High Incidence of Different Drug Uses and Media Campaign on the Injection Method in Borno State, Nigeria

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Abstract

Injection drug abuse has become a major public health problem, the prevalence of which has increased significantly in the last decade. There are approximately 15.6 million people who inject drugs (PWID) worldwide and this may be an underestimate of the real problem as the use of injection drugs is an illegal and stigmatized practice, making data collection challenging. The study employed a cross-sectional design to assess drug abuse via injection and primary data was collected through structured interviews and self-administered questionnaires. Quantitative data were analyzed using Statistical Package for Social Science, employing descriptive statistics to identify patterns and associations while the qualitative data were transcribed and analyzed thematically to understand underlying behaviors and motivations. The cognitive-affective-pharmacogenic control theory was employed. Based on the findings, most of the respondents inject drugs because it provides a stronger high compare to other methods. The findings revealed that vein damage is the most common effect found among the people of high incidence of different drug uses through the injection method in Maiduguri Local Government Area of Borno State. Similarly, most of the respondents inject synthetic opioids and morphine. Also, most of the drug users are not receiving any support or treatment for drug addiction. The study concludes that most of the respondents are facing the problem of stigma and discrimination. Based on the findings, the study recommends that there should be educational outreach focused on sensitising and educating young people about the risks of drug use and promotes life skills through schools and community initiatives.

I. Introduction

A media campaign on the injection method in Borno State, Nigeria, would focus on promoting awareness, education, and acceptance of this method as a viable and accessible option for contraception and healthcare delivery. By utilizing a mix of traditional and modern media, community engagement, and education on the benefits and accessibility of the injection method, the campaign can help increase adoption and create lasting change in reproductive health practices in Borno State, Nigeria (Aondover et al., 2020).

Injection drug abuse has become a major public health problem, the prevalence of which has increased significantly in the last decade. There are approximately 15.6 million people who inject drugs (PWID) worldwide and this may be an underestimate of the real problem as the use of injection drugs is an illegal and stigmatized practice, making data

collection challenging (Degenhardt et al., 2017). Injection drug use and particularly sharing needle practices are known risk factors for skin and soft tissue infections, infective endocarditis (IE), and also blood-borne infections, which are a topic of concern having played an important role in the further spread of HIV and hepatitis B and C (Nymoen Aasbrenn et al., 2019; Ahmed & Aondover, 2022).

There is a tremendous tragic human story behind this market analysis, which is mentioned above. According to Black (2020), England recorded the highest drug deaths (2,917) in 2018. Similarly, she stated that since 2012 heroin-related deaths have doubled over, while deaths involving cocaine have increased five times. We have the highest number of rough sleepers dying on our streets from drug poisoning since records began. Long-term drug users are cycling in and out of our prisons, at great expense but very rarely achieving recovery or finding meaningful work. Many of their children are taken into care. The problem with drug use is highly connected with poverty, and these problems blight our most deprived global communities (Aondover et al., 2022; Airaoje et al., 2023). children with emotional and behavioural difficulties are faced with interpersonal relationships, and their maladjusted behaviours are only a way of coping with difficult situations (Gadour, 2009).

When scientists began to study addiction behaviour in the 1930s, people addicted to drugs were judged as morally flawed and lacking in will power. Those views shaped society's response to drug abuse, treating it as a moral failure rather than a health problem. This led to an emphasis on punishment rather than prevention and treatment. New evidence describes addiction as a disease that affects both the brain and behaviour, shedding new light on our understanding of drug use and the appropriate response thereof. Addiction is defined as a chronic, relapsing brain disease that is characterised by compulsive substance seeking and use, despite the harmful consequences (National Drug Master Plan, 2019; Aondover, 2020).

According to National Drug Master Plan (2019), frequent use of psychoactive substances could change the structure of the brain over time. Psychoactive substance use can inhibit the way nerve cells normally send, receive, and process information. For example, some psychoactive substances, like marijuana and heroin activate neurons that reduce the effect of natural neurotransmitters in the brain. This leads to a need for the substance to bring the dopamine function back to normal. The person needs large amounts of the substance to create the dopamine high, resulting in an effect known as tolerance. Just as continued use may lead to tolerance, it may lead to dependence, which can drive the person to seek out and take psychoactive substances compulsively (Aondover et al., 2022).

