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Community Needs Assessment on Stimulant Use for Sexual Activities in Mombasa and Lamu, Kenya

2nd Community Needs Assessment

MEWA HEALTH AND HARM REDUCTION

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Abbreviations and Acronyms

- **KES** - Kenyan Shilling (currency)
- **ID** - Identification Document
- **STI** - Sexually Transmitted Infection
- **HIV** - Human Immunodeficiency Virus
- **PrEP** - Pre-Exposure Prophylaxis (for HIV prevention)
- **FGD** - Focus Group Discussion
- **KII** - Key Informant Interview
- **GDPR** - General Data Protection Regulation (data privacy regulation)
- **MEWA** – Muslim Education and Welfare Association

Executive summary

This Community Needs Assessment examines the challenges faced by young stimulant users in Mombasa and Lamu, with a focus on Muguka and Miraa use in sexual contexts and the associated health and socio-economic impacts. Conducted between December 2024 and January 2025, the study involved 100 participants (91% response rate) and used individual interviews, focus group discussions, and key informant interviews. Findings indicate that stimulant use is deeply entrenched among youth aged 19-35, often occurring in sexualized settings where it lowers inhibitions and increases risk-taking behaviors. This is linked to unprotected sex, multiple partners, and transactional sex, yet existing harm reduction services primarily target opioid users, leaving stimulant users without adequate support.

The health consequences are significant, with high rates of STIs, HIV risk, and unintended pregnancies linked to impaired decision-making under stimulant influence. Mental health concerns such as anxiety and depression are prevalent but remain unaddressed due to stigma and limited access to services. Fear of legal repercussions further discourages help-seeking, worsening health outcomes. Economically, 40% of participants are unemployed.. This financial instability contributes to reliance on informal work or transactional sex to sustain drug use, creating cycles of poverty. Stimulant use also impacts employability through job loss, absenteeism, and legal issues, limiting future opportunities.

To address these challenges, the assessment recommends expanding harm reduction services with stimulant-specific sexual health programs, mental health counseling, and integrated healthcare to reduce stigma. Economic empowerment initiatives, such as vocational training and job placements, are critical to breaking cycles of financial dependence. Policy efforts should focus on strengthening health-centered approaches rather than punitive measures. Community awareness campaigns are also needed to reduce stigma and encourage early intervention. These findings highlight the urgency of a multi-sectoral approach to mitigate the health risks and socio-economic impact of stimulant use, paving the way for evidence-based programming, policy reform, and community collaboration in Mombasa and Lamu.

1.0 Background and Rationale

Stimulant use among youths in Mombasa and Lamu has become a growing public health and social concern. The increasing consumption of substances such as Mugukaa (a variant of cathaedulis) and Miraa has been associated with heightened risky behaviors, mental health issues, and socio-economic instability. Mombasa, as a major coastal city, experiences high drug trafficking and consumption rates, while Lamu's geographical and cultural setting presents unique challenges in addressing substance use. Despite the rising prevalence of stimulant use, interventions in Kenya have largely focused on opioid users, leaving a significant gap in harm reduction strategies tailored for stimulant users.

This study was necessary to build on prior research and address critical knowledge gaps. While existing reports have documented the prevalence of opioid use and the effectiveness of harm reduction interventions for opioid-dependent individuals, stimulant use remains underexplored. The 2023 situational assessment conducted between October and December identified key themes such as the contexts of stimulant use, associated risks, service needs, and socio-economic impacts, emphasizing the urgency of targeted interventions. Unlike opioids, stimulants present unique challenges, including different withdrawal symptoms and treatment requirements. However, there is a lack of structured interventions specifically designed for stimulant users, making it crucial to document their lived experiences, barriers to accessing services, and potential harm reduction approaches.

The health risks associated with stimulant use further justify the need for this study. Both Miraa and Mugukaacontain amphetamine-like substances, including cathinone and cathine, which have significant physiological and psychological effects. Cathinone is a psychoactive compound that produces stimulant effects like amphetamines, leading to increased energy, alertness, and euphoria. However, prolonged use can result in agitation, anxiety, insomnia, and cardiovascular issues such as increased heart rate and elevated blood pressure. Cathine has milder stimulant effects but still contributes to hyperactivity and reduced appetite. The habitual use of these stimulants can lead to dependence making it difficult for users to quit without structured support.

Beyond individual health risks, stimulant use has broader socio-economic implications. Despite their harmful effects, Miraa and *Mugukaa* are legally recognized as cash crops under the Crops Act of 2013 in Kenya. Their legal status complicates regulation efforts and has contributed to the normalization of their use. These substances remain key economic commodities, with government support for their cultivation, trade, and export, particularly in regions where they provide livelihoods. This economic dependence creates a challenge for public health interventions, as regulatory measures must balance public health concerns with the economic interests of farmers and traders. The classification of

these stimulants as legal crops limits the enforcement of control measures and excludes stimulant users from harm reduction strategies typically targeted at illicit drug users.

Furthermore, stimulant use has been linked to engagement in HIV risk behaviors, including transactional sex. The lack of awareness and tailored interventions means that many stimulant users do not have access to appropriate harm reduction services. Economic instability and unemployment further exacerbate stimulant use, creating a cycle that is difficult to break. Understanding the economic and social drivers of stimulant use can help design interventions that integrate harm reduction with economic empowerment programs.

The findings from this study will provide valuable insights to inform service providers, policymakers, and harm reduction advocates, ensuring that interventions are evidence-based and responsive to the needs of stimulant users. By focusing on stimulant use in Mombasa and Lamu, this research fills a critical gap in understanding patterns of use, associated risks, and the support mechanisms needed to reduce harm and improve the well-being of affected individuals.

1.2 Research Objectives

This assessment aimed to gain a comprehensive understanding of the needs, risks, and service gaps affecting young people who use stimulants in Mombasa and Lamu, with a particular focus on stimulant use in sexualized settings. The findings from this study will guide the development of targeted interventions, inform policy recommendations, and improve service delivery for this population. The specific objectives of the assessment were:

1. To understand the context of stimulant use among young people in Mombasa and Lamu, including the patterns of use, social dynamics, and the role of stimulants in sexualized settings.
2. To assess the health risks associated with stimulant use, particularly in relation to mental health, sexual and reproductive health, and overall well-being.
3. To identify the socio-economic factors influencing stimulant use, including unemployment, financial instability, and the role of transactional sex.
4. To evaluate existing services available for stimulant users, including harm reduction, mental health, and sexual health services, while identifying gaps and barriers to access.

5. To provide evidence-based recommendations for the development of policies and programs that address the specific needs of young stimulant users, reduce harm, and improve overall health and social outcomes.

1.3 Research Questions

1.3.1 Main Research Question

What are the mental, sexual, and general health needs of young people who use stimulants in sexualized settings in Mombasa and Lamu?

