

**An Observational Study of Association of Substance Abuse and Psychiatric Disorders in Alleged Offenders Brought to S.M.S. Medical College, Jaipur**Vikas Soral<sup>1</sup>, Mahesh Soni<sup>2</sup>, Deepali Pathak<sup>3</sup>, D. K. Sharma<sup>4</sup>, Surya Bhan Kushwaha<sup>5</sup><sup>1</sup>Senior Demonstrator, Department of Forensic Medicine and Toxicology, SMS Medical College, Jaipur<sup>2</sup>Postgraduate Student, Department of Forensic Medicine and Toxicology, S.M.S. Medical College, Jaipur<sup>3</sup>Professor, Department of Forensic Medicine and Toxicology, S.M.S. Medical College, Jaipur<sup>4</sup>Senior Professor, Department of Forensic Medicine and Toxicology, S.M.S. Medical College, Jaipur<sup>5</sup>Postgraduate Student, Department of Forensic Medicine and Toxicology, S.M.S. Medical College, Jaipur

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**Abstract:****Background:** Criminal behaviour often stems from poor social upbringing, disturbed family dynamics, substance dependence, and undiagnosed psychiatric conditions. The overlap between mental illness and substance abuse among offenders poses a major concern for both healthcare systems and the legal framework.**Aim:** To study the association between substance abuse and psychiatric disorders in relation to criminal behaviour among alleged offenders.**Methods:** This prospective, descriptive observational study was conducted in the Department of Forensic Medicine and Toxicology at SMS Medical College, Jaipur, from August 2019 to November 2020. A total of 250 alleged offenders were selected based on informed consent and eligibility for medico legal evaluation. Information was gathered on their demographic profile, criminal background, substance use habits, family circumstances, and mental health status.**Results:** Out of 980 individuals examined, 250 (25.5%) met the inclusion criteria. Most participants were male (98.4%) and within the 18–30 year age group (64.8%). Substance use was observed in 45.2% of cases, with alcohol (60.2%) and smack (31.9%) being the most used substances. Strong links were found between substance use and factors such as low educational attainment, exposure to family conflict or abuse, and involvement in property-related crimes. Although only 4% of offenders displayed identifiable mental disorders, those with psychiatric issues had a higher incidence of childhood trauma and substance dependence. A history of repeat offenses was strongly associated with long-term addiction (77.4%).**Conclusion:** This study reveals a clear connection between substance abuse and criminal behaviour, especially when combined with unstable family and social conditions. These findings highlight the urgent need for prison-based rehabilitation, mental health assessment, and early family-focused interventions to reduce repeat offending and support offender recovery.**Keywords:** Offenders, Substance Abuse, Mental Illness, Criminal Behaviour, Family Conflict.This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.**Introduction**

Criminal behaviour often arises from poor socialization, leading individuals to disregard established societal norms and values [1]. It is influenced by learned behaviours, especially when criminal conduct is more reinforced than non-criminal alternatives [2]. Crimes are broadly categorized into violent (e.g., assault, homicide, rape, kidnapping, robbery) and non-violent offenses (e.g., theft, drug-related crimes, cybercrimes, bribery, tax evasion) [3–5]. Several studies have shown a strong link between mental disorders and criminal behaviour [1,6]. Offenders may exhibit serious psychiatric conditions, and in some cases, psychiatric patients may commit crimes under the influence of mental illness [7–9]. Claro et al. reported a significant cor-

relation between the severity of alcohol-related problems, mental health symptoms, and violent behaviour [10]. Substance abuse, defined as the harmful use of psychoactive substances including alcohol and illicit drugs is another major contributor to criminal activity. Repeated use may lead to dependence syndrome, characterized by compulsive drug use, withdrawal symptoms, tolerance, and prioritization of drug use over obligations [11]. Substances such as stimulants may cause psychotic symptoms and euphoria, while benzodiazepines can lead to disinhibition [12,13]. Crimes by substance users include drug-specific offenses (e.g., possession, trafficking) and acquisitive crimes (e.g., shoplifting, theft, burglary) committed to finance drug

use[14]. Research indicates a strong association between substance use disorders and violent crime, though further investigation is needed to understand the specific links between types of substances and violent behaviour[15, 16].

