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**The Use, Abuse and Control of Cough syrup Containing Codeine in Sokoto Metropolis**Sirajo, M.<sup>1\*</sup>, Rashida, A.<sup>1</sup>, Bashar, S.Y.<sup>1</sup> and Muhammad, A.H.<sup>1</sup>*Department of Sciences, State College of Basic and Remedial Studies, Sokoto<sup>1</sup>**Author for Correspondence\*: sarki4real@ymail.com/+234-803-804-9157***Abstract**

*Codeine is a prescription pain medication used to treat mild to moderate pain. It comes in tablet form or as cough syrup. Cough syrup have been widely abused for years, especially by adolescents who want to get high or drunk without stealing alcohol or paying for illicit drugs. Since cough syrups are legal for purchase, many people have abused these medicines. The aim of this study is to find out the causes and effects of cough syrup abuse among the youths in Sokoto metropolis. Subjects for this study were two hundred and thirty-four codeine syrup users. A significant, 91% of the subjects were 15 years to 34 years old. It was observed that interaction with bad friends and peer pressure was the major factor that influenced the subjects to abuse cough syrup. A total of 77% of the subjects indicated that they purchase and consume between 1 to three bottles of cough syrup daily. A significant number of the subject (98%) noted that they access the cough syrup easily from drug stores in the city and that the abuse the cough syrup because it makes them feel happy and relaxed. There is need for government to invest in public enlightenment programme among the youths and adolescent to educate them on the health effect of cough syrup addiction. There is also the need to set up adolescent, young adult and adult rehabilitation programs to help people struggling with cough syrup addiction.*

**Keywords:** *Subjects, Cough syrup, Codeine***Introduction**

Drug abuse is a universal public health problem with conditions and problems that vary locally. Oshikoya and Alli (2006) describe drug abuse as non-medical self-administration of a substance to produce psychoactive effects, intoxication or altered body image, despite the knowledge of its potential adverse effects. Drug abuse has become a national concern in

Nigeria, given its impacts on education and future leadership, innovations and human resources. Secondary school students are particularly at risk given that they are in their formative years of education, career development, social skills and identity formation (Ekpenyong, 2012). The Nigerian National Drug Law Enforcement Agency (NDLEA) has stated that drug abuse is a major problem in schools (NDLEA, 1997). In Nigeria, a report by NAFDAC (2008) as cited by (Ekpenyong 2012), show that alcohol is the most commonly abused substance with about 61% of the population engaging in its use. Alcohol, cigarettes and marijuana are commonly abused substances in the Southern part of Nigeria. Nevertheless, another study conducted in Lagos, show that marijuana is the most commonly abused substance among the students of Lagos State University living off-campus (Oshikoya and Alli, 2006).

The non-medical consumption of cough syrups in Northern Nigeria has become a subject of public concern of recent, largely due to its potential danger to the society. Abuse of cough syrups in Northern Nigerian States has now surpassed all other forms of drug abuse due to ease of access and its relative cheapness. Similarly, chemists and pharmacies sell these drugs to individuals by mere request without necessarily showing any form of prescription from a specialist or doctor (Dankani, 2012). The cough syrups containing Codeine is the most commonly abused. It is used to make a recreational form of the drug (commonly called "purple drank"). Purple drank is made by mixing prescription-grade (codeine) cough syrup with soft drinks. According to the 2015 annual report of the national drug law enforcement agency, (NDLEA) the North West topped the table of arrests for drug-related offences for that year, with a total of 2,205 persons compared to the South West which recorded 1,705 arrests. The

North Central followed with 1,605 while South-South, South East and North East recorded 1,380, 979 and 824 respectively (Icirmigeria News, 2016).

Majority of the Nigerian youths ignorantly depend on one form of drug or the other for their various daily activities - social, educational, political, moral, etc. (Dankani, 2012). The Nigerian Senate on October 11, 2017 raised the alarm that the 19 Northern states of the federation were under serious threat due to drug abuse, stating that over three million bottles of codeine cough syrup were consumed daily in Kano and Jigawa States (Vanguard News, 2017). On 1<sup>st</sup> May, 2018, the Nigerian government announced a ban on the production and import of cough syrup containing codeine after a BBC investigation into its role in an addiction epidemic was aired. The BBC investigation showed the syrup were being sold on the black market to be used by young Nigerians to get high.

