“THE CRITICAL ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PREVALENCE OF DRUG ABUSE AMONG ADULTS AND TEENAGERS IN SURULERE LOCAL GOVERNMENT AREA (L.G.A), LAGOS STATE, NIGERIA; A CASE STUDY OF TRAMADOL”

“La evaluación crítica del conocimiento, la actitud y la prevalencia del uso indebido de drogas entre adultos y adolescentes en el área del gobierno local de Surulere (L.G.A), estado de Lagos, Nigeria; un estudio de caso de tramadol”

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Resumen

Tramadol es un analgésico opioide indicado para el tratamiento de dolores moderados y severos. Cuando se administra en el cuerpo durante mucho tiempo, tiene el potencial de causar dependencia, tolerancia y abuso de drogas. El objetivo de esta propuesta es realizar una evaluación crítica del conocimiento, la actitud y la prevalencia del abuso de drogas entre adultos y adolescentes en el gobierno local de Surulere (LGA) del estado de Lagos, Nigeria; Un estudio de caso de tramadol. El diseño del estudio que se aplicará en esta investigación será un estudio transversal descriptivo entre adolescentes y adultos en el gobierno local de Surulere (LGA), Nigeria. Un total de 120 encuestados se incluyeron en el estudio y se les administraron cuestionarios bien estructurados. Se encontró que el 53,4% había usado tramadol durante 1,3 años y el 29,2% había abusado de la droga durante 5 a 6 años. El 84% confirmó que obtuvieron la información sobre los medicamentos de sus compañeros y el 55% confirmó que usaron el medicamento como fuente de refuerzo de energía. Por lo tanto, la disponibilidad de tramadol en nuestra comunidad nigeriana debe estar altamente regulada ya que su abuso entre los jóvenes está en aumento. Es un problema real y debe abordarse con un esfuerzo concertado para reducir esta amenaza, ya que es hora de actuar ahora.

Palabras clave: Cognición; adolescentes, adultos, abuso de sustancias, trastornos relacionados con sustancias; Tramadol

Abstract

The prevalence of drug and substance abuse in Nigeria is wide and an increasingly growing problem. Research done recently in Nigeria indicated that 54.4% of the total sampled population abused Tramadol and, in that population, 91% were male. Thus, the study aimed at understanding the root cause of the behavior through examining the understanding, attitude and prevalence of the abuse. The study design applied while carrying out the study was a descriptive cross-sectional study among teenagers and adult in Surulere Local Government (LGA), Nigeria. A total of 120 respondents were included in the study and well-structured questionnaires administered unto them. 53.4% were found to have used tramadol for 1.3 years, and 29.2% had abused the drug for 5-6 years. 84% confirmed that they got the information about the drugs from peers and 55% confirmed that they used the drug as a source of energy booster. Therefore, the availability of tramadol in our Nigerian community should be highly regulated since its abuse among the youth is on the ascendency. It is a real issue and should be tackled with concerted effort to curtail this menace as it is time to act now.

Keywords include; Cognition; teenagers, adults, substance abuse, Substance-Related Disorders; Tramadol

Introduction

There is no doubt that the strength of any form of society derives its powers from the sons who happens to work as the first line defense against any breach of the social fabric through maintenance of values and morals, religion and heritage (Oshodi et al, 2010). The health and social cost of abuse of any psychoactive substance in most cases reflect the most disturbing mortality and morbidity. The squealer of the physical, social, and economic and psychological harm derived from the abuse of the psychoactive substance tends to affect not only the individual user but also the family in general. Most of the reports indicate increment in risk-taking behavior which is inclusive of a significant rise in the cases of drug addiction. One of the drugs which have been associated with this typical trend is Tramadol, a drug first developed in Germany in the 1970s and then introduced in the 90s as a centrally acting analgesic properties which are similar to those of codeine and morphine and which are widely prescribed as pain killer; Although, this drug is considered illegal without prescription in most of the Nigerian regions, it also easily accessible especially with the use of fake prescriptions from pharmacies or even from the black market (Olsson et al, 2017).

Tramadol HCl is a centrally acting synthetic opioid analgesic used in the treatment of moderate to severe pain. It has a low affinity to opioid receptors and inhibits the reuptake of norepinephrine and serotonin. Tramadol was approved for marketing as a safe analgesic in 1995.The manufacturer initially claimed that it produced only very weak narcotic effects. Recent data have demonstrated that its opioid activity is the overriding contributor to its pharmacological activity.

The inadequate product labeling and lack of an established abuse potential have led to the safety feeling of many physicians to prescribe it to recovering narcotic addicts and to be known as narcotic abusers. Consequently, numerous reports of abuse and dependence have been received.

The 21st century Nigeria has observed changing predispositions in the form of psychoactive substance use with tramadol HCL developing as a candidate drug in various parts and counties of the nation (Borofka & Olatawura, 2016). In Nigeria, the use and abuse of tramadol has become a problem of National mental health and psychiatric significance, this is because, the use and abuse of Tramadol have been associated with psychosocial, economic and medical complications (Burke, 2016). Calabar, Cross River State, like other parts of the country has its own share of the National drug abuse epidemic and has exhibited changing trends over time with tramadol usage trends and patterns increasing with time (Ibrahim et al, 2017).

Based on Anecdotal clinical records and practice, the emergence of the opioid-based analgesic; tramadol among drug abusers admitted in Neuropsychiatric Hospital with the last ten (10) years presents a major concern in mental Health care and in the society, as the number of patients admitted in Neuropsychiatric facilities have seen an increase (Lanier et al, 2010).

