

Article

THE DRIVING FACTORS FACILITATING NON-MEDICAL USE OF TRAMADOL: A QUALITATIVE STUDY OF NIGERIAN YOUTHS

Los factores que impulsan el uso no médico de tramadol: un estudio cualitativo de jóvenes nigerianos

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ABSTRACT

Background: The paper explores the opinions of Nigerian youth regarding their reasons behind the use of tramadol for non-medical purposes and learns their preferences in choosing tramadol.

Methods: We conducted In-depth Interviews (IDIs) and Focus Group Discussions (FGDs) among students in secondary schools, tertiary schools and out-of-school youths in Lagos, Ekiti, Edo and Delta states in Nigeria. A total of 20 IDIs and 6 FGDs were conducted among 92 Nigerian youths of age 15 – 25 years. Data was also complemented from school reports, participants' feedback from youth drug abuse sensitization workshops and desk reviews. Data were analyzed using thematic analysis to describe emerging themes.

Results: The sex distribution of the participants was 60.1% males and 39.1% females. The main findings for non-medical use of tramadol among the youths were; to enhance sexual excitement (prolong ejaculation), to feel less hungry (reduce the desire for and food) to sustain hard labor (reduce pain, withstand prolong manual labor). The respondents also revealed that tramadol in

combination with other substances will give them a euphoric effect. However, many of youths are ignorant of the risk of the non-medical use of tramadol.

Conclusion: Tramadol abuse has become widespread in the Nigerian environment among the youths. The findings from this study revealed that the choice of tramadol use for non-medical purposes is a result of different effects discovered in the use which could pose potential harm to the abuser. Therefore, public health approaches should be adopted in preventing the abuse of tramadol among the youth.

Keywords: Tramadol, non-medical use, abuse, youths, qualitative study, Nigeria.

1. Introduction

Tramadol is a prescription opioid painkiller known for moderate pain. As a narcotic painkiller, tramadol has a potential for abuse, can be dangerous in large doses, and those who misuse or abuse tramadol are at risk of developing an addiction (American Society of Health-System Pharmacists, 2022; Zhang *et al.*, 2013). In some cases, even people who follow their doctor's directions can become addicted. Medical studies established that prolonged or frequent tramadol use could lead a person to develop a tolerance to the drug (Elliason *et al.*, 2018; WHO, 2020). This means they have to take larger doses to feel the drug's effects. Although people who use tramadol claim to feel relaxed and happy, higher doses of tramadol can put someone at higher risks of serious side effects, including seizures and respiratory depression. As a central nervous system (CNS) depressant, tramadol slows down lung and heart function or may lead to a fatal overdose causing seizures in breathing (Nakhaee *et al.*, 2021; Nicole *et al.*, 2015). The drug could be fatal in people with suicidal tendencies. Taking tramadol in combination with other substances, called poly-drug use, also increases the risk of serious and sometimes fatal side effects. In addition to developing tolerance, tramadol users may experience withdrawal symptoms when they stop using the drug which could manifest symptoms of irritability and depression (WHO, 2020).

The non-medical use of tramadol in Nigeria is a worrying phenomenon. The evidence from increased seizures of tramadol (especially tablets with higher-than-normal dosage strength) in Nigeria (NDLEA, 2022) and other Communities in West Africa, ECOWAS, member states indicate increasing use of the drug in West Africa, and the burden of the drug use is found to be high among people aged 15 to 44 years (WENDU, 2017). The National Drug Use Survey in Nigeria 2018 estimated 4.7% of the Nigerian population, i.e. 4.6 million people have used opioids (such as tramadol, codeine, or morphine) for non-medical purposes. The survey further revealed that tramadol is the second most used drug after Cannabis (UNODC, 2018). Tramadol approved prescribed dosage by National Agency for Food and Drugs Administration and Control (NAFDAC) for medical use is 50 to 100 mg. However, non-medical use has been found on doses above 100mg. Doses above 100mg are considered illicit tramadol which is mostly abused by the youths (NAFDAC, 2021).