1.3.2 Sub-questions

1. **Understanding the Context of Sexualized Stimulant Use**
    - In what settings do young people use stimulants in relation to sex?
    - How do stimulants influence sexual activities and experiences?
    - What types of stimulants are commonly used in sexual contexts, and how do they compare to non-sexual stimulant use?
    - How does social media shape attitudes, behaviors, and perceptions regarding stimulant use for sexual activities?
    - What are the attitudes and beliefs of young stimulant users regarding the impact of stimulants on their sexual lives and overall well-being?
2. **Risks and Risk Behaviors Associated with Sexualized Stimulant Use**
    - What are the primary health risks linked to stimulant use in sexual settings (e.g., STIs, unplanned pregnancies, mental health issues, violence, and organ damage)?
    - How do socio-economic factors (e.g., unemployment, poverty, education) influence risky behaviors associated with stimulant use?
    - What patterns emerge regarding frequency, quantity, and methods of stimulant use in sexualized contexts?
    - How does the social environment (e.g., peers, family, healthcare providers, law enforcement) influence risk behaviors?
    - Does stimulant use in sexualized settings lead to other forms of substance use or additional high-risk behaviors?
3. **Service Needs and Barriers to Access**

- What types of health, social, and harm reduction services do stimulant users in sexualized settings require?
- What services are currently available, and how adequate are they in meeting the needs of young stimulant users?
- How do young stimulant users perceive and access existing services?
- What are the key barriers preventing stimulant users from seeking health and social support?
- What strategies could improve service accessibility and effectiveness for young stimulant users?

2.0 Methods

2.1 Study area

The study was conducted in Mombasa and Lamu counties, Kenya, selected due to their high prevalence of stimulant use among youth and the unique socio-cultural dynamics influencing drug consumption patterns. These coastal regions are characterized by high unemployment rates, tourism-related economies, and distinct gender norms that shape substance use behaviors (Weldon, 2013)The urban setting of Mombasa and the rural context of Lamu provided diverse perspectives on stimulant use in sexualized settings.

2.2 Inclusion and Exclusion Criteria

Participants were eligible if they were 15–35 years old, resided in Lamu or Mombasa counties, and had used stimulants to enhance sexual activity within the past three months. For minors aged 15–17, parental or guardian consent was required to uphold ethical standards. These criteria ensured the study focused on a relevant population while capturing diverse experiences across age, socioeconomic background, and stimulant use patterns. The three-month recency requirement helped gather timely and reliable insights from both occasional and habitual users.

Exclusion criteria applied to individuals unwilling or unable to provide informed consent, those who had not used stimulants in the past three months, and those with severe cognitive impairments or mental health conditions that could hinder meaningful participation. These measures ensured consistency, ethical compliance, and reliability in data collection.

2.3 Sample Size and Sampling Techniques

A total of 110 participants were targeted of which 100 were recruited, using purposive and snow balling sampling to select information-rich cases that could provide in-depth insights into stimulant use in sexualized settings. The sample included 40 individual interviews per county with young people aged 15–35 years who had used stimulants for sexual activities in the past three months, capturing personal narratives on motivations, risks, and service needs. Additionally, 5 key informant interviews per county were conducted with healthcare workers, policymakers, and service providers to triangulate findings with professional perspectives on systemic challenges and intervention gaps. To explore shared social norms and collective experiences, 1–2 focus group discussions (FGDs) were held per county, each comprising 5–10 young stimulant users, with careful attention to group dynamics and peer interactions. Participants were identified through outreach workers (MEWA staff) in known drug-use hotspots, employing to reach hidden populations while ensuring diversity across gender, age, and socio-economic backgrounds. Key informants were purposively selected from pre-defined stakeholder lists, including HIV prevention program implementers, community leaders, and county health officials, to provide institutional insights that complemented individual user experiences. This diverse sampling approach ensured a balance between detail and scope, providing a comprehensive insight into stimulant use patterns and their impact on health services in both the urban setting of Mombasa and the rural environment of Lamu.

2.4 Data Collection

The study implemented a rigorous data collection protocol, ensuring ethical compliance and methodological consistency. Formal authorization was obtained from relevant local authorities before participant recruitment began. A dual chain-referral approach was used to engage eligible individuals aged 15-35 years, residing in Lamu or Mombasa, and having used stimulants for sexual activities within the past three months. Outreach workers directly mobilized participants and arranged interview appointments, while supervisors coordinated with community organizations to recruit additional participants. The recruitment strategy also incorporated peer referral mechanisms, where participants could either share contact details of potential candidates or physically accompany peers to interview sessions.

A total of 100 participants were recruited, achieving a 91% response rate from the target sample of 110. The study employed three qualitative data collection methods: individual interviews with 80 participants (46 males and 34 females), of whom only 65 met the eligibility criteria; key informant interviews (KIIs) with five male stakeholders, including harm reduction service providers and community leaders; and focus group discussions

(FGDs) with 15 participants (10 males and 5 females) in a structured setting to explore shared experiences and perspectives.

To maintain high data security and confidentiality, the study utilized KoboToolbox for data collection. Interviews were conducted using the KoboCollect mobile application, with responses recorded as encrypted audio files and securely stored on the KoboToolbox server. The offline functionality of the system ensured uninterrupted data entry in areas with limited connectivity, while GDPR-compliant security measures, including end-to-end encryption, daily automated backups, and restricted access, safeguarded participant information.

The data collection process followed ethical guidelines to ensure voluntary participation. Upon arrival at the research sites, supervisors verified each individual's identity and eligibility and explaining the study objectives. The informed consent process included an assessment of mental state and time availability, followed by the signing of dual consent forms, one copy for the participant and one for the research team. To maintain anonymity, each participant received a unique identifier code, with consent documents stored separately from interview data.

Trained interviewers conducted semi-structured interviews in private settings, ensuring participant comfort and confidentiality. At the start of each recorded session, the interviewer stated the participant's assigned code. The research team continuously monitored participant engagement, checking for comprehension and willingness to proceed throughout the session. After the interviews, supervisors facilitated peer referrals and provided emergency contact information for any post-study concerns. While refreshment provided

2.5 Data Analysis

The study employed a systematic qualitative approach to analyzing the collected data. Using results from a situational assessment conducted between October and December 2023, four key themes were identified to guide both data collection and analysis: contexts of stimulant use, risks and risky behaviors, service needs and barriers, and socio-economic impacts.

Audio recordings from individual interviews were transcribed verbatim by a trained MEWA transcriptionist. The transcriptions were manually reviewed for accuracy, anonymized to protect participants' identities, and analyzed using a thematic approach. Verbatim responses were categorized according to the predefined themes, ensuring that participants' experiences and perspectives were accurately captured.

The team manually coded the data, carefully identifying patterns and recurring insights within the transcripts. The thematic analysis, followed both an inductive and deductive approach, pre-defined themes were informed by the situational assessment, while additional themes emerged organically from participants' responses. To ensure reliability, data triangulation was conducted by comparing responses across different participants, recruitment chains, and study locations (Mombasa and Lamu). Field notes and observations from data collectors were also incorporated to provide additional context and validate findings. The final synthesis of findings was structured around the four core themes, offering a comprehensive understanding of stimulant use patterns, associated risks, service gaps, and socio-economic impacts.

