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# An Empirical Study on Forensic Analysis of Drugs Facilitated Sexual Assault

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## ABSTRACT

*Drug-Facilitated Sexual Assaults (DFSA) have increased notably in the past few years. To facilitate sexual assault, tablets and alcohol are used often. Date rape drug impacts quick fitness reasons fitness issues like a sense of sleep, confusion, and lack of consciousness, much less capable of shielding towards sexual assault. The main of the research is to determine the reason for using drugs in committing sexual assault, to find the most widely used rape drug, and to understand whether the person who takes these drugs willfully can also be a victim because of the sedative property in it. The Research method followed here is empirical research. A total of 200 samples have been taken, out of which are taken through simple random sampling. The primary sources are taken from the general public in the form of survey methods. The independent variables taken here are age, gender, employment status, marital status, and educational qualification. The dependent variables are alcohol as the most commonly used drug, the reason for using drugs for committing sexual assault, the most widely used drugs, need for awareness. The statistical tools used for this analysis are a graphical representation. It was found that most of the time, date rape cases are not reported on time due to numerous reasons like a victim not being able to recall what happened, fear of humiliation, peer pressure, defamation, and social taboo. Investigators face challenges while analyzing the evidence collected due to delayed reporting, as most of the drugs have short half- life, are easily metabolized, and can be eliminated from the victim's body.*

*Keywords: Drug facilitated sexual assault, Date rape drugs, Victims of DFSA, Forensic analysis.*

## I. INTRODUCTION

Drug-Facilitated Sexual Assaults (DFSA) have increased notably in the past few years. Drugging is the main purpose of a sexual offender. Perpetrator secretly adulterates the drink of the sufferer with a sedative drug and sexually attacks the sufferer who's under the influence of such substance. Date rape may be an awesome type of DFSA wherein the sufferer is on a go-to with the perpetrator. To facilitate sexual assault, tablets and alcohol are used often. Terms that

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includes 'date rape drugs' were used to explain tablets which could reason organic results that facilitate sexual assault. Date-Rape-Drugs are the kind of drugs which causes sedation, so that the person becomes unconscious and becomes helpless as they cannot fight or counter back. According to the Society of Forensic Toxicologists guides, the primary tablets worried in DFSA are analgesics (fentanyl, codeine, tramadol); antidepressants (fluoxetine, amitriptyline); antihistamines (diphenhydramine and hydroxyzine); a few antipsychotics which includes clozapine and barbiturates which includes phenobarbital. However, the maximum used drugs are ethanol, benzodiazepines, gamma-hydroxybutyrate (GHB), Rohypnol, and Ketamine (KET). These tablets appear like pills, liquid, or powder and don't have any colour, no smell, and no particular flavor when introduced to meals or drinks because of weakness, lack of consciousness, lack of frame control, and emotion will become unstable. Date rape drug impacts quick fitness reasons fitness issues like a sense of sleep, confusion, and lack of consciousness, much less capable of shielding towards sexual assault. Sexual assault sufferers who suppose tablets had been secretly given to them commonly record remembering responses of drunkenness that don't correlate with the quantities of alcohol consumed, unexplained gaps in memory, adjusted stages of consciousness, and unexplainable ashes of bodily trauma. The Drug-Induced Rape Prevention and Punishment Act of 1996 provide penalties of up to 20 years imprisonment and fines for persons who intend to commit a crime of violence (including rape) by distributing a controlled substance to another individual without that individual's knowledge. Under, Narcotic Drugs and Psychotropic Substances (NDPS) Act, ketamine was prohibited and as per law, a person can be sent to jail for a minimum of six months and up to 20 years for varying degrees of contravention involving Psychotropic Substances. The aim of the research is to find reasons for using these drugs and to find the most widely used drugs in committing sexual assault.

**Objectives:**

- To determine the reason for using drugs in committing sexual assault.
- To find the most widely used rape drug.
- To understand whether the person who takes these drugs willfully can also be a victim because of the sedative property in it.
- To examine the difference in the level of agreeability towards the need of public education, awareness and empowerment of medical staff dealing with investigating and management of drug facilitated crimes.