II. Review of Literature

2.1 Empirical Review

Research has shown that underlying factors influence drug use and its extent in the population. Trends in drug use are determined by a multitude of factors related to individual, family, community and environmental characteristics, as well as by the impact of national and local policy and service delivery (UNODC, 2020a). The interlink age and complexity of these factors make drug use difficult to forecast and project. However, the size and composition of the global population are perhaps the only elements that can be easily considered to anticipate the global extent of drug use in the future. Notwithstanding the unpredictable trajectory of the prevalence of drug use, the total number of people who use

drugs is a direct function of the population size. Therefore, using a population projection can provide a scenario of the size of the population using drugs in 2030, the target year for achieving the Sustainable Development Goals. Such a scenario can assist drug service providers in different regions to consider the order of magnitude of potential efforts needed to meet target 3.5 of the Sustainable Development Goals on strengthening the prevention and treatment of substance use.

According to the United Nations (UN), approximately 269 million people used drugs worldwide in 2018 (United Nations, 2021a). With a 20% increase in statistics since 2010, there has been a significant impact on the UN Sustainable Development Goals, which include within its objectives "to ensure healthy living and promote wellness for all at all ages" (United Nations, 2021b). It is estimated that by 2030, global drug abuse will have increased by 11%, with Africa seeing an increase of up to 40%, reflecting at the same time a general increase among low- and middle-income countries and a decrease in developed countries. Much of this change is the result of demographic shifts in the population curve, changes in public policy, and legislative changes in many countries. The most commonly used substances are alcohol, tobacco, and drugs such as cannabis; however, there are different patterns of abuse depending on the situation in each country. The real risks of drug abuse are ignored voluntarily or involuntarily by the general population, particularly by the younger generation, who are unaware of the effects of drug potency and the harm it can cause. The use of drugs is frequently linked to the modern life, geographical location, and demographic characteristics of each population. In addition to having higher morbidity, intravenous drug abusers have been proven to have a much higher death rate than the general population (Gjeruldsen et al., 2003).

Many factors, such as poverty, curiosity, peer pressure, the existence of psychiatric pathology, and other psychosocial causes may lead people to use drugs, including intravenous drugs. Peer pressure and education level are the two social factors that highly influence drug use (Cornford et al., 2011). Although experimental use of illicit drugs like marijuana may begin between the ages of 12 and 13 in developed countries, in general, drug use worldwide is mainly distributed among people between the ages of 15 and 34, who, according to the UN, constitute the population most at risk for the decade (United Nations, 2021a). Furthermore, economic access is also a factor in intravenous drug abuse. Marijuana, inhalants, and cocaine are the most used drugs in developing countries such as Peru, and all drugs except marijuana can be administered intravenously. Abusers often have a difficult time estimating how much of the substance they are injecting into their system because of the quick onset of the high and the intensity of the symptoms. The search for a rapid increase in the concentration of drugs in the blood is the primary cause of intravenous drug abuse. Additionally, many users crush tablets of one or more drugs for use as an injectable solution, and when doing so, they also inject the drug's adjuvants, which carry health risks independent of the ones from the active ingredient from which they seek pleasure. Opioids are the most used intravenous drugs; in fact, heroin is the most prevalent drug among intravenous drug users (NIDA, 2021).

Still, urbanism is another major risk factor for substance abuse. Although no studies have quantified the relationship between urbanization and drug use, it is a fact that urban conditions such as urban sprawl, low economic levels, overcrowding, unemployment, and crime rates have generated a positive correlation between urbanization and drug use. It is projected that the urban population will increase by approximately 23% during this decade, distorting the relationship between urbanization and drug use (Godfrey and Julien, 2005). Another important factor complicating the achievement of this UN goal is an increase in the production of stimulants with different precursors than ephedrine and phenylephrine, with increased production being found in countries where other drugs were traditionally

manufactured for trafficking, such as Mexico. Because of easier access, the redistribution of stimulant substances' production increases the risk of their use by IVDU in middle and low-income countries (United Nations, 2020).