2.6 Ethics Statement

This study was conducted with strict adherence to ethical principles to ensure the protection, dignity, and rights of all participants. , A verbal authorization was obtained from local authorities to conduct research within the study locations.

Participation was entirely voluntary, with no coercion or incentives influencing involvement. A robust informed consent process was implemented to ensure that all participants fully understood the purpose of the study, their rights, potential risks, and the measures taken to protect their confidentiality. Consent was obtained both verbally and in writing, with participants receiving a copy of the signed consent form for their records.

To maintain confidentiality and anonymity, participants were assigned unique identification codes, and no personally identifiable information was recorded in the interview transcripts. Individual interview data, including audio recordings and demographics, were securely stored on the KoboToolbox platform, which employs encryption and strict access controls in compliance with General Data Protection Regulation (GDPR) standards. Only authorized research personnel had access to the collected data. Transcripts, audio recordings for focus group discussion and key informant interviews were securely stored on a highly encrypted server only accessible to one person of the research team.

Given the sensitivity of the study topic, additional precautions were taken to ensure participant well-being. Interviewers were trained to recognize signs of distress and refer participants to appropriate support services if needed. Participants were also provided with contact details for assistance in case they experienced any discomfort related to their participation.

3.0 Results

A total of 100 participants took part in this study, representing a response rate of 91% against the targeted 110 participants. The study included 80 individuals for individual interviews, 5 key informants, and 15 participants in focus group discussions (FGDs). Among those in the individual interviews, 45 were male and 33 were female, while the FGDs comprised 10 males and 5 females. Out of the 80 participants in the individual interviews, 65 (81%) were eligible for the study, while 15 were excluded, 6 declined consents, and 9 did not meet the inclusion criteria as they had not used mugukaa or Miraa in the last three months. Most participants (99%) identified as heterosexual, while 1% identified as bisexual. The average age of participants in the individual interviews was 29 years, with a minimum of 19 and a maximum of 35 years, while those in the FGDs had an average age of 24 years, ranging between 20 and 32 years. Regarding education levels, 52% had completed secondary education, 34% had attained only primary education, 12% had reached university or college level, and 2% had no formal education. Employment status varied among participants, with 40% being unemployed (the largest group), 29% engaged in formal self-employment, 9% working in informal jobs, 5% employed part-time, and 17% employed full-time. The average monthly income recorded was Kshs. 6,883, with earnings ranging from Kshs. zero to Kshs. 40,000. years.

3.1 Contexts of Stimulant Use

The findings reveal that stimulant use among youths in Mombasa and Lamu is deeply intertwined with social norms, economic hardship, and gendered expectations. *Muguka*, *Miraa*, and marijuana are the most used drugs, with peer influence emerging as a key initiator of use. Many participants reported being introduced to stimulants by friends or intimate partners, reinforcing the normalization of substance use within social circles. This normalization is particularly evident in gender-specific motivations. For men, stimulant use is often linked to enhancing sexual performance and social status. One male participant explained, *"When you're with an older woman, you need stamina. Stimulants make you feel invincible" (MM1MF02),* while a female participant disclosed, *"My boyfriend said it would make things more exciting. Now I plan my nights around using" (LFIMM06).* A prison warden who works also as a healthcare worker corroborated this trend, noting *"The use of stimulants in groups, common hotspots, parties and pairing Muguka or miraa with other substances is prevalent" (KII04, Prison warden).*

The economic accessibility of stimulants, particularly *Muguka*, which costs as little as KES 50 (the Dollar equivalent here) per bundle, further drives their widespread use. Youths experiencing unemployment and financial hardship reported turning to stimulants as a coping mechanism especially those who in the "*matutu"* business as touts and drivers. One participant described this cycle: *"When I have money, I buy more. When I don't, I steal—*

it's the only way to cope" (MMIMM02). This economic vulnerability is compounded by the idleness that often accompanies unemployment, as another participant noted, *"I lost my job because I missed shifts to buy Muguka. Now I'm trapped"* (MMIJW03). A religious leader observed this pattern among youth, stating "*Children from dysfunctional families are more prone to drug use. The community has lost its cohesion in disciplining young ones" (KII05, Religious leader).*

Additionally, the affordability and availability of stimulants have led to poly-substance use, where individuals mix stimulants with alcohol, heroin, or sedatives to amplify effects or manage withdrawal symptoms. A participant noted, *"I mix Muguka with alcohol and pills. Now my heart races, and I can't sleep"* (LMIMW05). This practice not only exacerbates health risks but also deepens dependency, creating a vicious cycle of substance abuse. The prison warden confirmed this trend: "*Majority are Muguka/Miraa users, with only a small percentage being poly drug users of Muguka and Marijuana" (KII04, Prison warden).*

Social media also plays a significant role in shaping attitudes towards stimulant use. Platforms like Facebook, Instagram, and WhatsApp are used to share experiences, tips, and even memes that normalize consumption. As one female user remarked, *"Seeing posts about stimulants makes it seem like everyone's doing it. You don't think about the risks"* (*MFIMF03).* Another participant highlighted how social media influences behavior: *"People mostly talk about the fun side of it. They share stories and joke about how it makes sex better, but they rarely talk about the negative effects" (MFIMF06*). This digital exposure, combined with social influence and economic stress, creates an environment where stimulant use is both accessible and culturally ingrained.

Religious and community leaders have observed these trends with concern. As one religious leader noted, *"These substances destroy a person's ability to think clearly and make sound decisions. They lead to irresponsible behavior, broken families, and even crimes"* (KII03, Religious leader). The youth leader added that *"users report several issues, including erectile dysfunction, reduced sperm release, and difficulty maintaining relationships"* (KII002, Youth Leader), underscoring the physical and social consequences. Healthcare workers also emphasized the intersection with sexual health risks: *"Risks include erectile dysfunction, infertility, unplanned pregnancies, and increased susceptibility to STIs and HIV"* (KII001, Health professional). These perspectives highlight the multifaceted challenges posed by stimulant use in the region.

3.2 Risks and Risky Behaviors

Stimulant use among youths in Mombasa and Lamu is associated with severe physical, mental, and sexual health risks that significantly impact well-being. Participants commonly reported physical health issues including heart palpitations, insomnia, and dental decay,

with one male user lamenting "*Look at my teeth—they're ruined from years of chewing*" (MFIJW05). The physical toll extends beyond these visible effects - healthcare workers noted many users suffer from ulcers, appetite loss, and drastic weight loss that weakens immunity (KII001, Health professional).). Poly-substance use exacerbates these problems, as described by a participant who admitted "*I mix Muguka with alcohol and benzodiazepine pills. Now my heart races, and I can't sleep" (LMIMW05).* These health complications are compounded by limited healthcare access, as fear of judgment deters many users from seeking medical attention. Sexual health risks are equally concerning, with participants reporting increased STIs and unintended pregnancies due to impaired judgment. A male participant acknowledged *"I had gonorrhea twice. When I'm high, I forget condoms"* (MMIJW03), while others described relationship breakdowns like "*After years of chewing Muguka, I struggle to perform without it. My partner left me" (MMIMM04).* Women face disproportionate stigma, with one revealing "*I was blamed for my husband's impotence from Muguka. No one asked why he used it" (MF2DW01)*, highlighting gender biases in how communities perceive stimulant-related sexual problems.