**Literature review:**

**Anderson, Laura Jane, et al.(2019)** has analysed about the role of voluntary and involuntary drug and alcohol consumption and premorbid mental health factors in drug-facilitated sexual assault. It was found that most (93.6%) complainants reported voluntary consumption of psychoactive substances prior to the alleged DFSA. Alcohol was the most commonly self-reported substance consumed (n = 164; 64%) and concomitant use of alcohol, prescription, and illicit drugs was also commonly self-reported (24%). **Negrusz, Adam, and R. E. Gaensslen (2003)** gave a general overview of the drug-facilitated sexual assault phenomenon. discuss the most recent analytical developments in the toxicological investigation of drug-facilitated rape designed to reveal drug presence and that may help successfully prosecute perpetrators. The list of drugs reportedly associated with sexual assault is long and among others includes flunitrazepam with other benzodiazepines. **de Souza Costa, Yanna Richelly (2020)** have reviewed the drugs used to facilitate sexual assault, addressing their mechanism of action, as well as drug detection times in the human body and types of forensic identification. It was found that many sexual violence victims do not report the fact to the police or report it later and the most used Date rape drugs are ethanol, benzodiazepines, ketamine, and gamma-hydroxybutyrate. These drugs have a short metabolism, which makes analysis a challenge for forensic toxicology. **O'Callaghan, Erin, and Sarah E. Ullman (2021)** compared victim alcohol use, drug use, and combined substance use in sexual assaults among a community sample of 693 victims. It was hypothesized that victims in the combined substance use assault type would report overall worse post-assault outcomes, more contextual and interpersonal traumas, and higher assault severity. The results partially confirmed these hypotheses, but victims in the drug-involved assault type group overall reported higher assault severity and worse post-assault outcomes. **Fields, Laurie, et al (2022)** have tried to identify psychological sequelae characterizing DFSA and to determine how impaired trauma memory relates to the development of PTSD and depression symptoms. The study examined therapy records beyond case studies for DFSA. Survivors with impaired trauma memory had significantly fewer hyper-arousal and overall PTSD symptoms, and specifically less hypervigilance. No differences were found in re-experiencing symptoms. **Singh, Gaurav, Pratik Singh, and Piyush Jyoti (2020)** discussed such types of Date rape drugs which are being used at an extensive level in India, their mechanism, and how they affect a person and their consequences. In this paper, we discussed 5 major and most common date rape drugs used worldwide, like MDMA, ketamine, Rohypnol, GHB, and, most commonly, alcohol. Such drugs are widely used because the victims lose their ability to recall or memorize the whole situation and fail to recognize the perpetrator.

**Lahane, Nishtha, and Gurmeet Kaur (2022)** have covered the introduction to Club drugs, different types of date rape drugs, and their prevention. It was found that these drugs not only physically impair or blunt the victim but also retard the mental capability of the victim when condemned to such a situation as a repercussion; the victim cannot remember anything. These drugs can be mixed in the food and drinks of the victim as they don't have any smell, taste, or color and hence act as a convincing tool for the criminals. **Murugan, M., and K. K. Bairagi (2011)** have provided some light on the information regarding the drugs which are commonly used in sexual assaults, their pharmacology, uses & misuses, and their forensic analysis. It is imperative that any investigation into the suspected use of date rape drugs involve an immediate blood test, as waiting too long to test for the presence of drugs may cause false negatives because these drugs are quickly metabolized and eliminated by the body. Trying to deduce from the symptoms whether or not date rape drugs have been used can cause false positives. **Singh, Salam Bitam, Thounaojam Meera (2004)** have attempted to find out the pattern of date rape cases in Imphal. A detailed study of the history given by the police and the victim and the medical examination findings were carried out, and the findings were analyzed. The result shows out of the total 210 cases of alleged sexual assault cases, 17 (8%) were date rape victims. And also it was found that the exact type of the drug/agent used in some of the cases could not be established because of delayed reporting and untimely collection of samples. **Soni, Shringika, Utkarsh Jain, and Nidhi Chauhan (2021)** has described Drug-facilitated sexual assault (DFSA) and associated drugs briefly and the Advantages of sensors based detection over conventional analytical technique explained. They summarized attempts made in sensing technology development for on-spot and rapid DFSA drugs detection. They suggested the scientific community to make additional effort in this emerging interdisciplinary field for DFSA associated drugs detection. **Sonone, S. S., S. Jadhav, and M. S. Sankhla (2021)** has discussed on drugs used in a date rape scenario, its effect, collection, biological samples, and forensic analysis. The findings stats that date rape drug alters the consciousness, lowers self-control, makes the body physically weak, or inhibit the ability of a person to oppose sexual assault and These drugs are either used alone or with combination to facilitate sexual assault/rape. And they states some common drugs used in date rapes cases are Gamma-hydroxybutyric acid (GHB), Benzodiazepines, Rohypnol, Ketamine (KET), etc. **LeBeau, M. A., and M. A. Montgomer (2010)** examined numerous challenges of drug-facilitated sexual assaults (DFSA). The challenges are categorized as follows: the drugs, reporting the crime, evidence collection, and laboratory analysis of specimens. It was found that the challenges associated with the drugs used to commit DFSA emphasizes the pharmacological effects of strong central nervous system