The present study explored the opinions of the Nigerian youths regarding their reasons for using tramadol for non-medical purpose and their preferences for the choice of tramadol for this purpose.

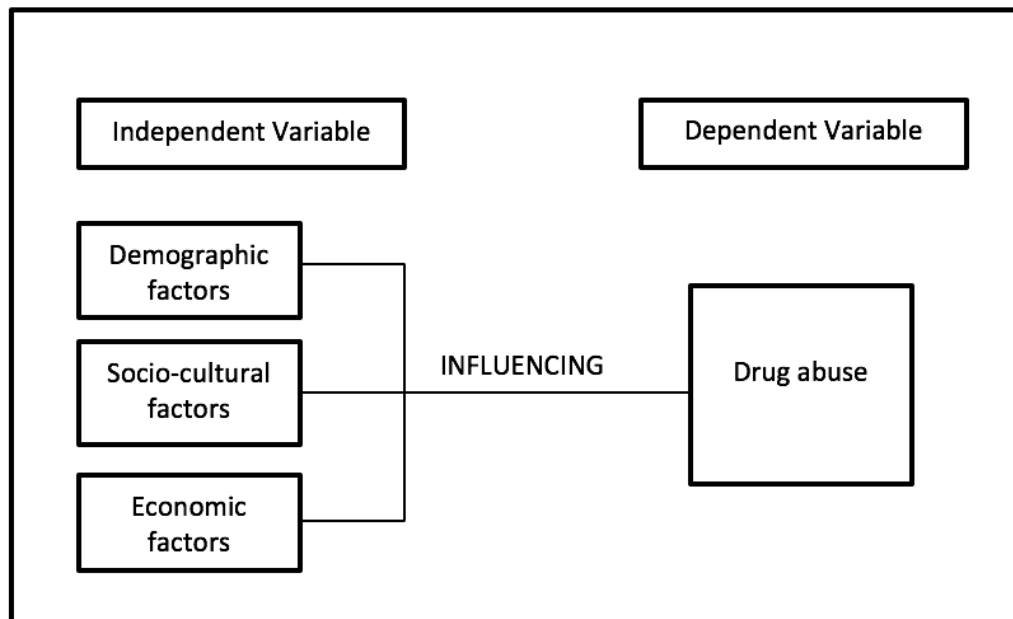
2. Methods

This study utilized the qualitative approach to explore and have a deeper understanding of factors facilitating the non-medical use of tramadol among Nigerian youths. This approach offered interactions with Nigerian youths from diverse communities through focus group discussions and In-depth Interviews. Complementary data was obtained from school reports, participants' feedback from youth drug abuse sensitization workshops and desk reviews. Purposive sampling was used to select the participants of this study. Consent was obtained from participants who were informed about the study, understood the study process and agreed to participate in the study. The study participants were youths aged 15-25 in secondary schools, tertiary schools, and out-of-school in Lagos, Ekiti, Edo and Delta states. Data was collected using IDIs and FGDs for the different groups, and a total of 20 IDIs and 6 FGDs were conducted among 92 Nigerian youths. The Interview guide used to collect data was designed based on relevant existing literature on tramadol use. The interviews were all conducted in English Language, audio recorded and complemented with note taking. Each session of the IDIs lasted about 45 minutes while each session for the FGDs lasted between 60 and 90 minutes. The interviews were transcribed and coded by a team, and emerging themes derived were analyzed using thematic analysis. Themes were compared with the responses to identify common trends, similarities, and differences. Important quotations were noted and referenced. Data were verified through proofreading, peer debriefing, and audit trail to ensure validity and quality data (Sarah Blaschke, 2017).

