



## PREVALENCE AND REASONS OF USE OF DIFFERENT PSYCHOACTIVE SUBSTANCES AMONG PRISONERS AT MALIR PRISON, KARACHI.

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## INTRODUCTION

The latest estimated report<sup>1</sup> 2013 by UNODC reveals 5.8% or 6.45 millions of total population in Pakistan used drug in last 12 months. World drug report<sup>2</sup> of UNODC 2018 revealed that in 2016 some 275 million people worldwide had used drugs at least once in the previous year. Corresponding to 5.6% of the global population aged 15–64 years, or approximately 1 of every 18 people. Sindh has second highest (6.5 percent) prevalence of any drug used in province after Khyber Pakhtunkhwa 11%. In Sindh 4.2% of population used charas, bhang, and hashish and estimated 560,000 used opioid and almost 100,000 injecting drug users in last year, 66 per cent used opiate-based painkillers and 34 per cent used heroin or opium or both. The treatment hole for substance use disorder (SUD) inside jail has been accounted

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**ABSTRACT...** The use psychoactive substances are on the rise in general population and even seen more among those who are involved in criminal activities. There are many reasons for such irrational use of psychoactive substances. **Objectives:** To determine the prevalence and reasons of use of different psychoactive substances among prisoners at Malir prison, Karachi. **Study Design:** Descriptive Cross-Sectional study. **Setting:** Malir prison, Karachi. **Period:** 22<sup>nd</sup> April 2019 to 26<sup>th</sup> May 2019. **Material & Methods:** This study was conducted at district Malir prison, Karachi. All the cases who were imprisoned due to any reason and had history of psychoactive substance use were enrolled. Thorough history and examination was carried out. Ethical considerations were taken as per international guidelines. **Results:** Among all 490 male prisoners who used to take different type of psychoactive substance, majority were of age ranges of 21 to 35 years and 55% were married while 44% were single and 1% were divorced or separated. Out of 490 cases 453 (92%) were using different substances through routes other than injections while 37 (8%) were injection users. Majority of prisoners 252 (52%) were using Heroin while 86 (17%) were using Crystals, 74 (15%) Cannabis, 37 (8%) Synthetic substances, 24 (5%) Ice, 6 (1%) Opioid and 11 (2%) were using some other type of substance. The most common reason of substance use was peer pressure followed by fun and frustration. **Conclusion:** Substance use prevalence is high in prison. Existing services for the management of drug dependence are not meeting the global standard of evidence based comprehensive drug treatment and rehabilitation.

**Key words:** Prevalence, Prisoners, Psychoactive Substance, Use.

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for in numerous studies.<sup>3,4</sup> Assessments of the predominance of these clutters in cases who are imprisoned can help with arranging administration arrangement viably, focusing on rare assets and creating activities to decrease the gap between wellbeing needs and intercessions. As per the most recent accessible information on the jail populace, most detainees are from poor networks and helpless social gatherings, with the extent who are foreigners or from minority ethnic foundations on the expansion. Studies demonstrate that a lion's share of detainees have utilized illegal medications sooner or later in their life, and many have interminable and hazardous medication use examples.

Due to the wrongdoing of the medications showcase and the significant expense of

substance use, which is frequently supported by crime, the more tricky types of substance use are joined by an expanded danger of detainment. Albeit a few people do stop or decrease their utilization of medications when they are sent to jail, others start medication use or participate in all the more harming practices when they are detained. Jail populaces in low-and middle income countries (LMICs) have been expanding in the course of the last few decades.<sup>5</sup> Little is thought about significant reasons for grimness in individuals engaged with the criminal equity framework in LMICs, and prison health services rely on evidence from high income countries. In such settings, a significant health issue is substance use disorders.<sup>6,7</sup> These disarranges increment the danger of a scope of antagonistic results, including irresistible diseases<sup>8</sup>, other psychological wellness problems<sup>9</sup>, and death<sup>10,11</sup>, and of reoffending on release.<sup>12</sup> In spite of the fact that there is excellent proof from the all-inclusive community and jail populations<sup>13</sup> for treatment, there have all the earmarks of being considerable neglected treatment needs in individuals associated with the criminal equity framework.