depressants and how the pharmacokinetics and pharmacodynamics of these drugs create difficulties in an investigation. **Salomone, Alberto, et al (2012)** examined on hair analysis of drugs involved in drug-facilitated sexual assault and detection of zolpidem in a suspected case. The results revealed that zolpidem was present at low in three out of eleven segments of hair specimen obtained from the first of the alleged victims, offering plain evidence of single or sporadic exposure, whereas the agent was detected in the high picogram per milligram range in the hair collected from suspect's wife, coherently with therapeutic administration. **Panyella-Carbó, Maria Neus, Carles Martin-Fumadó (2021)** perform a literature review on the prevention of drug-facilitated sexual assault. The results obtained show that these crimes are committed mainly in nightlife situations and during weekends; the authors agree that the enabling risk factor is alcohol consumption. On the other hand, there is limited literature on prevention measures, methods and strategies, which are also ineffective in view of the increase in these kinds of crimes in recent years. **Style, A. M. A., L. N. Gorstein, and R. J. Riviello (2018)** discussed about drug-facilitated sexual assault in the college environment, examine the health effects of drugs and alcohol in facilitating sexual violence. The results shows many survivors of sexual violence do not report or seek help out of fear of being blamed for the assault and/or not being believed. It is estimated that approximately 90% of individuals who experience sexual assault on college campuses do not report their assault. **Walsh, Emily, and Virginia M. Maxwell (2012)** evaluate the use of XRD for the detection of date rape drug residues on clothing and in containers, such as those typically submitted as evidence in suspected DFSAs. The results shows the technique of X-ray Diffraction was successfully employed to detect date rape drugs in pure form for this project. This project was able to demonstrate and give validity to the use of XRD for the purposes of detecting date rape drugs and residues. **Angelone, D. J., Damon Mitchell, and Adriana Pilafova (2007)** examined whether intentionality of alcohol or club drug use would affect observer attributions of a victim and a perpetrator after a sexual assault. Participants were 198 male and female college students sampled from a small college located in the United States. In general, participants attributed less blame to the victim, more guilt to the perpetrator, and were more likely to define the assault as rape and convict the perpetrator when the substance use was involuntary as opposed to voluntary. **Hindmarch, I., et al. (2001)** has discussed on forensic urinalysis of drug use in cases of alleged sexual assault. This research highlights the need for the early collection of forensic samples in cases of alleged sexual assault. Law enforcement agencies and health professionals should establish guidelines and procedures to ensure that appropriate forensic samples (blood and urine) are collected in a timely manner following allegations of possible drug mediated sexual assault. **Stringer, Kristi Lynn, et al**

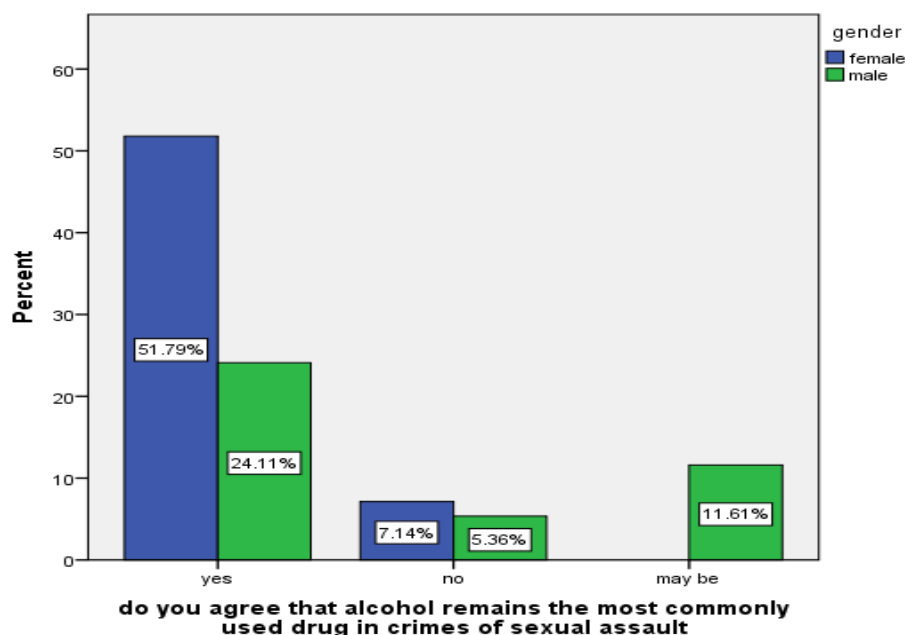
(2020) examines the prevalence, correlates, and mental health consequences of sexual misconduct by law enforcement and criminal justice (LEcj) personnel. These findings suggest that LEcj sexual misconduct is a previously unreported risk factor for adverse mental health outcomes among criminal-legal system-involved women. There is a need for recognition of LEcj sexual victimization among criminal-legal system-involved women. **Franklin, Cortney A (2011)** examined victim self-control as a correlate of vulnerability to general victimization. Results indicate that low self-control is significantly correlated with increased odds of alcohol-induced sexual assault victimization despite the inclusion of other theoretically relevant variables. Implications for research, theory, and prevention policy are discussed.

### Research methodology:

The Research method followed here is an Empirical research. A total of 200 samples have been taken out of which is taken through simple random sampling. The primary sources are taken from the general public in the form of survey methods. The information was collected from secondary sources from journals, articles, books and reports of the presidency and non-governmental organizations. The data were collected in public places, and colleges. The independent variables taken here are age, gender, employment status, marital status and educational qualification. The dependent variables are alcohol as most commonly used drug, reason for using drug for committing sexual assault, most widely used drugs, need for awareness. The statistical tools used for this analysis are graphical representation.

