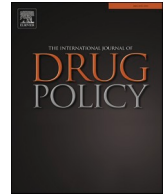




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Research Paper

The social-structural contexts of cannabis consumption and harm reduction among young Nigerian women

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ABSTRACT

Background: Young women remain under-represented in the research literature on young people's cannabis use. This study explored cannabis use and harm reduction practices of young Nigerian women.

Methods: The study draws on 19 in-depth interviews conducted with young women aged 21–35 years who were recruited through time-location sampling in Uyo, Nigeria. Interview transcripts were subjected to thematic coding and analysis.

Results: Accounts highlighted a rapid progression from occasional consumption during hang-outs to regular and heavy consumption for most participants. Frequent and heavy cannabis use, shaped by trauma, stress and mental health problems linked to participants' marginal social locations, established a context of risk for health harms. The participants sought to reduce harms by attempting to reduce frequency and quantity of cannabis consumed, often with limited success. They also micro-dosed to monitor drug effects, avoided mixing cannabis with more potent drugs, sought out cannabis strains with lower THC as well as consuming privately to reduce social harms such as violence and police arrest associated with using in street milieus. On the other hand, cannabis consumption was seen as helping to reduce harms by providing a relatively safer and less addictive alternative to drugs such as heroin and pharmaceutical opioids, preventing high-risk sexual exchanges often associated with opioid withdrawal among women, and relieving pain.

Conclusions: Cannabis was consumed recreationally at first, and harmful consumption patterns developed from using cannabis to treat the psychological symptoms of structural inequalities. The analysis supports the social-structural production of drug-related harms, foregrounding the importance of structural-level interventions for creating an enabling environment for safer consumption.

Introduction

Cannabis is arguably the drug of choice for young people who consume drugs across the world. An estimated 219 million people used cannabis in 2021, the majority being young people (United Nations Office on Drugs and Crime [UNODC], 2023). The UNDOC further reported a narrowing of the gender divide in some sub-regions such as North America, where women accounted for 42 % of cannabis users. In Africa, a systematic review found a 5.2 % past year cannabis use prevalence among young people aged 10–17 years (Belete et al., 2023). Other studies, including those that used qualitative methods, corroborate the general impression of an increase in cannabis use among youth and young adults across the continent (Kalula, 2011; Kgatitswe &

Amone-P' Olak, 2017; Manu et al., 2021; Nelson, 2021a; Opong Asante, 2019). Its use among young women has also been documented, including patterns of use (e.g., heavy and regular use) that potentiates harms (Dumbili, 2020; Nelson, 2021b; Ugwu, 2023).

Cannabis use is a complicated issue. On one hand, pleasure derived from intoxication, social experiences such as relaxation with friends, coping with the troubles of everyday life, and treatment for physical and mental health problems are among the benefits that young people attribute to its use (Amos et al., 2004; Bell et al., 1998; Hammersley & Leon, 2006; Holm et al., 2014; Paul et al., 2020). Cannabis is consumed by both men and women (Dahl & Sandberg, 2015). Among young women, cannabis has been used to meet complex needs including to improve mood or cope with emotional distress (Patrick et al., 2018;

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Walukevich-Dienst et al., 2019). Moreover, cannabis is the least toxic illicit drug used recreationally, with a negligible risk of overdose (Gable, 2004). It has been used as a safer alternative to other drugs such as alcohol and prescription opioids (Lucas et al., 2013; Paul et al., 2020). On the other hand, scientific evidence indicates an association between cannabis use and a variety of potential harms, including mental health disorders (Blanco et al., 2016; Lowe et al., 2019). Regular use over a period of years increases users' risk of experiencing adverse physical and mental health effects (Hall, 2015).

Concerns about the adverse effects of cannabis use among young people, often driven by media and popular discourses that emphasize potential harms (Boeri et al., 2021; Heidt & Wheeldon, 2021), have contributed to strengthening public support for criminalization of personal consumption in many parts of the world, including Africa. However, studies have shown that criminal penalties have limited effect on cannabis use prevalence (for a recent comparative analysis of countries with different cannabis policies see Kotlaja & Carson, 2019). Instead, criminal penalties, including arrest and incarceration, potentiate more social harms to young people who use cannabis, especially those from poorer socioeconomic and minority ethnic backgrounds, than the drug itself (Grace et al., 2022; Nelson, 2021a). The disproportionality of these policy-related harms relative to those stemming from use of the drug underline the growing support for alternative approaches.

