

Influence of Cannabis Decriminalisation on Consumption Patterns: A Qualitative Case Study in Eastern Cape, South Africa

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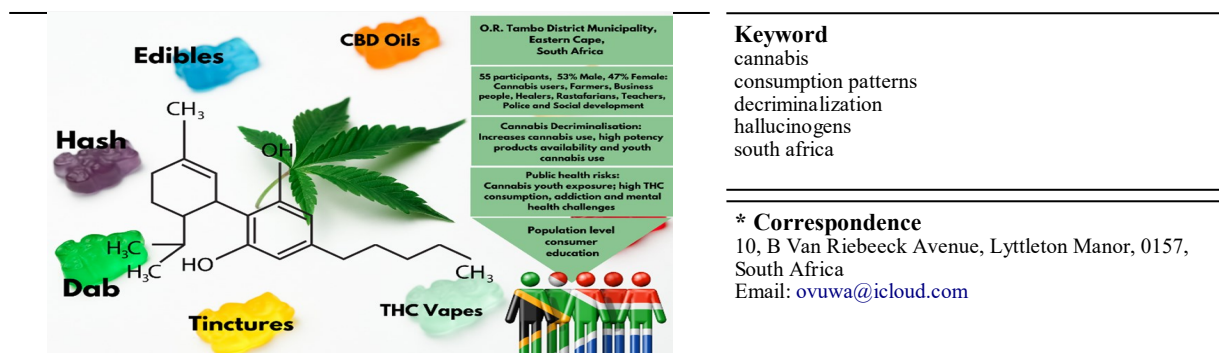
ABSTRACT

Earlier research has frequently neglected regional consumption patterns and socio-cultural dynamics following cannabis policy shifts, particularly in low- and middle-income countries. This study seeks to address this gap by examining cannabis use trends following decriminalisation in South Africa, thereby offering novel insights into community-level behavioural changes. The objective of this study was to investigate changes in cannabis consumption trends in the Eastern Cape province following national decriminalisation. A qualitative case study design, guided by the interpretivist paradigm, was employed to explore contextualised user experiences and perceptions. Data were collected through focus group discussions and in-depth interviews conducted in historically recognised cannabis-growing areas within the OR Tambo District Municipality of the Eastern Cape. A purposive sampling strategy was employed to recruit 55 participants representing various governmental and community stakeholders. The findings suggest that the decriminalisation of cannabis has led to increased production, which in turn has contributed to heightened consumption patterns, particularly among the youth, including minors. Additional concerns have emerged regarding the availability of high-potency cannabis strains and derivative products. As a result, public health education initiatives and regulatory frameworks are essential to ensure optimal consumer safety and public health protection. The insights generated from this study can inform policymakers in developing evidence-based cannabis policies. Furthermore, a nuanced understanding of post-decriminalisation consumption patterns will assist in assessing public health risks and formulating strategies to mitigate associated harms.

ABSTRAK

Penelitian sebelumnya sering mengabaikan pola konsumsi di tingkat daerah serta dinamika sosial dan budaya setelah adanya perubahan kebijakan ganja, terutama di negara-negara berpenghasilan rendah dan menengah. Studi ini bertujuan untuk mengisi kekosongan tersebut dengan meneliti tren penggunaan ganja setelah dekriminalisasi di Afrika Selatan, sehingga dapat memberikan wawasan baru mengenai perubahan perilaku di tingkat komunitas. Tujuan dari penelitian ini adalah untuk menyelidiki perubahan tren konsumsi ganja di Provinsi Eastern Cape setelah adanya dekriminalisasi secara nasional. Penelitian ini menggunakan pendekatan studi kasus kualitatif yang dipandu oleh paradigma interpretivis, untuk memahami pengalaman dan persepsi pengguna dalam konteks sosial mereka. Data dikumpulkan melalui diskusi kelompok terfokus (FGD) dan wawancara mendalam yang dilakukan di wilayah-wilayah penghasil ganja yang telah lama dikenal, yaitu di wilayah Pemerintahan Daerah OR Tambo, Eastern Cape. Sebanyak 55 partisipan yang berasal dari berbagai kalangan pemerintah dan masyarakat direkrut melalui teknik purposive sampling (sampel bertujuan). Hasil penelitian menunjukkan bahwa dekriminalisasi ganja telah menyebabkan peningkatan produksi, yang pada akhirnya mendorong meningkatnya pola konsumsi, terutama di kalangan anak muda, termasuk anak di bawah umur. Kekhawatiran lain yang muncul adalah semakin mudahnya akses terhadap jenis ganja dengan kadar zat aktif tinggi dan produk-produk turunannya.