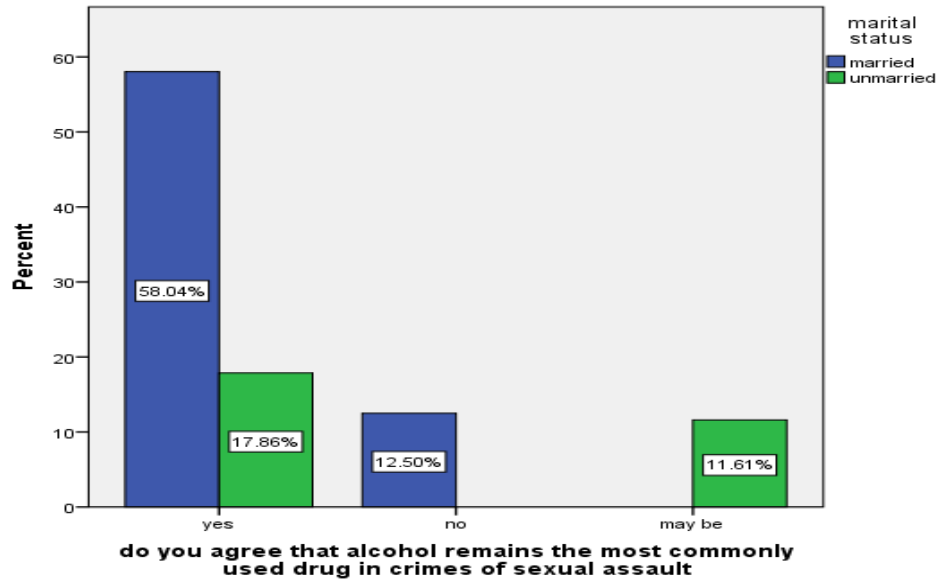
## II. ANALYSIS:

**Figure 1:**



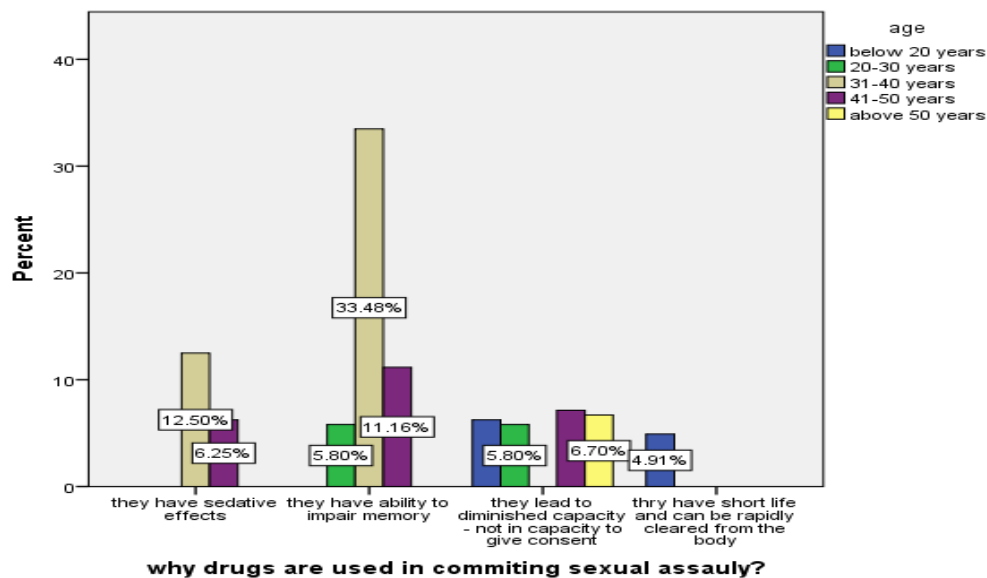
**Legend:** It shows the gender of respondents and their opinion on alcohol as most commonly used drug in sexual assault.

**Figure 2:**



**Legend:** It shows the marital status of respondents and their opinion on alcohol as most commonly used drug in sexual assault.