Tramadol is a centrally acting analgesic with strong opioid agonist properties as well as inhibitory effects on the reuptake of noradrenaline and serotonin. It was initially thought to have minimal addictive potentials when compared to other opioid analgesics, but the unfolding scenarios are contrary (Boostani & Derakhashan, 2012).

Though not included in the essential drug list of the country, it is often prescribed for acute and moderate pains that are not responsive to other non-narcotic analgesics by clinicians. It is often used off-label for other purposes such as premature ejaculation and for its euphoric effects, and muscular enhancement (Chiang & Goldfrank, 2009). Literature also abound that and have documented the detrimental effects of tramadol which include, induction of seizures and Parkinson-like symptoms, development of classical opioid withdrawal syndrome and psychiatric symptoms such as aggressiveness, hostility, mania, mental and behavioral disorders (Aliyu et al, 2016). Its availability without prescription makes it easy to obtain and some people consider it a treatment for sexual dysfunctions such as weak erections and delay orgasms (Liu, Lianz and Ren 2014).

The detrimental and addictive effects of tramadol abuse have been revealed by the influx of patients presenting in emergency centers of psychiatric and mental Health facilities with cases of suicide attempts, acute schizophrenia, mental and behavioral disorders secondary to its compulsive addiction. It is in context of this background information, that this study seeks to determine the prevalence and factors responsible for Tramadol abuse among patients admitted in the Federal Neuropsychiatric Hospital, Calabar from 2013 - 2017.

Approach and Formulation of The Problem

There is a growing concern from various stakeholders in the health sector who are concerned that both adults and teenagers from in Surulere Local Government (LGA) of Lagos State, Nigeria have been misusing and abusing Tramadol where they take them with an aim of increasing their sexual performance, ecstasy, boost their energy among

others (Abdel-Hamid et al, 2016). There are various researches which indicate that there are some of these teenagers and adults who put high doses of tramadol in energy drinks to achieve quicker results. It is important to note that Tramadol ought to be taken under the monitoring and supervision of the doctor. However, any form of an attempt to subject the drug to constant use precariously leads to addictions which in some case may lead to death (Umukoro et al, 2016).

Formulation Of The Problem

The prevalence of drug and substance abuse in Nigeria is wide and an increasingly growing problem. Studies carried in some places such as Adebayo indicate that 46.6% of the sample respondent had taken medicine for non-medical purposes at least once which are an indication that drug and substance abuse is a real problem in the country. Another study which was conducted by Onofa shows that the lifetime prevalence rate of any drug abuse among the respondent happened to be 69.2% which is low compared to that which had been reported by Maknjuola et al.

In this study, alcohol was the most prevalent lifetime drug with 34.4% (Abdel-Hamid et al, 2016). Alcohol and cigarette are the commonly abused drugs but currently, the abuse is taking a new direction. There are increasing concerns which have been evoked for the risk of developing tramadol dependence and the risk of adverse reactions which include epileptic seizures and fatal intoxications. Research done recently in Nigeria indicated that 54.4% of the total sampled population abused Tramadol and, in that population, 91% were male. The major mode of initiation into tramadol use was peer influence and 63% used over 200mg per day.

The primary reasons for tramadol abuse was reported as relief of tiredness, stress and pain 48%, prolonging of sexual enhancement and intercourse 40% and compulsive urge was 12% (Bashirian, 2014). Despite that these cases are being experienced and their effects studied, to understand the root cause of the behavior which is considered wrong, it is important to examine the understanding, attitude, and prevalence of the abuse. It has been noted that most people use the drug without being aware of the side effects. In this regard, it is important to examine the issue into details if proper and effective strategies will be initiated to curb the behavior. Drug abuse and addiction are currently one of the most important health problems. Information which pertains the role of lay theories is being considered undeniable in the rehabilitative and preventive works.

There are various studies which have assessed the lay beliefs and attitudes which are related to various kinds of drugs where others indicate that there are variables which tend to increase the risk of drug abuse. The abuse of tramadol among the people of Surulere local government, reports indicate that 30% both male and female aged between 14 and 30 years have abused tramadol at least one time, and there are many people who are increasingly dependent on the drug with some becoming seriously addicted (Ibrahim et al, 2017).

Based on the observed spread of tramadol abuse and lack of information pertaining to its effect and preventive measures, the incidence has encouraged the researchers to study this phenomenon. It is a study which will assess the extent of the phenomena of abuse of the tramadol on the person who has tramadol abuse in Surulere.

Objectives

General Objective

This study aims at assessing the abuse of tramadol in Surulere Local Government (LGA) of Lagos State, Nigeria by examining the level of knowledge, attitude, and prevalence of the drug.