The research over the prison population in our part is very scarce. Keeping in view all these scarcities and lack of studies in prison population, we designed this study to know the frequency of different substances use at Malir prison, Karachi.

## **MATERIAL & METHODS**

This descriptive and cross sectional study was conducted at district Malir prison, Karachi. All males who were detained, inside the investigation time frame, shaped the examination populace.

### **Inclusion Criteria**

To be qualified for enrollment in study, a man ought to have been a detainee in one of the Malir penitentiaries, be of 18 years old or more established, regardless of his psychoactive substance utilizing status and hazard practices and was happy to give an educated agree to take an interest in the research.

### **Exclusion Criteria**

Those who were not willing to participate in study

were not enrolled. Those who were having some serious physical or mental health issues were also excluded from study.

Ethical approval was sought from jail authorities and authorities from institute. Information gathering went before by a review stage. The supervisory staff in jails was reached by the researchers, and was clarified the targets of the examination. Information was gathered from 22<sup>nd</sup> April 2019 to 26<sup>th</sup> May 2019. Every single qualified subject, living in the chose penitentiaries during this timeframe was approached to partake in an up close and personal meeting with prepared male questioners. Information was gathered on a pre-structured arrangement which was created through a consultative procedure between the overview staff and the clinical group Anti Narcotic Force, Model Addiction Treatment and Rehabilitation Centre, Karachi. Information was gathered in a safe room, separate from the jail's primary structure and gave enough security to the meetings to be directed easily with no obstruction. Ethical issues were dealt with as giving equal opportunity and recognizing rights of individual whether imprisoned or not and their rights to refuse from being enrolled in study or withdraw consent.

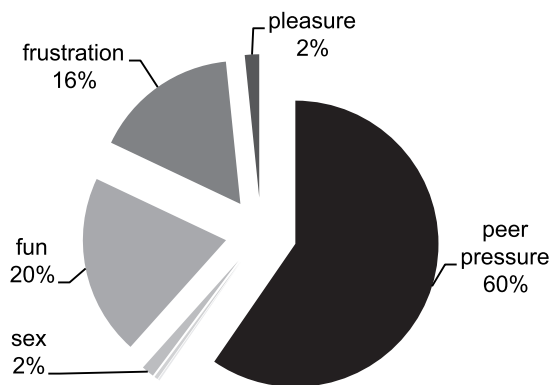
## **RESULTS**

There were 2100 prisoners at the time of study at Malir district jail, Karachi. Out of which 490 (23.33%) were found out to be substance use disorder cases. The majority were of age range of 21 to 35 years. Among all 55% were married while 44% were unmarried and 1 % were divorced or separated. Out of 490 cases 453 (92%) were using different substances thorough routes other than injections while 37 (8%) were injection users. Majority of prisoners 252 (52%) were using Heroin while 86 (17%) were using Crystals, 74 (15%) Cannabis, 37 (8%) Synthetic substances, 24 (5%) Ice, 6 (1%) Opioid and 11 (2%) were using some other type of substance as shown in Table-I. Among all the drugs users the commonest mode of taking substance was foil (44%) followed by smoking 25%, sniff 20%, injections 8%, swallow 1% and some other modes 2%. Mostly were using substances for 4-6 years.

The educational statuses of drug users at Malir prison was mostly 54% were uneducated followed by 17% primary passed, 13% middle, 11% matric, 4 % intermediate and only 1% were graduate. Occupationally 28% were unemployed, 30% were labor workers, 15% were drivers, 4% tailors, 6% fisherman, 2% painters, 3% electricians, 5% mechanics and 8% were doing some other jobs for earnings. Majority 60% started using drugs in peer pressure followed by fun 20%, pleasure 2%, sex 2%, and frustration 16% as shown in Figure-1. Majority of individuals over 60% the age of start of drug was 15-25 years. Mostly 63% prisoners daily expenditure on drug use was 100-500 rupees while 23% used 600-1000 rupees and 14% expended over 1000 rupees daily. The reason why they are imprisoned was as 26% were imprisoned due to use of drugs, 25% due handling of illegal weapons, drugs sellers 21%, drug suppliers were 12%, 8% due to robbery and snatching and 8% due to other reasons.

