS: A STUDY OF KHYBER PAKHTUNKHWA, PAKISTAN

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Abstract
This study investigates the socio-demographics information and socio-economic effects of a synthetic stimulant drug methamphetamine is popularly known as 'ice' which is commonly used in Khyber Pakhtunkhwa, Pakistan. This study was conducted in two most populous districts (i.e. Peshawar and Mardan) of the Khyber Pakhtunkhwa, Pakistan. The conceptual framework comprises of Independent variable (frequency of ice) and dependent variables (social and economic effects). A total of 180 respondents were sampled through sequential sampling and each respondent was through a snowball sampling technique. For checking the reliability of tool a Chronbach Alpha test was used was stood 0.78. In addition, for testing the association between the variables a Chi-square test was applied. The result shows that male and unmarried male in particular and a range of 21 to 30 years respondents were mostly involved in this evil. Furthermore, the study found is a significant (p=0.05) association between the frequent use of ice and socio-economic effects on the addicts i.e. social stigma, loss of respect, family problems, taunting of people, family neglects addicts and addicts neglects family, engagement in anti-social activities/commit a crime in order to finance drug habit and living of addicts in isolation, economic problems, sold valuables and stealing of money and jewelry/valuables. The study concludes that ice is a toxic drug and effects the users socially and economically which leads the addicts to other crimes and anti-social behavior.

Keywords: Addicts, Economic; Effects; Methamphetamine; Social

1. Introduction

Methamphetamine is a powerful synthetic stimulant drugs (Saul, 2005; Ministerial Action Group on Drugs, 2003) that activates the neurotransmitters; serotonin, noradrenaline and dopamine in the brain. These are the chemicals which cause to create feelings of euphoria, excitement and alertness (Drabsch, 2006). It comes in various purities and forms i.e. tablet, powder, base and crystal or ice

(Mehrjerdi, 2013). However, the purest form of methamphetamine is known by ice or crystal (Drabsch, 2006).

Globally, there is an increasing acknowledgment that methamphetamine/ice is an important threat which is becoming more apparent in the field of drug use. In recent years, the use of methamphetamine has been increased dramatically among the people of East and South Asian countries (UNODC, 2017).

Ice has a story similar to many addictive drugs like heroin which was first discovered and used as a medicine but later proved to be devastating. It was manufactured in the last quarter of 19th century, the time when Chemistry was miraculously advancing. During World War-II the drug was widely used by the warring sides to undermine the enemy. Japan adopted it widely as compared to the other (De-Carolis, Boyd, Mancinelli, Pagano & Eramo, 2015; Goodchild & Donaldson, 2007).

Methamphetamine/ice is a potent drug which can easily be manufactured and can be made in a household kitchen as heroin being manufactured in make-shift labs. It can be prepared from numerous household items such as drain cleaner, paint thinner, freon, lithium strips from batteries (Klasser& Epstein, 2005). Though, what gives this drug its energy is pseudoephedrine and ephedrine, which can be found in various over the counter cold medicines (Maxwell, 2006). The uniqueness of this drug is that all of the materials are legal and can be easily get from pharmacy and hardware stores and its procedures can be learned from internet. It is, when these components are combined together that they produce the drug methamphetamine (Parks & Jack, 2005).

Ice can be smoked, drank, and swallowed, snorted and even injected in liquid form (Maxwell, 2006). The most common route of ice administration is smoking. The user puts the ice white powder into the bulb, the wire has been taken out of the bulb, heated with a lighter, and then smoked the fumes. When injected or smoked, it makes an initial rush that lasts only a few minutes but is extremely enjoyable (Klasser & Epstein, 2005).Like other psychoactive drugs, long-term use of Ice can lead to tolerance, which requires an increase in ice to get the same level of satisfaction (Lake & Quirk, 1984).

According to the World Drug Report (2020), throughout the globe in 2018 nearly 269 million people had used drugs at least one time ranging from 166 million to 373 million. These figures constitutes 5.4 per cent of the world population from 15 to 64 years of age (range: 3.3 to7.5 per cent), which represent round about 1 in every 19 people.

According to the same report, only in 2019 worldwide, nearly 27 million people have used amphetamine-type stimulants (ATS) i.e. amphetamine, methamphetamine and pharmaceutical stimulants. This data corresponding to 0.5 percent of the adult population. About half of the world estimates of 2019 users of amphetamines (12.7 million people) living in Asia, although the region is home to 60 per cent of the global population aged 15–64 (World Drug Report, 2020; ASEAN Drug Monitoring Report, 2018).

The National Assessment Report published in 2013 states that drug abuse problem in Pakistan, there were 6.5 million drug addicts. According to the report, in Khyber Pakhtunkhwa, drug abuse is the most common, with 11% of the population using drugs, followed by 6.5% of the Sindh population.