People with socioeconomic disadvantages are at greater health risks when abusing substances, especially when using intravenous drugs, first because they are more likely to use drugs that are considered of lower quality or impure, and second, because a low income may lead to a higher risk of using drugs with syringes used by others or by themselves multiple times, increasing the radius of bacteria exposure, impurities in products, dangerous adjuvants in solid components of the drug, use of broken syringes, and parentally transmitted diseases. These dangers are part of the economic constraints, low cultural level, or peer-pressure situation that can lead to intravenous drug use and cause a variety of pathologies, including DVT (Unger et al., 2006).

2.2 Theoretical Framework

The cognitive-affective-pharmacogenic (CAP) control theory stresses how the individual's style and affective experience of drug use interact with the drug's pharmacogenic effect (Gold & Coghlan 1976). The cognitive style of a drug abuser is seen to be the most important component in a person's transition from drug experimentation to drug abuse. As a result, the cognitive dimension will be covered first (Aondover et al., 2020; Aondover et al., 2022).

In behavior therapy, there is an emphasis on cognitive techniques (Mahoney 1977). The fundamental concepts of cognitive behavior therapy are that unobservable interact between a stimulus and the response to that stimulus to moderate human behavior. The types of mediating constructs currently considered fundamental to an understanding of emotion and behavior include beliefs, sets, strategies, attributions, and expectancies. Second, an individual's emotional and behavioral responses to a circumstance are determined by how he or she labels or evaluates it. The causal interaction of thoughts, feelings, and acts is a third basic postulate (Msughter et al., 2020; Hile et al., 2022).

To connect the cognitive approach to drug users, the CAP control theory claims that conflict is a predisposing factor in the abuse process. People who are having trouble satisfying the demands or expectations that society or themselves impose on them are in conflict, and anxiety is a result of the stress of conflict. Anxiety is a universal emotion that most of us experience on a daily basis. The individual's interpretation of the anxiety, not the sensation of anxiety, is key to the notion. The perception that they cannot change or control the situation, which they are unable to modify their environment and reduce or remove the sources of stress, is at the root of drug addicts' anxiety. Drug addicts' primary cognitive error is the assumption that they are powerless to cope with stress. According to Krystal and Raskin (1970) the severe sensation of poor self-esteem that is a well-known clinical phenomenon among drug addicts is one of the consequences of this. The affective component of the CAP theory is self-depreciation feelings, which lead to the sense that one is powerless (Msughter et al., 2020; Msughter et al., 2023).

Anxiety is, without a doubt, unpleasant, and a method for reducing anxiety is required. Anxiety reduction is a main pharmacogenic effect of heroin. Not only does the drug relieve anxiety, but it also gives the user a brief euphoric feeling; a "high." The individual temporarily gains a sensation of power, control, and well-being when under the influence of the substance. While "high," the feeling of powerlessness is replaced by an exaggerated sense of being all powerful. That is, no effort is too great, and no feat is insurmountable. As a result, drugs can provide abusers with what they believe they are unable to provide for themselves: relief from anxiety, a positive self-image, and the belief that they are competent,

in charge, and capable of mastering their surroundings (Namadi & Aondover, 2020; Obada et al., 2021).

Unfortunately for the drug addict, the effects of the drugs are transient, and any short-term gains quickly turn into long-term losses. After the high wears off, some internal or external stressor will inevitably reignite the conflict and worry. Not only can old emotions of powerlessness resurface, but they are likely to be even more intense than before. The individual progresses from drug usage to abuse when their sense of powerlessness grows with greater drug use. Substance users become less capable of managing on their own every time they rely on a drug to relieve tension and make them feel good about themselves. By relying on drugs to cope, the person is prevented from acquiring more adaptive coping methods and becomes less tolerant of anxiety's agony. The drug user now understands that nervousness does not have to be accepted because drug use has previously relieved tension and produced positive feelings. As a result, it is projected that drug usage would rise in both frequency and the variety of contexts in which it is used (Pate et al., 2020; Obada et al., 2021).