Specific Objective

- To identify the knowledge and attitude of tramadol among the people abusing Tramadol
- To determine the prevalence of tramadol abuse among patients admitted in the hospital since 2013 to 2017
- To ascertain the socio-demographic characteristics of the patients with tramadol abuse as indicated in the hospital records
- To assess the factors responsible for tramadol abuse

Theoretical Review

Below is a theoretical review which has been proposed in a manner of thinking about the information that is potentially related to the main area of study and its main aim is to help in understanding the current body of language on the research topic. Based on a systematic approach, substance use happens to be a social complex phenomenon which can only be meaningfully understood by carrying out an analysis on the complex relations for the users instead of having a linear casual deterministic perspective. The systematic approach basically result to a broader reading of the factors which contribute to substance use behavior including the physical effects of the abused drug to the body, the users knowledge and attitude towards the drug, the users belief towards the power of the drug and the network of favors that consumption imposes mainly the avenue through which he or she access the drug (Ibrahim et al, 2017). If any of the scholars will fail to consider some of these aspects, then the understanding of the whole problem of drug addiction becomes incomplete, and it becomes difficult to understand the prevalence of the drug among the community, and the knowledge and attitude which the abusers tend to entail.

There are various theories and frameworks which have been developed with the aim of trying to describe or predict drug use in the community. For many years, health professionals, policymakers and researchers have carried out researches which mainly focus on the effects of drug abuse on the user. However, the phenomenon happens to be multivariate and most of these theories tend to focus on a single aspect of the problem thus failing to answer the core question about the phenomenon.

This study is guided by the differential reinforcement theory which maintains that drug and substance abuse stems from the effects of the drug which outweigh the negative ones. Whenever a drug produces an undesirable result such as panic and other problems, they tend to deliver negative reinforcement. More so, they can always return to positively reinforcing effects such as euphoria which in most cases outweighs the negative effects. People tend to learn how to take a drug and what to expect from it, they learn the rules of taking these drugs despite that they do not always apply what they have learned. Scholars indicate that people tend to be shaped by the consequences of consuming various products and they will always continue to be involved in their behavior whenever someone else complements their behaviors. Whenever an individual gets a reward from taking a drug such as being able to cope with a pain, any positive consequence despite how small it is tending to be more emotionally powerful when compared to the negative one.

The differential reinforcement theory happens to be relevant because it takes into account the factors contributing to drug abuse and captures the complexities and intricacy of the prevalence of drug abuse in that excessive taking of the drug happens to be a learned behavior which tends to be reinforced and it is subject to change via relearning and various patterns being incorporated in reinforcing it.

Social Cognitive Theory

This is a theory which on the reason why people tend to acquire and maintain behavioral patterns which also indicating the basis which can be used during interventions. While assessing the behavioral changes, both the environmental factors, people and behaviors are examined.

The environment is defined as a factor which can affect the behavior of a person (Mamman et al, 2014). These include the social, economic and environmental factors. The environment tends to provide models for behavior via observational learning which occurs when an individual watch the actions of another person and the reinforcement which this person receives. This theory happens to be important because it analyzes the social context on which taking of most drugs occurs and factors contributing to drug abuse.

Expectancy Model

This theory evolved from cognitive-behavioral and social learning perspectives. According to this model, people with alcohol dependence develop problematic beliefs about substances use relatively early in life can occur through a combination of reinforcement and observational learning Another concept of expectancy model is that of self-efficacy and coping.

Self-expectancy refers to an individual ‘s perception that he or she has the ability to meet the challenges of a difficult situation while coping refers to the strategies that an individual use to reduce the perception of a threat or danger. Based on Umukoro et al, 2016 on expectancy model, a series of reactions can occur when a drug-dependent individual attempts to remain abstinent. There will be a contrasting scene when two persons try to remain abstinent in high-risk situations. For example, Persons A and B encountered high-risk situations, such as parties where people are consuming alcohol. A can abstain from drinking at the party because he or she has learned how to cope with such situations, and he or she feels capable of carrying through with his or her intention not to drink alcohol.

Each successful episode of abstinence reinforces his or her sense of self-efficacy, causing him or her to feel more capable of abstaining in subsequent situations. B lacks a satisfactory coping response. The actual consumption of alcohol is not what leads to a relapse, but, rather, his or her interpretation of the act of drinking as a sign of loss of self-control. Thus, when B enters a high-risk situation, he or she feels incapable of staying away from alcohol because of his or her low sense of self-efficacy. A compelling expectation that alcohol will have a positive mood-altering effect adds to his or her low sense of self-efficacy and leads him or her to take the first drink.

The positive sensations that the drug produces further undermine B ‘s resolve, but cognitive factors enter at this point in the process as well. Having violated the self-imposed rule of remaining abstinent, B now is subject to the abstinence violation effect, a sense of loss of control over one ‘s behavior that has an overwhelming and demoralizing effect. Thus, B ‘s self-efficacy is further eroded, initiating a down-ward spiral trend, which eventually ends in renew drug dependence.

Methodology

The method section of this paper provides the methods and procedures used in a research study or experiment.

Study Design

The study design which was applied in this research is the descriptive cross-sectional study among teenagers and adult in Surulere Local Government Area (LGA), Nigeria. More so, a Retrospective Research design will be used to assess the prevalence of the of tramadol abuse since it deals with historical events and assessments of records for a condition within a given period.

Reason for Choice of The Study Area

Surulere being one the local government within Lagos state indicates increased use and abuse of drugs both the adults and teenagers. Research indicates that the predominant dwellers of the area tend to indulge in drug consumption terming it as social culture.

More so, in the youthful birthday parties, there is a tendency of drugs being distributed is one type of refreshment (Ekpenyong, 2012). People from this region have grown to become drug users seeing no harm. There are several seizures of the tramadol which have been carried in the area and culprits arrested after they are found having the drugs. This makes Surulere an ideal place to have a research analysis conducted.