In Baluchistan, almost 5 percent population used drugs while in Punjab, the figure is 4.8 percent (UNODC, 2013).

With an increase in the number of drug users in the country, the drug epidemic in Pakistan is more serious than ever. Opium, cocaine, marijuana and marijuana have been commonly used, but ice, which is now considered one of the most harmful drugs in the world, is also becoming a common commodity used by drug users. The biggest danger facing Pakistani society on this issue is that the agencies are responsible for the curbing of drug use in the country has failed to control the increase in drug addicts in society.

Like other parts of the country, Khyber Pakhtunkhwa province has been experiencing by ice drug and spread extensively among youngsters, both male and female. Causes could be numerous including its easy availability in the society, lack of awareness about the toxicity of this substance, local manufacturing in the indigenous laboratories, carries attraction while used among friends, lack and poor preventive measures, etc. The addicts of this drug like others causing major social problems for themselves, their families and society. Youngsters, particularly those who are unemployed, the financial cost of drug use is very important because of low income they tend to committing crimes, such as theft or dealing in drugs in order to finance their drug habits. Those people who were involved in selling of other drugs, especially the heroin smugglers have switched to ice smuggling due to more profitable business and weak prohibitive measures on the part of the government.

2. Objectives of the Study

This study was carried out with the following objectives

- To know about the socio-demographics of the addicts of ice.
- To explore the social and economic effects of ice use on the addicts

3. Material and Methods

The current study is a cross-sectional research design. The data was collected from two most populated districts of Khyber Pakhtunkhwa i.e. Peshawar and Mardan. Since, the population of methamphetamine users was unknown, therefore, through a sequential sampling technique a total of 180 respondents was selected. Moreover, for interviewing each respondents' a snowball sampling technique was used to trace the unknown respondents through known respondents. A self-design tool was developed and verified from subject experts for the collection of data to examine the socio-demographics, social and economic effects on the addicts due to methamphetamine addiction. A Cronbach alpha test was carried out for checking the reliability of the tool which stood 0.78. In addition, a Chi-square test was applied for testing the association between independent i.e. (ice use) and dependent variables i.e. (social and economic effects) (Kothari, 2004).

4. Results

4.1. Socio-demographic characteristics of the respondents

A sample of 180 methamphetamine/ice users during the time of collection of data; of them (n=163, 90.6%) were male and (n=17, 9.4%) were female. In addition, majority of the respondents were single i.e. (n=98, 54.4%). The age range of the respondents was >20 to 60 years with a mean age of 26.28 years. Moreover, the major portion of the respondents were fell in the group range from 21 to 30 years i.e. (n=93, 51.7%). In addition, majority of the respondents had primary level of education.

Table 4.1. Socio-demographic characteristics of the respondents

	N	%
Gender		
Male	163	90.6
Female	17	9.4
Marital status		
Single	98	54.4
Married	78	43.3
Divorced	04	2.2
Age (in years)		
<20	52	28.9
21-30	93	51.7
31-40	19	10.6
41-50	13	7.2
51-60	03	1.7
Education		
Illiterate	19	10.6
Primary	42	23.3
Middle	30	16.7
SSC/O level	16	8.9
HSSC/A level	35	19.4
Graduate	38	21.1
Total	180	100.0

4.2. Social effects associated with the frequency of methamphetamine/ice use

Table 4.2 reveals the social effects associated with the frequency of methamphetamine/ice use. The findings of the study shows a significant (p=0.001) (p=0.124) association between the frequent use of ice on one hand and ice as a social stigma and also loss of respect on the other.

Similarly, a significant direct association was found between the frequent use of ice and problem between you and your spouse/children/family member due to ice and taunted by people due to your ice use, and neglect of family by the addicts: (p=0.008) (p=0.001) and (p=0.001), respectively.

Furthermore, a significant association was found between the frequent use of ice and various social effects such as: family has neglected (p=0.003), engaged in anti-social activities/commit crime in order to obtain ice (p=0.005), living in isolation (p=0.006), had a fight with either of your father or mother (p=0.036), and had a serious fight in school/college/university or at work, etc. (p=0.000).