GRAPHICAL ABSTRACT



INTRODUCTION

Cannabis continues to be a popular recreational drug globally, despite its illegal status in many countries (Kitchen et al., 2022). In South Africa, it has traditionally been cultivated in the Eastern Cape for centuries for traditional medicine and recreational use (Fortune, 2021). Patterns of use are shaped by legislation, availability, cultural attitudes, religious beliefs, public health perspectives, and economic factors such as education, income, and job role status (Siddique et al., 2022). The Cannabis for Private Purposes Act No. 07 of 2024 provides a framework for managing adult access, possession, and cultivation of cannabis in South Africa. Legalization and decriminalization have expanded access to diverse cannabis products, attracting new users and encouraging experimentation, which correlates with policy liberalisation trends (Caulkins, 2024; Mametja & Ross, 2020). However, these changes have also led to increased health-risk behaviours (Mokwena, 2019).

In South Africa, the cannabis market is projected to generate \$308.2 million in sales by 2024, with an annual growth rate of 1.19%, reaching \$326.9 million by 2029 (Statista, 2024). Ogundipe et al. (2018) reported up to a 15.9% lifetime prevalence of cannabis use among adolescents in sub-Saharan Africa. High rates of substance abuse among youth have been reported across South Africa, particularly in the Eastern Cape (Manu et al., 2020). A study in Kouga Municipality in the Eastern Cape found that rural youth in South Africa face several challenges contributing to substance use and risky behaviours, including feelings of hopelessness, lack of motivation, absence of adult role models (especially fathers), limited recreational spaces, and poor educational opportunities (Majee et al., 2021). The strength of Delta-9-THC and CBD in cannabis products has increased along with usage, contributing to public health concerns. Average levels have risen from 3.96% in 1995 to 16.9% in 2022, indicating a

preference for high-potency cannabis products (National Institute on Drug Abuse, 2024).

The impact of cannabis decriminalisation on usage patterns remains debated among scholars. Some argue that decriminalisation increases cannabis use (Perlmutter, 2019), and recreational legalisation has been linked to higher cannabis positivity, particularly among youth (Windle et al., 2022). However, other studies have found no evidence of increased use following decriminalisation (Smart & Pacula, 2019; Melchior et al., 2019). The growth of cannabis retailers, along with online and social media marketing, has enhanced access for recreational users and expanded product availability, particularly influencing younger populations (Everson et al., 2019; Wanke et al., 2022).

Cultural factors and current cannabis legislation significantly influence societal perceptions of cannabis (Wanke et al., 2022). Decriminalisation may have a considerable impact on younger children, increasing cannabis use, especially during the initial years following the policy change (Mokwena, 2019). Substance abuse among South African youth, particularly in the Eastern Cape, is on the rise (Manu et al., 2020). Swartz et al. (2024) found that adolescent cannabis use has increased, especially among those hospitalised for mental illness following decriminalisation. Greater cannabis availability, growing social acceptance, and potentially reduced prices are expected to increase demand, exacerbating social and public health problems (Elrod, 2019; Mokwena, 2019).

High-potency cannabis products are associated with elevated risks of addiction, psychosis, and accidents (Parry et al., 2019). Consumption patterns are shifting towards novel products such as edibles, beverages, and highly concentrated extracts, which pose additional risks due to inadequate quality control (Blake & Nahtigal, 2019). Also of concern are discrepancies in CBD product labelling, with some exceeding legal THC limits in South Africa (Jooste et al., 2021). Although cannabis may alleviate cancer-related symptoms (Green et al.,

2022), its potential therapeutic benefits are offset by harmful effects such as psychological distress, cognitive impairment, and addiction (Mokwena, 2019). Insufficient THC regulation and limited safety data raise significant concerns regarding cannabis decriminalisation for recreational use (Orsini et al., 2022).

Several studies have explored the impact of cannabis decriminalisation on consumption patterns. The influence of decriminalisation on usage rates varies depending on implementation and public perception (Smart & Pacula, 2019; Melchior et al., 2019). Some studies suggest that cannabis use tends to increase following decriminalisation, particularly among adolescents and young adults (Mokwena, 2019; Orsini et al., 2023), while others argue that cannabis policy liberalisation results in little or no increase in youth consumption (Grucza et al., 2018; Melchior et al., 2019). Smart and Pacula (2019) highlighted the complex relationship between cannabis policy shifts and public health outcomes, noting both intended and unintended consequences. However, these studies often rely on national-level data or quantitative methodologies, which may overlook the nuanced experiences and perceptions of local communities.