Further, cannabis use among young people has become normalized in many western societies, with many studies reporting trends such as high availability and accessibility of cannabis, increased rates of trying cannabis, and cultural accommodation of recreational cannabis use (Hathaway et al., 2018; Liebrechts et al., 2015; Parker et al., 2002). These trends have been paralleled by the emergence of legal markets for medicinal and recreational cannabis in an increasing number of countries across the world. The gradual unravelling of cannabis prohibition, further propelled by its recent re-classification under an international listing that recognizes its medicinal value, has encouraged more governments to re-think their policies on cannabis, resulting in adoption of various forms of government regulation of cannabis markets (Nelson, 2021c).

In Africa, while a number of countries (e.g., Lesotho, Zimbabwe, South Africa, Ghana) have established legal markets for medicinal cannabis (Eligh, 2019), recreational consumption is still heavily criminalized in many countries, with the exception of South Africa where a bill to legalize recreational cannabis use by adults has recently been approved. Across the continent, cannabis criminalization is reinforced by sensational media reports and popular discourses about addiction, criminality and anti-social behaviour linked to its use by young people (Kitchen et al., 2022; Nelson, 2021a). This has hindered recognition of how cannabis use is becoming a common practice among youth populations, including women. It has also resulted in a missed opportunity for interventions to reduce harms, seen as a sensible response to young people's recreational drug use. While there is a growing literature on young people's cannabis use in Africa (Akanle et al., 2015; Dumbili, 2020; Kalula, 2011; Manu et al., 2021; Nelson, 2021a), less is known about young women's cannabis use, particularly the factors that shape consumption patterns and experiences of harms.

Focusing on Nigeria, this study explores cannabis use and harm reduction practices of young women from poor socioeconomic backgrounds. Theoretically, we understand drug harms to be dependent on social context, involving interactions between individuals and contextual factors. We draw on the 'risk environment' approach (Rhodes, 2009), which emphasize how social, economic, policy and physical environments interact at different levels to shape behaviours in ways that contribute to harms. From this standpoint, drug-related harms are highly contextualized phenomena that reflects the impacts of structural factors on lived experiences. Further, the approach recognizes the role of individual agency and emphasize reciprocal and adaptive interactions between individuals and environments. We explore the benefits that shape initiation and continuing use of cannabis, and the risk

environments (social and structural factors) that influence harmful consumption patterns. Further, we highlight individual harm reduction practices and how their efficacy is constrained by the wider social and structural factors that shape cannabis use patterns. The findings challenge policy-related discourses that emphasize pharmacological determination of cannabis harms, highlighting the importance of interventions that address the social and structural drivers of harms.

Cannabis: social and legal environments in Nigeria

Cannabis is the most commonly used drug considered illegal by the state in Nigeria. An estimated 10.8 % of the population aged 15 to 64 years or 10.6 million people reported past year cannabis use in 2018 (UNODC, 2018). The average age of initiation of cannabis use was 19 years (UNODC, 2018). The introduction of cannabis into Nigeria has been credited to ex-servicemen returning from Asia and North Africa after the second world war (Boroffka, 1966). Initially consumed by urban labourers, ex-soldiers and seamen in the 1950s (Klantschnig, 2014), cannabis has entered the cultural mainstream. Among young people, considered the major users, cannabis is consumed for different reasons, including relaxation and socialization, to function daily, improve energy to perform work and for pain relief (Dirisu et al., 2019; Dumbili, 2020; Nelson, 2021a; Nelson & Kitchen, 2023). Studies have reported cannabis use by young women contrary to normative expectations regarding women's roles (Nelson, 2021b). Despite increased consumption, and differentiated normalization in some populations (Dumbili, 2020), cannabis use is highly stigmatized and consumers experience discrimination (Dirisu et al., 2019; Nelson, 2021a).

Cannabis has very negative connotations among ordinary Nigerians, as seen in some of its local names. For example, it is referred to as *Ikon Ekpo* ('Ghost Herb') among the Ibibio of South-South Nigeria (the ethnolinguistic setting of the present study). Its use is widely linked to mental health problems in the popular imagination, often with little consideration of the factors that shape cannabis-related harms. Klantschnig (2021) has traced negative social and moral perceptions of cannabis among Nigerians to how its cultivation and use were framed in police and media reports, particularly reports of a 'hemp boom' in Lagos, in the first half of the 1960s. Media reports during this period reflected emerging perceptions that linked cannabis smoking, which was spreading across the country, to urban deviance, exemplified by political violence in the western region in the 1960s. These reports portrayed cannabis as a social and moral danger to Nigerian youth, emphasizing the threat of radicalizing young people and fuelling political thuggery, gang violence and other criminal activities. Cannabis use was also portrayed as a threat to mental health, with some reports describing smokers who behaved irrationally and violently due to their consumption habits (Klantschnig, 2021). Such negative perceptions of cannabis have continued up to the present (Nelson, 2021a).

