

# Abuse and Misuse of Tramadol Among the Youth in Hodan District Mogadishu Somalia

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## Abstract

**Objectives:** Tramadol is a synthetic (man-made) pain reliever (analgesic). Researchers and doctors do not know the exact mechanism of action of tramadol, but it is similar to morphine. The objective of the study was to assess the knowledge and contact traces of tramadol in Hodan district Mogadishu Somalia. A descriptive cross-sectional survey was adopted using structured questionnaire as the major instrument for the collection of data- this was both closed and open-ended. **Methodology:** A sample size of 130 respondents was used through the use of simple random sampling technique. Quantitative data analysis methods were used with the aid of Statistical Package for Social Sciences (SPSS) version 21.0 in the analysis of the data. **Results:** The study found that majority (70%) of respondents knew about tramadol of which more happened to be males. The study found that participants take higher doses of tramadol. The study found that preponderance (58.5%) of respondents knew people who use tramadol of which majority were their friends and co-workers. It also turned out that (83.1%) of the respondents knew where tramadol is readily available. **Conclusions:** In determining the main purpose of tramadol as energy booster, (30%) attested sexual ecstasy and performance. In conclusion, the availability of tramadol in our Somali community should be highly regulated since its abuse among the youth is on the ascendency. It is a real issue that should be tackled with concerted effort to curtail this menace most especially in the Hodan district.

**Keywords:** Brain, Mogadishu, synthetic, tramadol

## INTRODUCTION

### Background statement

Tramadol is a synthetic (manmade) pain reliever (analgesic). Researchers and doctors do not know the exact mechanism of action of tramadol, but it is similar to morphine. Like morphine, tramadol binds to receptors in the brain (narcotic or opioid receptors) that are important for transmitting the sensation of pain from throughout the body to the brain.<sup>[1]</sup>

Tramadol is a centrally acting analgesic with a multimode of action. It acts on serotonergic and noradrenergic nociception, while its metabolite O-desmethyl tramadol acts on the -opioid receptor. Its analgesic potency is claimed to be about one-tenth that of morphine. Tramadol is used to treat both acute and chronic pain of moderate-to-severe intensity. Tramadol monotherapy does not usually provide adequate analgesia. In chronic noncancer pain, there is little evidence for the use of tramadol for more than 3 months.<sup>[2]</sup>

Tramadol is considered to be a relatively safe analgesic. The main adverse reactions to tramadol therapy are

nausea, dizziness, and vomiting, particularly at the start of the therapy. At therapeutic doses, tramadol does not cause clinically relevant respiratory depression. Tramadol is contraindicated, however, in patients with diminished respiratory function.

Tramadol is generally considered as a medicinal drug with a low potential for dependence relative to morphine. Nevertheless, tramadol dependence may occur when used for prolonged periods of time (more than several weeks to months). Dependence to tramadol may occur when used within the recommended dose range of tramadol but especially when used at supratherapeutic doses. In many individuals with tramadol dependence, a substance abuse history is found.<sup>[3]</sup>

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## The spreading of tramadol

The 2017 UNODC report indicates that tramadol use was common among younger people and peaks in childhood before 15 years. There are about 35 million users of opioids globally. Although Cannabis remains the world's most widely used illicit drug (135 million users), opioids (such as morphine, heroin, methadone, buprenorphine, codeine, tramadol, oxycodone, and hydrocodone) are known to cause the greatest negative health impact. Global trends indicate an increased misuse of opioids with a 5% prevalence reported in Europe.<sup>[4]</sup>

Historically, tramadol has been considered to have limited abuse liability.<sup>[5]</sup> Reasons for use of tramadol include the need to relax, increase strength, and sleep.<sup>[6]</sup> In the study among university students, the predictor of the use of psychoactive substances includes gender (males 5 times more than females), living away from parents, parental marital status, and staying in a hostel.<sup>[7]</sup>

There are many different forms, strengths, and brands of tramadol. Some are immediate release formulations that start working quickly to ease the pain, while others are sustained or delayed release, thus releasing the active moiety, tramadol more slowly, over several hours, to provide a constant and more even pain control. In most countries, it is a prescription only medicine. However, for Somalia, the story is quite different, you can buy ever pharmacy without prescription.<sup>[8]</sup>