The CAP model of drug abuse also contains a number of assumptions about drug abuse therapy. To begin, successful and long-lasting transformation requires understanding that one's actions have repercussions and that one can influence his/her life. The abuser must be taught alternate methods of responding to external or internal stress in order to replace a sense of powerlessness with a sense of mastery. These alternative methods, on the other hand, cannot be developed, practiced, or embraced as long as the person continues to use drugs (Usman et al., 2022; Msughter et al., 2022).

A second premise is that a successful treatment strategy must be multimodal (Lazarus 1976). A comprehensive treatment plan must consider negative emotions (e.g., anxiety), unpleasant physical sensations (e.g., withdrawal aches and pains), intrusive images (e.g., recollections of past failures), faulty cognitions (e.g., "nothing I do will ever be successful"), and interpersonal inadequacies (e.g., difficulty making friends with non-drug-taking peers).

Each of the individual's issues may necessitate a unique treatment plan. Systematic desensitization, for example, could be employed to assist the abuser manage with anxiety, while cognitive restructuring could be required to rectify the flawed cognitive processes. In the same way that the CAP theory emphasizes the interplay between personality modes, the multimodal therapy approach emphasizes the importance of addressing all important components of an individual's functioning in complex human problems. The high recidivism rate seen in drug abuser therapy could be attributed to treatment focusing on only a small part of the abuser's total personality and lifestyle (Platt & Labate, 1976).

Summarily, the cognitive-affective-pharmacogenic (CAP) effects of drug use are intertwined in the CAP theory of drug dependence. The concept that one has no authority over the environment or how to cope with stress is key to the theory. Newer cognitive theories that highlight the significance of internal ideas and beliefs in the development of maladaptive behavior are considered as consistent with the CAP theory. The concept that an individual's belief in their power to control a circumstance has a substantial influence on behavior is supported by research findings. A multimodal approach to substance abuse treatment is required to change incorrect thinking, educate new interpersonal skills, assist the abuser in coping with pain and anxiety, and foster the formation of a good self-image.

This theory is relevant to this study in the sense that it stresses how the individual's style and affective experience of drug use interact with the drug's pharmacogenic effect, which makes them to lose control over life and unable to cope with realities.

III. Research Method

3.1 Research Design

This study employed a cross-sectional design to assess drug abuse via injection. Primary data was collected through structured interviews and self-administered questionnaires to gather both qualitative and quantitative information.

3.2 Study Area and Population

The study was conducted in Maiduguri and the specific location is Danboa axis. The target population included individuals aged 18 and above who had a history of injecting drugs. Participants were recruited from known hotspots for drug use.

3.3 Sampling Technique

A purposive sampling technique was used to identify participants who met the inclusion criteria. Snowball sampling was employed to reach hidden populations.

3.4 Data Collection Tools

Data were collected using:
- Questionnaire: Captured demographic details, injection practices, types of drugs used, frequency of use, and health-related outcomes.
- In-depth Interviews: Explored participants' experiences, motivations, and challenges related to injection drug use.
- Observation Checklist: Documented visible indicators of drug injection, such as needle marks and equipment handling.

3.5 Ethical Considerations

Informed consent was secured from all participants. Anonymity and confidentiality were ensured, and participants were provided referrals to health and support services if needed.

3.6 Data Analysis

Quantitative data were analyzed using statistical software, employing descriptive statistics to identify patterns and associations. Qualitative data were transcribed and analyzed thematically to understand underlying behaviors and motivations.

3.7 Limitations

This study relied on self-reported data, which may be subject to recall bias or social desirability bias. The sampling technique may limit generalizability to the broader population.

IV. Result and Discussion

4.1 Results

1. What is your sex?

	Frequency	Percent (100%)
Male	191	72.1
Female	74	27.9
Total	265	100.0

Table 1 shows response of gender. The data shows that 72.1% (n=191) is male while 27.9% (n=74) is female. Based on the data, male constitute the highest number of respondents as shown in the preceding table.

