OPEN ACCESS

Kashf Journal of Multidisciplinary Research
Vol: 02 - Issue 09 (2025)
P-ISSN: 3007-1992 E-ISSN: 3007-200X
https://kjmr.com.pk

THE MULTIDIMENSIONAL EFFECTS OF METHAMPHETAMINE ON YOUTH IN PAKISTAN: A COMPREHENSIVE ANALYSIS

Asfand Yar Khurshid*
PhD Scholar, Lincoln University College, Petaling Jaya, Malaysia

Bushra Mazhar
Lecturer/Clinical Psychology, University of Applied & Biological Science, Lahore, Pakistan

Kanwal Mazhar
Lecturer/School of Pharmacy, University of Management & Technology, Lahore, Pakistan

Rabia Altaf
Associate Professor/School of Pharmacy, University of Management & Technology, Lahore, Pakistan

****Corresponding Author:*** khurshid.phdscholar@lincoln.edu.my

Article Info

Abstract

Everyone's mental health is vital, yet dangerous habits like substance abuse can impair it. Methamphetamine, also referred to as "ice," is a potent & dangerous narcotic that has become more prevalent in Pakistan throughout the past ten years. Methamphetamine is a potent stimulant substance whose toxicity has an impact on the user's physical, mental, & social well-being. The current study sets out to evaluate the socioeconomic, physiological, & psychological impacts of amphetamine among its users. The independent variable (ice frequency) & the dependent variables (social-economic, psychological, & physiological effects) make up the conceptual framework. Sequential sampling was used to select 200 respondents in total, with a snowball sampling technique used for each respondent. The tool's reliability result was 0.78. Results show positive correlation among all variables. Methamphetamine is a potent stimulant that, when taken repeatedly, can have a variety of psychological, physiological, & socioeconomic impacts, according to the current study.

Keywords:

Physiological, Psychological, Socio-Economical, Methamphetamine.

INTRODUCTION

Methamphetamine has resurfaced as a problem for researchers & mental health professionals alike in the aftermath of the opioid crisis. Nowadays, methamphetamine comes in a variety of forms, including pills, powder, & ice, each with unique pharmacokinetic properties that make them appeal to user types (Chomchai C, Chomchai S. 2015). According to Stoneberg DM, Shukla RK, & Magness MB. (2017), recent seizure data indicates that its manufacturing & trafficking are expanding into new regions of the world.

One of those most intricate & challenging societal issues in the modern world is substance abuse. The majority of people, particularly children, suffer from drug addiction, &most substance users start using drugs at a young age (Jan, Khan, Asad & Khan, 2021a). The World Health Organization (2024) estimates that 35 million individuals worldwide suffer from drug use problems, that an estimated 1.3 million people die each year from drug-related causes, & that 1311 million inject drugs. Methamphetamine, or meth, is gradually being recognized as a serious concern in the field of drug usage on a global scale. Over the past ten years, methamphetamine consumption has skyrocketed across East & South Asian nations (UNODC, 2021).

Methamphetamine, also referred " meth or ice" in Pakistan, is a highly effective stimulative substance that is abused extensively worldwide. Methamphetamine usage can have major, long-lasting effects on one's physical & mental health as well as one's socioeconomic stating (Jan et al., 2021a; Akbari et al., 2021). A pattern of repetitive, recurrent, compulsive use of illegal substances is known as substance abuse, & it can negatively impact a person's relationships, career, legal issues, & physical & mental health (Swimmer KR, Selich S. 2024) Some refer to it as a "social drug" or "club drug" because of its sophisticated central nervous system & stimulant properties, which allow users to stay awake for extended periods of time (Mehrjerdi, 2013).

The Diagnostic & Statistical Manual of Mental Disorders (DSM-5) serves as the foundation for diagnostic standards. To ascertain whether a person satisfies the diagnostic requirements for substance use disorder, an evaluation is performed by a qualified medical expert, such as a psychiatrist. Substance use disorders (SUDs) are now the most common mental illness among young adults due to rising rates of illegal drug use & legal drug abuse (Ghazal P. 2024).

