

Knowledge and Health Impact of Crystal Meth Consumption among Youth in a Rural Community in Rivers State

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Abstract

This study investigated knowledge and health impact of crystal meth consumption among youth in a rural community, Rivers State. Three objectives were formulated to guide the conduct of the study. The study adopted cross sectional descriptive design involving 100 respondents. Random sampling technique was used for the study. The instrument for data collection was self-structured questionnaire. The demographic characteristics of respondents and the research questions were analyzed using simple frequencies and percentages and chart. Results of the study revealed that 68.2% of the respondents agreed that youth have knowledge about crystal meth, 65.5% agreed that there are factors that promote crystal meth consumption among the youth such as unemployment and poverty, abusive parental discipline, friends involvement in drug, availability of drug (crystal meth), boldness and confident and 63.6% agreed that there are health impact of crystal meth consumption among the youths such as a change in brain circuit, increases of heart rate, high blood pressure and stroke, violent behaviour, aggressiveness and psychosis, nosebleeds, sinus problem and damage inside the nose. Based on the findings, recommendations were made that there should be education of family units on the dangers of drug abuse by government, professional bodies, NGOs among others and parents should give their children proper upbringing and build up healthy communication relationship with them to know when they have started indulging in abusing drugs

Keywords: knowledge, health, impact, crystal meth, consumption, youth, rural, community, Rivers State.

Introduction

Among a myriad of public health concerns, harmful substance use has gradually emerged as one of the most tropical issues in global health and significantly contributes to the global disease burden and mortality rate (Kristjansson et al., 2020). One of such substance is crystal meth. Crystal meth also known as Methamphetamine (MA) is a synthetic stimulant that affects the brain and central nervous system and smoking is the most common route of administration for it (Klasser & Epstein, 2015). When smoked or injected, it produces an initial rush that lasts only a couple of minutes but is intensely pleasurable. This is followed by prolonged high results in an extended period of euphoria (Saw et al., 2015). The half-life of crystal meth (Methamphetamine) ranges from 10–30 hours depending on the purity of the drug, urine pH, and the amount consumed and like other psychoactive drugs of abuse, Chronic crystal meth use can result in tolerance, where increased amounts of crystal meth (MA) are required to produce the same high (Lake & Quirk, 2014).

Crystal meth (Methamphetamine) as a stimulant produces physiological and psychological effects similar to those elicited by cocaine and stimulates the release of dopamine, norepinephrine, and serotonin, and blocks their reuptake (Sulzer et al, 2015). This excess amount of neurotransmitters in the synapses produces sensations of euphoria, lowered inhibitions, feelings of invincibility, increased wakefulness, heightened sexual experiences, and hyperactivity resulting from increased energy for extended periods of time (Marcelle et al., 2016). Deleterious short-term effects include

increased heart and respiration rates, hyperthermia, chest pain, hypertension, increased respiration, decreased appetite, anorexia, irritability, confusion, tremors, convulsions, anxiety, aggressiveness, and symptoms of psychosis such as hallucinations and paranoia (Slavin, 2014). This is followed by mental and physical exhaustion, headaches, reduced concentration, hunger, decreased energy, anhedonia, and a craving for more crystal meth. Cognitive impairments and changes in the brain that result in symptoms similar to those of Parkinson's disease can occur. Long-term use of crystal meth is associated with neurotoxicity, neurodegeneration, and clinical depression that may lead to homicidal and suicidal ideation and action (Klasser & Epstein, 2015).

Crystal methamphetamine use among youth, mirroring a global trend that puts amphetamine-type stimulants as the second most widely used illicit drug in the world, following cannabis and is manufactured from common, easily obtainable precursor chemicals and is synthesized in small-scale, local “meth labs”, as such, it widely available and easily to obtain on the street level (Slavin, 2014). Crystal methamphetamine is a highly potent form of methamphetamine and is more commonly injected than other forms of methamphetamine, resulting in higher addiction potential and blood borne disease transmission (Klasser & Epstein, 2015). In terms of high-risk drug activities, crystal methamphetamine use has been associated with injection drug use, and syringe borrowing and lending to transmission of infection from one person to another. Use of methamphetamine and amphetamine has increased rapidly throughout the world, with more than 34 million users worldwide.