2. What is your educational qualification?

	Frequency	Percent (100%)
Postgraduate	32	12.1
Degree	43	16.2
Diploma	39	14.7
Secondary	64	24.2
Primary	71	26.8
None	16	6.0
Total	265	100.0

Table 2 shows the educational qualification of the respondents. Based on the result obtained from the respondents, 12.1% (n=32) are postgraduates, 16.2% (n=43) are degree holders, 14.7% (n=39) have diploma, 24.2% (n=64) have secondary certificate, 26.8% (n=71) have primary school certificate and 6.0% (n=16) have no educational qualification.
What is your marital status?

	Frequency	Percent (100%)
Single	85	32.1
Married	60	22.6
Divorced	48	18.1
Separated	39	14.7
Widowed/widower	33	12.5
Total	265	100.0

Table 3 shows the marital status of the respondents. The data point that 32.1% (n=85) are single, 22.6% (n=60) are married, 18.1% (n=48) are divorced, 14.7% (n=39) are separated and 12.5% (n=12.5) of the respondents are widows/widowers. Based on the data, most of the respondents that abuse drug intravenously are not married.

3. How frequently do you inject drugs?

	Frequency	Percent (100%)
Daily	51	19.2
Weekly	63	23.8
Monthly	29	10.9
Occasionally	122	46.0
Total	265	100.0

Table 4 shows the frequency of drug injection of the respondents. 19.2% (n=51) of the respondents inject drugs daily, 23.8% (n=63) weekly, 10.9% (n=29) monthly and 46.0%

(n=122) inject drugs occasionally. The result implies that most of the respondents inject drugs occasionally.

a. Research Question One: What are the factors that influence high incidence of different drug uses through the injection method in Maiduguri Local Government Area of Borno State?

1. What is your age?

	Frequency	Percent (100%)
18-25	98	37.0
26-30	88	33.2
31-45	48	18.1
46 and above	31	11.7
Total	265	100.0

Table 5 indicates the age of the respondents that are abusing drugs intravenously in Maiduguri. That data point that 37.0% (n=98) of the respondents are between the age of 18-25, 33.2% (n=88) are between the age of 26-30, 18.1% (n=48) of the respondents are between the age of 31-45 and 11.7% (n=31) of the respondents are between the age of 46 above. Based on the data, most of the respondents that abuse drugs intravenously are between the ages of 18-25 as shown in the table above.

2. What is your employment status?

	Frequency	Percent (100%)
Employed	64	24.2
Unemployed	201	75.8
Total	265	100.0

Table 6 shows the employment status of the respondents. Based on the result obtained from the respondents, 24.2% (n=64) of the respondents are employed while 75.8% (n=201) are unemployed. The data indicate that most of the respondents are unemployed.

3. Why do you choose to inject drugs rather than using other methods like smoking and snorting?

	Frequency	Percent (100%)
Mental illness	38	14.3
Loneliness	91	34.3
Peer pressure	64	24.2
Feel good feeling	72	27.2
Total	265	100.0

Table 7 shows the reason for drug injection by the respondents. The data generated point that 14.3% (n=38) of the respondents inject drugs as a result of mental illness, 34.3% (n=91) as a result of loneliness, 24.2% (n=64) as a result of peer pressure and 27.2% (n=72)

of the respondents inject drugs as a result of feel good feeling. From the data generated, it implies that most of the respondents inject drugs as a result of loneliness.

4. Do you feel injecting drugs provides a stronger high compared to other methods?

	Frequency	Percent (100%)
Yes	178	67.2
No	87	32.8
Total	265	100.0

Table 8 shows the feeling of drug injection by the respondents. The data indicate that 67.2% (n=178) of the respondents agree that drug injection provides a stronger high while 32.8% (n=87) do not agree that drug injection provides a stronger high compare to other methods. The result implies that most of the respondents believe that drug injection provides a stronger high compare to other methods.

b. Research Question Two: What are the effects of high incidence of different drug uses through the injection method in Maiduguri Local Government Area of Borno State?