According to a survey of male inmates in Karachi, substance misuse was very common among them; most of these inmates were rural, uneducated, unemployed, & unmarried (Jamal M, Waheed S, Shakoor A. 2022). According to studies, people with SUDs use a variety of tactics to prevent social stigma & humiliation at work, school, & other settings. Drug users get isolated from the general population of society because of this. According to a 2022 study carried out at several rehabilitation facilities across Pakistan, the degree of stigma attached to substance use disorder varied according on the intensity of the drug usage (Abbas S, Iqbal S, Sher A, Waseem A. 2022).

The neurotransmitters dopamine, serotonin, & norepinephrine, which regulate sensations related to pleasure in the brain, are released when methamphetamine is consumed (Gabrovec, 2015). Dopamine levels fall below normal when the medicine is stopped, which leads to a decrease in enjoyment & a sense

of stress. Chronic methamphetamine use can reduce the brain's dopamine receptor count, making it harder for the user to experience joy (Khazaie et al., 2016; Gabrovec, 2015)

Long term methamphetamine abuse can lead to deficits in neurocognitive abilities, including executive function, verbal memory, sleep difficulties, & information processing (Sadock & Sadock, 2009; Khazaie, et al., 2016). According to certain research, frequent methamphetamine use is strongly linked to high levels of anxiety, psychotic symptoms, & psychiatric symptoms, especially depression & suicidal thoughts. (Gabrovec, 2015; Zweben et al., 2004). They also stated that the addicts found it extremely difficult to manage their aggressive behavior, which led to similarly high incidence assaults & charges containing weapons.

In addition to excruciating headaches, many methamphetamine users have physical symptoms including lethargy & exhaustion when they stop using the substance. According to Sadock & Sadock (2009), during the initial stages of withdrawal, users might spend the bulk of their time sleeping & catching up on meals. In this study, the multifaceted consequences on young ice users are being investigated. Because socioeconomic progress depends on young people. In addition to offering some potential corrective measures that could be implemented to make our youth's lives safer & more trouble-free, this study opens the door for assistance in understanding the issue from a variety of perspectives.

The main objective of the present study is to address the multifaceted impacts of methamphetamine, a highly stimulant substance, which is the goal of the current study. This type of addiction is now increasingly prevalent in Pakistani culture regarding drugs & is now a serious issue for both the addict &, typically, their entire family. The financial, physiological, & psychological effects of the type of drug usage in Pakistan are yet to receive enough attention.

METHODOLOGY

The research design is cross-sectional used in this study. The data was gathered in Lahore, Pakistan, between June 2nd, 2023, & June 10th, 2024.

SAMPLE SIZE AND SAMPLING STRATEGIES

Sample size of methamphetamine abusers are 200. Additionally, a snowball sampling strategy was employed to interview each responded.

DATA ANALYSIS AND DATA COLLECTION

The research design used in this study is cross-sectional. The data was taken during June 2nd, 2023, until June 10th, 2024, at Lahore Pakistan.

Since the number of users of methamphetamine was unknown, 200 respondents that were currently methamphetamine users were chosen using a sequential sample technique. Additionally, a snowball sampling strategy was employed to interview each respondent by tracing the unknown respondents with the known respondents.

To collect data on the demographics, psychological, physiological &socio-economic effects of regular methamphetamine use, a self-designed tool was created & validated by subject matter experts. Tool's reliability was assessed using a Cronbach alpha test, which yielded a result of 0.78. Furthermore, the relationship between the independent variables is frequency of meth use & the dependent variables are psychological, physiological, & socioeconomic consequences) was examined using a Chi-square test (Kothari, 2004).

RESULTS

Table 1: A sample of 200 male methamphetamine users at the time of collecting data in which majority of the respondents were single i.e. (n=120, 60%) whereas the married i.e. n=60, 30%) & divorced i.e. n=20, 10%. The respondents' mean age was 18.22 years, with a range of >14 to 30 years. Furthermore, most respondents (n=115, 57.5%) were in the 19–23 age range and furthermore, the majority of those surveyed held an A/O degree. For example, (n=85,42.5)

Demographic Characteristics (n=200)

Characteristics	N	%
Marital Status		
Single	120	60
Married	60	30
Divorced	20	10
Age		
14-18	51	55.5
18-22	85	42.5
22-26	24	12
26-30	40	20
Education		
Illiterate	121	60.5
Educated	79	39.5

Source: *Author's original work (2025)*

Table 2: Psychological effects

The psychological effects correlated to methamphetamine abuse frequency are shown in the table 2. The findings show a highly significant correlation with anhedonia (p=0.001), (p=0.001),easily irritated (p=0.001), aggressive behavior (p=0.026), Mistreat kin (p=0.001) & highly significant correlation also found (p=0.000) with hallucinations/psychosis.