This paper examines community perspectives on the influence of cannabis decriminalisation on consumption patterns. The qualitative nature of the study offers a unique lens into community stakeholder perspectives regarding changes in cannabis use post-decriminalisation. By amplifying the voices of those directly affected, the study provides rich, contextually grounded insights into perceived public health risks associated with cannabis policy changes. The findings aim to support policymakers in developing evidence-based cannabis policies that are responsive to community realities and propose strategies to minimise potential harms.

METHODS

This study investigates the effects of

cannabis decriminalisation on consumption patterns through a qualitative, exploratory case study approach. The interpretivist research paradigm adopted seeks to comprehend participants' viewpoints regarding cannabis usage trends and associated public health risks observed in the research area following decriminalisation.

Participants were selected from Mpondoland communities in the OR Tambo District of the Eastern Cape, South Africa, and engaged in data collection waves from September 2022 to March 2023. The experiences and viewpoints of people in the Eastern Cape, where cannabis has been grown and used for centuries, are essential because the decriminalisation of cannabis for recreational use is a recent development in South Africa (Fortune, 2021).

The qualitative, exploratory case study design enabled the researcher to describe, explain, and explore the impact of cannabis decriminalisation through multiple data collection methods, including individual face-to-face interviews and focus group discussions (Joubert, 2016; Nieuwenhuis, 2019). This approach allowed the researcher to delve into participant perspectives by posing "what" questions (Joubert, 2016), thereby enabling participants to share their versions of reality (Holt & Ammaturo, 2019). The questions explored observed changes in cannabis use patterns in the OR Tambo District Municipality since decriminalisation, including user demographics, cannabis strain varieties, and methods of use.

Participants were selected through non-probability purposive sampling, ensuring a diverse group knowledgeable about cannabis decriminalisation. The sample included 55 participants aged 19–65 from various racial backgrounds, with 53% male and 47% female representation. Participants represented stakeholders from the cannabis industry value chain, as well as cultural, religious, and traditional groups, and government personnel. Additionally, 53% of participants reported personal cannabis use. Table 1 provides a detailed profile of

Table 1
Number and Profile of Participants

Stakeholder Group	Number of participants	Number of cannabis users	Description
Business Operators	4	4	Business people involved within the cannabis value chain
Consumers/User	4	4	Cannabis users who use cannabis in various forms
Law Enforcement	6	0	Police officers mandated to monitor and enforce compliance to cannabis control laws
Social Development	6	0	Public service personnel tasked with managing societal challenges related to substance abuse amongst others
Religious Communities	7	7	Members of the Rastafarians community who use cannabis as part of their religious practices
Traditional Leaders	3	2	Tribal authority members who help maintain community peace and cultural cannabis practices in their respective villages
Healers	4	4	Herbalists and traditional healers who use cannabis in their practices
Cannabis Growers	10	5	Indigenous and new cannabis farmers mainly involved in illicit cannabis cultivation and trade
School Teachers	8	0	Education staff responsible for a maintaining school governance and optimal teaching practices
Other entities	3	3	1 cannabis production trainer and 2 community builders working with non-profit organisations
Total	55	29	25 of the participants representing different community groups also use cannabis in various forms

the sampled community groups.

The study employed semi-structured interviews and focus group discussions. Participants provided informed consent, including approval for digital recording. Consent forms were collected, and the principles of focus group discussions or interviews were reiterated before the commencement of each session. Data were collected through eight focus group discussions and 26 individual interviews, all of which were recorded, transcribed, and analysed using thematic analysis via NVivo software to ensure comprehensive insight into participants' perspectives. Thematic analysis was conducted using inductive coding to identify patterns and organise responses into themes and categories. This approach ensured a rigorous examination of the data, yielding deeper insights into the impacts of cannabis decriminalisation on consumption patterns in the study area.