The prevalence of crystal meth drug use in the South East is about 13.8 per cent, based on a United Nations Office on Drugs and Crime (UNODC) estimate (UNODC, 2015). It is the third highest in the country (Nigeria), following South South and South West with 22 per cent and 16.6 per cent, respectively. This figure simply means that one out of every seven persons in the South East between 15 to 64 years of age has used an illicit drug (crystal meth). A video clip of youths in villages and communities of the South East flogging persons said to be involved in the sale and consumption of (crystal meth) went viral in the social media. Many of them had their hands and legs fastened with strings while the beating went on; there were cases where the persons concerned died in the process. In fact, in one of the videos, a young man alleged to have killed his mother and only sister after taking (crystal meth) known in the village parlance as “mkpuru mmiri” was allegedly stoned to death by villagers.

Most youth consume crystal meth without understanding its complications which include mood disorders, psychotic symptoms and schizophrenia, depression, suicide, anxiety, paranoia, hallucination, violent behavior, cardiovascular and cardiomyopathy problems, teeth damage, and infectious disease risk (Yeo et al., 2017). Methamphetamine use among the youths also increases the risk of Parkinson's disease (PD), using this substance increases the risk of high-risk sexual behaviors and, consequently, the risk of acquired immune deficiency syndrome (AIDS) and violent behaviors (Vearrier et al., 2013). In 2013, methamphetamine was mostly-used illegal narcotic substance after opium in Iran and the prevalence of methamphetamine among Iranian youths aged 19-29 years was reported to be 7.1% (Bagheri et al, 2017). In the similar vein a study conducted in Myanmar indicated that 73.0% of men and 60.5% of women started taking methamphetamine before age 18 (Saw et al. 2017).

Statement of the Problem

Crystal meth (Methamphetamine) is one of substances regularly abused by youths. It has been observed that crystal meth, glass or ice have proven to be the most commonly used hard drugs among the youths today, just as is now very rampant in communities in Rivers State. Investigation has shown that most of youths claimed to use crystal meth as pills for cold remedies and as basis for its production. Some of the people in the community claimed to have friends that indulge in abusing the substance, and from their statement the drug have the same level of addiction like cocaine and highly affordable for just N500. According to them, the meth “cook” extracts ingredients from those pills increase its strength when combine the substance with chemicals such as battery acid, drain cleaner, lantern fuel and antifreeze to manufacture it. It was also discovered that users smoke crystal meth with a small glass pipe and may also swallow, snort or inject it into their vein. Crystal meth is commonly manufactured in illegal hidden laboratories, mixing various forms of amphetamine (another stimulant drug) or derivatives with other chemicals to boost its potency. The health impact of crystal meth

among the youths include increased heart and respiration rates, hyperthermia, chest pain, hypertension, increased respiration, decreased appetite, anorexia, irritability, confusion, tremors, convulsions, anxiety, aggressiveness, and symptoms of psychosis such as hallucinations and paranoia, mental and physical exhaustion, headaches, reduced concentration, hunger, decreased energy, anhedonia, addiction neurotoxicity, neurodegeneration, and clinical depression that may lead to homicidal and suicidal ideation and action. Though the users have a quick rush of euphoria shortly after taking drug, but its effect is dangerous and can be damaging to one's body with psychological problems. It is imperative that urgent attention need to be taken to reduce its impact on the health of the youths. Based on this premises the research carry out this research to ascertain the knowledge and health impact of crystal meth consumption among youth of Obeama Community, Oyigbo Local Government Area of Rivers State.