**Methodology**

Two hundred and thirty-four codeine syrup users constituted the subjects for this study. Qualitative interview method was used for data collection. Subjects were interviewed using a questionnaire with twenty unique questions. The instrument is valid and

reliable because the subjects were told to be honest while making their comments and the data collected was analyzed using basic statistics and results was expressed as percentages.

**Results and Findings**

Age distribution of the subjects indicated that 36% were 15 years to 24 years old while 55% were between 25 years to 34 years old and 9% were 35 years and above. Gender distribution indicated that, 75% of the subjects were male and 25% were female. Ethnic distribution of the subjects indicated that, 82% were from Sokoto state, 18% were from Abia, Bayelsa, Bauchi, Kebbi, Kogi, Kaduna, Katsina, Kano, Lagos, Niger, Oyo, Osun, Plateau and Zamfara states. Distribution of subjects based on the level of educational attainment of the subjects studied indicated that 18% were either dropout or attained primary school certificate, 41% were either in secondary school or attained senior secondary school certificate 32% were either undergoing ND/NCE programme or graduated as ND/NCE holder and 9% were HND/Degree students during the time of the research or they already graduated as HND/Degree holders.

**Table 1: Distribution of subjects based on when they started taking codeine syrup**

When they started	Frequency	Percentage
2000-2005	55	24
2006-2011	74	31
2012-2017	105	45
Total	234	100

Table 1 show that, 24% of the subjects started taking codeine syrup 12 to 17years ago while 31% of them started 6 to 11 years ago and 45% of the subjects started 0 to 5 years ago.

**Table 2: Distribution of why subjects started taken codeine syrup**

Why subjects started	Frequency	Percentage
Influence of friends	134	24
For pleasure	36	15
As a cough medicine	11	5
Political party rallies	19	8
Frustration/loneliness	34	15
Total	234	100

Table 2 show that, interaction with bad friends and peer pressure as the major factor that influenced subjects to abuse cough syrup, 57% of the subjects reported that their either male or female friend motivate them to start taken codeine syrup while 15% were influenced by the quest for pleasure, 5% started taking codeine syrup as a cough medicine, 8% started abusing cough syrup at either political party rallies or offices and 15% were due to frustration in life or being alone.

**Table 3: Distribution of number of bottles subjects buy and abuse daily**

Number of bottles subjects can buy	Frequency	Percentage
1-3	181	77
4-6	46	20
7-Above	7	3
<b>Total</b>	<b>234</b>	<b>100</b>

Table 3 show that, 77% of the subjects can buy and abuse 1 to 3 bottles of cough syrup daily while 20% of them buy and abuse 4 to 6 bottles daily and 3% can buy and abuse 7 bottles or above daily. The response of subjects on their abuse of cough syrup if the codeine syrup is free and in abundance indicated that 70% of the subjects would have used 1 to 5 bottles daily while 26% would have used 6 to 10 bottles daily and 4% of them can use 11 bottles or above daily.

**Table 4: Distribution of what subjects feel after taken codeine syrup**

What subjects normally feel	Frequency	Percentage
Relax or Happy	230	98
Angry	4	2
<b>Total</b>	<b>234</b>	<b>100</b>

Table 4 show that, 98% of the subjects normally feel happy or relax whenever they take codeine syrup, according to some of the male subjects they feel as they are kings or princes and is hard for them to be unhappy in that moments while to some female subjects, they feel as they are queens and 2% of the subjects normally feel angry which may lead them to fight or commit crime

**Table 5: Distribution of changes on subject's bodies after taking codeine syrup**

Changes on subject's bodies	Frequency	Percentage
Yes	139	59
No	95	41
<b>Total</b>	<b>234</b>	<b>100</b>