The study prioritised rigour and trustworthiness by incorporating local languages, member checking, detailed methodological descriptions, and data triangulation. Credibility

was enhanced through the author's fluency in Xhosa and English, while dependability was ensured through thorough research documentation. Confirmability was established via an audit trail, second coder validation, and the inclusion of verbatim quotes. The study, with ethics number SMUREC/H/37/2022:PG, received ethical clearance from the Sefako Makgatho Research Ethics Committee (SMUREC) of Sefako Makgatho University, thereby guaranteeing adherence to established guidelines, protocols, and ethical standards. These standards included informed consent, anonymity, and confidentiality. Participants were protected from harm, personal data were securely stored, and voluntary participation was emphasised, with transparency about the study's purpose and the right to withdraw at any time.

RESULTS

Of the 55 participants representing various community sectors, including cannabis producers, law enforcement personnel, business owners, religious leaders, traditional healers,

and educators, 29 participants reported using cannabis in some form. All six law enforcement officers, eight schoolteachers, and six Department of Social Development personnel indicated that they did not use cannabis. In addition to the four participants identified as cannabis consumers, seven religious community members (Rastafarians), four business operators, and four traditional healers reported cannabis use. Among the ten cannabis growers, five reported using cannabis, and two of the three traditional leaders also confirmed usage. All three participants representing other entities, such as a cannabis production trainer and community development practitioners, also reported cannabis use.

Increased Availability and Methods of Consumption

Participants reported increased cannabis cultivation, easier access, and more widespread use since decriminalisation. There is a heightened sense of freedom in using cannabis, with most households reportedly cultivating the plant. Several participants observed frequent recreational use, even in public spaces. High-potency cannabis strains and products—such as dabs and edibles—are reportedly becoming more popular. Cannabis is increasingly being used in various forms, including cosmetics and tinctures.

Participants reported the use of cannabis oils for managing conditions such as cancer, asthma, and arthritis, with methods of administration including steaming, ingestion, and smoking.

Traditional healers use cannabis in their remedies, people mostly used it during COVID-19 by steaming with cannabis to helped them recover from the virus (P1_Female Cannabis Grower).

In a day, I often receive multiple types of cannabis to try, leaving me with an ample supply. Many people prefer smoking hash or dabbing because it's very strong (P36_Male Cannabis User).

Cannabis User Demographic Changes

Participants highlighted a rise in cannabis use among school-aged youth, including children as young as seven, raising concerns about its impact on school dropout rates and behavioural issues. Unemployment was identified as a factor driving youth participation in both cannabis cultivation and use. The demographic of cannabis users is shifting, with more young people, including girls, and adults reportedly using it recreationally:

Previously, only Rastafarians and young people mostly used cannabis but since decriminalisation older people have joined in, people now have the freedom to buy (P7_Focus group of male cannabis growers).

Even girls are using it now; the boys use it the most (P28_Police focus group).

Market shift towards High-Potency Cannabis strains

Participants reported a market shift towards foreign cultivars introducing new cannabis strains to growers and users. Some participants perceive this shift to have improved cannabis strain quality and variety, whilst others raised concern over the increased accessibility and popularity of high-THC especially among the youth. Participants mostly associated the use of high THC products with greater health and social risks exasperated by combination use of cannabis with other harmful drugs.

Historically, cannabis was helpful as a source of income for some families but now, kids are using it mixed with other drugs and its leading to bad behaviour, crime and youth addiction. (P29_Police focus group)

We now use imported genetically modified seeds which produces a good quality bud with very strong THC, up to 24%...Customers always need it and have bought all our stock (P45_Male Healer)

Participants reported both negative and positive attitudes toward cannabis. Teachers,

police, and social workers strongly disapproved, highlighting societal and individual harm, while users and growers emphasized its social, cultural, and medicinal value and historical economic benefits. Local cannabis shops advertise products like dry bud, pre-rolls, edibles, dabs, vapes, and seedlings for self-cultivation, with one grower reporting producing cannabis potency as high as 24 %. Some participants emphasized the need for improved regulatory control of cannabis distribution and use among minors.

DISCUSSION

The Theory of Planned Behaviour (TPB) offers a theoretical framework for understanding cannabis-related behaviours in the Eastern Cape, focusing on attitudes, norms, and perceived behavioural control. Cannabis cultivation has historically supported household livelihoods in the OR Tambo District Municipality with minimal reported adverse effects. Its cultural and economic relevance has traditionally surpassed its recreational application.

Cultural cannabis use is observed among the Khoisan and Rastafarian communities (Duvall, 2019), with Rastafarians continuing to view cannabis as central to their religious practices and peace-promoting values. However, conflicts persist between religious freedoms and legal restrictions, particularly in relation to cannabis use by Rastafarian women and children.