Research Questions

1. What is the knowledge on health impact of crystal meth consumption among youth of Obeama Community, Oyigbo Local Government Area Rivers State?
2. What are the factors responsible for crystal meth consumption among youth in Obeama Community, Oyigbo Local Government Area Rivers State?
3. What is the health impact of crystal meth consumption among youth in Obeama Community, Oyigbo Local Government Area Rivers State?

Methodology

This study adopted a cross sectional descriptive study design. According to Nkwankwo (2016) descriptive study design is a non-experimental research carried out to analyze and explain events or behaviour as they occur in their natural phenomenon without influencing them in any way. This research design was suitable for the study because it is flexible for collecting various types of data posed on the opinion of the respondent without manipulation.

Obeama Community is in Oyigbo Local Government Area, Rivers State, 30 kilometers from the city of Port Harcourt and a local government area of Rivers State, Nigeria. It has an area of 126 km² and a population of 228,828 at the 2006 census. Geographically, coordinates latitude 4° 40' 5" N and 4° 43' 19.5" N and longitude 7° 22' 53.7" E and 7° 27' 9.8" E. Obeama is mostly an agrarian society. A mixture of both cash and food crops is cultivated by the people these including, yam, cassava, plantain, banana, cocoa, cocoyam, oil palm etc. Livestock rearing is carried out mostly in a non-commercial manner and is limited native goat and chickens. Other traditional crafts that the people engage in include palm wine tapping, hunting, fishing, canoe building and weaving. Modern occupations such as barbing, hairdressing, tailoring, masonry, carpentry and bicycle repairs are also engaged in by a significant part of the population. Weaving in the community which is mostly carried out by the female population deserve special mention as the famous 'Akuruaku' material is a product of the ingenuity of these women. These craft has evolved from the use of raffia yarn to dyed cotton and silk for producing traditional wrappers, dresses, suits, shirts, chieftaincy regalia and household furnishing. There are schools in the community such as primary and secondary schools. Most of the people in the community are Christians, few are Muslims and traditionalists. The population of this study consisted of one hundred (100) youths residing in Obeama Community, Oyigbo Local Government Area of Rivers State (Obeama Youth Register, 2022). The sample size for this study consisted of one hundred (100) youths.

Random sampling technique was used because every member of the population was studied. A structured questionnaire was used to generate a quantitative data from the respondents. Data collection was done through the use of questionnaire. The questionnaire distributed to respondents by the researcher was retrieved immediately on the spot after filling. The retrieved copies of the questionnaire were subjected to descriptive statistical analysis using the statistical package of social science (SPSS 20.0 version 2010). The results of this study were presented in percentages, tables, and chart.

Results

Research Question 1: What is Knowledge of Youth on Crystal Meth Consumption?

Table 1: Knowledge of Youth on Crystal Meth Consumption

| S/N | Items | Yes | % | No | % | Total |
|---------------------------|--|-----|------|----|------|----------|
| 1. | Have you heard about crystal meth before? | 73 | 73 | 27 | 27 | 100(100) |
| 2. | Have you consumed crystal meth before? | 69 | 69 | 31 | 31 | 100(100) |
| 3. | Do you get it from your community? | 68 | 68 | 32 | 32 | 100(100) |
| 4. | Was it sold at a cheap price? | 68 | 68 | 32 | 32 | 100(100) |
| 5. | Is crystal meth sold in an undisclosed location? | 63 | 63 | 37 | 37 | 100(100) |
| Overall Percentage | | | 68.2 | | 31.8 | |