Tramadol abuse is rapidly increasing and claiming lives in the Somali capital Mogadishu, according to Ministry of Women and Human Rights Development.<sup>[9]</sup> The increase is related to the large number of unemployed youths and freelance gunmen in the city, "who have nothing better to do." It is believed that nearly 50% of all the crimes committed in Mogadishu are related to either tramadol or other drugs. Recently, there has been an increase in the number of establishments selling tramadol in the city. More worrying is the growing trend of poor and uneducated youths consuming a locally concocted drugs, specially the abuse of tramadol, which is major challenge to youth in the city and can be potentially lethal.<sup>[10]</sup>

### Statement of problem

There is a growing concern among medical officers in the Habeeb Mental Health Hospital that the youth in Mogadishu have been seriously abusing and misusing Tramadol in a bid to increase sexual performance, boost their energy, ecstasy among others. An interview by Dr. Abdirahman Ali Awale with some clients revealed that some of them even put high doses of tramadol in energy drinks for quicker results. Tramadol is supposed to be taken under doctor's monitoring and supervision. However, any attempt to subject the drug to constant use precariously leads to addiction which can result in death in some situations.

Again, it should be noted that the perception of good feeling that leads to abuse and misuse of tramadol can lead to long-term consequences such as weakness, sleepiness, insomnia, panic attacks, and other symptoms of opioid dependence. In some

**Table 1: Demographic variables of respondents**

Variable	Category	Frequency (%)
Male	Male	108 (83.1)
	Female	22 (16.9)
	Total	130 (100.0)
Age	11-15	3 (2.3)
	16-20	20 (15.4)
	21-25	81 (62.3)
	26-30	14 (10.8)
	Above 30	12 (9.2)
	Total	130 (100.0)
Marital status	Married	20 (15.4)
	Single	110 (84.6)
	Total	130 (100.0)
Educational status	Basic	4 (3.1)
	Secondary	98 (75.4)
	Tertiary	19 (14.6)
	None	9 (6.9)
	Total	130 (100.0)
Occupation	Employed	27 (20.8)
	Unemployed	103 (79.2)
	Total	130 (100.0)

cases, overdose of tramadol may lead to difficulty in breathing and even death.<sup>[11]</sup>

Tramadol abuse liability is underestimated and the evidence of abuse and dependence is emerging in the medical offices in the Banadir region Mogadishu Somalia. It has many health and social consequences, especially among the youth. This emerging incidence has not been properly researched. It is therefore based on this context that there is an urgent need to study the abuse and misuse of tramadol among the youth in the Hodan district Mogadishu Somalia for immediate action to be taken. The objective of the study is to assess the knowledge and contact traces of tramadol in Hodan district Mogadishu Somalia.

## METHODOLOGY

A descriptive cross-sectional study was conducted to assess the knowledge and contact traces of tramadol in Hodan district Mogadishu Somalia. The study was carried out from May 2021 to July 2021. The total sample size for the study was 130 participants who were available and willing to participate in this study. A semi-structured questionnaire and face-to-face was used for this study, and it was divided into two sections: sociodemographic section and tramadol Abuse section. The questionnaire included a range of close-ended questions as well as some open questions. All the data collected were coded numerically and entered into the SPSS version 22.0 software (IBM, New York, United States) program for the analysis. Descriptive statistical analysis was used to calculate the frequencies and percentages. The descriptive analysis of data was presented as tables and graph format. For some analyses, Pearson Chi-square test was also done;  $P \leq 0.05$  was

considered statistically significant. Informed written consent was obtained from the participants, as well as from the district authority, and confidentiality of the participant's information was maintained properly where the participant had the choice to refuse and withdraw from the interview.

## RESULTS

Based on the Table 1, the study found majority (83.1%) of the respondents were males whereas the remaining (16.9%) were females. This could be attributed to the fact that more males are involved in activities that trigger them to use tramadol. However, a higher number (62.3%) of respondents were between the ages of 21 and 25 years, followed by (15.4%) who were between the ages of 16 and 20 years. A close look at the age category of the respondents implies that this age group of respondents is in their early and late twenties. This is the age range where the youth is very viable and energetic to learn and contribute to their well-being and society as whole.

The study found that a high (84.6%) number of the respondents were single and married respectively (15.4%). In terms of educational status, 3.1% of the respondents had basic level education, 75.4% were senior high school graduates, 6.9% of the respondents had no education, whereas 14.6% of the respondents had tertiary level of education. Finally, when it comes to type of occupation, high number (79.2%) of the respondents were unemployed, 20.8% were employed. It is deduced from the above that the study considered different category of respondents with respect to sex, marital status, educational level, and type of occupation which enabled the researchers to obtain varied information to satisfy the intended purpose of the study.