Although perceptions became more diverse as cannabis use spread across Nigerian urban centres in the 1980s, its representation as a symbol of urban deviance and criminal violence also became entrenched (Klein, 1999). Medical research on cannabis use back in the 1960s had sought to shape a more nuanced understanding of cannabis use disorders contrary to media and popular discourses, but as Klantschnig (2021) has aptly argued, the findings were often misrepresented and used selectively to strengthen public perception of an association between cannabis and mental health problems. Popular perceptions that associate cannabis consumption with deviance, mental illness and poor academic performance became part of a political discourse that influenced drug policy beginning from the Indian Hemp Decree of 1966, the first post-independence Nigerian drug legislation (Klantschnig, 2014; Obot, 1992).

Contemporary research has highlighted the persistence of negative perceptions of cannabis among Nigerians, and how these fuel stigma and marginalization of cannabis users. Dirisu et al. (2019) have shown how negative societal perceptions of cannabis, including the association of

cannabis use with criminal and anti-social activities, serves as an informal mechanism of social control that forces users to conceal their consumption to avoid stigma. Ugwu and Dumbili (2021) have similarly shown how stigma contributes to the persistence of cannabis sub-cultures, in contrast to normalization of its consumption in western countries. Nelson (2021b) has shown that women who smoke cannabis experience double jeopardy for engaging in a stigmatized activity and violating normative expectations governing women's behaviour. He further showed how young women smoke cannabis to relax and have fun, as well as construct gender identity in ways that both reinforce and subvert traditional norms. Nelson (2021a) has also described how socially marginalized young men who earn a living from informal economic activities consume cannabis to enable day-to-day functioning and to boost stamina for work performance. He also showed how repressive drug policies, that do not recognize the situated benefits of cannabis consumption for these populations, do more harm than the drug itself.

Nigeria has played a prominent role in the production and trafficking of cannabis (Klantschnig, 2014). A 'youth bulge', where over 70 % of the population is below age 24, makes the country potentially a large consumer market. Driven by sensational media reports and moral panic over cannabis harms, the Nigerian state relies heavily on criminal sanctions to control cannabis supply and consumption. The highpoint of cannabis criminalization was enactment of the death penalty for cultivation and trafficking between 1966 and 1975 (Obot, 2004). Cannabis is categorized as a dangerous drug along with cocaine and heroin in domestic law, even though it has recently been removed from a similar category in the 1961 UN Convention on Narcotic Drugs, where it was listed alongside substances regarded as having little to no therapeutic uses (such as heroin). Nigerian drug laws have been described as a military-style policy of social reform focused on elimination of drug supply and use (mainly cannabis). The current legislation (the National Drug Law Enforcement Agency Act of 1989/2004) stipulates 10 years sentence for simple possession of cannabis, and life imprisonment for cultivation and trafficking. Although they are often not fully enforced, these sentences have been described as highly disproportionate and as encouraging a futile pursuit of a 'drug-free society', thus precluding more effective alternatives such as harm reduction and health and social care (Nelson, 2021a).

Drug laws support punitive enforcement measures, including raids on street markets, which in some places have forced cannabis users and dealers underground and reinforced stigma and marginalization (Nelson, 2018; Ugwu & Dumbili, 2021). Most arrests are on charges of petty cannabis trade and use, resulting in many 'casualties, including hundreds of people convicted on several years' sentences for smoking cannabis inside a joint' (Klein, 1999, p. 68). The prospects of adopting policies that are grounded in public health are limited within the current political climate. Instead of reforming existing policies, there has recently been an intensification of enforcement-based responses to drug use, driven by concerns about crime and insecurity (Sahara Reporters, 2022). Drawing on the long-standing rhetoric of war in relation to drugs, government statements have consistently blamed crime and insecurity in Nigeria on cannabis use, while denouncing calls for legal regulation on the presumption that it will lead to increase in use and related harms (Folarin, 2021). It is in this context that we explore cannabis consumption and harm reduction practices among young women, aiming to show how their knowledge and practices foreground policy approaches that are centered around safer consumption and harm reduction.