1. Have you experienced any of these health related issues due to injection drug use?

	Frequency	Percent (100%)
Infections	73	27.5
Abscesses	67	25.3
Vein damage	98	37.0
Hepatitis	18	6.8
HIV	9	3.4
Total	265	100.0

Table 9 indicates health related issues due to injection drug use. Based on the data, 27.5% (n=73) of the respondents have had infection, 25.3% (67) abscesses, 37.0% (n=98) vein damage, 6.8% (n=18) hepatitis and 3.4% (n=9) have experienced HIV. The result shows that most of the respondents have experienced vein damage.

2. How has injection drug use affected your relationships with family and friends?

	Frequency	Percent (100%)
Negatively	81	30.6
Very negatively	112	42.3
Positively	32	12.1
Very positively	16	6.0
Neutral	24	9.1
Total	265	100.0

Table 10 shows how injection drug use has affected the respondent's relationships with family and friends. Based on the data, 30.6% (n=81) of the respondents stated that their relationships with friends and family has been affected negatively, 42.3% (n=112) very negatively, 12.1% (n=32) positively, 6.0% (n=16) very positively and 9.1% (n=24) stated that

their relationships with family and friends were neutral. The result implies that injection drug use has affected the respondent's relationships with family and friends very negatively.

3. How often do you experience legal issues related to your drug use?

	Frequency	Percent (100%)
Often	23	8.7
Very often	46	17.4
Rarely	109	41.1
None	87	32.8
Total	265	100.0

Table 11 indicates the frequency with which the respondents experience legal issues related to drug use. Based on the data generated from the above data, 8.7% (n=23) of the respondents often experience legal issues related to drug use, 17.4% (n=46) very often, 41.1% (n=109) rarely while 32.8% (n=87) of the respondents experience none. This implies that most of the respondents rarely experience legal issues related to drug use.

c. Research Question Three: What are the health attitudes of the different drug users through the injection method in Maiduguri Local Government Area of Borno State?
1. Are you aware of safe injection practices like using clean needles, disinfecting skin and not sharing equipment?

	Frequency	Percent (100%)
Yes	117	44.2
No	148	55.8
Total	265	100.0

Table 12 shows awareness of safe injection practices. The data indicate that 44.2% (117) of the respondents are aware while 55.8% (n=148) of the respondents are not aware of safe injection practices like using clean needles, disinfecting skin and not sharing equipment. Based on the data, the result indicates that most of the respondents are not aware of safe injection practice.

2. Have you ever sought medical help for issues related to injecting drugs?

	Frequency	Percent (100%)
Yes	117	44.2
No	148	55.8
Total	265	100.0

Table 13 showed responses of respondents that have ever sought medical help for issues related to injecting drugs. Based on the data, 44.2% (n=117) of the respondents have sought medical help while 55.8% (n=148) have never sought medical help for issues related to drug injection. From the above table and data, it implies that most of the respondents have never sought medical help for issues related to injecting drugs.

3. Are you currently receiving any support or treatment for drug addiction?

	Frequency	Percent (100%)
Yes	41	15.5
No	224	84.5
Total	265	100.0

Table 14 shows whether the respondents are currently receiving any support for drug addiction. From the above table, the data show that 15.5% (n=41) of the respondents are receiving support or treatment while 84.5% (n=224) of the respondents are not receiving any support or treatment for drug addiction. The result shows that most of the respondents are not receiving any support or treatment for drug addiction.

4. What support systems do you currently have in place?

	Frequency	Percent (100%)
Family	53	20.0
Friends	28	10.6
Support groups	26	9.8
None	158	59.6
Total	265	100.0

Table 15 shows the support systems the respondents currently have in place. From the data generated, 20.0% (n=53) of the respondents have family support, 10.6% (n=28) friends, 9.8% (n=26) support groups and 59.6% (n=158) have none. This implies that, most of the respondents do not have any support system currently in place.