The mental health impacts are profound, with participants describing anxiety, depression, and suicidal ideation. One female participant shared *"I feel empty without stimulants. It's like my brain shuts down" (LFIMWA07),* illustrating psychological dependence. The emotional toll extends to public shaming, as another participant revealed *"My partner told everyone I was bad in bed. People laughed—I almost ended my life" (MMIJW03).* One of the religious leaders provided a personal account of these mental health impacts: *"My son had attempted suicide after he had overdosed"* (KII04, Religious leader).

Counselors note users often develop paranoia and aggression, especially when mixing substances, which frequently leads to family abandonment that worsens isolation. This creates a vicious cycle captured by one user's statement *"The more I used, the lonelier I felt. The lonelier I felt, the more I used*" (MM2DW003). Stimulants also amplify risky sexual behaviors by lowering inhibitions, as one female participant admitted *"When I'm high, I'm more experimental. I say yes to things I wouldn't consider doing while sober"* (MF6JM01). This includes dangerous practices like transactional sex, where *"young men trade sex for Muguka, and women enter risky relationships to afford drugs"* (KII002, Youth Leader), as well as chemsex (drug-fueled sexual encounters) that increase HIV transmission risks (KII01, Health professional). One of the participants noted these behaviors often lead to *"increased gender-based violence among sexual partners who use stimulants and sexual harassments and even rape cases amongst the users*" (KII05, Prison warden).

These interconnected risks highlight the urgent need for comprehensive harm reduction strategies. While programs providing sex education, condoms, PrEP, and mental health support are critical, systemic barriers persist. Healthcare gaps like "*stockouts of condoms*

and HIV tests in clinics force users to choose between disclosure or no care" (KII01, Health professional) compound the problem, as do gender disparities where "*women fear seeking help for STIs because clinics assume they're promiscuous*" *(MF2DW14).*

Religious leaders emphasize the broader social damage, noting "*risky sexual behaviors under stimulant influence lead to broken families and community distrust*" (KII03, Religious leader). As one participant poignantly asserted *"We're not lost causes. Give us jobs, not judgment, and we'll prove we can change" (MMIJW03)*, capturing the need for solutions that combine healthcare access with economic opportunities and stigma reduction. The data reveals a complex public health crisis where physical deterioration, mental health struggles, and sexual risk behaviors reinforce each other, demanding interventions that address all dimensions simultaneously while challenging the social norms and economic conditions that perpetuate stimulant use.

3.3 Service Needs and Barriers

While some harm reduction services are available in Mombasa and Lamu, significant barriers prevent youths from accessing the care they need. Participants expressed a lack of trust in healthcare systems, primarily due to stigma and discrimination, with one male participant *explaining "Clinics treat me like a criminal if they know I use drugs. I'd rather stay sick" (*LMIYS01). This judgmental attitude extends beyond clinical settings, as one religious leader observed "*Many families reject users completely, leaving them with nowhere to turn"* (KII03, Religious leader). The fear of disclosure is particularly acute for women, with one participant sharing *"I hide my stimulant use from doctors. They'd blame me for my ulcers"* (*LFIAB02*), while another noted *"Most women are unable to seek help because of the cultural hostility towards women who use drugs" (LFIMM06).* This gender-based stigma creates additional layers of marginalization that specifically disadvantage female users.

Lack of awareness about available services compounds these access challenges, particularly regarding HIV prevention tools like PrEP. As one participant stated *"I've heard of PrEP, but I don't know how to get it. No one explains these things" (MMIMM03.*, This information gap persists despite some community outreach efforts. Healthcare workers acknowledged systemic shortcomings: "*Our outreach teams try to educate, but we lack materials and staff to cover all hotspots" (KII01, Healthcare professional).* Mental health services face similar visibility problems, with a male user noting *"I know about therapy and rehab programs, but I don't know how to reach them" (MMIMF02).* A youth leader highlighted how this information vacuum affects vulnerable groups: *"School dropouts and street-connected youth miss vital health messages that others might access through formal channels" (KII02, Youth Leader).*

Financial barriers present another critical obstacle, with many participants unable to afford either healthcare or transportation to facilities. One participant's plea to *"make services anonymous and more affordable"* (*MMIJW01*) reflects the economic precarity of users who often must choose between basic needs and drug purchases. The situation is exacerbated by what the healthcare professional described as *"frequent stockouts of free testing kits and medications at public clinics" (KII01, Healthcare professional)*, forcing users to pay for services that should be accessible. This economic instability creates a vicious cycle, as one counselor noted "*When clients relapse due to stress about money, they're often too ashamed to return for follow-up care"* (MFDW12).

Despite these systemic challenges, participants identified models of effective care that could be expanded. The nonjudgmental approach of organizations like MEWA received praise, with one male user sharing *"Counselors listened without shaming me. They gave me hope to quit"* (MM1MM03). The prison warden described their comprehensive services: *"We offer legal counselling services, psycho-social support, methadone clinics (for opioid users) and curative measures. We also have a psychologist that offers mental health education services"* (KII04, Prison warden). However, service gaps remain significant, particularly in vocational support - a need powerfully articulated by one participant: *"Train me in welding, and I'll quit. Give me a chance to rebuild" (MMIJW03).* The youth leader emphasized how economic interventions could complement healthcare: *"When we connected recovered users to motorcycle repair apprenticeships, relapse rates dropped sharply"* (KII02, Youth Leader). This underscores the need for integrated programs addressing both health and livelihood needs.

Cultural barriers further complicate service access, particularly for women and rural communities. As one female participant noted, *"cultural norms label women who use drugs as mmoral" rather than needing help" (MF2DW08)*, creating additional deterrents to seeking care. In Lamu, traditional healers often serve as first-line responders despite lacking training in substance use disorders, leading one healthcare worker to note *"We need to bridge traditional and clinical care rather than compete with it" (KII01, Healthcare professional).* A religious leader advocated compassionate approaches: *"Offering restorative justice rather than retributive one, listen to the concerns of these stimulants' users without judging them"* (KII05, Religious leader). These multilayered barriers spanning from stigma, information gaps, economic constraints, and cultural norms demand equally comprehensive solutions that adapt services to the realities of users' lives while challenging the systemic inequities that perpetuate both substance use and healthcare access differences.