Methods and materials

The study was conducted in Uyo, Akwa Ibom State in Nigeria. The city has an estimated population of 1143,689 people (World Bank, 2020). Poverty level is high, with about half of the population (51 %) living in absolute poverty (National Bureau of Statistics, 2010). Past year prevalence of drug use among the population (15–64 years) was estimated at 12.5 % in 2018, and cannabis was the most commonly used

drug (UNODC, 2018). Following enumeration of all cannabis hot-points ($n = 30$) in the city (these are locations where cannabis is sold and consumed) (see Ratcliffe, 2007), 11 hot-points were purposively selected based on availability of contacts or relationship with the gatekeepers (e.g., drug dealers). Enumeration of hot-points was undertaken by peer outreach workers, and involved mapping, assigning unique identifiers, and compiling a list of all hot-points. A non-probability, time-location sampling technique (see Semaan, 2010) was used to recruit women who use cannabis present at each hot-point at a "hot-time" (Ratcliffe, 2007), which spanned 4pm to 6pm. Sample recruitment was undertaken by peer outreach workers from a local NGO that provides services for PWUD (the first author is an associate of this NGO).

Eligibility criteria included being a cannabis consumer between the age of 21 and 35 years (based on the chronological definition of youth in the African Youth Charter). A total of 19 women who use cannabis were interviewed across the 11 selected hot-points over a period of six months (March to August 2017). They were between the ages of 21 and 34 years, with a mean age of 27. They were all from poor socio-economic backgrounds, earning a living from different economic activities including hair-weaving, food vending and street sex work. The majority were from the indigenous Ibibio ethnic group ($n = 16$). A few Igbo ethnic migrants ($n = 3$) were also included in the sample. Most ($n = 11$) had regular heterosexual partners. The highest level of schooling completed by any participant was primary education. They lived with parents ($n = 5$), friends ($n = 3$), and sexual partners ($n = 5$), while some were homeless ($n = 6$).

Data were generated through in-depth interviews using an open-ended question guide, which was revised in the course of the interviews. Interviews, which lasted between 45 and 60 min, were conducted in English language by trained peer outreach workers at the drop-in centre for PWUD operated by the local NGO referred to earlier. The reason for using the outreach workers and the drop-in centre was to leverage the trust participants had in the workers and their familiarity with the centre to make them feel safe and comfortable during interviews as well as improve data quality. Some of the questions in the guide were: "Could you describe how you started using cannabis?"; "Could you tell me the reason you use cannabis?"; "What are some of the negative effects that cannabis has had on you?"; "Could you describe how you have managed these effects?". All participants were given adequate information about the research and were assured of anonymity and confidentiality of their responses. They all provided verbal consent before interviews were conducted, including for the recording of their responses with a digital device.

Interviews were transcribed verbatim and cross-checked with the audio recordings to ensure accuracy. This process enabled greater familiarity with the data. Thematic coding and analysis were undertaken following the procedures outlined by Braun and Clarke (2006). We read the transcripts repeatedly to identify patterns of meaning in the data. This process facilitated identification of initial codes at the semantic level across the entire data set. We then initiated a manual inductive coding, which involved developing codes directly from the data (Linneberg & Korsgaard, 2019). This approach helped to improve analytic rigour and transparency (Gioia et al., 2013). Coding was completed by grouping coded data to enable the search for and identification of themes. We reviewed the identified themes, moving data to more suitable codes and creating new codes where necessary. Thereafter, we refined and named the themes and sub-themes and recorded the patterns of meanings in them. We drew on the risk environment to identify the factors that shaped consumption patterns and to conceptualize the levels at which they operated to produce harms (e.g., heavy use influenced by trauma and stress, which were in turn linked to macro-structural factors such as gender, social inequality and housing instability). Based on availability, we met with some of the participants to check if the analysis matched their experiences, and received a positive response from all of them. We used pseudonyms throughout the article to protect participants identity. The study was approved by the ethics review committee

of the University of Uyo, Akwa Ibom State, Nigeria.

Results

Cannabis use and related harms

For many study participants, cannabis use was an occasional activity at the beginning of their consumption experience, and was often motivated by a need to relax and to socialize with friends. Indeed, most participants started consuming cannabis because the drug was promoted to them by friends and/or sexual partners as a means of relaxation and fun.

The first time I used weed was because my boy friend told me that it is very good for relaxing and having a good vibe. That was what he said about weed. So, I needed that. I needed something to help me relax and have some fun (Eunice, aged 32).

This recreational and social consumption of cannabis partly explained its use occasionally at this stage. Occasional consumption was also due to the fact that participants mostly used the drug when offered it by friends while hanging out together. At this stage, cannabis consumption was seen by most participants as an occasional indulgence, not a regular activity and much less a major part of their daily lives.