Psychological effects (DV)	Independent variable	Chi-square & P value
Anhedonia	Frequency of methamphetamine abuse	26.521 (0.001)
Easily irritated	Frequency of methamphetamine abuse	21.918 (0.001)
Aggressive behavior	Frequency of methamphetamine abuse	17.409 (0.026
Mistreat kin	Frequency of methamphetamine abuse	25.678 (0.001)
Hallucinations/psychosis	Frequency of methamphetamine abuse	29.317 (0.000

Source: *Author's original work (2025)*

Table 3: Physiological effects

The physiological effects correlated to methamphetamine use frequency are shown in the table 3. The findings show a highly significant correlation between weight loss (p=0.012), loss of appetite (p=0.001) and last physical weakness (p=0.002).

Physiological effects (DV)	Independent variable	Chi-square & P value
Weight loss	Frequency of methamphetamine abuse	19.685 (0.012)
Loss of appetite	Frequency of methamphetamine abuse	25.157 (0.001)
Physical weakness	Frequency of methamphetamine abuse	24.716 (0.002)

Source: *Author's original work (2025)*

Table 4: Socio-Economic effects

The socioeconomic effects correlated to methamphetamine use frequency are shown in the table 4. The findings show a highly significant correlation between social stigma (p=0.001) taunted by people due to your ice abuse (p=0.008), & Family negligence(p=0.001). Moreover, a significant correlation found huge economic crisis (p=0.001) and defaulters due to ice abuse (p=0.010).

Socio Economic Effects (DV)	Independent variable	Chi-square & P value
Social stigma	Frequency of methamphetamine abuse	26.419(0.001)
Taunted by other people due to your ice abuse	Frequency of methamphetamine abuse	22.379(0.008)
Family negligence	Frequency of methamphetamine abuse	27.219(0.001)
Huge economic crisis	Frequency of methamphetamine abuse	(0.001)
Defaulter due to ice abuse	Frequency of methamphetamine abuse	(0.010).

Source: *Author's original work (2025)*

DISCUSSION

The main purpose of this study was to investigate the multifaceted impacts of methamphetamine on Pakistani youth, including the psychological, physiological, & socioeconomic aspects that are covered below; Frequent use of methamphetamine exacerbates its effects, prolonged usage has numerous detrimental psychological & physiological repercussions, including addiction (Courtney & Ray, 2014).

Most of the people who responded had only completed primary school. These findings are consistent with research by Saul (2005) & Russell et al. (2008) who surveyed street meth abusers in 2002 & discovered that 71% of young people between the ages of 14 & 30 used amphetamine-type stimulants, & 57% had used them more than ten times. A survey conducted had poor levels of education, according to the report. Due to ignorance of the drugs' toxicity, these kinds of behaviors can easily be classified as anti-social. Several other expert studies, including those by Yen, Yang & Chong (2006), Yen (2004), &Sattah, Supawitkul, Dondero, Kilmarx, Young, Mastro, & Griensv (2002), also looked at the relationship between education & ice use & concluded that ice use was significantly correlated with low levels of education.