Table 2 shows that the majority (70%) of the respondents known what tramadol is, while 30% of the respondents do not know what tramadol is, 42.3% of the respondents affirmed the main purpose of tramadol as energy booster, 13.1% said for pain reliever, whereas 12.3% said it enhances sexual ecstasy, whereas 2.3% of the respondents indicated other purpose.

Data obtained from Table 3 show 82.3% of the respondents use tramadol, whereas 17.7% do not use it. 9.2% of the respondents used to boost their energy level, 44.6% used to feel high, 9.2% of the respondents used for sexual performance, 7.7% used to overcome feelings of inadequacy, 6.2% used to overcome stress and anxiety, 3.1% used to cope with everyday problems, and 2.3% used to increase confidence. The dosage used for 32.3% of the respondents takes 1–2 doses of tramadol, 16.9% takes 7–9 doses, 12.3% more than 11 doses, 10.0% takes 5–6, while 6.2% and 4.6% take 9–10 and 3–4 doses, respectively. Data per the above table revealed that 50.8% of those respondents who have ever used tramadol said they have been using tramadol for 1 year, while 31.5% used for 2 years. In this study, the majority (32.3%) of the respondents swallow the tramadol with water, 23.1% indicated that they inject it into their veins or muscles, 19.2% of the respondents add to alcoholic beverage and drink, just few (5.4%) of the respondents add to energy

**Table 2: Knowledge on the abuse of tramadol**

Variable	Category	Frequency (%)
Do you know what tramadol is	Yes	91 (70.0)
	No	39 (30.0)
	Total	130 (100.0)
If yes, what do you understand to be its main purpose?	Energy booster	55 (42.3)
	Pain reliever	17 (13.1)
	Enhances sexual ecstasy	16 (12.3)
	Other	3 (2.3)
	Total	91 (70.0)

**Table 3: Practice on the abuse of tramadol**

Variable	Category	Frequency (%)	
Have you ever used tramadol before?	Yes	107 (82.3)	
	No	23 (17.7)	
	Total	130 (100.0)	
If yes, what did you it for?	To boost my energy level	12 (9.2)	
	To feel high	58 (44.6)	
	For sexual performance	12 (9.2)	
	To overcome feelings of inadequacy	10 (7.7)	
	To overcome stress and anxiety	8 (6.2)	
	To cope with everyday problems	4 (3.1)	
	Increase confidence	3 (2.3)	
	Total	107 (82.3)	
	How many doses/tablets do you take?	1-2	42 (32.3)
		3-4	6 (4.6)
5-6		13 (10.0)	
7-9		22 (16.9)	
9-10		8 (6.2)	
Above 11+		16 (12.3)	
Total		107 (82.3)	
How long have you used tramadol?	1 Year	66 (50.8)	
	2 year above	41 (31.5)	
	Total	107 (82.3)	
How do you take tramadol?	Swallow with water	42 (32.3)	
	Add to alcoholic beverage and drink	25 (19.2)	
	Add to energy drink and take it	7 (5.4)	
	Inject it into my veins or muscles	30 (23.1)	
	Other	3 (2.3)	
	Total	107 (82.3)	

drink and take it, while 2.3% take others. Strangely, it was further indicated by respondents that they sometimes use tramadol for enema as a way of preventing stomach upsets.

Above Table 4 revealed that, (58.5%) of respondents affirmed they knew people who use tramadol while the remaining (41.5%) indicated No. When respondents were asked how they are related to those who take tramadol, the study found that majority (26.2%) of the respondents stated they were their friends, followed by 10.8% of respondents who said they were coworkers, few 9.2%, 6.9%, and 5.4% of the respondents indicated they were related as family members, others, and neighbors, respectively. When we asked the respondents what does this person take tramadol, they found