When I started taking weed, I used to take it like once in a while. It was not like all the time. Maybe we are hanging out with friends and they are smoking. If they offer it to you, you will not be able to turn it down. So, like that you will be smoking. Like once in a while (Emem, aged 24).

This pattern of consumption soon changed for many participants, with most reporting swift progression to regular and, in some cases, heavy consumption. In most cases, this transition occurred within 6 months of initiating cannabis use such that participants expressed surprise at the rapid escalation of their cannabis use. For example, Esther (aged 27) told us:

Like I still feel surprised at how I am taking it now like a real addict because I have only been using for less than a year. I keep asking myself how I allowed this thing to get out of hand. Like, how did I get to be smoking weed several times in a day? That is addiction, right?

Accounts emphasized that transitions to regular and heavy cannabis consumption were situated within lived experiences of trauma, emotional distress and mental health problems. These experiences and their characteristic effects shaped elevated patterns of consumption by furnishing additional (therapeutic) motivations for consumption. For example, Ama (aged 26), who started using cannabis daily within months of initiating consumption, located this transition within a period in her life when she broke-off with her heterosexual partner and consequently lost accommodation. To cope with the emotional toll of the incidence, she started consuming large quantities of cannabis:

I started smoking like crazy when I broke-up with my boyfriend. That time I was going through a lot. I was feeling really down. Plus, I didn't have where to stay because I had moved out of his place. All these things just made life very difficult for me. When I would smoke, I used to outdo myself because I was now taking it to like forget all the things that I was going through in life. I was smoking all the time to just survive.

The quote makes it evident that Ama used cannabis regularly to help her 'forget' recent experiences of break-up and loss of accommodation. In other words, Ama used cannabis therapeutically to manage the emotional distress of adverse life experiences, and the need to deal with these effects throughout a typical day rationalized frequent use. Similarly, Iqwo (aged 34), a single-mother who worked multiple odd jobs to earn enough income to meet basic needs, explained how her functional use of cannabis to manage stress and improve mood contributed to

heavy use as a way of maximizing these benefits.

This weed used to help me a lot because I am someone who does so many things just to get enough money to take care of myself and my kid. I do different kinds of jobs. Anything you need someone to do, I can do. Weed helps me a lot to be able to do all that work. It helps me to relax when I come back home tired and feeling bad because of all I am going through. I was using it a lot to be able to work and go through all that stress.

In Iqwo's case, as in similar others, transition to problematic consumption patterns were shaped by difficult life experiences and inequities linked to social location. Therapeutic use, involving frequent and heavy consumption, became routinized, in turn creating a context of risk for harms (e.g., cannabis use disorder and mental health problems such as temporary paranoia). Expectedly, a number of participants reported problems related to cannabis consumption, particularly cannabis use disorder, characterized by inability to quit cannabis consumption and continuing use despite experience of health harms. Mkpouto (aged 31) stated:

I have been taking weed so much that now I cannot stop it. It has become a habit, like an addiction. I started to notice that I was losing weight and I was not taking care of myself because I was taking too much weed. I have tried to stop it, but every time I always go back to taking it.

The accounts presented in this section shows that lived experiences of trauma, stress and social marginalization shaped the consumption patterns that generated harms. This suggests that harms were not only due to pharmacology; instead, they had more to do with the social and structural contexts of consumption. In the next section, we describe participants' agency and subjectivity in the ways they managed harms arising from problematic consumption and the social contexts in which consumption took place.

Reducing cannabis harms

Accounts indicated that most participants recognized the negative effects of cannabis, and modified their consumption to reduce these effects. This was an interesting finding from the interviews, suggesting that participants sought to reduce harms instead of quitting cannabis consumption altogether. A common harm reduction strategy was to reduce the quantity of cannabis consumed based on the understanding that heavy consumption potentiates health harms. For most participants, reduction of quantity consumed involved considerable effort and was not always actualized due to physical dependence on cannabis:

On my own, I try to like reduce how much cannabis I take at one time because I am someone who takes a lot of it. I have realized that it is not good for me to be taking too much like that. That is why I am now trying to like reduce it. It is very difficult to take small quantities when you have been taking like jumbo size (i.e., large quantity) because it helps you to go through the day. But I am trying to reduce it (Vicky, aged 29).