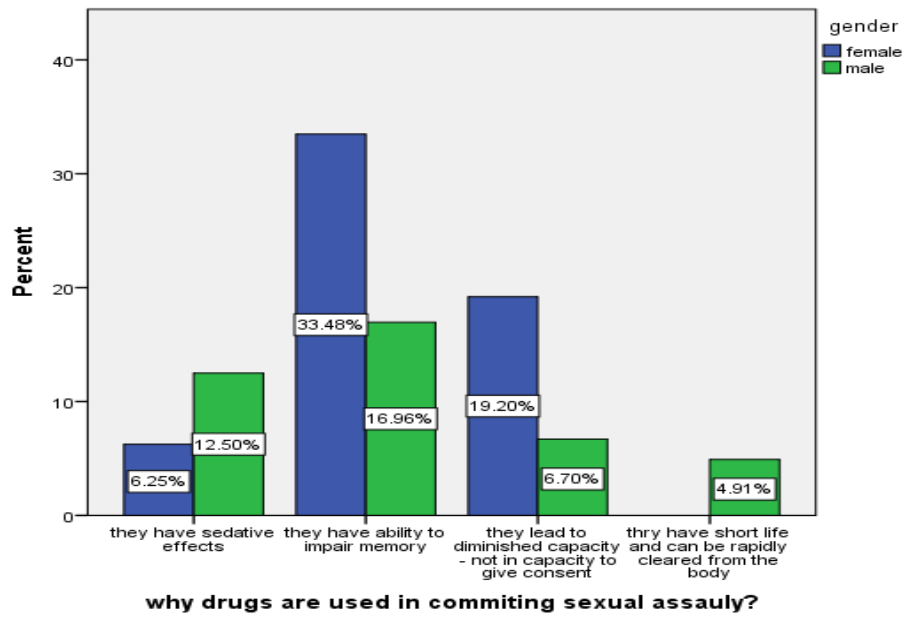
**Figure 3 :**



**Legend :** It shows the age of the respondents and their opinion on why drugs are used in committing sexual assault.

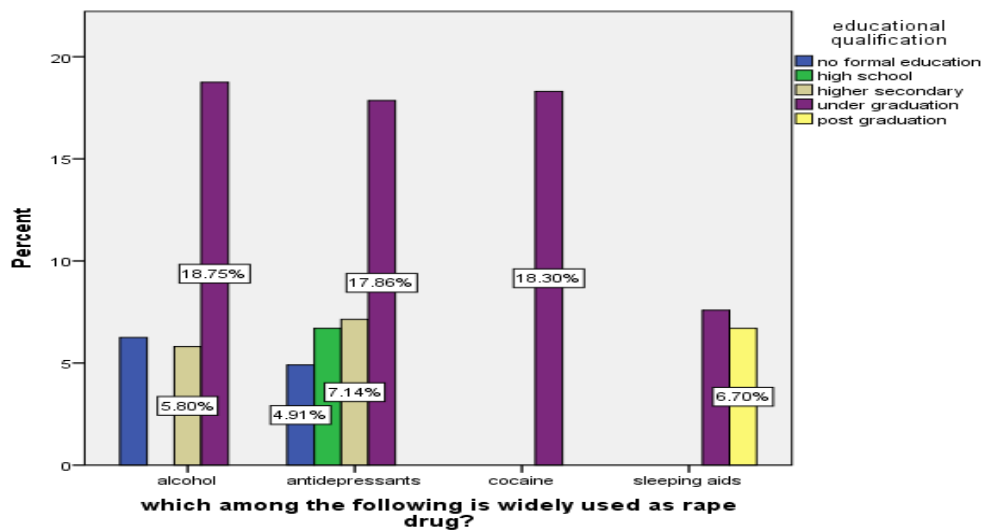


**Figure 4:**



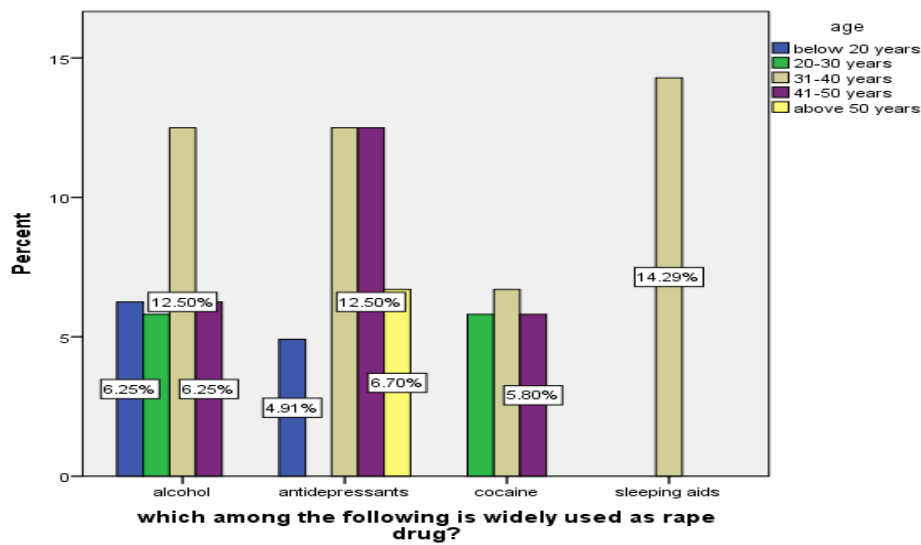
**Legend :** It shows the gender of the respondents and their opinion on why drugs are used in committing sexual assault.