**Table 4: The reasons underlying the use of tramadol**

Variable	Category	Frequency (%)
Do you know anyone who uses tramadol?	Yes	76 (58.5)
	No	54 (41.5)
	Total	130 (100.0)
How are you relate to this person?	A friend	34 (26.2)
	A family member	12 (9.2)
	A co-worker	14 (10.8)
	A neighbour	7 (5.4)
	A other	9 (6.9)
	Total	76 (58.5)
What does this person take tramadol?	I don't know	8 (6.2)
	Energy booster	41 (31.5)
	Pain reliever	17 (13.1)
	Enhances sexual ecstasy	10 (7.7)
Total	76 (58.5)	
Do you know where tramadol is readily available?	Yes	108 (83.1)
	No	22 (16.9)
	Total	130 (100.0)
If yes, where can you obtain tramadol?	Pharmacy/drug store	54 (41.5)
	Provision store	14 (10.8)
	Market	17 (13.1)
	Health facility	22 (16.9)
	Others	1 (0.8)
	Total	108 (83.1)
What is your source of information on tramadol?	Peers/friends	70 (53.8)
	Radio/Tv/internet	39 (30.0)
	Pharmacies or drug store	13 (10.0)
	Books and magazine	2 (1.5)
	Health works	6 (4.6)
	Total	130 (100.0)
A part from tramadol what other substances that you take	Alcohol	30 (23.1)
	Tobacco/cigarette	59 (45.4)
	Inhalants	12 (9.2)
	Cocaine	6 (4.6)
	None	23 (17.7)
	Total	130 (100.0)

that the majority (31.5%) used as energy booster, 13.1% said for pain reliever, while 7.7% said that it enhances sexual ecstasy, whereas (6.2%) of the respondents indicated that they don't know. The majority (83.1%) of the respondents affirmed that they knew where tramadol is readily available, whereas the remaining 16.9% indicated no. Ascertaining where tramadol can be obtained from this table, majority (41.5%) of the respondents attested that tramadol is obtained from the pharmacies and drug stores, 16.9% of the participants indicated it is obtained from the health facility, 13.1% and 10.8% of the respondents also stated tramadol can be obtained from the market and provision stores, and 0.8% of the respondents obtained from others. According to the respondents when buying tramadol from pharmacies, there is a common sign that both the customer and the pharmacist know in that when exhibited, the drug will be sold to them. When we asked What is your source of information on tramadol higher number (53.8%) of respondents heard the information on

tramadol from their friends and peers between, 30.0% of the respondents heard the information from radio/Tv/Internet, 10.0% heard the information from pharmacies or drug store, 4.6% and 1.5% of the respondents heard the information from health works and books and magazines, respectively. Other materials commonly taken by respondents other than tramadol. The data obtained revealed that majority (59%) of respondents commonly take tobacco/cigarette, 23.1% of the respondents take alcohol, 17.7% of the respondents do not take any substances, while just few 9.2%, and 4.6% commonly inhalants and cocaine, respectively.

## DISCUSSION

With respect to the doses of tramadol taken by respondents, the study found that 32.3% of the respondents takes 1–2 doses of tramadol, 16.9% takes 7–9 doses, 12.3% more than 11 doses, 10.0% takes 5–6, while 6.2% and 4.6% take 9–10 and 3–4 doses, respectively. However, it should be noted that these doses taken by respondents are based on the milligrams contained in the drug. They indicated that the tablets give them quicker results as compared to capsules. It for this reason that most youth from Mogadishu and its environs report series of cases due to tramadol abuse, of which some end up dying while others suffer from severe health conditions including fighting each other, motor accidents in the Kalkaal Hospital in Hodan district Mogadishu Somalia. The main interest is to achieve desired results, but due to lack of knowledge on the required doses needed to be taken with respect to the age, the weight will not be considered by such victims. Milligrams (Mgs) usually taken by respondents include 50 mg, 100 mg, 150 mg, 200 mg, 250 mg, 300 mg, 350 mg 400 mg, 450 mg, and 500 gm. These Milligrams of tramadol taken is based on its type (capsules [low mg] or tablets [high mg]).

The study revealed that 50.8% of those respondents who have ever used tramadol said they have been using tramadol for 1 years, while 31.5% used for 2 years. This implies that participants started using tramadol at different duration, and this difference could partly be attributed to the time he/she got to know about the drugs, peer, curiosity, and availability, among others. Soliciting the views of respondents on how they take tramadol, it turned out that the majority (32.3%) of the respondents swallow the tramadol with water, 23.1% indicated that they inject it into their veins or muscles, 19.2% of the respondents add to alcoholic beverage and drink, just few 5.4% of the respondents add to energy drink and take it, while 2.3% take others. This practice among tramadol abusers is to heighten the effects of the drugs in their body. This can pose a very serious health threat to these individuals in our community. More so, the use of alcoholic aphrodisiacs as sex enhancers has also become the order of the day predominantly among the youth. This therefore informs the reason why these individuals prefer mixing these drinks with tramadol for quicker reaction. Strangely, it was further indicated by respondents that they sometimes use tramadol for enema as a way of preventing stomach upsets which is quite dangerous.