Study Population

The people targeted in this study include both teenagers and adults. The problem of tramadol abuse is not only with the youths but also the elderly and in this regard, everyone will be incorporated in the study while considering all genders. A total of 300 respondents will be included in the study.

Sampling

Purposive sampling was relied to enable the researcher to recruit participants with a variety of demographic characteristics and thereby garner a diversity of perspectives. This sampling technique was also used due to its usefulness in making assessment of respondents who have characteristics, such as drug use. Also, snow-balling sampling technique was used to get the sample for this study. These techniques were used in order to get the actual respondents needed

Data Collection

Both secondary and primary data collection methods were used during the research. Secondary data sources were used to access information from books, journals, magazines, reports and the Internet. Under the primary data collection method, quantitative (survey structured questionnaire) was used through well-structured questionnaire. There was be a designed questionnaire with an average of 40 questions which will be presented to 120 respondents from Surulere Local Government (LGA).

Pilot Testing of The Instrument

A preliminary testing was done on the data collection to identify likely problems. The researcher took necessary actions in time before the actual data collection.

Data Processing and Analysis

After collecting data from the field, it was coded and entered. The study used statistical package for social sciences SPSS to analyze quantitative data. Data collected using questionnaires were analyzed using descriptive statistics and inferential statistics. In quantitative analysis, the data was grouped according to the research objectives and questions. Data was analyzed through frequencies, percentages and t-tests.

Frequency distribution Tables and percentages were used to determine the peer-oriented activities used to provide knowledge about Substance Abuse, change attitude towards Substance Abuse, and reduce the prevalence of Substance Abuse among students. The researcher used t-test and percentages to determine if there existed significant differences between students in schools with peer-oriented activities and students in schools without peer-oriented activities in their knowledge about Substance Abuse (Yunusa et al, 2017).

Limitations of the Study

The limitations of this study include factors such as time constraints due to the fact that the researchers have to spend much time at the study area in data collection and the inability to reach some respondents at the right time since most of these people are not well versed with fluent English. Language barrier served as one of the limitations of the study- to overcome this, research assistants who were fluent in local language were recruited to participate in the survey to facilitate easy communication.

Delimitations

In order to address the limitation, the researcher had to make a thorough introduction as well as assuring them of maximum confidentiality as well their right to withdraw from the study any time they felt.

Ethical Considerations

Clearance was carried out for all the respectful offices and any other relevant body and this will be done while explaining all the objectives of the study to all those stakeholders. Similar explanation was also be done to the people whom data will be collected from.

Results

This chapter presents results and discussions of the results with reference to the specific research objectives and hypotheses. This chapter presents the results and discussions of the results of the study. The presentation of the results is based on the objectives. The chapter starts with descriptive statistics of the study variables, correlation analysis and test of hypotheses. This chapter is primarily devoted to the analysis of primary data obtained from the field survey and the secondary data obtained from the hospital.

Analysis of the secondary data

Figure I: The prevalence of tramadol abuse among patients in Randle General Hospital, Surulere from 2013-2017

Year	Number of patients admitted	Percentage
2013	30	11.5%
2014	43	16.5%
2015	60	23.3%
2016	55	21.1%
2017	72	27.6%
Total	260	100%

Section A above, shows the prevalence of tramadol abuse among psychiatric patients to be 260 from 2013-2017. The table shows the highest number of patients admitted was 72 with 27.6% in 2017, 2013 with 30 (11.5%) being the lowest prevalence in 2013.

Socio demographic characteristics of patient with tramadol abuse

Figure II

Age distribution of patients	Number of patients admitted per year (2013)	Percentage
15-20 years	4	13.3%
21-24 years	5	16.6%
25-30 years	8	26.6%
31-34 years	10	33.3%
35-40 years	2	6.6%
41 and above	1	3.4%
Total	30	100%
Age distribution of patients	Number of patients admitted per year (2014)	Percentage
15-20 years	3	7.0%
21-24 years	4	32.6%
25-30 years	7	16.3%
31-34 years	12	27.9%
35-40 years	5	11.6%
41 and above	2	4.6%
Total	43	100%

Age distribution of patients	Number of patients admitted per year (2015)	Percentage
15-20 years	10	16.7%
21-24 years	11	18.3%
25-30 years	20	33.3%
31-34 years	10	16.7%
35-40 years	4	6.7%
41 and above	5	8.3%
Total	60	100%
Age distribution of patients	Number of patients admitted per year (2016)	Percentage
15-20 years	8	14.5%
21-24 years	10	18.1%
25-30 years	15	27.3%
31-34 years	7	12.7%
35-40 years	10	18.1%
41 and above	5	9.1%
Total	55	100%
Age distribution of	Number of patients	Percentage

patients	admitted per year (2017)	
15-20 years	11	15.3%
21-24 years	15	20.5%
25-30 years	13	18.1%
31-34 years	20	27.8%
35-40 years	7	9.7%
41 and above	6	8.3%
Total	72	100%

The table above shows the highest age of patient that abused tramadol in 2013 to be 31-34 years with 33.3% and the lowest age to be 40years and above with 3.4% respectively.

In 2014, the highest number of age of patient that abuse tramadol was 27.9% (31-40 years) and 4.6% for 41 and above respectively. In 2015 the highest age group of patients were 33.3% (25-30years) and lowest 8.3% (40years and above). The table above also shows the highest age characteristics of patient in 2016 to be 27.3% (20-30 years) and the lowest age characteristics to be 9.1% (40 years and above) respectively. From findings above, the highest age characteristic in 2017 were 31-34years with 27.8% and lowest 40 years and above with 8.3% respectively.