Decriminalisation has strengthened the entrenchment of cannabis culture, resulting in increased cultivation and recreational use, even in public spaces. While some participants expressed support for cannabis use, others disapproved of its legal status. Despite persistent stigma, existing literature indicates shifting attitudes attributable to legal reform (Kitchen et al., 2022; Mametja & Ross, 2020). Among Rastafarians, who historically incorporated cannabis into religious rites (Ferrara, 2021), legal changes had a limited impact.

Participants generally perceived decriminalisation positively, citing medicinal ben-

efits such as improved mental health and alleviation of cancer-related symptoms. This study found that decriminalisation has contributed to shifts in social norms, facilitating greater acceptance of cannabis use across diverse demographic groups, including youth, women, and adults. This is consistent with Social Norms Theory, which emphasises the influence of perceived behaviour within social groups.

Everson et al. (2019) observed a gradual increase in cannabis use following decriminalisation, attributed to the expansion of cannabis retailers. This study similarly found that cannabis had become more accessible, with participants reporting sales in informal venues such as vegetable markets.

Concerns were raised about the increasing availability of high-potency cannabis products, with foreign strains supplanting indigenous varieties. Local outlets were reported to sell a range of cannabis products, including to underage individuals. Supporting studies (Chiu, 2021; Parry et al., 2019) associate decriminalisation with increased availability and the risk of mislabelled THC/CBD concentrations (Viviers, 2021).

Studies by Hammond et al. (2022) and Swan et al. (2021) indicate a rise in the consumption of cannabis concentrates, vape oils, and edibles among youth. These products are frequently criticised for uneven THC distribution, delayed onset of effects, and heightened risk of overdose. Despite these dangers, participants reported low concern about potential health impacts (Gwala, 2023). As the market for novel cannabis products expands, regulatory safeguards must be enhanced to protect vulnerable populations, including children and pregnant women.

Researchers have emphasized the importance of routinely assessing cannabis potency due to growing evidence that potency, though often overlooked, is a crucial factor in cannabis exposure. Evaluating the amount of cannabidiol (CBD) in cannabis is particularly important, as CBD has been reported to offer

more therapeutic benefits and fewer negative effects compared to tetrahydrocannabinol (THC) (Spinella et al., 2023). In light of this, South Africa's cannabis policy reforms should aim to regulate high-potency cannabis to reduce associated harms. Such regulation could follow models used for alcohol and tobacco control, including prohibiting the sale of high-potency cannabis, prescribing THC content thresholds, imposing higher taxes on more potent products, and requiring clear labeling of THC content and potential effects. Additionally, product labels should include age restrictions, legal consequences for violations, and warnings about the negative effects of cannabis use.

Although the use of THC content labelling has not been used long enough to ascertain its success it will significantly improve consumer protection and provide users the necessary information to make wise cannabis use choices and minimize the negative effects of high THC cannabis use.

The study highlights the need for public health interventions to educate communities about the risks of frequent cannabis use, particularly high-potency products. Strengthened regulatory frameworks are essential to ensure the safe cultivation, production, and sale of cannabis, drawing on best practices from the food industry (Blake & Nahtigal, 2019). Communication tools like technology and social media can enhance public health efforts (Daowd et al., 2023). Aligned with Harm Reduction Theory, which focuses on minimizing the negative effects of risky behaviours rather than eliminating them, strategies such as THC labelling, age restrictions, and regulating high-potency products are recommended to minimize risks. Initiatives like the Lower-Risk Cannabis Use Guidelines (LRCUG) promote safer practices, advising users to avoid smoking, to rather use regulated products, avoid high THC intake, and reduce frequency and intensity of use (Fischer et al., 2022).

Several countries have allowed the es-

tablishment of cannabis social clubs. South Africa is experiencing an increase of Cannabis grow clubs of "Dagga Clubs" despite its legally ambiguous and controversial status of operating as a non-profit organization (Clarke, 2021). The South African government should explore the Cannabis club model to enable regulated access to cannabis for adult recreational use. This may also assist in providing data on the population of cannabis users, cannabis products which will ultimately enable research and effective strategies to manage the burden on the state that result from the use of cannabis from an education, prevention and rehabilitation point of view.