Table 4.2. Social effects associated with the frequency of methamphetamine/ice use

Social Effects (Dependent variable)	Independent variable	Chi-square and P value
You regard the use of ice as a social stigma	Ice use frequency	26.419(0.001)
You think people or your relatives do not respect you due to ice use	Ice use frequency	14.287(0.124)
Has there been any problem between you and your spouse/children/family member due to ice	Ice use frequency	15.730(0.127)
Your parents/children/brother ever complained to you that they have been taunted by people due to your ice use	Ice use frequency	22.379(0.008)
You neglected your family because of your use of ice	Ice use frequency	27.219(0.001)
Your family has neglected you because of your ice use	Ice use frequency	24.572 (0.002)
You engaged in anti-social activities/commit crime in order to obtain ice	Ice use frequency	21.575(0.005)
You want to live in isolation	Ice use frequency	20.477(0.006)
You participate in any community activities/functions	Ice use frequency	17.255(0.019)
Argued or had a fight with either of your father or mother	Ice use frequency	15.600(0.036)
Had a serious fight in school/college/university or at work, etc.	Ice use frequency	36.782(0.000)

4.3. Economic effects associated with the frequency of methamphetamine/ice use

Table 4.3discloses the economic effects associated with the frequency of use of methamphetamine/ice. The results show a significant (p=0.001) (p=0.010) association between the frequent use of ice on one hand and facing huge economic problems and also defaulter due to ice on the other side. However, a non-significant (p=0.617) association was found with sold the property to finance drug habit. Furthermore, a significant association was found between the frequent use of ice and leased/ mortgaged some property to finance ice expenses and loss of regular job due to ice, and unemployed due to addiction: (p=0.025) (p=0.001) and (p=0.000), respectively.

In addition, a significant association was found between the frequent use of ice and various economic effects such as: job/study/work performance is affected due to your addiction (p=0.001),

have sold valuables things (p=0.030), have stolen money, jewelry/valuables from your family (p=0.033), and have stolen something from person, shop, car, etc. (p=0.018).

Table 4.3. Economic problems associated with the frequency of methamphetamine/ice use

Economic effects (Dependent variables)	Independent variable	Chi-square and P value
You are facing huge economic problems due to ice use	Ice use frequency	31.250 (0.001)
You are defaulter due to ice	Ice use frequency	21.597 (0.010)
You sold the property to finance your drug habit	Ice use frequency	13.642 (0.117)
You leased/ mortgaged some property to finance your ice expenses	Ice use frequency	13.307 (0.025)
You have lost your job due to ice	Ice use frequency	29.769 (0.001)
You are unemployed due to addiction	Ice use frequency	33.138(0.000)
Your job/study/work performance is affected due to your addiction	Ice use frequency	28.790 (0.001)
You have sold your valuables things	Ice use frequency	17.121(0.030)
You have stolen money, jewelry/valuables from your family	Ice use frequency	12.497(0.033)
You have stolen something from person, shop, car, etc.	Ice use frequency	18.972(0.018)

5. Discussion

The aim of this study was to explore the social and economic effects of a stimulant drug methamphetamine popularly known in Pakistan by 'ice'due to its crystal shape. The findings of the current study shows that majority of the addicts were male (i.e. 90%) and single (i.e. 54.4%). Other studies conducted by researchers (i.e. Oetting, Deffenbacher, Taylor, Luther, Beauvais & Edwards, 2000; Russell,Dryden, Liang, Friesen, O'Gorman, Durec & Klassen, 2008) claimed that males are more likely to use ice as compared to the females. Moreover, the majority of the respondents of this study was fell in age range from 21 to 30 years (i.e. 51.7%) with a mean age of 26.28 years. Moreover, another found similar results with this study that the prevalence of methamphetamine use are significantly higher in singles than in married couples (Amiri, Khosravi & Chaman, 2009). In this regard, Jalilian, Emdadi, Karimi, Barati, Gharibnavaz (2011) and Barati, Ahmadpanah, Soltanian, (2014), reported that unmarried persons are under the influence of multiple psychological and physical problems i.e. depression and anxiety, which results to tend them towards drug abuse.

In addition, the majority of the respondents had primary level of education.These results are similar to the studies conducted by Saul (2005) and Russell, Dryden, Liang, Friesen, O'Gorman, Durec & Klasse, (2008) in 2002, that street ice users were surveyed and found 71% youth age range from 14 to 30 years were using amphetamine-type stimulants and 57% had used them on more than ten occasions.

The current study shows that majority of the respondents had low level of education. These types of category may easily fall in any anti-social behavior due to lack of awareness about the toxicity of the drugs. Other studies conducted by experts i.e. Yen, Yang & Chong, (2006), Yen, (2004) and Sattah, Supawitkul, Dondero, Kilmarx, Young, Mastro, & Griensv,(2002) also examined that education is a risk factor for ice use and all these studies concluded that ice use was significantly associated with low level of education.