Analysis of the primary data

Figure III: Demographic variables of the respondents

Variables	Response	Frequency (N=300)	Percentage (%)
Sex	Male	258	86.0
	Female	42	14.0
	Total	300	100.0
Age Group (years)	11-15	12	4.00
	16-20	85	28.3
	21-25	138	46.0
	26-30	47	15.7
	>30	18	6.00
Minimum = 13; Maximum = 35			
	Total	300	100.0
Marital Status	Married	81	27.0
	Single	137	45.7
	Co-habitation	82	27.3
	Total	300	100.0
Religious Affiliation	Christian	243	81.0
	Moslem	35	11.7

	Traditionalist	22	3.7
	Total	300	100.0
Level of education	Basic	118	39.3
	S.H. S	97	32.3
	Tertiary	27	9.0
	None	58	19.3
	Total	300	100.0
Type of Occupation	Artisans	100	33.3
	Small scale miners	76	25.3
	Farming	60	20.0
	Unemployed	24	8.0
	Trading	19	6.3
	Employed by Formal sector	12	4.0
	Employed by Private sector	9	3.0
	Total	300	100.0

4.2 Demographic Variables of Respondents

The study found majority (86%) of the respondents were males whereas the remaining (14%) were females. This could be attributed to the fact that more males are involved in activities that trigger them to use tramadol. But a higher number (46%) of respondent were between the ages of 21-25 years, followed by (28.3%) who were between the ages of 16-20 years. The minimum age was 13 years whereas the maximum age was 35 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 wellbeing and society as whole. Religious affiliation indicated that preponderance (81%) of the respondents were Christians. The means that the communities under the study were Christian dominated in the municipality. One will therefore be tempted to think that since respondents were Christians the level in which they abuse tramadol including other substances such alcohol, marijuana, cigarette among others will be minimal; but this is not so. The study found that a high (45.7%) number of the respondents were single followed by those who were co-habituating and married respectively (27%).

In terms of educational status, (39.3%) of the respondents had basic level education, (32.2%) were Senior High School graduates, (19.3%) of the respondents had no education, whereas just few of the respondents had tertiary level of education. Finally, when it comes to type of occupation, high number (33.3%) of the respondents were Artisans, (25.3%) were small scale miners, this was immediately followed by (20%) of the respondents who were into farming. It is deduced from the above that, the study considered different category of respondents with respect to sex, marital status,

religious affiliation, educational level, and type of occupation which enabled the researchers to obtain varied information to satisfy the intended purpose of study.