Heroin	Cry-stal	Opioid	Ice	Syn-thetic	Can-nabis	Other
252	86	06	24	37	74	11
52%	17%	1%	5%	8%	15%	2%

**Table-I. Prevalence of different substances use at Malir prison, Karachi.**



**Figure-1. Reasons for use of substances.**

**DISCUSSION**

Lifetime prevalence of any illicit drug use in prison ranges between 2% to 76% worldwide with, in most cases, cannabis being the most frequently

reported substance. In current study the prevalence of substance use was 23.33% and predominant substance was Heroin instead of cannabis. Our results are consistent with the results of research conducted at Punjab province<sup>14</sup> in 2016. Results show that the prevalence of drug use varies greatly between studies. Most recent (past-month) illicit drug use is reported by <1% to 65% of inmates, while <1% to 39% report injecting illicit drugs during their stay in prison. Here in our study the ratio of injectable drugs was just 8% while 92% were using drugs through other routes. A systematic review reported ranges for drug abuse and dependence of 10–48% in men and 30–60% in women on reception or arrival to prison while here in current study only male inmates were present so enrolled in study and no female prison was enrolled and in males 23.33% were using different types of substances, the use of alcohol in current study was lower as compared to previous studies.<sup>15</sup> Jails the world over confine huge quantities of people with substance use issues, which increment the danger of mortality after jail release<sup>16,17</sup> and rehash offending.<sup>18,19</sup>

Moreover, alcohol use issue (AUD) are related with suicide inside prison<sup>20,21</sup> and of executing brutality and being exploited inside custody.<sup>22,23</sup> In current study, we had many individuals who were been imprisoned many times earlier and every time their reason for reuse of substance was peer pressure mostly and few were also reporting frustration and pleasure purposes. Other studies conducted earlier showed that Substance use disorders were also an independent determinant of external-cause morbidity, with population attributable fraction estimates at 42% in men and 70% in women.<sup>24</sup>

The high prevalence of substance use underscore the importance of evidence-based interventions being available to all individuals who are imprisoned. When a prison enters in custody, he may need to have systems in place to identify individuals with high treatment needs, and treatments should be matched to individual needs.<sup>25</sup> Treatment combination pharmacological and psychosocial should be available, considering the high prevalence and the subsequent effects

on adverse outcomes, including mortality after release and violent reoffending.<sup>26</sup>

## CONCLUSION

Substance use prevalence is high in prison. Existing services for the management of drug dependence are not meeting the global standard of evidence based comprehensive drug treatment and rehabilitation.