3.4 Socio-Economic Impacts

Stimulant use has profound socio-economic consequences, disrupting personal relationships, employment stability, and community cohesion. Participants

reported strained family dynamics, with many facing ultimatums or outright rejection from loved ones due to their substance use. One male participant revealed, *"My wife threatened to leave if I didn't quit. She says I care more about Muguka than our kids"* (*MMIMM02)* illustrating the toll that addiction takes on familial bonds. Another participant described how their relationship with their family deteriorated: *"It's complicated. I avoid them when I feel ashamed about my choices" (MMIJW04).* One of the religious leaders shared his personal experience with this: "*My son was heavily addicted... had tried to kill me once while under the influence"* (KII05, Religious leader). Religious leaders corroborated these observations, with one noting, *"Substance use destroys families first—parents disown sons, wives abandon husbands"* (KII03, Religious leader).

Economic instability was a recurring theme, with many users prioritizing stimulant purchases over essential needs such as food, housing, and healthcare. A participant shared, *"I sold my phone to buy Muguka. Now I beg vendors for credit on Muguka"* (*MMIMM02)* highlighting the extreme lengths to which users go to sustain their habits. Another participant lamented, *"I spend money on stimulants that should go to more important things"* (MF1MF06). This financial mismanagement perpetuates a cycle of poverty, as users divert limited resources away from basic necessities and productive investments.

Employment instability compounds these crises. Participants linked stimulant use to job losses, citing absenteeism *"I've skipped work because I was too tired or coming down from a high"* (MF1MF06), and legal troubles - *"I've been arrested three times for breaking curfew to buy drugs"* (LMMW01). The prison warden noted the legal consequences*: "Those arrested end up serving sentences... lose their good conduct form and are not eligible to work outside the country" (KII04, Prison warden).* The youth leader highlighted how this perpetuates poverty: *"Employers recognize Muguka users by their stained teeth and avoid hiring them"* (KII02, Youth Leader). In Lamu, cultural stigma intensifies these barriers. *"In Lamu, drug use is seen as shameful. People suffer silently"* (LFHM02), a dynamic that drives use the underground and delays help-seeking.

Bureaucratic hurdles, such as the lack of identification documents, also marginalize users by restricting their access to formal employment and social services. One participant remarked, *"I was turned down for a job because I didn't have an ID"* (MM3JM01), while another shared, *"It is difficult to secure any form of employment or enlist for any social services and benefits without your identification documents"* (LMIAB004). These barriers perpetuate cycles of poverty and exclusion, leaving users with few opportunities to rebuild their lives.

Despite these challenges, some participants expressed hope for recovery through vocational training and economic empowerment. One participant urged, *"Train*

me in welding, and I'll quit. Give me a chance to rebuild" (MMIJW03), emphasizing the potential of skill-building programs to break the cycle of addiction. Another participant highlighted the importance of family therapy in repairing relationships: *"Families need therapy. My wife thinks I'm weak—she doesn't understand addiction" (MM1MF08).*

3Yet, pathways to recovery exist. Participants emphasized vocational training as a lifeline: *"Train me in welding, and I'll quit. Give me a chance to rebuild"* (MM1JM03). The youth leader shared success stories: "*Our motorcycle repair program reduced relapses by 60% among participants"* (KII02, Youth Leader). A religious leader highlighted the importance of economic support: *"We supported [my son] with house rent and cash for a small business set up of retailing boiled eggs" (KII05, Religious leader).* Family reconciliation also emerged as critical. *"Families need therapy. My wife thinks I'm weak—she doesn't understand addiction"* (LM1AM009), a sentiment echoed by counselors who noted that *"family education programs double the success rates of rehabilitation" (MF2DW00).*

These narratives reveal a stark dichotomy: stimulant use devastates socio-economic stability, but targeted interventions including economic opportunities, family support, and systemic reforms can break these cycles. *As a religious leader urged, "The government should reconsider those that have served their sentences, reformed and are now running normal lives, and erase their criminal past to give them a clean slate"* (KII05, Religious leader). This aligns with one participant's assertion, *"We need jobs, not judgment" (MMIJW03),* a call for solutions that address both the material and social roots of addiction.

4.0 Discussions

The research findings reveal a complex interplay of social, economic, and health factors driving stimulant use among youths in Mombasa and Lamu. The data shows that stimulant use (primarily Muguka, and Miraa) is deeply embedded in local social norms, with peer influence emerging as a key initiation factor. This aligns with studies showing that peer networks significantly shape substance use behaviors, especially among adolescents and young adults (Kaggwa et al., 2023, Kebede, 2002 & Deressa & Azazh, 2011). Gendered patterns are particularly striking, with men often using stimulants to enhance sexual performance and social status (Gebrehanna et al., 2014), while women face disproportionate stigma and cultural sanctions for the same behaviors, reflecting broader gendered disparities in substance use research (Becker, McClellan, & Reed, 2016).

Economic hardship serves as both a driver and consequence of use, with the affordability of Muguka at just KES 50 per 150 grams making it accessible to unemployed youth. This finding echoes prior work illustrating how economic deprivation fuels substance use as a coping mechanism (Degenhardt et al., 2016). Moreover, stimulant consumption

exacerbates poverty by prompting youth to prioritize drug purchases over basic necessities, perpetuating a cycle of economic instability (Atwoli et al., 2011). Health impacts are severe and multidimensional, ranging from physical effects like dental decay and cardiovascular issues to mental health consequences, including anxiety, depression, and suicidal ideation (Duflou, 2019, & Darke et al., 2008). Sexual health risks are amplified through impaired judgment, leading to unprotected sex and sexually transmitted infection (STI) transmission a trend observed in other studies on stimulant use and risky sexual behavior (Feelemyer et al., 2023, & Ssekamatte et al., 2023).

Several concerning trends emerge from the data. The normalization of stimulant use within sexualized circles, particularly among male youth, creates a self-reinforcing cycle of consumption (Parker, Williams, & Aldridge, 2002). Economic vulnerability appears to be both a cause and effect of use, with participants describing job losses due to addiction while simultaneously turning to stimulants to cope with unemployment stress findings that are consistent with research on socio-economic disadvantage and substance use (Lee et al., 2015, Wahler & Otis, 2014, & Adekoya, 2014). Additionally, poly-substance use is prevalent, with users combining stimulants with alcohol, heroin, or sedatives, which intensifies health risks and complicates treatment (Connor et al., 2014).

The data reveals significant service gaps, where even available harm reduction programs are underutilized due to stigma, lack of awareness, and financial barriers. This aligns with findings from other low-resource settings where structural and cultural barriers limit access to care (Kamenderi et al., 2023). Youth in Lamu face additional cultural constraints that drive substance use underground, while bureaucratic hurdles like the lack of identification (ID) documents further marginalize users from formal employment and social services.

When compared to existing literature, these findings both confirm, and complicate previous understandings of youth substance use in coastal Kenya. The role of stimulants in sexual performance especially on the effect of the sperm mortility aligns with regional studies on miraa use (The Standard, 2015) a study by lecturers from Moi Universitybut the rapid shift to Muguka (with its cheaper cost and stronger effects) represents an evolving pattern requiring updated interventions. The gendered stigma findings corroborate global research on women who use drugs (Pinkham & Malinowska-Sempruch, 2008) while the specific cultural dynamics in Lamu offer new insights into how local contexts shape use patterns.