**Figure 5:**



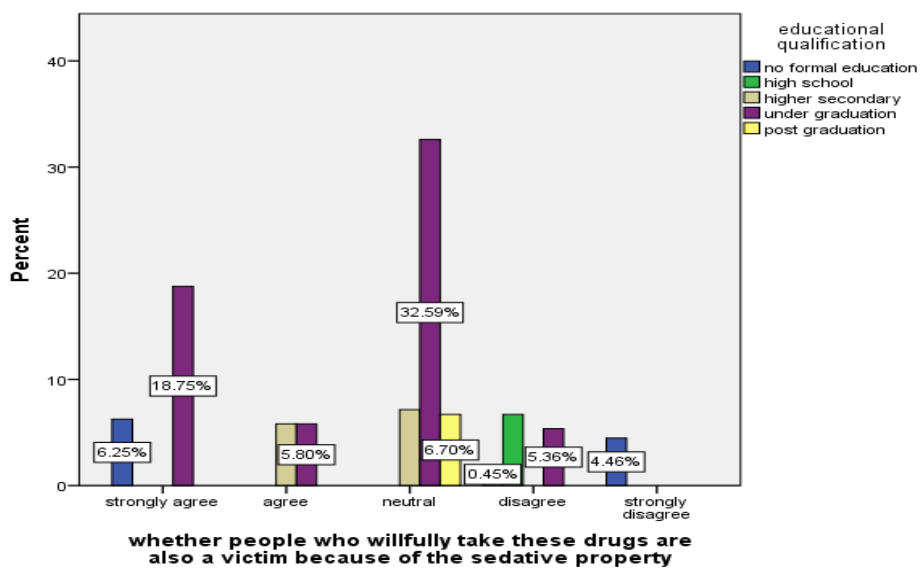
**Legend:** It shows the educational qualifications of respondents and their opinion on widely used rape drug.

Figure 6:



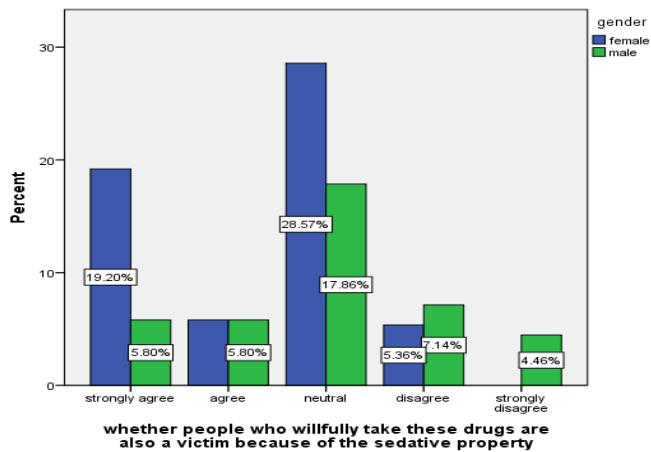
Legend: It shows the age of respondents and their opinion on widely used rape drug.

Figure 7:



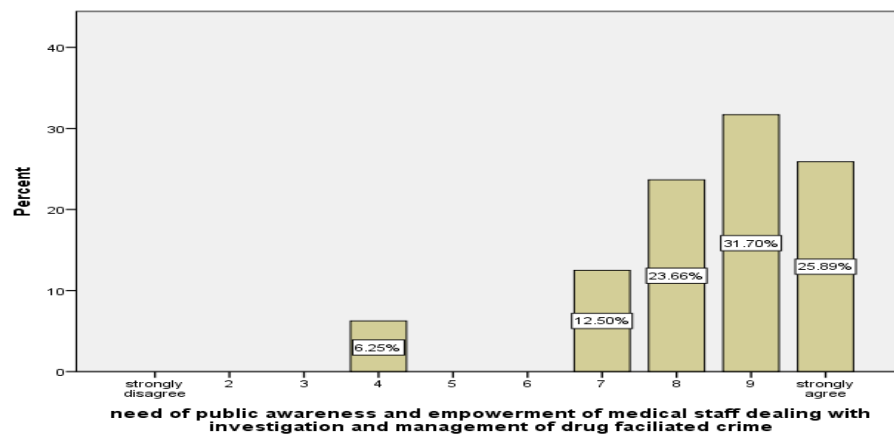
Legend: It shows the educational qualifications of respondents and their agree ability towards people who willfully take these drugs are also a victim of the sedative property in it.

Figure 8:



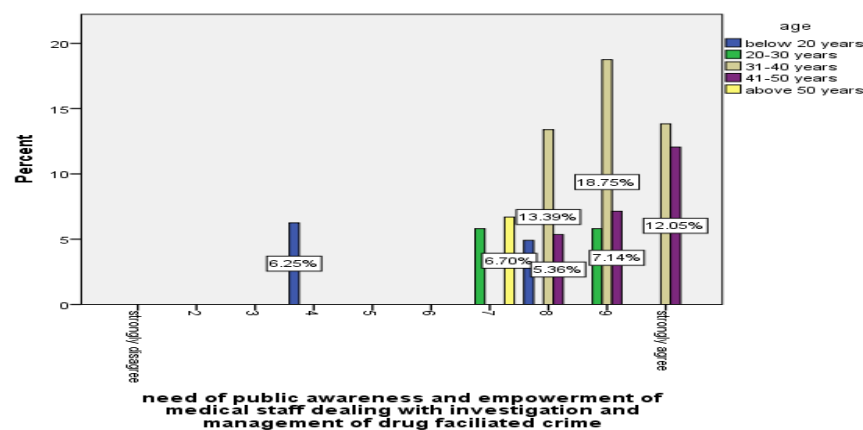
**Legend:** It shows the gender of respondents and their agreeability towards people who willfully take these drugs are also a victim of the sedative property in it.