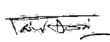


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## REFERENCES

1. [http://www.unodc.org/documents/pakistan/Survey\\_Report\\_Final\\_2013.pdf](http://www.unodc.org/documents/pakistan/Survey_Report_Final_2013.pdf).
2. <http://www.unodc.org/documents/wdr2018>.
3. Oser CB, Knudsen HK, Staton-Tindall M, Taxman F, Leukefeld C. **Organizational-level correlates of the provision of detoxification services and medication-based treatments for substance abuse in correctional institutions.** *Drug Alcohol Depend* 2009; 103: S73–81.
4. Department of Health. **The patel report: reducing drug-related crime and rehabilitating offenders.** London, UK: Department of Health; 2010.
5. Walmsley R. **World prison population list. Institute for criminal policy research;** 11th edi, London, UK: 2016, 735-55.
6. Mundt AP, Chow WS, Arduino M, et al. **Psychiatric hospital beds and prison populations in South America since 1990: does the Penrose hypothesis apply?** *JAMA Psychiatry*. 2015; 72(2):112–118.
7. Fazel S, Bains P, Doll H. **Substance abuse and dependence in prisoners: A systematic review.** *Addiction*. 2006; 101(2):181–191.
8. Fazel S, Yoon IA, Hayes AJ. **Substance use disorders in prisoners: an updated systematic review and meta-regression analysis in recently incarcerated men and women.** *Addiction*. 2017; 112(10):1725–1739.
9. Rubenstein LS, Amon JJ, McLemore M, et al. **HIV, prisoners, and human rights.** *Lancet*. 2016; 388(10050):1202–1214.
10. Mir J, Kastner S, Priebe S. **Treating substance abuse is not enough: comorbidities in consecutively admitted female prisoners.** *Addict Behav*. 2015; 46:25–30.
11. Chang Z, Lichtenstein P, Larsson H. **Substance use disorders, psychiatric disorders, and mortality after release from prison: A nationwide longitudinal cohort study.** *Lancet Psychiatry*. 2015; 2(5):422–430.
12. Zlodre J, Fazel S. **All-cause and external mortality in released prisoners: Systematic review and meta-analysis.** *Am J Public Health*. 2012; 102(12):67–5.
13. Chang Z, Larsson H, Lichtenstein P. **Psychiatric disorders and violent reoffending: A national cohort study of convicted prisoners in Sweden.** *Lancet Psychiatry*. 2015; 2(10):891–900.
14. Clarke JG, Stein LA, Martin RA. **Forced smoking abstinence: Not enough for smoking cessation.** *JAMA Intern Med*. 2013; 173(9):789–794.
15. Singh GP, Joshi R, Bhardwaj M, Brar SS, Kaur R, Singh N et al. **Pattern of drug abuse along with the criminal and demographic profile of prisoners admitted at the de-addiction facility at a Central Jail in Punjab.** *International Journal of Medical Science and Public Health*, 2016, 5(06)1103-1110.
16. Fazel S., Bains P., Doll H. **Substance abuse and dependence in prisoners: A systematic review.** *Addiction* 2006; 101: 181–191.
17. Pratt D., Appleby L., Piper N., Webb R., Shaw J. **Suicide in recently released prisoners: A case-control study.** *Psychol Med* 2010; 40: 827–35.
18. Kinner S. A., Forsyth S., Williams G. **Systematic review of record linkage studies of mortality in ex-prisoners: why (good) methods matter.** *Addiction* 2013; 108: 38–49.
19. Chang Z., Lichtenstein P., Larsson H., Fazel S. **Substance use disorders, psychiatric disorders, and mortality after release from prison: A nationwide longitudinal cohort study.** *Lancet Psychiatry* 2015; 2: 422–430.
20. Baillargeon J., Binswanger I. A., Penn J. V., Williams B. A., Murray O. J. **Psychiatric disorders and repeat incarcerations: The revolving prison door.** *Am J Psychiatry* 2009; 166: 103–109.
21. Chang Z., Larsson H., Lichtenstein P., Fazel S. **Psychiatric disorders and violent reoffending: A national cohort study of convicted prisoners in Sweden.** *Lancet Psychiatry* 2015; 2: 891–900.
22. Rivlin A, Hawton K, Marzano L, Fazel S. **Psychiatric disorders in male prisoners who made near-lethal suicide attempts: Case-control study.** *Br J Psychiatry* 2010; 197: 313–319.
23. Teasdale B., Daigle L. E., Hawk S. R., Daquin J. C. **Violent victimization in the prison context: An examination of the gendered contexts of prison.** *Int J Offender Ther Comp Criminol* 2016; 60: 995–1015.

24. Chang Z, Lichtenstein P, Larsson H, Fazel S. **Substance use disorders, psychiatric disorders, and morbidity after release from prison: A nationwide longitudinal cohort study.** *Lancet Psychiatry.* 2015; 2(5):422-430.
25. Taxman FS, Perdoni ML, Harrison LD. **Drug treatment services for adult offenders: The state of the state.** *J Subst Abuse Treat,* 2007; 32: 239–54.
26. Rich JD, McKenzie M, Larney S, Wong JB, Tran L, Clarke J. *et al.* **Methadone continuation versus forced withdrawal on incarceration in a combined US prison and jail: A randomized, open-label trial.** *Lancet,* 2015; 386: 350–59.

**AUTHORSHIP AND CONTRIBUTION DECLARATION**

Sr. #	Author(s) Full Name	Contribution to the paper	Author(s) Signature
1	Muhammad Ilyas Jat	Statistical analysis and manuscript writing.	
2	Muhammad Tarique Arain	Discussion writing and review of manuscript.	
3	Saima Qureshi	Data collection and manuscript writing.	
4	Kheenpal Das	Concept design, statistical analysis.	
5	Anum Haider	Editing and final approval of manuscript.	