Economic drivers reinforce established links between poverty and substance use (Spooner & Hetherington, 2004), but our data provides novel detail on how stimulant use disrupts livelihood strategies in this region. Furthermore, the barriers to service access mirror challenges documented in other resource-constrained environments (Njuguna et al., 2024),

though the intersection with Lamu's unique cultural norms presents distinctive challenges for implementation.

These findings carry significant implications for both policy and practice. Harm reduction programs must address the gendered dimensions of use, with tailored approaches for men and women that account for differing motivations and stigma experiences (Harm Reduction International, 2022). Economic interventions like vocational training show promise based on participant feedback and should be integrated with health services, as supported by evidence on livelihood support improving treatment outcomes (Magura et al., 2004). The central role of peer influence suggests that peer-led education could be particularly effective in reducing stimulant use (Latkin et al., 2013). Policymakers must address systemic barriers like ID requirements that inadvertently exclude users from services, while healthcare systems need stigma-reduction training for providers. The rapid normalization of Muguka use among youth indicates an urgent need for updated public health messaging and regulatory approaches to this emerging substance.

5.0 Strengths and Limitations

The reliance on self-reported data may introduce social desirability bias, particularly around sensitive topics like sexual behavior and illegal drug use (Krumpal, 2013). Cultural context may affect how participants interpret and respond to questions, particularly in Lamu, where drug use carries strong stigma. The qualitative nature of the research provides depth, but limits generalizability compared to quantitative epidemiological studies.

The study was conducted in the aftermath of the Muguka ban in Mombasa, which may have influenced participant responses and perceptions. This temporal context may also affect the accuracy of reported use patterns and attitudes. Additionally, the legal status of Muguka and Miraa as recognized cash crops despite their psychoactive properties raises critical policy implications, particularly regarding public health risks and the need for regulation to mitigate harm.

Other limitations include cross-sectional design, which captures a single point in time and cannot account for changing behaviors or causal relationships. Furthermore, the study's sampling may underrepresent hidden populations, such as women and marginalized youth, who may face greater barriers to participation. Longitudinal studies could track how use patterns change with age and life circumstances. Implementation research is needed to test culturally adapted harm reduction models for Lamu's unique context. Quantitative research could establish prevalence rates and health correlations more definitively.

Additionally, future studies should explore how policy changes such as bans or regulation impact both consumption and health outcomes in affected communities. There is also a

need to examine gendered experiences of stimulant use and how tailored interventions could reduce barriers to care. Finally, research should examine the role of digital platforms in both spreading and potentially mitigating stimulant use norms among youth, given participants' reports of social media influence. These directions could yield actionable insights while addressing current knowledge gaps in understanding and addressing youth stimulant use in coastal Kenya.

6.0 Conclusions

This community needs assessment highlights the complex interplay of social, economic, and health factors driving stimulant use among youth in Mombasa and Lamu. The findings reveal that stimulant use, particularly Muguka and Miraa, is deeply entrenched in social norms, exacerbated by peer influence, economic hardship, and gendered expectations. The associated health risks, including STIs, mental health issues, and physical deterioration—are compounded by limited access to tailored harm reduction services and pervasive stigma.

Socio-economic instability further perpetuates the cycle of addiction, with unemployment and financial precarity both driving and resulting from stimulant use. Barriers to service access, such as stigma, lack of awareness, and systemic inequities, underscore the urgent need for integrated interventions that address health, economic, and social dimensions.

The study underscores the necessity of a multi-sectoral approach, combining harm reduction programs, economic empowerment, and policy reforms to mitigate the far-reaching impacts of stimulant use. Evidence-based strategies, informed by the lived experiences of youth, are critical to fostering sustainable change and improving outcomes for affected individuals and communities.

This community needs assessment highlights the complex interplay of social, economic, and health factors driving stimulant use among youth in Mombasa and Lamu. The findings reveal that stimulant use, particularly Muguka and Miraa, is deeply rooted in social norms, reinforced by peer influence, economic hardship, and gendered expectations. The associated health risks, including STIs, mental health disorders, and physical deterioration are exacerbated by the absence of stimulant-specific harm reduction services and the stigma surrounding drug use.

Socio-economic instability further entrenches stimulant use, with unemployment and financial precarity both fueling and resulting from substance dependence. Barriers such as stigma, misinformation, and systemic inequities hinder access to care, underscoring the urgent need for integrated interventions that address health, economic, and social dimensions.

7.0 Recommendations

To assist young people who use stimulants and reduce the harm they cause, we require a compassionate, multidimensional strategy that considers their real-life experiences and offers them opportunities to heal and flourish. Individual treatments should aim to foster trust and understanding, ensuring that young people feel heard and supported. Rather of focusing solely on substance use behavior, we must consider the whole context of their lives, including mental health issues, trauma, and social isolation. Therapeutic treatments, like as cognitive-behavioral therapy (CBT), can assist young people in redefining their relationship with substances; however, these must be supplemented with peer support groups, where shared experiences and empathy promote recovery. Such spaces foster a sense of belonging and provide an environment in which young people can recover their self-esteem, empowering them to make healthier choices and address the underlying causes of their substance use.

At the communal level, the goal should be to create circumstances that foster connection, support, and alternative paths to personal fulfillment. Communities can develop programs that engage young people in meaningful activities such as athletics, the arts, or mentorship, allowing them to form positive relationships and find joy outside of substance use. These initiatives not only promote healthier alternatives, but also assist to alleviate the stigma and social isolation that frequently accompany drug use. When communities work together to educate and support one another, they break down barriers and foster a culture of care, allowing young people to openly express their issues without fear of being judged. This proactive, inclusive strategy not only treats substance abuse, but also fosters emotional resilience and well-being in youth.

Community organizations are critical in bridging the gap between young stimulant users and the assistance they require. These organizations can provide a variety of services geared to the specific needs of young people, such as harm reduction education, mental health assistance, and referrals to treatment facilities. They offer a safe and nonjudgmental environment in which young people can seek resources and guidance. By developing ties with local healthcare practitioners and social agencies, community organizations may ensure that young stimulant users receive comprehensive care that addresses both the psychological and physical components of their substance use. Furthermore, these organizations must implement trauma-informed treatment approaches, which acknowledge the complicated histories that frequently underpin substance abuse and ensure that every contact is compassionate and respectful.

Government agencies, particularly the Ministries of Health, Youth, Gender, and Sports, and Interior Security, play an important role in developing policies to support young stimulant users. The Ministry of Health must spearhead efforts to develop comprehensive public health frameworks that prioritize prevention, early intervention, and accessible treatment. Healthcare providers should be properly trained and equipped to provide compassionate, evidence-based treatment. The Ministry of Youth, Gender, and Sports should prioritize projects that provide young people with new chances for self-expression and growth, particularly those that teach life skills and resilience. The Ministry of Interior Security must take a reformative approach, ensuring that law enforcement methods prioritize rehabilitation over punishment and collaborate with mental health practitioners to address the underlying causes of substance abuse. These ministries should collaborate to gather data and conduct research on the unique requirements of young people who use stimulants. This will assist ensure that policies are fact-based and address the issues that young people confront. By creating a supportive, integrated framework of care, government institutions may help young people reclaim their futures and succeed in society.