3. Conceptual Framework

The conceptual framework used for the approach of this study considered the following factors that influence the abuse of drugs;

- Demographic factors such as age, gender and occupation often influence the decision to indulge in drug abuse. Age for instance is a major factor which influences the onset of drug abuse. Young people are inquisitive and experimental in nature and therefore desire to explore.
- Social-cultural factors also play a major role in determining one's behavior. The social environment for example, such as peer group influence and the need to fit in a certain group plays a major role in influencing drug abuse.
- Economic factors such as the lucrative sale of illegal drugs, easy accessibility of drugs and one's economic situation can determine one's indulgence in drug abuse

Figure 1: Conceptual Framework (Mutiso et al, 2012)

Results

A total of 92 youths participated and were recruited to explore their opinions regarding the use of tramadol for non-medical purposes. The table below shows the socio-demographic characteristics of the youths interviewed.

Table 1: Demographics of Youths Interviewed (N=92)

Demographics	n (%)
Gender	
Male	56 (60.9)
Female	36 (39.1)
Age	20 years (mean age)
Youth Group	
Secondary school	24 (26.1)
Tertiary school	24 (26.1)
Out-of-school	44 (47.8)

4. Themes

Sexual excitement; to reduce hunger cravings; to sustain hard and prolong labor; euphoric effect; peer pressure and the accessibility of tramadol were six themes that emerged from the interviews and were driving factors facilitating the non-medical use of tramadol among youth.

Theme 1: To enhance sexual excitement

Tramadol for sexual enhancement was reported among participants. The male participants reported that tramadol helps them to prolong erection and ejaculation thereby giving them sexual excitement during intercourse. These participants also mentioned that the use of tramadol most times is combined with sexual stimulants such as prescription viagra; aphrodisiac substances; or psychoactive substances (such as alcohol, nicotine, and marijuana) to boost their sexual drive for maximum satisfaction.

Two of the participants illustrate as follows:

I use tramadol when I want to have sex in order to satisfy my partner and to stay longer before ejaculation. – (male, age-18, Secondary school participant)

The use of tramadol gives me maximum pleasure for sex, sometimes I use it with Viagra and am able to satisfy my girlfriend and it makes me not feel embarrassed – (male, age-20, Out-of-school participant)

Similar responses cut across the diverse communities in this study. The participants from secondary schools, tertiary schools and out-of-school indicate that they use tramadol and also in combination with other drugs for sexual satisfaction.

The responses from the female participants indicate that some females who engage in prolonged and also have multiple sex sessions with partners experiment with tramadol among other drugs for reasons such as; to withstand longer sex, to reduce pain during or after sex, and to be able to earn a living through commercial sex work. The following extract was pulled from the female participant's interview:

We have to use some of these drugs like tramadol during sex to be able to sleep with several men in a day or week to pay our madam – (female, age-24, out-of-school participant)

The study found that for this use, tramadol was obtained from unauthorized street vendors who sold these drugs to the youths. Some of these vendors are ignorant about the drug and also misinform these young people on the use and benefits of the drugs in order to sell the drugs. The participants further revealed that youths patronize these vendors because they claim to have solutions to boost sexual satisfaction. These vendors also use all sorts of pictures, images and sexual fantasy stories to entice these young persons to buy these drugs.

Theme 2: To reduce hunger cravings

The participants, most especially those in schools, stated that they use tramadol to feel less hungry. When probed further, these participants revealed that most of the time as a result of financial challenge, as most of them live in the school hostel, may not have enough money to eat or feed three square meals a day and therefore they take tramadol to make them feel less desire for food. This finding is supported by the following quotation from a participant:

Sometimes I don't have sufficient money to eat three times a day and I have to take tramadol because it reduces my appetite for food – (male, age-21, University student participant)

It was further revealed by the students that this tramadol is sold to the students by their colleagues who buy the drugs from the illicit market and sell them within the school.