Figure IV: A Representation of Whether Respondents Know About Tramadol

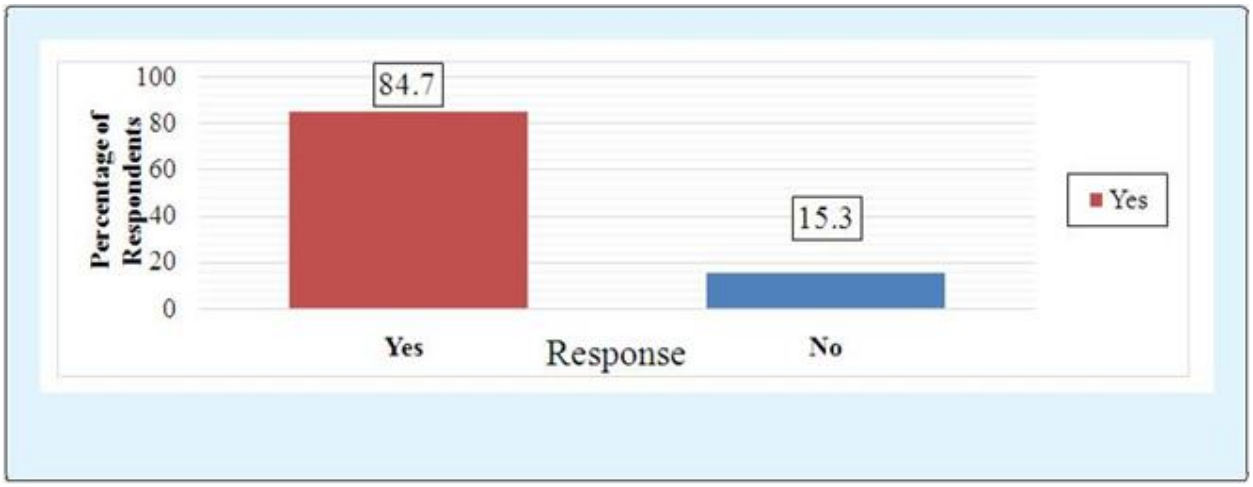


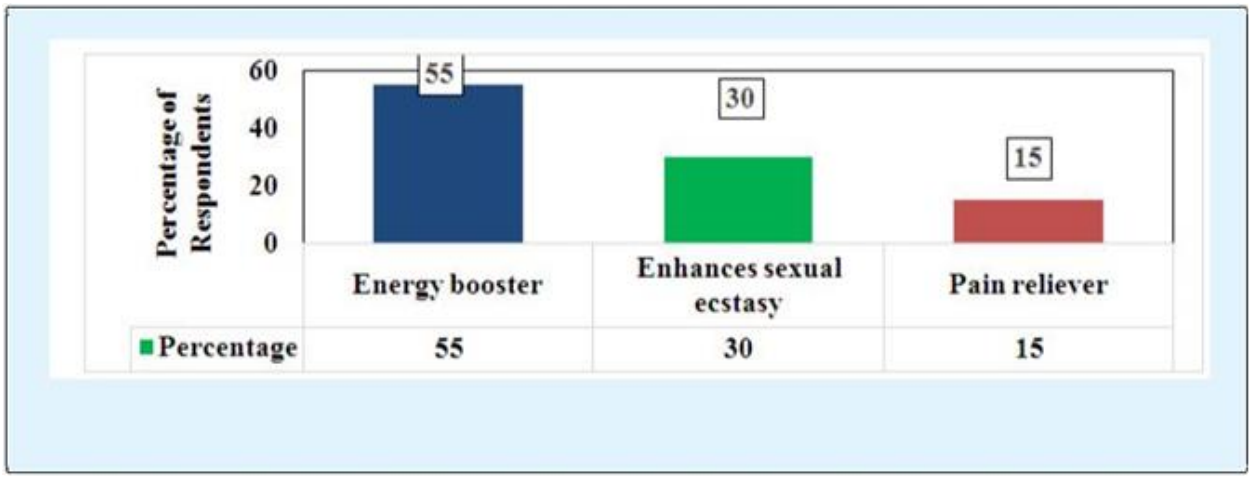
Figure V: Chi-Square Test between Demographic variables and Respondents knowledge on tramadol.

Variable	Response	Have you heard of tramadol before?				
		Yes	No	Total	Chi-Square	P-value
		(Frq.) (%)	(Frq.) (%)			
Sex	Male	216(72.0)	42(14.0)	258	19.270a	0.002
	Female	38(12.7)	4(1.30)	42		
	Total	254(84.7)	46(15.3)	300		
	11 - 15	12(4.00)	0(0.00)	12	18.618a	0.001
	16 - 20	76(25.3)	9(3.00)	85		

Age group	21 - 25	104(34.7)	34(11.3)	138		
	26 – 30	45(15.0)	2(0.60)	47		
	30 >	17(5.70)	1(0.30)	18		
	Total	254(84.7)	46(15.3)	300		
Marital status	Married	70(23.3)	11(3.70)	81	.446a	0.800
	Single	114(38.0)	23(7.60)	137		
	Cohabitation	70(23.3)	12(4.00)	82		
	Total	254(84.7)	46(15.3)	300		
Religious affiliation	Christian	208(69.3)	35(11.6)	243	11.130a	0.004
	Moslem	24(8.00)	11(3.70)	35		
	Traditionalist	22(7.30)	0(0.00)	22		
	Total	254(84.7)	46(15.3)	300		
Level of education	Basic	108(36.0)	10(3.30)	118	16.331a	0.001
	S.H. S	71(23.6)	26(8.70)	97		
	Tertiary	22(7.00)	5(1.60)	27		
	None	53(17.7)	5(1.60)	58		

	Total	254(84.7)	46(15.3)	300		
Type of occupation	Artisans	86(28.7)	14(4.70)	100	16.718a	0.001
	Employed by Formal sector	10(3.30)	2(0.60)	12		
	Employed by Private sector	8(2.60)	1(0.30)	9		
	Farming	54(18.0)	6(2.00)	60		
	Small scale miner	57(19.0)	19(6.30)	76		
	Trading	18(6.00)	1(0.30)	19		
	Unemployed	21(7.00)	3(1.00)	24		
	Total	254(84.7)	46(15.3)	300		

Figure VI: Main Purpose of Tramadol.



Data gathered from the above chart found that more enhances sexual ecstasy, whereas (15%) of the than half (55%) of the respondents affirmed the main respondents indicated relieving of pains. purpose of tramadol as energy booster, (30%) said it.

Figure VII: Chi-square Test between Demographic variables and use of Tramadol

Variable	Response	Have you ever used tramadol before?				
Sex		Yes	No	Total	Chi-Square	P-value
		(Frq.)(%)	(Frq.)(%)			
	Male	136(45.3)	99(33.0)	235	15.43a	0.013
	Female	3 (10.7)	33(11.0)	65		
	Total	168(56.0)	132(44.0)	300		
Age Group	11 - 15	8(2.70)	4(1.30)	12	3.946a	0.413
	16 - 20	42(14.0)	43(14.3)	85		
	21 - 25	77(25.7)	61(20.3)	138		
	26 – 30	31(10.3)	16(5.30)	47		
	30 >	10(3.30)	8(2.60)	18		
	Total	168(56.0)	132(44.0)	300		

Marital Status	Married	49(16.3)	32(10.7)	81	8.703a	0.000
	Single	83(27.7)	54(18.0)	137		
	Cohabitation	36(12.0)	46(15.3)	82		
	Total	168(56.0)	132(44.0)	300		
Religious Affiliation	Christian	134(44.7)	109(36.7)	243	4.897a	0.086
	Moslem	17(5.60)	18(6.00)	35		
	Traditionalist	17(5.60)	5(1.70)	22		
	Total	168(56.0)	132(44.0)	300		
Level of education	Basic	54(18.0)	64(21.3)	118	9.490a	0.023
	S.H.S	64(21.3)	33(33.0)	97		
	Tertiary	17(5.70)	10(3.30)	27		
	None	33(11.0)	25(8.70)	58		
	Total	168(56.0)	132(44.0)	300		
	Artisans	52(17.2)	48(16.0)	100	15.193a	0.019
	Employed by Formal sector	6(2.00)	6(2.00)	12		

Type of Occupation	Employed by Private sector	4(1.30)	5(1.60)	9		
	Farming	26(8.7)	34(11.3)	60		
	Small scale miner	51(17.0)	25(8.30)	76		
	Trading	16(5.3)	3(1.00)	19		
	Unemployed	13(4.30)	11(3.7)	24		
	Total	168(56.0)	132(44.0)	168(56.0)		

Data obtained from table 4 portrayed a chi-square computation test between demographic variables and use of tramadol.