In accordance with the current investigation, there is a substantial correlation between the frequency of ice usage & feelings of helplessness & hopelessness, as well as violent conduct & maltreatment of family

members. These findings are consistent with prior research showing that methamphetamine use results in a variety of psychological side effects, such as sadness, anxiety, abuse of family members, aggressive conduct, extreme dysphoria, a sense of helplessness, & impatience. McKetin, Duflou, Kaye, & Darke (2008). The frequency & intensity of ice consumption appear to be associated with the severity of these symptoms (Henry et al., 2010; McKetin et al., 2006)

Furthermore, a highly substantial relationship between the frequency of ice consumption & psychosis or hallucinations was discovered. Likewise, a highly substantial correlation was discovered between itching at imaginary insects & the sensation of scabs. According to some research, methamphetamine users who used the drug frequently experienced hallucinations more frequently, which led to scabs from insects (Brecht & Herbeck, 2014; McKetin et al., 2005). Additionally, a strong correlation between the frequency of ice use & restlessness/tiredness was discovered. Depending on the purity, dosage, & individual's past drug experience, using a stimulant drug such as methamphetamine can produce alertness & energy that lasts for several hours. However, when it comes down, it causes fatigue & restlessness, the frequency & attitude of administration are linked to the severity of this issue (Henry et al., 2010; Plüddemann et al., 2007)

The physiological repercussions of methamphetamine usage are also examined in this study. The frequent consumption of methamphetamine caused individuals in the current study to experience a variety of physiological consequences. Weight loss, poor appetite, physical weakness, & the frequency of ice use was all found to be significantly correlated. These findings are consistent with prior research of National Institute of Drug Abuse, 2009 showing that frequent use of methamphetamine can lead to several detrimental health effects, such as anorexia, weight loss, seizures, & physical weakness.

The illicit use of ice is a major issue for families, according to the current study, since families of ice abusers lose respect & social string for being a part of their family. According to other surveys, substance addiction is closely linked to negative public perceptions, commonly known as public stigma (Yang et al., 2017; Crisp et al., 2005). The family boycotted these abusers & disregarded them in domestic affairs. Due to the shame attached to addiction, several of them were homeless & completely shunned by their family. According to McKetin, McLaren, & Kelly (2005), methamphetamine addiction shows a significant negative influence on users' social interactions, occasionally leading to relationship dissolution & social isolation. As a result, neighbors & other family members feel embarrassed around such relatives. Methamphetamine use causes a variety of social & emotional issues for drug users & their families, according to an empirical study by investigators Lankenau, Wagner, Bloom, JS Sanders, Hathazi, & Shin (2010). The use of methamphetamine also isolates addicts from their families & the community. They dodged & disregarded several significant & grave issues as well as other events like marriage ceremonies, etc. Similar social issues have been documented in other Australian research, where regular ice users reported a variety of social issues associated with their use. According to McKetin, McLaren, Kelly, Hall, & Hickman (2005), loneliness & interpersonal issues are the most prevalent negative social effects. Loneliness reduces self-protective actions as a social threat & social contact (Jan et al., 2020; Brecht & Herbeck, 2014). Drug addicts lead different lives than other family members because they abuse their family members & refuse to take on family duties. Because methamphetamine use accounts for a sizable amount of household income, it also has a substantial economic effect on drug users & their families.

When ice users are unable to purchase ice, they first steal goods from their homes, then friends, family, & neighbors.

According to studies done in the United States, addicts who rely on methamphetamine to support their drug habit are responsible for a sizable portion of crimes involving the drug. To maintain their addictive habit, they frequently do various impulsive criminal behaviors, such as robbery, stealing, grabbing purses, & burglaries(Hobkirk et al., 2016; Bagheri et al., 2015) Despite the fact they end up being drug dealers, they commit crimes to make money to support their drug habit. Due to its high cost, methamphetamine consumers are more likely to engage in drug dealing than users of other soft drugs, according to other studies (McKetin& associates, 2005). Furthermore, Sales of drugs more often called "drug dealing" were examined by researchers (Jan et al., 2021a; Bashirian et al., 2012) as a typical source of revenue for drug users, particularly frequent users.

CONCLUSION

The current study's findings indicate that methamphetamine negatively impacts users' psychological & physiological well-being as well as their social & economic circumstances. Persistent consumption of this potent stimulative substance meth had Lasting harmful repercussions on users, the researcher said. According to the current study, the nation's law enforcement authorities must devote attention to the fight against drugs (both supply & demand). Religious academics, the media, & families may all help prevent drug use & help addicts get back on their feet. Furthermore, the substances that are used to make methamphetamine might be taken into consideration.