**Aim & Objectives**

To study the association between substance abuse and psychiatric disorders to criminal behavior in alleged criminal offenders.

**Material and Methods**

This prospective descriptive observational study was conducted in the Department of Forensic Medicine & Toxicology at SMS Medical College, Jaipur. The proposed study period spanned from August 1, 2019, to July 31, 2020, or until the attainment of the targeted sample size, with an additional three months allocated for data analysis and interpretation. However, in order to achieve the desired sample size of 250 alleged offenders, the sample collection period was extended until November 20, 2020. The study included alleged criminal offenders brought for medicolegal examination to SMS Medical College, Jaipur, who were booked under various sections of the Indian Penal Code (IPC) or other applicable criminal laws. Inclusion criteria consisted of all offenders with an alleged history of criminal activity under IPC or other Acts, whose investigating officers provided consent, and who were themselves capable of giving valid informed consent. Offenders who were unwilling to participate were excluded from the study.

**Observation and Results**

980 alleged offenders were brought for medical examination during the study period to the hospital, out of which 250 offenders (25.5%) satisfying the inclusion and exclusion criteria and who consented for the study were included in the study. In the present study, there were 246 male (98.4%) and 4 female (1.6%) offenders. Maximum offenders (45.6%) were between 21-30 years age followed by

18- 20 years (19.2%), 31-40 years (16.8%) and 41-50 years (10.8%).

In the present study, 162 offenders were from 18-30 years (64.8%). 3.2% offenders were juveniles (eight offenders) and only 2 offending persons (0.8%) were senior citizens.7.6% offenders had single parent and for 0.8% offenders, both the parents had expired in childhood. One offender had stepparent (mother). In all only 8.8% offenders had an abnormal parental status in the present study.11.6% offenders were from families with financial problem; 5.6% offenders were from families with conflicts, and 3.2% offenders had faces other conflicts in their surroundings. 2.4% offenders had confronted sexual abuse, and 1.6% offenders had faced emotional abuse in their childhood.

In the present study, 128 offenders (51.2%) were either illiterate or had only attended primary school. 21.2% offenders were illiterate. 48.8% offenders were educated and 18% of them were graduates.54.8% alleged offenders were unskilled laborers. 30.4% offenders were also laborers but skilled; 9.2% of the alleged offenders were professionals and 5.6% were still studying.86.8% were financially independent and only 13.2% were dependent on others for their bread. 52% offenders were married, and rest were either unmarried or had not attained the marriageable age.

In the present study, 45.2% of the alleged offenders (113 out of 250) had addiction history whereas 54.8% did not have any addiction history. Age group of the alleged offenders was significantly related to addiction to some or the other substance of abuse. No juvenile offender in the present study was addicted to any drug of abuse.59.25% of the offenders with normal families were not addicted to any drug/ alcohol. Family conflicts and child abuse were significantly associated with substance abuse among offenders in the present study.

**Table 1: Showing percentage of Family History of Abuse/ Addiction History**

Family History of Abuse/ Addiction History	Present	Absent	Total
Family conflict	8(7.1%)	6(4.4%)	14(5.6%)
Sexual Abuse	5(4.4%)	1(0.7%)	6(2.4%)
Surrounding Conflict	5(4.4%)	3(2.2%)	8(3.2%)
Financial Problem	14(12.4%)	15(10.9%)	29(11.6%)
Emotional Abuse	4(3.5%)	0(0%)	4(1.6%)
Normal	77(68.2%)	112(81.8%)	189(75.6%)
Total	113(100%)	137(100%)	250(100%)

Addiction was proportionately higher in alleged offenders who were engaged as laborers (47.42%) in comparison to professional where addition was present in only 21.74% professionals among the alleged offenders. The p value was less than 0.05

which implies that the association of occupational status with addiction was significantly related. Alcohol was the most common drug of abuse among alleged offenders with addiction. (60.2%) followed by smack (31.2%).