Table 5 show that, 59% of the subjects have seen changes on their bodies, according to some of them codeine syrup makes them lazy while some claimed that codeine syrup makes them fresh and bigger, and it also make some slim or eat less but 41% of the subjects do not seen any change on their bodies

**Table 6: Distribution of period subjects prefer to take codeine syrup**

Period subjects prefer to use codeine syrup	Frequency	Percentage
Morning	60	25
Afternoon	0	0
Evening	70	30
Night	72	31
<b>Anytime</b>	<b>234</b>	<b>10</b>

Table 6 show that, 25% of the subjects preferred codeine syrup in the morning hours while 30% preferred it in evening hours and 31% of them preferred codeine syrup in night hours. According to some subjects the weather in these hours is more favorable and cool while 14% of the subjects can drink codeine syrup at any time and none of the subjects preferred it in afternoon hours because the is hot and unfavorable.

**Table 7: Distribution of what subjects prefer to do after taking codeine syrup**

What subjects prefer to do	Frequency	Percentage
Resting	63	27
Smoking	55	23
Drink/Eating	6	3
Watch moving	8	3
Discuss with friend	28	12
Working	21	9
Sleep	44	19
Walking	9	4
Total	234	100

Table 7 show that, 27% of the subjects prefer to rest or sit in a quiet place, 23% of them prefer to smoke cigarette and 3% prefer to drink soft drinks or chewing something or watch television/movies, also 9% prefer to go to their working place to work while 12% prefer to discuss with friends, 19% prefer to sleep or have sexual intercourse with their partner after they have taken codeine syrup and 4% prefer to walk from one place to another.

**Table 8: Distribution of days subjects can take without taking codeine syrup**

Numbers of days subjects can take	Frequency	Percentage
NIL	76	32
1-3	110	47
4-6	12	5
7 and Above	36	16
Total	234	100

Table 8 show that, 32% of the subjects can't go a single day without codeine syrup, 47% of them can take 1 to 3 days without codeine syrup while 5% of the subjects can take 4 to 6 days without taken codeine syrup and 16% can take 7 days or above without codeine syrup

**Table 9: Distribution of were subjects normally get codeine syrup**

Where subjects normally get codeine syrup	Frequency	Percentage
Drugstore	143	61
Pharmacy	28	12
Friend	32	14
Army Barrack	31	13
Total	234	100

Table 9 show that, 61% of the subjects normally get codeine syrup in drugstore, 12% of them at pharmacies while 14% of the subjects get codeine syrup from either their male or female friends and 13% of them get their codeine syrup in the military barrack.

**Table 10: Distribution of response to question on whether subjects can stop abuse of codeine syrup**

<b>Can subjects stop taken codeine syrup</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	153	65
No	81	35
Total	234	100

Table 10 show that, 65% of the subjects are ready to stop taken codeine syrup or they already minimized the intake, according to some of them as far as someone is taking codeine syrup he/she will never save something for his future use and 35% of them are not ready to stop taking it. When subjects were asked if they are in support of stopping the sale of codeine syrup in Sokoto, 55% of the subjects are in support while 45% are not in support because according to some of them without codeine syrup their blood pressure will raise. Again, when asked if they know the side effects of codeine syrup, 58% of the subjects knew the side effects while 42% of them they did not know.

**Table 11: Distribution of advice subjects can give to codeine syrup consumers**

<b>Advise subjects can offer</b>	<b>Frequency</b>	<b>Percentage</b>
To stop intake	143	61
To minimize intake	81	28
To continue intake	25	11
Total	234	100

Table 11 show that, 61% of the subjects advise codeine syrup consumers to stop, according to some of them the consumers can do something better or more reasonable with their time and money, while 28% of them advise the consumers to minimize the intake, according to some of them many consumers find it difficult to stop it at once but they can minimize the intake and 11% of the subjects advise the consumers to continue since it is their choice and also because they use their money to buy it

**Table 12: Distribution of advice subjects can offer to parents of people who consume codeine syrup**

<b>Advise subjects can offer to consumers' parents</b>	<b>Frequency</b>	<b>Percentage</b>
To pray for their children	120	51
Enlighten their children about drug abuse	47	20
Separate their children with bad friends	67	29
Total	234	100