5.1 Social effects

As far as the socio-economic effects of the frequent use of ice was concerned, this study found a significant association with social effects i.e. social stigma, loss of respect in relatives, problem with spouse/children/family member due to ice use, people taunted the addicts parents/children/brother, addicts neglected family, family neglect addicts family member, engagement of addicts in anti-social activities/commit crime in order to obtain ice and living of addicts in isolation. According to Hando, Topp& Hall, (1997) states that people who are using drugs, or who are recovering from drug addiction, are stigmatized for their drug involvement such as; social rejection, labelling, stereotyping and discrimination in Pakistan. Even in technologically advanced states addiction of some drugs also considered a stigma. Moreover, the addicts face many other emotional and social problems as a result of methamphetamine use (White, Breen & Degenhardt, 2004).Other surveys have also found that the negative public attitudes (or public stigma) are strongly associated with substance abuse (Yang, Wong, Grivel & Hasin, 2017; Crisp, Gelder, Goddard & Meltzer, 2005). These addicts were ignored/neglected in all family matters and boycotted by the family. Some of them were living on streets who were totally disowned by their families due to the stigma associated with addiction. Methamphetamine addiction has a strong impact on users' social relationships, sometimes resulting in relationship breakdowns, and social isolation (McKetin, McLaren & Kelly, 2005).

Moreover, many studies have found that most drug addicts engage in anti-social behavior especially when they had broken relationships or ignored by their families. They try to manage their money for drug habit from illegal routes when they fail in legal ways (McKetin, McLaren & Kelly, 2005; Maher, Dixon, Hall & Lynskey, 2002).

In addition, the current study has found that the addicts argued or had a fight with his/her parents and they also did a serious fight in school/college/university or at work, etc. The researchers McKetin, McLaren & Kelly, (2005) and Plüddemann, Flisher, McKetin, Parry & Lombard, (2010) found in their research studies that people who repeatedly use ice his behavior was aggressive, dangerous, unpredictable, impulsive, and irrational.

5.2 Economic effects

The economy plays an important role in individual lifestyle. The addiction of any strong drug leads to financial burden inflicted on individual itself, their family, and on society as a whole. As the person

goes downhill deeper into his addiction to a drug as a result his ability to earn money decreases due to psychological and physical dependency while his addiction-related expenses continue to soar.

The results of the present study shows that the ice users facing huge economic problems and defaulters due to the frequent use of ice use. The experts Henry, Minassian & Perry, (2010) also found in their study that repeated use of ice is associated with decreased daily functioning due to physical and psychological dependency in such a situation they cannot manage their economy, as a result, the users face financial problems.
In addition, the ice addicts face many other economic problems such as; sold, leased/mortgaged his/her property to finance their ice expenses, lost their job due to ice, job/study/work performance was affected due to the ice addiction. The frequent use of ice use is strongly associated with weak daily functioning, poor cognitive tasks related to comprehension and planning and poor communication skills (McKetin, McLaren & Kelly, 2005).

Furthermore, it has also been found that the ice users had sold their valuables things to finance his/her ice addiction and stolen money, jewelry/valuables from his/her family, stolen something from someone, shop, car, etc. These results are in the line with other studies that there is much evidence for an association between illicit drug use and crime. When the drug users have not enough money to finance his/her drug habit, they tend to commit crime i.e. drug dealing, robbery or theft to fund their drug habit (Maher, Dixon, Hall &Lynskey, 2002; Klee & Morris, 1994). Other studies had also found that people who are dependent on illicit drugs need a continuous supply of money to support their drug habit. If they cannot find money from legal ways then they do crimes to obtain money to funds their drug habit (Gjeruldsen, Myrvanga & Opjordsmoen, 2004; Kaye, Darke & Finlay-Jones, 1998).

6. Conclusion

After analyzing the present study, the researcher concluded that ice is a strong stimulant drug that hits the users from multiple dimensions to be addicted. The main purpose of this study was to know about the socio-demographics of the ice users and also explore the socio-economic effects of ice on the users. The current study found that male and unmarried male in particular, were mostly involved in this evil. In addition, the age range of the respondents from 21 to 30 years were found more engage.
The users who had use ice more frequently were affected socially such as; social stigma, loss of respect in relatives, problem with spouse/children/family member due to ice use, people taunted the addicts parents/children/brother, addicts neglected family, family neglect addicts family member, engagement of addicts in anti-social activities/commit crime in order to obtain ice and living of addicts in isolation. In addition, they also affected economically i.e. facing huge economic problems, defaulters ice users had sold their valuables things to finance his/her ice addiction and stolen money, jewelry/valuables from his/her family, stolen something from someone, shop, car, etc.

7. Recommendations

In light of the analysis of the current study, it recommends the following;

- To educate the mass about the toxicity of ice
- Government should take strict actions on the availability of the ingredients of the ice in the market.
- Parents should monitor their children activities.

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