Closely related to the above is the practice of reducing harms through micro-dosing, where participants consumed small amounts (e.g., a wrap) of cannabis to assess the effects before deciding whether to take more or not. This strategy allowed them to monitor effects of the drug and to make thoughtful decisions about their consumption. For example, Mabel (aged 29) stated:

What I used to do is to take small quantities like a wrap at one time. Then I will now see how that goes down and how my body is reacting to that. Like I just take it and relax for a while to see how it will be. If I feel like I can take more, I take another wrap. If not, I stop there so that it does not turn to something else.

Others continued to consume large quantities of cannabis per time,

but sought to reduce how often they consumed cannabis in a day. Asked why they took this approach instead of reducing the quantity consumed like others, they explained that consuming large quantities increases the pleasurable effects, enabling them to experience a temporary escape from the difficulties of everyday life. Some observed that they would rather use a large quantity once and derive maximum pleasure than consume small quantities several times a day, which would result in using a much larger quantity overall:

I prefer to take a good size of weed at once and really enjoy the high than to be taking small quantities many times without getting any good feeling from it. It is just like you are wasting the weed. If you want it to last you throughout the day, you need to take enough at once (Maureen, aged 31).

As Maureen further explained, she would rather smoke three wraps at once than a wrap each on five or six different occasions during the day, which would mean consuming more. Accounts highlighted other harm reduction strategies deployed by the participants such as avoiding mixture of cannabis with other, usually more potent, drugs. Cannabis users in the geographical setting of the present study often attempt to increase the potency of cannabis as well as maximize its intoxicating effects by sprinkling street heroin or powder cocaine on cannabis. Most of our participants refrained from this practice, which they saw as increasing the risk of health harms. For example, Emem told us:

One thing I don't do is to lace my weed (i.e., sprinkle other drugs on cannabis). I don't do it because it is bad. It makes the weed so strong that you can even go bunkers (i.e., insane) after smoking just a joint... I smoke only the natural weed. I don't want to have any problem that will land me in psychiatric hospital.

In addition to using pure cannabis herbs, some deliberately seek out strains that are known to possess lower THC levels ('There are some weed that does not have much highness; that is the one most girl who smoke prefer'; Rose, aged 29). Similarly, while most male consumers prefer smoking (see Nelson, 2021a), most participants also consumed cannabis by drinking it as tea or using the herbs to prepare food. Alternating between smoking and other consumption methods was seen as a way to reduce the risks associated with smoking. Mkpouto told us:

I have realized that smoking is not very good because the heat will burn your heart and your internal organs. Even though I smoke, but I don't smoke it all the time. I can smoke it now and next time I drink it as tea or put it into gin and drink it.

Accounts also indicated that harms could also be social in nature, and could arise from the social and physical environments within which cannabis consumption occurs. For example, participants explained that consuming cannabis within 'bunks' (semi-public spaces for the trade and consumption of illicit drugs) was associated with the risk of physical violence by intoxicated male consumers as well as the risk of arrest by law enforcement agents. For example, Vicky stated:

The bunk is not really a good place to stay, even though it can be fun because people hang out together and have fun. If you smoke in a bunk, you are going to have some problems. It is either you will see a fight break out because of people who are high and trying to prove that they are tough. Or else, you will have police raid the bunk and you may be arrested.

Exposure to street-based drug consumption milieus (such as bunks) is associated with the risk of violence (see McNeil et al., 2014). Concerned about the risk of violence, some of the participants expressed a preference for consuming cannabis in private apartments ('I take it at home, not at the bunk and anyhow place like that', Eunice). While consuming cannabis privately helped to reduce the social and legal harms associated with using in semi-public spaces, it nonetheless encouraged patterns of high-risk consumption ('When you use alone, you tend to use too much because you are not sharing'; Okechi, aged 27).

Reducing harms with cannabis

Accounts highlighted an interesting dynamic wherein cannabis consumption was seen as a strategy for reducing other types of harms. For example, a major reason most participants continued to consume cannabis was because they saw it as a safer and less addictive drug compared to others such as opioids and cocaine. In this way, the consumption of cannabis served as a way to prevent potential harms from consuming more potent drugs. Emem (aged 24) explained:

For me, I don't take other things like Thai (street name for heroin) and Tram (Tramadol) because those ones will cause you more problems. I take weed. Weed does not cause you much problems like Thai, especially if you are the kind of person who is careful how you are taking things.