Source: Researcher Survey, 2023

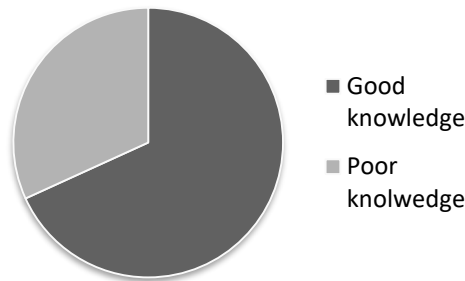


Fig. 1: Level of Knowledge of Youth on Crystal Meth Consumption

Table 1 and Fig 1 show knowledge of youth on crystal meth consumption. 73 respondents representing 73% agreed that they have heard about crystal meth before while 27(27%) said they have not heard about it. 69(69%) accepted that they have consumed crystal meth before and 31(31%) disagreed. 68(68%) indicated that they get crystal meth from their community and 32(32%) said they don't know. 68(68%) agreed that crystal meth is sold at a cheaper price while 32(32%) said no. 63(63) affirmed that crystal meth is sold in a disclosed location and 37(37%) disagreed. The overall percentage is 68.2% which means that youth have knowledge about crystal meth consumption.

Research question 2: What are the factors that promote crystal meth consumption among youth?

Table 4.2 Factors that Promote Crystal Meth Consumption among the Youth

| S/N | Items | Yes | % | Yes | % | Total |
|---------------------------|--|-----|------|-----|------|----------|
| 6. | I consume crystal meth due to unemployment and poverty | 68 | 68 | 32 | 32 | 100(100) |
| 7. | Abusive parental discipline drives me into consuming crystal meth? | 65 | 65 | 35 | 35 | 100(100) |
| 8. | I abuse drugs because my friends are involved | 58 | 58 | 42 | 42 | 100(100) |
| 9. | Availability of the drug (crystal meth) makes me to consume it. | 64 | 64 | 36 | 36 | 100(100) |
| 10. | Consuming drug make me to be bold and confident | 73 | 73 | 27 | 27 | 100(100) |
| Overall Percentage | | | 65.6 | | 34.4 | |

Source: Researcher Survey, 2023

Table 2 shows factors that promote crystal meth consumption among the youth. 68 respondents representing 68% agreed that they consumed crystal meth due to unemployment and poverty and 32(32%) said no. 65(65%) accepted abusive parental discipline drives them into consuming crystal meth and 35(35%) disagreed. 58(58%) affirmed that they abuse drug because their friends are involved while 42(42%) disagreed. 64(64%) indicated that the availability of drug (crystal meth) make them to consume it and 36(36%) said no. 73(73%) agreed that consuming drug make them to be bold and confident and 27(27%) disagreed. The overall percentage is 65.6% which means that there are factors that promote crystal meth consumption among the youths.

Research Question 3: What is the health impact of crystal meth consumption among youths?

Table 4.3 Health Impact of Crystal Meth Consumption among Youths

| <u>S/N</u> | <u>Items</u> | <u>Yes</u> | <u>%</u> | <u>Yes</u> | <u>%</u> | <u>Total</u> |
|---------------------------|--|-------------|----------|-------------|----------|--------------|
| 11. | Consuming crystal meth causes change in brain circuit that makes it difficult to stop even with negative effect. | 72 | 72 | 28 | 28 | 100(100) |
| 12. | My heart rate increase, blood pressure rises and being at risk of stroke after taking crystal meth. | 68 | 68 | 32 | 32 | 100(100) |
| 13. | I exhibit violent behaviour, aggressiveness and become psychosis after consuming crystal meth. | 61 | 61 | 39 | 39 | 100(100) |
| 14. | Crystal meth causes nosebleeds, sinus problem and damage inside the nose. | 54 | 54 | 46 | 46 | 100(100) |
| 15. | I share unsterile equipment without knowing its increasing risk of contacting blood borne virus. | 63 | 63 | 37 | 37 | 100(100) |
| Overall Percentage | | 63.6 | | 36.4 | | |

Source: Researcher Survey, 2023

Table 3 shows health impact of crystal meth consumption among the youths. 72 respondents representing 72% agreed that taking crystal meth causes change in their brain circuits that makes it difficult to stop smoking it even with its negative effect and 28(28%) disagreed. 68(68%) accepted that their heart rate increases, blood pressure rises and being at risk of stroke after consuming crystal meth and 32(32%) said no. 61(61%) indicated that they exhibit violent behaviour, aggressiveness and become psychosis after consuming crystal meth and 39(39%) disagreed. 54(54%) agreed that crystal meth causes nosebleeds, sinus problem and damage inside the nose while 46(46%) said no. 63(63%) affirmed that they shared unsterile equipment without knowing its increasing risk of contracting blood borne virus and 37(37%) disagreed. The overall percentage is 63.6 which means that there is health impact of crystal meth consumption among the youths.