**Table 2: Showing history of drug abuse in offenders**

Alleged Offence	Drug of Abuse					Total
	Alcohol	Smack	Ganja	Cocaine	Normal	
Theft	25(36.8%)	24(66.6%)	05(71.4%)	01(50%)	46(33.6%)	101
Assault	25 (36.8%)	02(5.6%)	0(0%)	0(0%)	31(22.6%)	58
Cheating	12(17.6%)	0(0%)	0(0%)	01(50%)	30(21.9%)	43
Smuggling	03(4.4%)	06(16.7%)	02(28.6%)	0(0%)	09(6.6%)	20
Sexual Assault	03(4.4%)	0(0%)	0(0%)	0(0%)	10(7.3%)	13
Child Labour	0(0%)	0(0%)	0(0%)	0(0%)	10(7.3%)	10
Robbery	0(0%)	04(11.1%)	0(0%)	0(0%)	01(0.7%)	05
Total	68(100%)	36(100%)	7(100%)	02(100%)	137(100%)	250

In the present study, 94.6% offenders with addictive history were addicted for more than an year and 38% offenders were addicted to substance abuse for more than 5 years.

**Table 3: Duration of abuse in offenders**

Duration of Abuse	No. of Alleged Offenders	Percentage
Less than 1 year	06	05.3%
1-5 years	64	56.6%
6-0 years	29	25.7%
More than 10 years	14	12.4%
Total	113	100%

In the present study, 24.8% of the alleged offenders in the present study also had past criminal history. 0.8% offenders (03.2% of these) were involved with crime on multiple episodes.19.2% of the total alleged offenders were addicted to some of other substance of abuse and also had past criminal history. 77.4% of offenders with history of addiction also had past criminal history whereas only 34.6% people without any addiction had a criminal history in the past.

Only 12.6% offenders with addiction history had either committed a crime for the first time or had been accused of an offence for the first time in life.40.4% of the accused were arrested for theft; 23.2% offenders for assault followed by cheating (17.2%); smuggling (08%); sexual offenders (05.2%) and engaging children for labour (04%). Least number of accused persons (02%) had committed robbery. Out of 61 offenders with an abusive

family history, 47.5% had faced financial problems and 79.3% of the were involved in crimes committed to gain money like theft, cheating, smuggling and robbery.

Out of 22.9% offenders who had faced conflicts in the family, 42.8% had assaulted another person and 14.2% had sexually abused a female. Amongst offenders with history of sexual abuse in childhood, 33% of offenders had assaulted another person and 33% were sexually offenders. In the present study, 63.6% of the offenders with economically dependent status had committed offences with the intention to gain money to enhance their economic status. Addiction was very significantly related to the type of offence committed in the alleged offenders. In the present study, 65.5% of offenders addicted to substance abuse were intoxicated at the time of committing the offence 5.3% of them were under influence of the drug of abuse.

**Table 4: Condition of offender at time of crime**

State at Crime	No. of offenders	Percentage
Intoxicated	74	65.5%
Abstinence	05	04.5%
Influenced	06	05.30%
Normal	28	24.7%
Total	113	100%

Only 04% offenders were found to suffer from psychological disorder in the present study.

**Table 6: Mental status examination of offenders**

Mental Status Examination	No. of alleged offender	Percentage
Mood Disorder	06	02.4 %
Thought Disorder	04	01.6%
Normal	240	96%
Total	250	100%

In the present study, 50% of offenders detected to be suffering from psychological problems on men-

tal status examination had childhood history of abuse in comparison to 23.7% normal offenders

with abusive family history. In the present study, abnormal mental status examination was significantly higher in offenders who had suffered family conflicts and child abuse.

In the present study, 33.3% offenders each with personality disorders were euphoric and manic and rest 11.1% each were anxious, depressed and emotionally vulnerable. 22.2% offenders with personality disorders had suffered family conflicts in childhood and 11.1% each had suffered emotional and sexual abuse in childhood.

In the present study, 55.6% offenders with personality disorders had exhibited criminal behaviors in the past in comparison to 22.8% offenders without personality disorders. In the present study overall, 24% offenders had past criminal history and 8.33% of them were suffering from personality disorder. 44.5% offenders with personality disorder had committed theft and 33.33% were involved in smuggling. 11.1% each had cheated or assaulted someone.