Proportion by cross tabulation indicated that more than half (56%) of the respondents attested they have ever used tramadol while (44%) indicated no. A chi-square test revealed a significance evidence of association between the use of tramadol and demographic variables such as sex, educational level and type of occupation with probability values less than alpha (α=0.05)(p= 0.013, 0.023, and . 0.019 respectively) with chi-square values (X2 = 15.43a ,8.703a, and 15.193a).

Figure VIII: Relationship between Age group and Source of Information

Attributes	Source of information					Chi-Square	P-value
Age Group	Peers/friends	Radio/TV/ Internet	Pharmacies or Drug stores	Books and magazines	Total	72.074a	.000
	Frq. (%)	Frq. (%)	Frq. (%)	Frq. (%)			
11 - 15	12(4.00)	0(0.00)	0(0.00)	0(0.00)	12		
16 - 20	62(20.7)	15(5.00)	8(2.70)	0(0.00)	85		
21 - 25	121(40.3)	1(0.30)	11(3.6)	5(1.60)	138		
26 – 30	46(15.3)	0(0.00)	1(0.30)	0(0.00)	47		
30 +	10(3.30)	0(0.00)	8(2.70)	0(0.00)	18		
Total	251(83.7)	16(5.30)	28(9.30)	5(1.60)	300		

Data gathered from table 11 showed, higher number (40.3%) of respondents heard the information on tramadol from their friends and peers between the ages of 21-25 years, this was followed by (20.7%) and (15.3%) of those within the ages between 16-20 and 26-30 years old. From the Chi-square test, the study found a strong evidence of association between the age distribution of respondents and the source of information on tramadol (Chi-square (x2) =72.074a, P=.000) where p-values is less than alpha (α=0.05).

Figure IX: Relationship between Marital status and Source of information

Attributes	Source of information					Chi-Square	P-value
Marital Status	Peers/friends	Radio/TV/ Internet	Pharmacies or Drug stores	Books and magazines	Total	55.958a	.000
	Frq. (%)	Frq. (%)	Frq. (%)	Frq. (%)			
Married	59(19.7)	14(4.6)	3(1.00)	5(1.60)	81		
Single	125(41.6)	2(0.60)	10(3.30)	0(0.00)	137		
Co-habitation	67(22.3)	0(0.00)	15(5.00)	0(0.00)	82		
Total	251(83.7)	16(5.30)	28(9.30)	5(1.60)	300		

Figure X: How Long Respondents Have Used Tramadol

Response	Frequency (N)	Percentage (%)
1-3 Months	9	5.40
4-6 Months	20	12.0
1-3 Years	90	53.4
5-6 Years	49	29.2
Total	168	100.0

Mode of Taking Tramadol by Respondents

Response	Frequency (N)	Percentage (%)
Swallow with water	26	8.7
Add to Alcoholic beverage and drink	187	62.3
Add to Energy drink and take it	87	29.0
Inject to my veins or muscles	0	0.00
Other	0	0.00
Total	300	100.0

Data per the above table revealed that more than half (53.4%) of those respondents who have ever used tramadol said they have been using tramadol for 1-3 years, (29.2%) 5-6 years, (12%) 4-6 months and the remaining (5.4%) 1-3 months. Data obtained from table 10 found that majority (62.3%) of the respondents mostly take tramadol along with alcoholic beverage, (29%) indicated they add tramadol to energy drink and take, just few (8.7%) of the respondents swallow the tramadol with water. Strangely, it was further indicated by respondents that they sometimes use tramadol for enema as a way of preventing stomach upsets.

Discussion Of The Primary Data Analysis

Prevalence Of Abuse Among Patients

What is the prevalence of tramadol abuse among patients admitted in the hospital since 2013 to 2017? Based on the findings, it was clearly reviewed that, the highest prevalence occurred in 2017 (n=72, 27.6%) and the lowest percentage (n=30, 11.5%) in 2013. This indicates that, the rest of the percentages representing other years under the period of study fall between the percentages above. These percentages put together make the total percentage of prevalence of tramadol abuse patients admitted in the hospital during the period of study.

Social Demographic Characteristics Of The Patients with Tramadol Abuse

The research sought to know the sex in the “socio demographic characteristics” of patients with tramadol abuse from 2013 – 2017. Following the findings, it was revealed that tramadol abuse has the greatest tool or percentage amongst male. The analysis shows that out of the total percentage under study, males had in 2013 100%, while female had nil %, in 2014 males had 100%, while females had nil %, in 2015 males had 96.6% while female had 3.3%, in 2016 males had 96.3% while the female had 3.6% and in 2017 males had 94.4% while the female had 5.5%.