By contact tracing from the study, 58.5% of respondents affirmed that they know people who use tramadol, while 82.3% attested [Table 3] that they have ever used tramadol before. By comparison, it can be deduced that majority of respondents were able to indicate those who use tramadol but not same proportion of respondents agreed that they have ever used tramadol. From a considered view from the study, there is some kind of relationship between these individual and may probably taking tramadol with them. When respondents were asked their relationship with such persons, the study found that majority (26.2%) of the respondents attested to the fact that they were their friends, followed by (10.8%) those who indicated they were coworkers, few of the respondents were their family members, neighbor, and school mates. As indicated, because of the kind of bond that exists among them, the likelihood of peer influence will be high.

The study found that majority (83.1%) of the respondents affirmed they knew where tramadol is readily available. Ascertaining where tramadol can be obtained, majority (41.5%) of the respondents attested that tramadol is obtained from the pharmacies and drug stores, while some participants indicated that it can be obtained from market places and provision stores. Other places indicated by respondents include health facility and some drinking spots. According to the respondents when buying tramadol from pharmacies, there is a common sign that both the customer and the pharmacist know in that when exhibited, the drug will be sold to them. It can be deduced that users of the drug from the various communities have different means of obtaining the tramadol that it requires strategic methods to curtail the level of entry of tramadol in the municipality.

Again, the study sought to establish the source of information on tramadol and demographic variables of respondents. The study found that majority (53.8%) of the respondents affirmed they got information from their friends/peers. However, out of that 83.1% were males, while the rest females. It is deduced that more males had the information on tramadol than females according to the survey.

### **The reasons underlying the use of tramadol**

Ascertaining the main reasons why participants use tramadol, it turned out that nearly half (42.3%) of the respondents affirmed the main purpose of tramadol as energy booster, 13.1% said for pain reliever, while 12.3% said it enhances sexual ecstasy, whereas 2.3% of the respondents indicated other purpose. It implies that participants have varied reasons for using tramadol, of which energy booster and sexual ecstasy seem to be the other of the day in such communities. However, one can also say that per the responses, boosting energy levels in order to perform can also have a relation on sexual ecstasy since both involve the exertion of energy. Some are even of the view that their wives will leave them if they fail to sexually satisfy them.

In relation to that, when participants were further asked to state the uses of tramadol, it turned out that higher number (44.6%) indicated tramadol is used to feel high, 9.2% of the respondents

used to boost their energy level, this was followed by 9.2% sexual performance. The remaining also attested that they take tramadol to increase confidence level, cope with everyday problems, overcome feeling of inadequacy, and overcomes stress and anxiety. In this case, the main purpose of tramadol as pain reliever has totally been defeated by the youth in recent times due to its misuse and abuse.

The study also found other substances commonly taken by respondents apart from tramadol. It was revealed that majority (59%) of respondents commonly take tobacco/cigarette, followed by alcohol (23.1%), whereas the remaining commonly take inhalants and cocaine. It is not therefore so surprising when abusers of tramadol usually take it along with alcoholic beverages to heighten its effect in the body. Another worrying issue indicated by respondents in Hodan district is that a certain young man took very high doses of tramadol along with alcoholic drink while having sexual intercourse with his wife. In the process, he collapsed and died. When that happened, the lady ran away. More importantly, ladies, both married and unmarried, also influence the abuse of tramadol. This because ladies are fond of complaining if men are not able to satisfy them sexually. In a bit satisfy their ladies in bed, men would have no option than to resort to taking tramadol along with other alcoholic aphrodisiacs in order to perform well in bed.

## **CONCLUSIONS**

The study found that the majority (70.0%) of respondents knew about tramadol of which more happened to be males. Majority (82.3%) of the respondents use tramadol. Hence, the availability of tramadol in our Somali community should be highly regulated since its abuse among the youth is on the ascendancy. It is a real issue that should be tackled with concerted effort to curtail this menace most especially in the Hodan District. Although this study with a small sample size could not represent the national nutritional status of children under five years of age. A large-scale study is required to obtain the real situation. We recommend since tramadol is currently not under national control, government should prevent the sales of tramadol in the open market and other deadly drugs.

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### **Conflicts of interest**

There are no conflicts of interest.

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