Table 12 show that, 51% of the subject's advice that parents should pray for their children, according to some of them prayer is the only option now, while 20% of them advice parents to teach their children problems of drug abuse and 29% advice parents to prevent their children from interacting with bad friends. Again, when subjects were asked which advice they can offer to government, 61% of the subjects advise government to close all codeine syrup shop or industries if possible and government should arrest all codeine syrup dealers, 14% of them advice government to allow them to enjoy themselves since the law enforcement agents are after buyers not sellers or dealers and 25% advise government to provide jobs for them, according to some of them lack of jobs causes many societal problems.

## Discussion and Conclusion

Finding from this study indicates that 24% of the subjects started taken codeine syrup 12 years to 17 years ago, 31% of them started 6 years to 11 years ago and 45% of the subjects started 0 to 5 years ago. The reason for the wide spread use of codeine syrup is because it is very easy to get in many medicinal stores within Sokoto metropolis.

Our finding indicated that majority of subjects started abusing codeine cough syrup because of influence and interaction with bad friends. A significant number of the subjects (57%) complained that either their male or female friend motivated them to start taken codeine syrup while 15% were influenced by pursuit of pressure, 5% started taken codeine syrup as a cough medicine, 8% started at either political party rallies or offices and 15% were due to frustration in life or being alone. It also revealed that 61% of the subjects normally get codeine syrup in drugstores; 12% of them at pharmacies while 14% of the subjects get codeine syrup from both their male or female friends and 13% of them get codeine syrup in the military barrack. This may be as a result of the presence of numerous medicinal stores in Sokoto metropolis

The study also showed that 65% of the subjects are ready to stop taken codeine syrup or have already minimized the intake. According to some of them as far as someone is taking codeine syrup he/she will never save anything and 35% of them are not ready to stop taken it. When subjects were asked if they were in support of stopping the sale of codeine syrup in Sokoto, 55% of the subjects were in support while 45% are not in support, according to some of them without codeine syrup their blood pressure will raise. Again, when asked if they know the side effects of codeine syrup, 58% of the subjects knew the side effects while 42% of them they did not know. The study showed that, 61% of the subjects advise codeine syrup consumers to stop, according some of them the consumers can do something better or more reasonable with their time and money, while 28% of them advise the consumers to minimize the intake, according to some of them many consumers find it difficult to stop it at once but they can minimize the intake and 11% of the subjects advise the consumers to continue since it is their choice and also because they use their money to buy it.

Our finding showed that, 51% of the subjects advised the parents to pray for their children, according to some of them prayer is the only option now, while 20% of them advised parents to teach their children

problems of drug abuse and 29% advised parents to prevent their children from interaction with bad friends. Again, when subjects were asked which advice they can offer to government, 61% of the subjects advised government to close all codeine syrup industries if possible and government should arrest all codeine syrup dealers, 14% of them advised government to allow them enjoy themselves since the law enforcement agents are after buyers not sellers or dealers and 25% advised government to provide jobs for them, according to some of them lack of jobs causes many societal problems.

In conclusion, it is better to prevent the use, abuse and control of cough syrup containing codeine in Sokoto metropolis than to try to remedy its aftermath. To achieve this, the abuser's stands is the primary and most important way as they have a responsibility to look after themselves, make decision to stay healthy and avoid all forms of drug abuse.

## Recommendation

Based on the finding of this study the following recommendations are given:

1. There is need for government to invest in public enlightenment programme among the youths and adolescent to educate them on the health effect of cough syrup addition. There is also the need to set up adolescent, young adult and adult rehabilitation programs to help people struggling with cough syrup addiction.
2. That parents should monitor the kind of friends their children relate with all the time
3. The parents should engage in constant prayers for their children
4. Law enforcement agents should arrest the dealers and sellers not only the buyers
5. Medicinal industries should change cough syrup into tablets or capsules
6. The state government should give responsible agencies the mandate to monitor the activities of drugstores in the state.

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