Discussion

Knowledge of Youth on Crystal Meth Consumption

The finding of this study is in Table 4.1. The result of the study showed that majority of the respondents (68.2%) agreed that youth have knowledge about crystal meth. The study revealed that the youth have heard about crystal meth before, consumed crystal meth before, got crystal meth from their community at a cheaper price and in an undisclosed location. The finding of this study is in line with the work of Radfar & Rawson, (2014) that more than 52 million people aged 15-64 years have at least once used amphetamine stimulant. Among the amphetamine stimulants, methamphetamine is the most widely-used illegal stimulant such as cries, meth, speed, ice, crystal, and crank are the common names of methamphetamine among the consumers who use it in powder or smoking form. The 2016 Australian National Drug Strategy Household Survey reported that the highest proportion of people using crystal meth (CM) were in the adolescent and young adult age categories (Radfar & Rawson, 2014). Among Australians aged 14–19 years, approximately 0.8% reported using crystal meth in the past 12 months in 2016; this increased to 3.0% for young people aged 20–29 years.

Factors that Promote Crystal Meth Consumption among the Youth

The finding of this study is in Table 4.2. The result revealed that majority of the respondents 65.5% agreed that there are factors that promote crystal meth consumption among the youth. It was revealed that factors such as unemployment and poverty, abusive parental discipline, friends' involvement in drug, availability of drug (crystal meth), boldness and confident push them into consuming crystal meth. This finding is in line with the work of Hides et al. (2015) that it is often a combination of many factors such as mental health issues and socio-economic reasons such as unemployment and poverty, homelessness, sexual assault, other forms of abuse, family dysfunction, or the long-term effects of residential school experience on Indigenous people that drive people into drug.

Health Impact of Crystal Meth Consumption among Youths

The finding of this study is in Table 4.3. The result of the study showed that majority of the respondents (63.6%) agreed that there are health impacts of crystal meth consumption among the youths. It was revealed that change in their brain circuits that makes it difficult to stop smoking it even with its negative effect, heart rate increases, blood pressure rises and a risk of stroke, violent behaviour, aggressiveness and psychosis, nosebleeds, sinus problem and damage inside the nose are health impact of crystal meth consumption among the youths. The study showed that the youth shared unsterile equipment without knowing its increasing risk of contracting blood borne virus. This finding is in line with the work Radfar and Rawson (2014).

Conclusion

This study concluded that youth have knowledge about crystal meth. There are factors that promote crystal meth consumption among the youth such as unemployment and poverty, abusive parental discipline, friends' involvement in drug, availability of drug (crystal meth), boldness and confidence. The health impact of crystal meth consumption among the youths include change in brain circuit, increases heart rate, high blood pressure and stroke, violent behaviour, aggressiveness and psychosis, nosebleeds, sinus problem and damage inside the nose.

Recommendations

Based on the findings of this study, the following are therefore recommended:

1. There should be education of family units on the dangers of drug abuse and by government professional bodies, NGOs among others.
2. Parents should give their children proper upbringing and build up healthy communication relationship with them to know when they have started indulging in abusing drugs and crime.
3. Illegal sales of drug should be banned and their selling points close down.
4. Counseling centers should be established so that adolescents can be counseled on dangers of drug abuse and crime.
5. There should be introduction of drug abuse and crime as a subject into the school curriculum.
6. Government, NGOs, schools and religious bodies should carry out awareness campaign against drug abuse and crime.
7. There should be recreation of rehabilitation centers for the treatment of drug abused individuals.

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