The study gives insights into how decriminalization influences consumption patterns in the Eastern Cape. Despite cannabis legal ambiguities, consumption patterns reflect subjective norms driven by the cultural and economic reliance on cannabis within the Rastafarian community, Indigenous cannabis growers and other groups. This cannabis culture aligns with the Theory of Planned Behaviour given the historical practices and attitudes that drive cultivation and use. The study confirms the cultural, spiritual, and economic significance of cannabis for all groups, in contrast to the unfavourable opinions and experiences of teachers, social workers, and police, which are symptomatic of their normative and regulating positions in society. The study findings highlight the multifaceted and intricate nature of cannabis usage in rural areas, which is influenced by cultural norms, societal roles, and livelihood strategies.

A qualitative method was used, and different results could have been attained with the application of quantitative methods. Only interviews and non-probability purposive sampling were used in this qualitative study, which could introduce bias and restrict the validity and generalisability of the results outside of the Eastern Cape. The results reflect participants' subjective views and may differ from those in other provinces. Limited representation from

traditional leaders and business operators, who were largely unavailable or hesitant to participate due to legal concerns, may diminish the diversity of perspectives. Due to lingering post-COVID-19 protocols, telephone interviews were required, which reduced observational insights. Additionally, minors were excluded from the study, and their involvement in cannabis use was assessed indirectly through adult participants.

The findings highlight key compliance concerns, including the widespread availability of high-potency cannabis, inadequate measures to prevent youth exposure, and evolving patterns of consumption. These issues raise concerns about long-term adverse public health outcomes, including increased social and health risks linked to the rising prevalence of high-THC cannabis strains and products.

Notably, the study underscores changing user demographics, with a documented rise in usage among both adults and children. Particularly alarming are the emerging risks for rural communities, especially in the Eastern Cape, where cannabis use is reportedly increasing among young children. Of particular concern is the increasing availability of high-potency cannabis strains, which may exert stronger psychoactive effects and pose heightened health risks, especially for vulnerable groups such as minors.

As these trends continue in under-resourced areas like the study setting—marked by limited public health infrastructure, insufficient education, and lack of support services—communities become increasingly susceptible to the negative social and health consequences of cannabis use.

The study suggests that stricter policy reforms could improve public health outcomes. Further research is needed to understand the long-term risks of high-potency cannabis, particularly as illicit cultivation continues in the Eastern Cape amid South Africa's slow policy and legislative developments (Manu et al., 2020; Mametja & Ross, 2020). Insights from ongoing studies could help address public

health issues related to cannabis use. Additional research is required to enhance consumer protection as the cannabis industry grows, emphasizing stricter quality and labelling standards. Monitoring and evaluation will be crucial to ensuring these measures promote positive public health outcomes.

CONCLUSIONS

This study identified significant shifts in cannabis consumption patterns and associated public health risks following decriminalisation. While the Cannabis for Private Purposes Act No. 07 of 2024 presents potential benefits, such as market regulation and crime reduction, the complexity of cannabis legislation poses considerable challenges—particularly during South Africa's policy transition.

The findings highlight the urgent need for targeted public health interventions and regulatory policies that address the specific vulnerabilities of affected populations. The government must prioritise the implementation of comprehensive public health strategies aimed at mitigating the harms associated with cannabis use. These strategies should include population-level education on the risks of frequent and high-potency cannabis use, and the establishment of regulated distribution mechanisms such as cannabis social clubs.

It is further recommended that intervention efforts be coordinated across key government departments—such as education, law enforcement, and social development—to support effective awareness and prevention campaigns, particularly aimed at reducing youth exposure. Stronger regulatory frameworks are also required to ensure the thorough monitoring and control of cannabis and its derivative products at every stage of the supply chain—from cultivation and production to distribution and sale. This will be essential to protect consumer health and safety. Additionally, further research is necessary to assess the long-term social and health implications of cannabis decriminalisation and the proliferation of high-THC products in the

South African market. Such evidence is critical to guide future policy decisions. By addressing these multifaceted challenges, policymakers and public health institutions can more effectively manage the evolving cannabis landscape and safeguard public health in South Africa.

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AUTHORS' CONTRIBUTIONS

Ovuwa L. M. Nethomboni: conceptualization, methodology, formal analysis, original draft, writing, and review. Kebogile E. Mokwena: supervision, validation, and review. All authors have read and agreed to the published version of the manuscript.

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COMPETING INTERESTS

The authors confirm that all of the text, figures, and tables in the submitted manuscript work are original work created by the authors and that there are no competing professional, financial, or personal interests from other parties.

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