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9.0 APPENDICES

Annex 1: Questions for the selection of respondents (for young people who use stimulants)

Before enrolling for an interview or an FGD, ask them the following questions:

1. What is your current age? _____ years
   -> If below 15 or over 35, thank the person for their time and explain to them that this time they cannot participate in the assessment
   -> If 15 years or older but below 18, a parent or guardian needs to be present and needs to consent before proceeding
   -> If 18 years or older and not older than 35 years, then continue to the next question

2. Are you living or staying in Mombasa or Lamu, Kenya?
   ☐ Yes -> continue to the next question
   ☐ No -> thank the person for their time and explain to them that this time they cannot participate in the assessment

3. Have you used stimulants in the context of sexual activities in the past 3 months?
   ☐ Yes -> this person can be included in the assessment; continue to the consent procedure
   ☐ No -> thank the person for their time and explain to them that this time they cannot participate in the assessment

Annex 2: Informed consent sheet

DO NOT WRITE THE CODE OF THE PARTICIPANT ON THIS FORM

Title of the Study: Community Needs Assessment on Stimulant Use for Sexual Activities in Mombasa and Lamu, Kenya

Names & phone numbers of the persons responsible for the assessment:
Dolline Waliaula 07 3346 7388
Fatma Ismael 07 4185 4411

You are invited to participate in a community assessment conducted by MEWA Health and Harm Reduction. The purpose of this study is to gather a comprehensive understanding of the needs of young people who use drugs between the ages of 15 to 35 years in Mombasa and Lamu, with a special interest in the use of stimulant drugs in relation to sex. Through this assessment, we aim to:

1. Improve understanding of the needs of young people who use stimulants in a sexualised setting;
2. Inform the development of targeted interventions and improve services to support the mental, sexual, and general health of young people engaged in stimulant use;
3. Enhance understanding of the issues surrounding stimulant use for sexual activities in general community and among young stimulant users and, promoting open dialogue and reducing stigma;
4. Provide a basis for evidence-based recommendations for policy and program development aimed at addressing the challenges faced by this specific young vulnerable group.

If you choose to participate in this assessment, you will be asked to participate in a focus group discussion (FGD) or an individual interview about your experiences and perspectives on stimulant use for sexual activities. **Minors will not be included in FGDs, but can participate in individual interviews.** There will be questions about the context(s) in which you use stimulants, which risks are related to sexualised stimulant use, and what kind of services you would need in relation to your use of stimulant drugs. **We expect the individual interview to take XX minutes; the FGD is expected to take XX minutes.**

With your consent, the interview will be audio recorded**. If you prefer your answers not to be recorded, we will invite you for an individual interview, where – apart from the interviewer, a notetaker will be present.**

Your participation will contribute to a better understanding of the community needs of young people who use stimulants in relation to sexual activities. This information may help us and other service providers develop targeted interventions and support services to improve the well-being of young people engaged in stimulant use.

Your involvement is voluntary, and you have the right to withdraw at any time without any consequence. You may decide to only answer some of the questions or all of them.

Any communication with me and my colleagues will be confidential. This means that we won't identify who told us something to anyone else in the community, to the authorities, or in our research write-up. All information collected during this study will be kept strictly confidential. Your identity will be protected, and data will be **made anonymous** to ensure your privacy. Only the authorized research team members will have access to the collected information. We plan to share the overall, anonymous findings of the assessment to our staff, key stakeholders and government representatives from county and national levels (department of Health, Judiciary, Police, and Members of County Assembly).

Benefits and risks

There shall be no direct benefit for your participation in this assessment other than reimbursement of your transport costs.

There is a minimal risk for your privacy being breached; this risk shall be mitigated by:

- Conducting the interview in a safe space, that is not accessible to other staff, to police or other authorities or to any other person during the time of the interview / FGD;
- Using a code instead of your name in the interview notes and changing or deleting any information that may reveal your identity;
- Secure storage of collected data and data deleted after **seven (7)** years.

Your participation is entirely voluntary. You can choose not to participate or withdraw from the study at any time without any negative consequences. Your decision will not affect any current or future relationships with MEWA or any other services provider, nor with the authorities.

If you have questions or concerns about the study at any moment afterwards, you can always contact the assessment coordinator Fatma Jeneby, at 0724526099.

By agreeing to participate in this assessment, you indicate that you have read or heard and understood the information provided to you, and you voluntarily agree to take part in this study.

Before we proceed, please ask any question on any aspect of this study that is unclear to you. You may take as much time as necessary to think it over. If you decide to participate,

I would like you to give me your clear verbal authorisation and to sign this form to allow me to start the interview, as an indication that you have understood the reasons for this study and that all your questions have been answered. This authorisation indicates that you have decided to participate.

Name of participant: _____

Participant's signature: _____ *Date:* _____

Consent for audio recording: ☐ *Yes* ☐ *No*

Name of the staff member obtaining the consent: _____

Staff member's signature: _____ *Date:* _____

Name of parent/guardian (**in case participant is a minor**):

Guardian's signature: _____ Date: _____

Consent for audio recording: ☐ *Yes* ☐ *No*

YOU WILL BE OFFERED A COPY OF THIS CONSENT FORM TO KEEP.

Annexe 3: Memo on coding of assessment respondents

Each participant in the assessment will receive a code to reveal their real name. Names and codes should ONLY be linked to each other on one single sheet that is stored safely.

Please be aware that on consent forms names of respondents will appear, so never write the code of the person on the consent form

On all other documents, only codes should be used and never the name of the respondent.

Codes are built in the following way:

- Location
  - L for Lamu
  - M for Mombasa
- Gender
  - F for cis-female and trans-female
  - M for cis-male and trans-male
  - X for non-binary and other
- Assessment part
  - I for individual interview
  - F for focus group discussion
- Data collector
  - AB for Aisha Bwana
  - AM Anwar Mohammed
  - ~~DW for Dolline Waliaula~~
  - FI for Fatma Ismael
  - FO for Fatma Omar
  - HM for Hashim Mohamed
  - JM for Jamal Mohamed
  - JW for James Wafula
  - KA for Khadijah Abdalla
  - MH for Mahfoudh Famhy
  - MM for Mohammed Matano
  - MW for Mwiyi Wanje

Start from 1 and continue for each participant of your interviews or FGDs. If you interview over more than one day, make sure to continue your numbering where you left it on your previous assessment day.

Example: when the very first person Dolline interviews is a cis-women from Lamu, you start with L for Lamu, followed by F for female, I for interview, DW for your initials and then number 01. So the code will be **LFIDW01**.

Example: when the last person Mwiyi interviewed on your previous interview day was assigned number 15 and today you select someone for a focus group discussion, who is a non-binary person from Mombasa, the code will be M for Mombasa, X for non-binary, F for focus group discussion and MW for your initials, followed by number 16, thus **MXFMW16**.