Theme 3: To sustain hard and prolonged labor

It was also observed from the data gathered that some of the participants use tramadol in order to sustain hard labor. These participants were those that engage in prolong manual labor. Usually, some

of these participants are those living in menial jobs. Most of these participants that use tramadol, for this reason, said that they use this drug in order to work for long hours to earn a living. Two participants revealed as follows:

I take tramadol because of the hard labor I do, so that I will not feel much pain and I will be able to work for a long hour – (male, age-24, out-of-school participant)

We were recruited as laborers, and we were given tramadol to go and work in a construction site – (male, age-22, out-of-school participant)

Theme 4: To derive a euphoric effect

The participants reported feeling relaxed and happy when they use tramadol. These participants further disclosed that they combine tramadol with other drugs such as alcohol and marijuana to achieve maximum pleasure and relaxation. A participant shared his experience;

Someone introduced tramadol to me for the first time that I should take it if I want to feel relaxed. The person actually sells drugs on the street. So I started taking it when am moody just to feel happy – (male, age-19, out-of-school participant)

Theme 5: Peer pressure

Some of the participants said that tramadol was introduced to them by their friends and they started taking the drug or take the drug in the company of their friends in order to feel belonged, as one participant explained:

Most of my friends in school talk so much about this tramadol and I have to take it to feel the effect. - (male, age-19, University student participant)

Theme 6: Accessibility of the drug

The availability and easy access to the drug was observed in the study to contribute to the use of tramadol among the youths. Most of the participants said that these drugs were easily obtained within their communities. They mentioned that the drugs are available and sold on the streets, in schools, and in prisons among other places. Most of the tramadol sold within these places were the illicit dosage above 100mg smuggled into the country, as the following statements reflect;

We use this tramadol when I was in the prison. Tramadol and other drugs were sold to the inmates by the prison staff, reason is that those who sell these drugs in the prison make money from it, and they also sell the drugs to the inmates by giving them what they want in order to control them. There is a strong cartel of these drug dealers working in connection with the prison staff – (male, age-25, out-of-school participant)

I get this tramadol from someone selling the drug on the street and he told me that he gets the drugs from those bringing the drug into the country across the border – (male, age-17, Secondary school participant)

Supplementary findings

Complementary to the findings of this study, significant information gathered from school reports also revealed cases of tramadol overdose and addiction among students. An example of these cases was a report from a secondary school counseling unit which revealed a case of a female student who collapsed in the school because of a high dose of tramadol used. A similar report obtained from another school disclosed an incident of a student found unconscious at a night party. The student was reported to have taken tramadol in combination with heavy alcohol. In addition, a secondary school administrative unit disclosed that they found tramadol

in some of the students' luggage when they conducted a thorough search of the hostel students resuming back to school. A report from a university students' clinic indicated an increased number of students going to the clinic because of risk and complications emanating from tramadol use. The analysis of the study discovered that most of the youths were ignorant of the risk implications of the non-medical use of tramadol. In general, the findings from the study were an indication of the widespread and prevailing use of tramadol among youths.

Discussion

Our study explored the Nigerian youths' reasons for use of tramadol for non-medical purposes and also learned their preferences in choosing tramadol for their purpose. This study elicited three significant reasons for non-medical tramadol use among the youths which were; to enhance sexual excitement, to feel less hungry, and to sustain prolonged and hard labor. It was interesting to understand why young people choose to use tramadol for sexual enhancement as the study revealed that young people use tramadol to prolong sex for maximum excitement. Similar to this finding were the findings in a qualitative study of youths in Northern Ghana by Abdul-Ganiyu *et al* (2019) which also discovered that tramadol uses to enhance sex serves as one of the reasons for the continuous abuse. The majority of this abuse was a result of ignorance of the benefits and risks of tramadol. However, according to the pharmacology of the drug, tramadol has been found to have the effect to prolong erection and ejaculation as well as reduce pain but the beneficial effect of tramadol to enhance sexual performance is yet not supported by a high level of evidence and the Food and Drug Administration has not approved tramadol for use for sexual enhancement because of the risk involved (U.S FDA, 2016), and chronic use of tramadol has been reported to adversely affect the male reproductive tissues (Martyn-St James *et al*. 2015). This study also revealed the use of tramadol to reduce the desire for food which was observed especially among school students. Though there is a dearth of research on tramadol use to reduce the desire for food, however loss of appetite has been established as one of the adverse effects of tramadol use (U.S FDA, 2016; UNODC, 2020). Osuah *et al* (2021) in their study concluded that chronic exposure to tramadol is associated with reduced food intake which could also pose the risk of dietary health challenges and weight loss problems for abusers. Thus, young people have taken advantage of this side effect to choose tramadol as a remedy to control their craving for food due to the inability to afford three square meals in a day. In the context of tramadol use to sustain hard and prolonged labor as observed in the study, the study deduced that youths abuse the drug due to its pain relief effect. The findings of Abd-Elkader *et al* (2020) on tramadol abuse among workers in an industrial city in the mid-Nile Delta region, Egypt also support the finding of this study which depicts that tramadol is prevalent among industrial workers due to different reasons related to the workload and stressful events. Their study revealed the high intake of tramadol among construction workers followed by bus drivers and textile workers who work for long hours. The study by Maduekwe *et al* (2020) also depicts the use of tramadol for pain relief and physical work performance enhancement which collaborates with the findings of this study and confirmed work status to be associated with tramadol as a physical work performance enhancement medication. Secondly, we found other common reasons for drug abuse such as the euphoric effect, peer pressure and availability of the drugs which were also established in this study, as also found in previous studies such study by Fuseini *et al* (2019).