References

1. Abbas S, Iqbal S, Sher A, Waseem A. Stigma and Substance Use Disorder in Pakistan: A Comparison Over Drug Taking Duration. J Pak Psychiatr Soc. 2022;19(1).
2. Akbari, M., Orouji, M. A., Shahini, N., Rostami, H., Mohammadi, K., & Charkazi, A. (2021). Exploration of the factors associated with the initiation of methamphetamine use in Khomein County, Iran. ADDICTA: The Turkish Journal on Addictions, 8(2), 113-117. https://doi.org/10.5152/addicta.2021.21015
3. Bagheri, M., Mokri, A., Khosravi, A., & Kabir, K. (2015). Effect of abstinence on depression, anxiety, and quality of life in chronic methamphetamine users in a therapeutic community. International Journal of High-Risk Behaviors and Addiction, 4(3). https://doi.org/10.5812/ijhrba.23903
4. Brecht M. L., Herbeck, D. (2014): Time to relapse following treatment for methamphetamine use: a long-term perspective on patterns and predictors. Drug and Alcohol Dependence, 139, 18-25.
5. Chomchai C, Chomchai S. Global patterns of methamphetamine use. Curr Opin Psychiatry. 2015;28(4):269–274.
6. Courtney K. E., Ray L. A. (2014): Methamphetamine: an update on epidemiology, pharmacology, clinical phenomenology, and treatment literature. Drug and Alcohol Dependence, 143, 11-21.
7. Crisp, A., Gelder, M., Goddard, E. & Meltzer, H. (2005). Stigmatization of people with mental illnesses: a follow-up study within the Changing Minds campaign of the Royal College of Psychiatrists. World Psychiatry. 4:106–13.
8. Darke S., Kaye S., McKetin R., Duflou, (2008): Major physical and psychological harms of methamphetamine use. Drug and Alcohol Review, 27(3), 253-262.
9. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Methamphetamine from Afghanistan: signals indicate that Europe should be better prepared. Published 2021. Accessed June 22. 2024. https://www.emcdda.europa.eu/publications/ad-hoc-publication/methamphetamine-fromafghanistan-signals-indicate-europe-should-be-better-prepared_en
10. Ghazal P. Rising trend of substance abuse in Pakistan: a study of sociodemographic pro les of patients admitted to rehabilitation centers. Public Health. 2019;167:34–7.
11. Gunnarsson M, Törrönen J. Performing normality in working life among heavy substance users. Nordisk Alkohol Nark. 2022;39(5):473–86.
12. Henry B.L., Minassian A., Perry W. (2010): Effect of methamphetamine dependence on everyday functional ability. Addictive Behaviors, 35, 593-598.
13. Hobkirk, A. L., Watt, M. H., Myers, B., Skinner, D., & Meade, C. S. (2016). A qualitative study of methamphetamine initiation in Cape Town, South Africa. International Journal of Drug Policy, 30, 99-106. https://doi.org/10.1016/j.drugpo.2015.10.006
14. Jamal M, Waheed S, Shakoor A. The prevalence of substance abuse and associated factors among male prisoners in Karachi jails, Pakistan. J Taibah Univ Med Sci. 2022;17(6):929–35.
15. Jan, S. U. K., Ali, A., Alam, H. Niqab, M. Shakoor, A., Begum, A. & Khan, A. (2020). Impact of Methamphetamine on the Psychological and Physiological Conditions of Addicts in Khyber Pakhtunkhwa, Pakistan. International Journal of Innovation, Creativity and Change, 14(7), 1419-30

16. Jan, S. U., Alam, H., & Khan, A. (2021). An analysis of risk factors associated with methamphetamine/ICE use in Khyber Pakhtunkhwa, Pakistan. Global Sociological Review, VI(I), 111-118. https://doi.org/10.31703/gsr.2021(vi-i).15

17. Jan, S.U.K., Khan, R., Asad, A.Z & Khan, A. (2021a). Socio-Economic Effects of Methamphetamine on the Addicts: A Study of Khyber Pakhtunkhwa, Pakistan. Pakistan Journal of Society, Education and Language, 7(1), 204-14.