5. Would you consider seeking help to quit injecting drugs?

	Frequency	Percent (100%)
Yes	196	74.0
No	69	26.0
Total	265	100.0

Table 16 shows the manner respondents consider seeking help to quit injecting drugs. From the above table, 74.0% (n=196) of the respondents considered yes while 26.0% (n=69) chose no. From the above table, most of the respondents will consider seeking help to quit injecting drugs.

6. Medical treatment or support related to drug use

	Frequency	Percent (100%)
Rehabilitation	25	9.4
Counselling	52	19.6
Harm reduction programs	67	25.3
None	121	45.7
Total	265	100.0

Table 17 indicates medical treatment or support related to drug use. Based on the data generated, 9.4% (n=25) of the respondents are going through rehabilitation, 19.6% (n=52) counseling, 25.3% (n=67) harm reduction programs and 45.7% (n=121) of the respondents are not receiving any medical treatment or support related to drug use. The result shows that most of the respondents are receiving any medical treatment or support related to drug use.

d. Research Question Four: What are the common substances abused through the injection method in Maiduguri Local Government Area of Borno State?
1. Which drugs have you used through injection methods?

	Frequency	Percent (100%)
Heroin	45	17.0
Cocaine	41	15.5
Methamphetamine	37	14.0
Morphine	89	33.6
Synthetic opioids	53	20.0
Total	265	100.0

Table 18 indicates the kind of drug abused through the injection methods. The data point that 17.0% (n=45) of the respondents abuse heroin, 15.5% (n=41) abuse cocaine, 14.0% (n=37) methamphetamine, 33.6% (=89) morphine, and 20.0 (n=53) abuse synthetic opioids. The data indicate that most of the respondents inject morphine.

4.2 Discussions
Table 1 shows responses of sex of the respondents. The data shows that 72.1% (n=191) is male while 27.9% (n=74) is female. Based on the data, male constitute the highest number of respondents. The finding was in agreement with (Duru et al., (2017) who showed that male abuse more substance than female. Table 2 revealed that 12.1% (n=32) are postgraduates, 16.2% (n=43) are degree holders, 14.7% (n=39) have diploma, 24.2% (n=64) have secondary certificate, 26.8% (n=71) have primary school certificate and 6.0% (n=16) have no educational qualification. The majority 26.8% (n=71) attained primary education compared with 16.2% (n=43) that attained degrees and 12.1% (n=32) that attained postgraduate level. This finding was in consistent with Pisarska et al., (2016), who stated that people with a low level of education abuse substances than those with higher education. However, this is inconsistent with Akindipe and Aina (2021) that people with a low level of education abuse drugs than those with higher education. This study found that majority of the respondents who abuse drugs were single 32.1% (n=85) while 22.6% (n=60) were married.

a. Research Question One: What are the factors that influence high incidence of different drug uses through the injection method in Maiduguri Local Government Area of Borno State?
Table 3 indicates the age distribution of the respondents that are abusing drugs intravenously in Maiduguri. 37.0% of the respondents were between the ages of 18-25, 33.2% were between the ages of 26-30, 18.1% were between the ages of 31-45 while 11.7% were between the ages of 45 and above. This indicates that the majority of the abusers were young adults. The study found that most of the respondents were unemployed (75.8%) while only 24.2% were employed. The study was in agreement with Nolte-Troha et al., (2023) who showed that unemployed people abuse more substance than the employed. Table 9 shows the

reason for drug injection by the respondents. 14.3% of the respondents inject drugs as a result of mental illness, 34.3% as a result of loneliness, 24.2% as a result of peer pressure and 27.2% of the respondents inject drugs as a result of feel good feeling. The majority 91(34.3) inject drugs as a result of loneliness. The study found that most of the respondents inject drugs because it provides a stronger higher compare to other methods. This finding was inconsistent with Kerr et al., (2009) who showed that it is as a result of child physical abuse and trauma.

b. Research Question Two: What are the effects of high incidence of different drug uses through the injection method in Maiduguri Local Government Area of Borno State?