Figure 9:



**Legend:** It shows responses on a scale of 1-10 the need of public education, awareness and empowerment of medical staff dealing with investigating and management of drug facilitated crimes.

Figure 10:



**Legend:** It shows responses on a scale of 1-10 the need of public education, awareness and empowerment of medical staff dealing with investigating and management of drug facilitated crimes with respect to age of respondents.

### III. RESULTS

In **figure 1**, 51.79% of female respondents and 24.11% of male respondents have agreed that alcohol remains the most commonly used drug in crimes of sexual assault. In **figure 2**, 58.04% of married respondent and 17.86% of unmarried respondents have agreed that alcohol remind the most commonly used drug in crimes of sexual assault. In **figure 3**, 33.48 percent of respondents between the age group of 31 to 40 years and 11.16% of respondents between the age group of 41 to 50 years have selected drugs have ability to impair memory is the most common reason why they were used in committing sexual assault. In **figure 4** 19.20% A female respondent and 6.70% of male respondents have selected drug leads to diminished capacity ( not in capacity to give consent) As a reason why drugs are most commonly used in committing sexual assault. In **figure 5**, 18.75% of respondents who have completed their undergraduate and 7.14% of respondents who have completed their high school and higher secondary education have selected antidepressants as the most commonly used drug. In **figure 6**, 14.26% of respondents between age group of 31 to 40 years have selected sleeping aid as a most commonly used to rape drug and only 5.80% of respondents between the age group of 41 to 50 years have selected a kind as a most commonly used rape drug. In **figure 7**, 18.75% of respondents were all undergraduates strongly agreed and only 4.46 %of respondents with no formal education have strongly disagreed that people who wilfully take these drugs are also a victim because of a sedative property in it. In **figure 8**, 28.57% of female respondents and 17.86% of male respondents were neutral towards people who wilfully take these drugs or also victims because of the sedative property in it. In **figure 9**, Nearly 31.70% of respondents have eight and 25.89% of respondents stated 10 for the need of public awareness and empowerment of medical staff dealing with the investigation and management of drug-facilitated crimes. In **figure 10**, only 6.25% of respondents below the age group of 20 years have rated four for the need of public awareness and empowerment of medical staff dealing with the investigation and management of drug-facilitated crimes.

### IV. DISCUSSION

From **figure 1**, it was clear that most of the respondents have agreed that alcohol was the most commonly used drug in crimes of sexual assault because they were easily available and there were no restrictions in buying or selling alcohol hence the perpetrator can easily facilitate sexual

assault with the help of alcohol. In **figure 2**, only a few of them said no to alcohol as the most commonly used drug and crime of sexual assault because they think of when alcohol is used to facilitate sexual assault it is easier to identify than other drugs. From **figure 3**, most of the respondents have selected drugs used in committing sexual assault that have the ability to impair memory and they have sedative property in it, which make the perpetrator free from defence by victim and the victim will be in unconscious state and they can't able to memorise the things which was taken place which is a great advantage of a perpetrator. From **figure 4**, respondents think that the drugs which are used in facilitating sexual assaults have a power to diminish the capacity which will lead the victim in unconscious state to give concern and to memorise the incident. From **figure 5**, it was clear that most of the respondent have selected alcohol, antidepressants and cocaine as most widely used rape drug because they think alcohol and antidepressants were easily available and cocaine have high sedative property in it. In **figure 6**, respondents have selected sleeping aids and antidepressants as widely used to rape drug because the rape drugs are not which are always to be an illegal one, the drugs which are available in medical shops like sleeping pills and antidepressants can also be used as rape drug by increasing their dosages and they were easily available also. In **figure 7**, most of the respondents have strongly agreed and neutral towards the people who wilfully take these drugs are also victims of the sedative property in it because they think that the people who take any drinks or food which was contaminated by these drugs won't give any concern towards the sexual violence. In **figure 8**, most of the female have agreed because these kind of sexual assaults which was affiliated by drugs is a mostly happening in parties or clubs where they wilfully take any food or drinks in which the drugs are mixed by without knowing it hence they think the people who wilfully take these drugs are also a victim because of the sedative property in it. From **figure 9**, it was clear that there was a need in public education, awareness and empowerment of medical staff dealing with investigation and management of drug facilitated crimes. From **figure 10**, it was clear that most of the people were not even aware about the rape drugs or the consequences of consuming it hence that is the need for public education and empowerment of medical staff dealing with investigation and management of these crimes.

## **V. LIMITATION**

The major limitation of my observation is the sample body. The pattern frames such as bus stand and railway station don't have any root for knowledgeable samples. The centered audience weren't able to have interaction about the tougher perspective is any other disadvantage. The restrictive area of pattern size is likewise any other drawback. The physical factors are the most impactful and a main drawback to the research. The foremost downside whilst appearing the

research became the epidemic that outspread the state because of which the Researcher had to face time restraints and tougher occasions.