### Discussion

Out of 980 alleged offenders brought for medico-legal examination at our center, only 250 (25.5%) were included in the study, mainly due to lack of consent from Investigation Officers. The sample size was similar to Friestad & Kjelsberg (Norway, 2009; n=225) but smaller than in other international studies like Teplin LA (USA, 1994; n=728), Hartwell SW (USA, 2004; n=701), Webster JM (Canada, 2010; n=800), and Kuo Shih-Ya (Taiwan, 2020; n=2065).

The study population was predominantly male (98.4%) and young, with 45.6% aged 21–30 years. This pattern reflects findings from Teplin (Chicago, USA, 1994) and Barayni G et al. (Israel, 2019), who also observed higher crime rates among young adult males due to impulsivity, peer influence, and substance use. Parental absence was reported in only 08.8% of cases and was not significantly associated with criminal behaviour, which contrasts with Wilton G & Stewart L (Canada, 2017), who emphasized disrupted family structures as a major risk factor. However, in our study, 20% of those with abnormal mental status and 22.7% of repeat offenders had experienced parental absence.

In our study 24.4% of offenders reported childhood abuse or family conflict. This group had higher rates of substance abuse (59%), mental illness (8.2%), and past convictions (34.4%). These trends support the findings of Pickard H et al. (UK, 2013) and Wilton & Stewart (Canada, 2017) on the lasting impact of early life trauma.

In our study majority (51.2%) of offender were illiterate or had only primary-level education. Only 18% were graduates. Despite low education, 85.2% were employed mainly as labourers and 86.8%

were economically self-sufficient. This contrasts with Kuo Shih-Ya (Taiwan, 2020), who linked crime more directly with poverty.

Substance abuse was found in 45.2% of offenders, with alcohol (60.2%) and smack (31.9%) as the most common substances. This prevalence was higher than the 30.7% current use reported by Teplin (1994) but lower than lifetime rates (61.8%). According to Feucht & Gfroerer (USA, 2011), long-term addiction (found in 94.7% of users here) is strongly linked to criminal behaviour. Webster (2010) also reported higher smack usage due to its serious legal consequences under drug laws.

In our study, 24.8% of offenders had been arrested before, and 40.3% committed the same type of crime again. Among these repeat offenders, 77.4% were addicted to drugs or alcohol, showing a strong link between substance abuse and repeating criminal behavior. This finding is similar to the results of Wilton & Stewart (2017) and Kuo Shih-Ya (2020). In our study, property-related crimes were the most common (59.6%), followed by physical assault (23.2%), drug-related offenses (08%), and sexual crimes (05.2%). Additionally, 04% of offenders were involved in child labour trafficking, similar to findings by Webster JM (Canada, 2010). There was a strong link between substance abuse, family conflict, and the type of crime committed. Also, 65.5% of offenders admitted they were under the influence of drugs or alcohol at the time of the crime, as also reported by Feucht & Gfroerer (2011).

In our study, only 4% of offenders showed abnormal findings on the Mental Status Examination (MSE), and none had a known history of mental illness. This is much lower than the findings of Teplin (1994), who reported 30% current and 62% lifetime prevalence of mental illness. The low rate in our study may be due to stigma or underreporting in the Indian context.

Mental illness was mainly seen in those with a history of family abuse and substance use 80% of mentally ill offenders were also addicts. Personality disorders were found in 09 offenders (03.6%), which is lower than the 35% reported by Barayni et al. (2019). Only 03 offenders had both mental illness and substance addiction (dual diagnosis), compared to 62% in Hartwell SW's study (USA, 2004).

### Conclusion

This study showed that most offenders were young adult males, with property crimes being the most common. A large number had a history of alcohol or drug use, especially smack, and many committed crimes under the influence. Repeat offenders were often long-term addicts, highlighting a strong link between substance abuse and reoffending. Alt-

though few reported mental illness, it was more common among those with a history of family abuse and substance use. Parental absence and poverty were not strongly linked to crime, but childhood abuse and family conflict were. Most offenders had low education levels but were still employed. Mental illness was reported less often than in international studies, possibly due to stigma. The findings stress the need for early intervention, de-addiction programs, and mental health support in the criminal justice system. The study recommends regular de-addiction and mental health screening for offenders, early counselling for at-risk youth, education and skill training for the uneducated, family support in abusive households, and coordinated efforts among legal, medical, and social services for effective rehabilitation.

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