In the analysis of age bracket that the prevalence was higher, it was observed that; age 31-34years had the highest percentage (n=10, 33.3%) in 2013, while age 40 and above had the lowest percentage (n=1, 3.4%). In 2014 highest prevalence 31-34 years (n=12, 27.9%) and lowest percentage 41 and above (n=2, 4.6%), 2015 highest percentage 20-30 years (n=20, 33.3%) and lowest percentage 40 and above with (n=5, 8.3%), 2016 highest percentage 25-30years (n=15, 27.3%) and lowest percentage to be 45 and

above with (n=5, 9.1%) and 2017 highest percentage 31-34years (n=20, 27.8%) lowest being (n=6, 8.3%) for 40 years and above respectively. Following the analysis above, the prevalence of tramadol abuse is highest in the age group of 31-40years. This is based on the total number of percentages for the five years for each age group.

“What are factors responsible for tramadol abuse among patients in Federal Neuropsychiatric Hospital, Calabar from 2013- 2017”? Findings from this study clearly shows that the major factors or reasons why patients abuse tramadol were to enhance sexual performance 97.3% (n=70), peer group influence 94.4% (n=68), to increase physical performance during worker’s labor 83.3% (n=60) and to relieve pain 72% (n=52). Other factors identified in this study includes feelings of euphoria and relieve of stress, 69.3% (n=50) and 58% (n=42) respectively. also 27.7% (n=20), 13.8% (n=10) and 16.7% (n=12) revealed that the enhance sleep, relieve frustration, and boost appetite were factors responsible for tramadol abuse. Lastly, 20.8% (n=15) also indicated parental influence as factors responsible for tramadol abuse among patients admitted in Federal Neuropsychiatric Hospital, Calabar between 2013-2017.

Discussion Of The Secondary Data Findings

The study revealed, more than half (53.4%) of respondents have been using tramadol for 1-3 years and (29.2%) for 5-6 years. however, some also, started using drugs for 1-6 months; this is represented by (17.5%). 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, availability, among others. Soliciting the views of respondents on how they take tramadol, it turned out that majority (62.3%) of respondents mostly take tramadol along with alcoholic beverage, (29%) indicated

they always add tramadol to energy drink and take it, while few swallows the tramadol with water. 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 have 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.

Source Of Information On Tramadol

Again, study sought to establish the source of information on tramadol and demographic variables of respondents. The study found that majority (84%) of the respondents affirmed they got information from their friends/peers. However out of that, (64%) were males while the rest females. It is deduced that more males had the information on tramadol than females according to the survey.

Higher number (40.3%) of respondents had information on tramadol from their friends and peers between the ages of 21-25 years. From the Chi-square test, the study found a strong evidence of association between the age distribution of respondents and the source of information on tramadol (Chi-square (X2) =72.074a, P=.000) where P-values is less than alpha value (α=0.05).

With respect to marital status of respondents, higher number (41.6%) of those who were single according to the survey had information from their peers and friends.

The study found that, there is a relationship between the marital status of respondents and the source of information about tramadol (Chi-square X2) = (55.958a, P = .000) where P-values is less than alpha value (α = 0.05). It is also revealed that majority (68.7%) of Christians obtained information on tramadol from their peers and friends as compared to Moslems and traditionalist. The chi-square computation revealed that, there is a significant association between respondents' religious affiliation and the source of information on tramadol (Chi-square X2) = 21.403a, P = .002) where P-values is less than alpha value (α = 0.05).

When it comes the respondents' education level, the chi-square test indicated a significant association between one's level of education and source of information (Chi-square X2) = 52.407a, P = .000) where P-values is less than alpha value (α = 0.05). In this context, [10] and [11] argued that for many young people, the decision to use a drug is based on a rational appraisal process, rather than a passive reaction to the context in which a substance is available. Again, the study found an association between the type of occupation of respondents and source of information (Chi-square (X2) = 40.150a, p=.002) where p-values is less than alpha value (α=0.05). It means that the kind occupation informs the person to device alternative means of performing on the job especially if such kind of work requires a lot of energy. Indicated already by respondents, majority affirmed that the main reason for using tramadol is to boost their energy level.

The Reasons Underlying The Use Of Tramadol

Ascertaining the main reasons why participants use tramadol, it turned out that more than half (55%) of the respondents affirmed the main purpose of tramadol as energy booster, (30%) of the indicated it enhances sexual ecstasy, whereas (15%) stated that tramadol is for relieving pain. 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 exertion of energy. Some are even of the view that their girlfriends or wives will leave them if they fail to sexually satisfy them.

Conclusion

The general objective of the study in assessing the abuse of tramadol in Surulere Local Government Area (LGA) of Lagos State with a major interest in the level of knowledge, attitude and prevalence of the drug have been well covered especially from chapter one through out to chapter three.

It is important to note that the specific objective via identification of knowledge and attitude of tramadol among the people using Tramadol has been well covered in the expectancy model in chapter two and the personality and substance abuse has been evaluated to assess people's attitude.

More so, the specific objective which pertains the prevalence of tramadol abuse among the patients admitted in the hospitals have well been addressed in chapters two and three whereby drug dependence, tolerance and withdrawals has been assessed among people.

The social demographic characteristic of the patients with tramadol abuse has been illustrated in the chapter two where the effect of social demographic factors on people abusing tramadol abuse has been covered.

Lastly various factors responsible for tramadol abuse have been well been covered in the chapters two and three after an understanding on tramadol and its adverse effects have been laid down. This is an indication that all the specific objectives of the study were achieved.

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