Here, Emem points out that controlled use of cannabis (captured in the phrase 'careful how you are taking things') makes for safer consumption compared to drugs such as heroin. Unlike opioids, cannabis dependence was not associated with withdrawal symptoms, which some participants thought made people consume drugs 'non-stop', expending their meagre income in the process ('Thai will make you sick, and you will be taking it 'non-stop', wasting all your money', Vicky). They explained that desperation due to withdrawal sickness is the reason some women exchange sex for drugs with men. Consumption of cannabis helps to prevent such high-risk behaviours. According to Vicky:

Most girls that I know that take Thai always have the sickness when they have not taken it. They always complain about it. Some of them will do anything to get the stuff. They will even give barons (i.e., drug dealers) sex for it. We who take only weed do not have those kinds of problem.

In the same vein, cannabis was seen as cheaper and easily accessible, compared to street heroin which is often in short supply and unaffordable for most consumers. These market characteristics were seen as helping to reduce the risk of engaging in high-risk behaviours in order to obtain drugs. Asked why those who use only cannabis do not engage in high-risk sexual exchanges, Rose (aged 29) stated:

Weed is very cheap. Like you can buy two wraps for fifty naira in some places because it is everywhere. So, you don't have to do anything risky to be able to get it. Those kind of things (high-risk sexual exchange) are for those drugs that are expensive.

In addition to reducing sexual and drug-related risks, cannabis helped to relieve pain and had low risk of adverse side effects overall. For this reason, participants who had wanted to stop consuming cannabis continued using small quantities to manage pain ('I started using weed again because it helps me with my back pain'; Amaka, aged 29), instead of using large quantities for recreation as they did in the past. Most participants who used cannabis for pain relief did so along with pharmaceutical drugs. However, some relied only on cannabis, describing it as a more effective therapy than pharmaceutical drugs, which they had tried in the past ('I have used chemist drugs before. Weed has helped me better than all those pills', Mkpouto).

Discussion

We have explored the social and structural contexts of cannabis use and harm reduction among marginalized Nigerian young women. We have shown how patterns of high-risk consumption are situated within lived experiences of trauma, distress and mental health problems linked to structural inequalities. We have also highlighted risk awareness among these young women and the efforts they make daily to reduce harms related to cannabis use, while simultaneously seeking to reduce harms from other drugs through their use of cannabis. The findings and analysis we have presented contributes to foregrounding the experiences of young women who consume cannabis through a focus on the

structural and everyday contexts of drug harms, and the complex relationship between benefits and harms in young women's drug consumption practices. They also challenge understandings of drug harms that emphasize pharmacological determinants, highlighting the importance of the risk environment approach in understanding the social-structural production of harms.

Cannabis is consumed for recreational purposes by both men and women. Its effects, described as relaxing and pleasurable, fits well with this image (Dahl & Sandberg, 2015), making it appealing to women as well as men. This study bears out these views. As our data has shown, initiation of cannabis use among these young women was often influenced by expectations of its pleasurable effects including relaxation and fun. It was used at the initial stages on those occasions when the participants were hanging out with friends and sexual partners. This finding also resonates with previous studies which show that positive beliefs about the effects of cannabis consumption influenced the initiation and maintenance of cannabis consumption among young people (Holm et al., 2014). In Nigeria, previous studies have similarly shown the role of pleasure and positive benefits in initiation and continuing use of cannabis among different groups of young people (Dumbili, 2020; Nelson, 2021a).

Our findings contribute to the existing literature on young people's cannabis use through highlighting the social and structural contexts that shapes harmful consumption patterns. The findings captured rapid transition from occasional to regular cannabis use for most of the participants, contextualized within lived experiences of trauma, distress and mental health problems. Studies have reported on the use of cannabis for mood improvement and coping with emotional distress among young women (Patrick et al., 2018; Walukevich-Dienst et al., 2019). Building on these studies, our findings situate harmful cannabis consumption patterns within a shift from recreational to therapeutic uses, involving using cannabis to self-manage the psychological effects of social and structural inequalities. Using cannabis therapeutically, rather than recreationally as was the case at the early stages, routinized heavy and regular consumption that led to cannabis use disorders. The findings highlight a risk environment of cannabis harms, where harmful consumption patterns emerge as products of the impacts of structural forces on participants' lived experiences. This insight shifts attention away from pharmacological determinism, locating harms within the social and structural contexts that shape why and how young women consume cannabis.