18. Lankenau, S. E., Wagner, K. D., Bloom, J. J., Sanders, B., Hathazi, D., & Shin, C. (2010). The first injection event: Differences among heroin, methamphetamine, cocaine, and ketamine initiates. Journal of Drug Issues, 40(2), 241-262. https://doi.org/10.1177/002204261004000201

19. McKetin R., McLaren J., Kelly E. (2005): "The Sydney Methamphetamine Market: Patterns of Supply, Use, Personal Harms and Social Consequences," NDARC Technical Report no. 172 (Sydney: National Drug and Alcohol Research Centre 2005), xiv.

20. McKetin, R., Degenhardt, L., & Hall, W. D. (2016). Estimating the number of regular and dependent methamphetamine users in Australia, 2002–2014. Medical Journal of Australia, 205(9), 426-426. https://doi.org/10.5694/mja16.01043

21. Mehrjerdi, Z.A. (2013). Crystal in Iran: Methamphetamine or heroin kerack. DARU Journal of Pharmaceutical Sciences, 21(1). https://doi.org/10.1186/2008-2231-21-22

22. National Institute on Drug Abuse. (2009): Principles of Drug Addiction Treatment: A Research-Based Guide, 2nd addition. Washington, DC: National Institutes of Health (Publication No. 09–4180).

23. Plüddemann A., Myers B.J., Parry C. D. (2007): Cocaine treatment admissions at three sentinel sites in South Africa (1997–2006): findings and implications for policy, practice and research. Substance Abuse Treatment, Prevention, and Policy, 2(1), 1-8.

24. Russell, K., Dryden, D. M., Liang, Y., Friesen, C., O'Gorman, K., Durec, T. & Klassen, T. P. (2008). Risk factors for methamphetamine use in youth: a systematic review. BMC pediatrics, 8(1), 48.

25. Sattah, M. V., Supawitkul, S., Dondero, T. J., Kilmarx, P. H., Young, N. L., Mastro, T. D. & Griensven, F. V. (2002). Prevalence of and risk factors for methamphetamine use in northern Thai youth: results of an audio-computer-assisted self-interviewing survey with urine testing. Addiction, 97(7), 801-808.

26. Saul, D. (2005). Western Canadian Summit on methamphetamine: bringing together practitioners, policy makers and researchers: consensus panel report. Vancouver, BC: Vancouver Coastal Health pp. 1–48.

27. Shaq M, Shah Z, Saleem A, Siddiqi MT, Shaikh KS, Salahuddin FF, Siwani R, Naqvi H. Perceptions of Pakistani medical students about drugs and alcohol: a questionnaire-based survey. Subst Abuse Treat Prev Policy. 2006;1:31

28. Stoneberg DM, Shukla RK, Magness MB. Global Methamphetamine Trends: An Evolving Problem. International Criminal Justice Review. 2017;28(2):136–161.

29. Swimmer KR, Sandelich S. Substance Use Disorder. Emerg Med Clin North Am. 2024;42(1):53–67. 10.1016/j.emc.2023.06.023.

30. United Nations Office on Drugs and Crime (UNODC). Drug use in Pakistan: summary report reveals high levels of drug use and dependency. Published 2013. Accessed June 22. 2024. https://www.unodc.org/pakistan/en/report-on-drug-use-in-pakistan-2013-reveals-high-levels-of-druguse-and-dependency.html.

31. UNODC, (2021). World Drug Report: Drug Market Trends: Cocaine Amphetamine-type Stimulants [Booklet 4]. United Nations Office on Drug and Crime (UNODC), Vienna, Austria, 80.

32. World Health Organization. Drugs (psychoactive). Published 2021. Accessed June 22. 2024. https://www.who.int/health-topics/drugs-psychoactive#tab=tab_1

33. Yang, L., Wong, L. Y., Grivel, M. M., &Hasin, D. S. (2017). Stigma and substance use disorders: an international phenomenon. Current opinion in psychiatry, 30(5), 378.

34. Yen, C.F (2004). Relationship between methamphetamine use and risky sexual behavior in adolescents. Kaohsiung J Med Sci, 20(4):160-5.

35. Yen, C.F., Yang, Y.H. & Chong, M.Y (2006). Correlates of methamphetamine use for Taiwanese adolescents. Psychiatry Clin Neurosci, 60(2):160-7.