Table 11 showed health related issues due to injection drug use. 27.5% of the respondents had infection, 25.3% abscesses, 37.0% vein damage, 6.8% hepatitis and 3.4% had experienced HIV. The result shows that most of the respondents have experienced vein damage. The finding is similar to Pavithra et al., (2017) which, stated that collapsed vein is the common effect due to intravenous drug use (Pavithra et al., 2017). Similarly, Jain et al., (2021) stated that the prevalence of intravenous drug use has increased in the past decade and it represents an important risk factor for deep vein thrombosis (Jain et al., 2021). Again, according to Pavithra et al., (2017) drugs which are taken intravenously have been a cause in youngsters which would lead to major health disorders that could increase the morbidity and mortality rate to a higher ratio following complications, infections and permanent health disorders. The introduction of mind-altering substances into body through intravenous needle reports to addiction which is a source for unending complications causing higher death rates.

c. Research Question Three: What are the health seeking behaviours of the different drug users through the injection method in Maiduguri Local Government Area of Borno State?

Table 16 shows whether the respondents are currently receiving any support or treatment for drug addiction. 15.5% of the respondents are receiving support or treatment while 84.5% (n=224) of the respondents are not receiving any support or treatment for drug addiction. The result shows that more than 80% of the respondents have a very poor health seeking behaviour since these groups are not receiving any support or treatment for drug addiction. Furthermore, table 18 indicates barriers faced in accessing treatment or support services. 46.8% encounter stigma and discrimination, 25.3% financial barriers, 16.2% limited resources and 11.7% of the respondents are facing fear of legal consequences. Thus, the result shows that most of the respondents are facing the problem of stigma and discrimination.

d. Research Question Four: What are the common substances abused through the injection method in Maiduguri Local Government Area of Borno State?

Table 6 indicates the kind of drug abused through the injection methods. The data point that 17.0% of the respondents abuse heroin, 15.5% abuse cocaine, 14.0% methamphetamine, 33.6% morphine, and 20.0 abuse synthetic opioids. The data indicate that most of the respondents inject morphine. Based on the result, it was observed that most of the respondents inject synthetic opioids and morphine. This is similar with Lankenau et al., (2012) who stated that opioid is the most common substance abused by youngsters. According to them, initiation into opioid abuse was characterised by access or exposure to three primary sources of opioids, which include family members, personal prescription, and friends.

V. Conclusion

Injection drug abuse has become a major public health problem, the prevalence of which has increased significantly in the last decade. There are approximately 15.6 million people who inject drugs (PWID) worldwide and this may be an underestimate of the real problem as the use of injection drugs is an illegal and stigmatized practice, making data collection challenging. World Drug Report revealed that the estimated global number of past-year users of any drug climbed by 22%, from 226 million to 274 million, owing in part to global population growth, which increased by 10% among those aged 15 to 64. Approximately 36.3 million (range: 19.6 million to 53.0 million) of the estimated 275 million past-year users of any drug, or nearly 13%, are expected to have drug use disorders, which means their drug use is hazardous to the point where they may develop drug dependency and require treatment. In view of these problems, the findings of the study attest that most of the respondents who abuse drugs are males, with low educational qualification. Also, the study found that one of the factors that favour drug injection is because it provides a stronger high compare to other methods. The study discovered that most of the respondents have experienced vein damage as a result of injection drug use. The findings also revealed that most of the respondents have a very poor health seeking behaviour. Again, the result showed that most of the respondents inject synthetic opioids and morphine.

Recommendation
Based on the findings, the study recommends the following:
1. Expansion of harm reduction programs through the provision of sterile needles and syringes to reduce the sharing of injection equipment, a major cause of blood-borne infections.
2. There should be educational outreach focused on sensitising and educating young people about the risks of drug use and promote life skills through schools and community initiatives.
3. Healthcare and rehabilitation services should be strengthen through the establishment of specialized treatment centers offering comprehensive care for substance use disorders, mental health services, and management of co-infections like HIV and hepatitis.
4. There should be enhancement of policy and legal framework to ensure drug policies align with global best practices, emphasizing prevention, treatment, and harm reduction rather than criminalization.

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