Our study highlights the importance of approaches to reducing drug harms that emphasize the social and structural contexts within which drug consumption takes place. It shows that interventions which emphasize the individual-behavioural levels will have mostly moderate effects since drug consumption behaviours are shaped by social and structural contexts that influence how and why drugs are used. The argument for structural-level approaches to reducing harms is borne out by our findings. As shown earlier, our participants recognized the health and social harms associated with their consumption patterns and took steps to minimize these harms. Nevertheless, the approaches they adopted, such as reducing the quantity of cannabis used or how often they used, not mixing cannabis with other drugs and using non-smoking consumption methods, emphasized individual agency and behavioural changes, while leaving the wider social and structural contexts that shape these behaviours unaltered. This partly explains why most of the young women found it difficult to modify their consumption or to reduce harms overall. How does one reduce amount of cannabis used when it is driven by a need to manage trauma and stress on a daily basis? We argue that addressing the social and structural drivers of trauma and stress (e.g., poverty, inter-personal violence, poor access to healthcare) would reduce therapeutic cannabis use and create a context that enables consumption of cannabis in less harmful ways.

Structural contexts that influence harmful consumption patterns could also contribute to practices that produce the very harms they are intended to reduce. A good example is the practice of solitary

consumption of cannabis, motivated by concern about minimizing the risk of being intercepted by law enforcement officers within street drug-use milieus. This is an important finding, especially in view of the fact that in previous studies solitary cannabis consumption is associated with consumption motives (e.g., using to cope with mental health problems) and patterns (regular use) that contribute to health harms (e.g., Creswell et al., 2015; Spinella et al., 2019). In our study, the consumption trajectory of the young women involved transition from recreational consumption in group contexts to therapeutic, and in some cases, solitary consumption. The change in context of use, though helping to minimize a set of harms (e.g., policing), could create (or reproduce) other harms. This further buttress our argument about the futility of attempting to reduce drug harms without considering the wider social and structural contexts that shape those harms. Changing potentially harmful practices such as solitary consumption calls for reforms of laws that criminalize cannabis use, which would encourage consumption in ways and within environments that are safe.

It is important to note that the young women did not intend to stop using cannabis, but only to minimize the harms associated with their consumption patterns. This stands in contrast to the 'drug-free society' mantra of drug control in Nigeria, which is only an ideal since drug consumption, particularly of cannabis, continues unabated across the country. The young women's views support calls to rethink how cannabis is controlled in Nigeria. Importantly, these views endorse contemporary advocacy for a move away from the fruitless pursuit of a 'drug-free society', which has contributed to arrest and detention of many young people for petty drug offences, human rights abuse as well as corruption and abuse of police powers (Nelson, 2018), towards more humane and pragmatic approaches that emphasize harm reduction. These approaches would build on the knowledge and practices of young people who use cannabis, including therapeutic consumption. For example, using cannabis as a safer alternative to opioids is a key harm reduction practice. Cannabis use as a prevention method for high-risk sexual and drug-related behaviours is also significant from a harm reduction perspective, particularly in relation to socially marginalized young women. These examples indicate the harm reducing potentials of cannabis use, which could be enhanced through structural-level interventions that support safer consumption practices.

Limitations

The study has two major limitations. The first is that it is based on qualitative data from a small sample of women, which means that while the findings are valuable and useful, they can only be cautiously applied beyond the study participants and setting. The second is that responses may have been influenced by social desirability concerns, including the need to manage impression given the heightened stigma attached to women's drug use (see Nelson, 2021a). For example, participants may have under-stated their cannabis use or over-stated harm reduction practices. Nevertheless, the use of peer outreach workers for recruitment and interviews created an environment of trust and safety that helped in reducing biases.

Conclusion

In this study, we have explored cannabis consumption and harm reduction practices among young women in a Nigerian city. The findings unsettle key assumptions underlying current approaches to cannabis control in Nigeria, including the view of harms as pharmacologically determined independent of the social context. They show that young women initially used cannabis occasionally for recreational purposes, and that harmful consumption patterns developed from attempts to self-manage the psychological effects of structural inequalities. The findings help to centre the socio-legal contexts of drug use in Nigeria as a key driver of drug harms, foregrounding the importance of structural-level interventions in drug harm reduction. Specifically, this involves, at the

least, removing criminal penalties for possession and use of small quantities of cannabis and improving access to health and social care as an alternative to custodial sentencing. It also involves addressing wider social and structural determinants of mental health for young women, including through job creation, gender-based violence prevention and access to mental health services. Structural interventions offer potential to create an environment that supports safer consumption practices.

Ethics

The study was approved by the ethics review committee of the University of Uyo, Akwa Ibom State, Nigeria.

CRedit authorship contribution statement

Ediomo-Ubong Nelson: Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Conceptualization. **Macpherson Uchenna Nnam:** Writing – review & editing, Formal analysis.

Declaration of competing interest

The authors have no conflict of interest to declare.

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