Limitations of the study

This was a qualitative study conducted among a group in selected states which cannot be generalized and extrapolated to paint the situation of the country given the cultural diversity and practices that could influence youth behavior.

5. Conclusion

The preference for non-medical use of tramadol among young persons is emerging. This study identified that young people use tramadol for reasons such as to derive euphoric effects, peer pressure, availability of the drug, sexual enhancement, feeling less hungry, and sustaining prolonged and hard labor. The abuse of tramadol as revealed in this study shows that young people are ignorant of the benefits and risks associated with the drug. The different effects discovered in the use of tramadol also pose a potential for abuse. Given the observed level and diverse motives for tramadol use among the younger generation, there is a need to examine community safety as a result of this emerging drug use culture. Therefore, public health approach should be adopted in the prevention of abuse among young people.

6. Conflicts of interest

The authors have no conflict of interest

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RESUMEN

Antecedentes: El presente estudio explora las opiniones de los jóvenes nigerianos sobre las razones que los impulsan a utilizar tramadol con fines no médicos, y busca conocer sus preferencias al elegir tramadol.

Métodos: Se llevaron a cabo entrevistas en profundidad (IDIs) y discusiones en grupo (FGDs) entre estudiantes de escuelas secundarias, instituciones terciarias y jóvenes fuera del sistema educativo en los estados de Lagos, Ekiti, Edo y Delta en Nigeria. Se realizaron un total de 20 IDIs y 6 FGDs con 92 jóvenes nigerianos de entre 15 y 25 años. Además, se complementaron los datos con

informes escolares, comentarios de los participantes en talleres de sensibilización sobre el abuso de drogas en jóvenes y revisiones bibliográficas. Los datos se analizaron utilizando análisis temáticos para describir los temas emergentes.

Resultados: La distribución por sexo de los participantes fue del 60,1% de hombres y el 39,1% de mujeres. Los principales hallazgos sobre el uso no médico de tramadol entre los jóvenes fueron: para aumentar la excitación sexual (prolongar la eyaculación), reducir el apetito (disminuir el deseo de comer) y resistir trabajos pesados (reducir el dolor, aguantar labores manuales prolongadas). Los encuestados también revelaron que la combinación de tramadol con otras sustancias les produce un efecto eufórico. Sin embargo, muchos jóvenes desconocen los riesgos del uso no médico de tramadol.

Conclusión: El abuso de tramadol se ha vuelto generalizado entre los jóvenes nigerianos. Los hallazgos de este estudio revelaron que la elección del uso no médico de tramadol se debe a los diferentes efectos descubiertos en su uso, lo que podría representar un riesgo potencial para el consumidor. Por lo tanto, se deben adoptar enfoques de salud pública para prevenir el abuso de tramadol entre los jóvenes.

Palabras clave: Tramadol, uso no médico, abuso, jóvenes, estudio cualitativo, Nigeria.