## **VI. CONCLUSION & SUGGESTION**

Most of the time date rape cases are not reported on time due to numerous reasons like a victim being not able to recall what happened, fear of humiliation, peer pressure, defamation, and social taboo. Investigators face challenges while analyzing the evidence collected due to delayed reporting, as most of the drugs are having short half-lives, are easily metabolized, and can be eliminated from the victim's body. Evidence collected from biological or other samples should be properly collected, preserved, and transported to the laboratory with maintaining a proper chain of custody. This work also highlights the difficulties in criminal cases involving the use of date rape drugs, since, to guarantee more reliable results, toxicologists should have access to sensitive and specific methods able to detect traces of compounds in the blood, urine, or hair. For this, they need to have validated methods to detect potential drugs associated with DFC, the knowledge about the best metrics to analyze according to the delay of sample collection after the crime, and all equipment to proceed with the detection.

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## VII. REFERENCE

1. Anderson, Laura Jane, et al. "The role of voluntary and involuntary drug and alcohol consumption and premorbid mental health factors in drug-facilitated sexual assault." *Forensic Science, Medicine and Pathology* 15.3 (2019): 382-391.
2. Negrusz, Adam, and R. E. Gaensslen. "Analytical developments in toxicological investigation of drug-facilitated sexual assault." *Analytical and bioanalytical chemistry* 376.8 (2003): 1192-1197
3. de Souza Costa, Yanna Richelly, Stefânia Neiva Lavorato, and Julianna Joanna Carvalho Moraes de Campos. "Violence against women and drug-facilitated sexual assault (DFSA): a review of the main drugs." *Journal of forensic and legal medicine* 74 (2020): 102020.
4. O'Callaghan, Erin, and Sarah E. Ullman. "Are all substance-involved sexual assaults alike? A comparison of victim alcohol use, drug use, and combined substance use in sexual assaults." *Women & Criminal Justice* (2021): 1-19.
5. Fields, Laurie, et al. "Drug-facilitated sexual assault, impaired trauma memory, and implications for mental health treatment." *European journal of psychotraumatology* 13.1 (2022): 2057165.
6. Singh, Gaurav, Pratik Singh, and Piyush Jyoti. "Date Rape Drugs in Sexual Assaults: A Threat to Indian Society." *European Journal of Molecular & Clinical Medicine* 7.07 (2020): 2020.
7. Lahane, Nishtha, and Gurmeet Kaur. "Drug facilitated sexual assault and their analysis." *Materials today: proceedings* 48 (2022): 1240-1245.
8. Murugan, M., and K. K. Bairagi. "Date rape drugs and its detection in alleged victim." *Indian Journal of Forensic Medicine & Toxicology* 5.1 (2011).
9. Singh, Salam Bitam, Thounaojam Meera, and Thoidingjam Bijoy Singh. "Date rape: A study on drug-facilitated sexual assaults in Imphal." *Journal of Medical Society* 28.2 (2014): 86.
10. Soni, Shringika, Utkarsh Jain, and Nidhi Chauhan. "A systematic review on sensing techniques for drug-facilitated sexual assaults (DFSA) monitoring." *Chinese Journal of Analytical Chemistry* 49.11 (2021): 83-92.
11. Sonone, S. S., S. Jadhav, and M. S. Sankhla. "A forensic aspect on drug facilitated

- sexual assault.*" *Forensic Res Criminol Int J* 9.2 (2021): 59-63.
12. LeBeau, M. A., and M. A. Montgomery. "Challenges of Drug-Facilitated Sexual Assault." *Forensic science review* 22.1 (2010): 1-6.
  13. Salomone, Alberto, et al. "*Hair analysis of drugs involved in drug-facilitated sexual assault and detection of zolpidem in a suspected case.*" *International journal of legal medicine* 126.3 (2012): 451-459.
  14. Panyella-Carbó, Maria Neus, Carles Martin-Fumadó, and Esperanza L. Gómez-Durán. "*Prevention of drug-facilitated sexual assault.*" *Spanish Journal of Legal Medicine* 47.1 (2021): 24-34.
  15. Style, A. M. A., L. N. Gorstein, and R. J. Riviello. "Drug-Facilitated Sexual Assault: Implications for Collegiate-Based Emergency Medical Services." *J Coll Emerg Med Serv* 1.1 (2018): 25-34.
  16. Walsh, Emily, and Virginia M. Maxwell. "The Detection of Date Rape Drug Residues Using X-Ray Diffraction."
  17. Angelone, D. J., Damon Mitchell, and Adriana Pilafova. "*Club drug use and intentionality in perceptions of rape victims.*" *Sex Roles* 57.3 (2007): 283-292.
  18. Hindmarch, I., et al. "*Forensic urinalysis of drug use in cases of alleged sexual assault.*" *Journal of clinical forensic medicine* 8.4 (2001): 197-205.
  19. Stringer, Kristi Lynn, et al. "*Mental health consequences of sexual misconduct by law enforcement and criminal justice personnel among black drug-involved women in community corrections.*" *Journal of urban health* 97.1 (2020): 148-157.APA
  20. Franklin, Cortney A. "*An investigation of the relationship between self-control and alcohol-induced sexual assault victimization.*" *Criminal Justice and Behavior* 38.3 (2011): 263-285.

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