Annex 4: FGD facilitator guide

Participants
(fill codes in the table)

1. **Welcome and Introduction**
   - Greet participants warmly.
   - Introduce yourself and your role as the facilitator.
   - Introduce your colleagues and explain their roles (notetakers & timekeeper).
   - **If participants are comfortable to introduce themselves, do a round of introductions**
   - Provide a brief overview of the purpose of the focus group.
   - Explain that the session will be audio-recorded. **All participants have been** issued with a code. When responding to questions they will start with their code, this is how we will keep track of the conversation.
   - **Start recording and state the place of the FDG (Lamu/Mombasa) in order to ensure that the recording is linked to the correct meeting.**

2. **Review of Ground Rules**
   - Emphasize the importance of respectful and open communication.
   - Encourage active participation.
   - Remind participants of the confidential nature of the discussion; everything that is said in this room will stay in this room and nobody should discuss what has been said here with others. Also don't bring up any sensitive information that people have shared here, unless they explicitly state it is ok to continue discussing this outside of this space.

3. Introduction to the Topic
   - Open the floor with an icebreaker
   - Set the context of sexualised drug use in the county and express MEWA's interest in understanding this better so that support can be tailored
   - Ask participants to share their general perceptions regarding stimulant use for sexual activities in their communities. For example, what are the common attitudes, beliefs, and practices surrounding this issue?

4. Community Norms and Values / Attitudes and Beliefs
   - Explore participants' perspectives on community norms and values related to sexual activities and substance use.
   - Probe participants on their beliefs and attitudes regarding stimulant use for sexual activities within the community.

5. Stimulant Use Patterns
   - Ask participants what stimulants they normally use. No need for probing, unless if answers are unexpected.
   - Ask participants which are the types of stimulants commonly used in sexual activities. No need for probing, unless if answers are unexpected.
   - Explore the frequency of stimulant use.

6. Contexts of sexualised drug use
   - Ask participants to describe the settings in which sexualised drug use generally takes place. What kind of places? With whom? How many people will be together? Is it planned / coordinated, or does it happen spontaneously? Does everybody who is present know on forehand what will happen? Does everybody participate, or can people easily leave?
   - How is stimulant use in sexual activities influenced by community dynamics, including social norms and peer influences (peer pressure)?
   - How do social media influence the contexts and settings of sexualized drug use?

7. Risks and risk behaviours
   - Do you see or experience potentially risky situations while engaging in sexualised drug use? Probe for unprotected sex, violence / abuse / force, overdosing.
   - Can you describe situations in which this happened?

8. Service needs
   - What kind of services would help you in taking (better) care of your health? (harm reduction, sexual health services, mental health services, social services)
   - Where, how and by whom should such services be provided?
   - What are factors that would help you use those services?
   - What would prevent you from using such services?

9. Closing
   - Thank participants for their valuable contributions.
   - Provide information on any follow-up steps or future opportunities for involvement.
   - Reiterate the importance of participant confidentiality.

Annex 5: Interview guide for interviewing young people who use stimulants

Start recording and clearly state the code of the participant before starting the interview. If the interview is not recorded, write the code of the participant here and on the page(s) where notes are taken.

Section 1: Demographic Information

1. When were you born? _____

2. What is your gender identity?
   ☐ Cis-male
   ☐ Cis-female
   ☐ Trans-male
   ☐ Trans-female
   ☐ Non-binary
   ☐ Other (please specify) _____
   ☐ Prefer not to answer

3. What is your sexual orientation?
   ☐ Heterosexual
   ☐ Homosexual
   ☐ Bisexual
   ☐ Other (please specify) _____
   ☐ Prefer not to answer

4. What is your completed highest level of education?
   ☐ No education
   ☐ Primary school

☐ Junior secondary school

☐ Secondary school

☐ College/University

☐ Other (please specify) _____

5. What is your current employment status?

☐ Employed full-time

☐ Employed part-time

☐ Self-employed (formal job)

☐ Informal job(s)

☐ Unemployed

☐ Student

☐ Other (please specify) _____

6. What is your average monthly income? _____

7. Are you in an active sexual relationship?

   □ Yes

   □ No

Section 2: Contexts of Stimulant Use in sexualized setting

1. What factors influenced your decision to start using stimulants for sexual activities?
2. How has using stimulants has affected your sexual energy? Please explain.
3. How does the use of stimulants influence your life in general?
4. What are the prevalent attitudes and beliefs regarding the impact of stimulant use on sexual health among your peers and community members?

Section 3: Social media use and impacts on stimulant use

1. What kinds of things do you discuss on social media in relation to sexualised stimulant use?
2. How do social media influence the way you think about sexualised drug use and what role does it play?
3. Have you ever engaged in discussions or sought advice on social media platforms regarding the risks and consequences of stimulant use for sexual activities? If yes, which platforms and around which topics?

Section 4: Impacts on Mental and Sexual Health

1. How has stimulant use in sexualised settings affected your mental health?? Probe: Have you ever had thoughts of self-harm or suicide in connection with your experiences related to and stimulant use for sex? If yes, explain.
2. How common is it to have a discussion on potential sexual health risk among peers who use stimulant?
3. Have you ever experienced any **sexually transmitted infection (STI), HIV infection or an unintended pregnancy? Did the use of stimulant drugs during sexual activities have an influence on this (because of being less careful)?**
4. What sexual behaviours do you engage in when using stimulants in a sexualized setting? If not mentioned, follow up with: How often do you use condoms?
5. **What can you say about** social acceptance or stigma associated with using stimulants in sexualized settings?

Section 5: Impacts on General Health

1. Has your stimulant use in sexualized settings led to other forms of drug use or risky behaviours? Please elaborate.
2. Have you experienced any physical health consequences from using stimulants, such as overdose or organ damage? Please elaborate.
3. Which community resources addressing the health impacts of stimulant use are you aware of?

Section 6: Access to Healthcare and Support

1. Have you sought professional help or counselling for mental issues related to your involvement in stimulant use for sex?
2. What are the mental health services you know? Have you received such services recently?
3. Did you face any challenges accessing or receiving these services? Probe for stigma and discrimination, cultural norm, etc.
4. When was the last time you tested for HIV?
5. What do you know about PrEP?
6. Are you on PrEP? What are the challenges for using PrEP?
7. Have you or someone you know faced discrimination while accessing healthcare services due to the use of stimulants? Please provide details. What **(other)** barriers have you faced in accessing healthcare and support services related to your stimulant use and sexual health? **What is needed to improve access to harm reduction, sexual health, and mental health services for young people?**
8. What other services you would have wanted to receive that are not currently available? Are there any specific needs or preferences you have that are not being met by existing services?
9. Do traditional beliefs or cultural norms in Mombasa / Lamu affect how people seek help for issues related to stimulant use and sexual health? Please explain how.

Section 7: Socio-Economic Impact

1. How do you think changes in financial situation (either increase or decrease) affect the use of stimulants for sexual activities among young people in Mombasa and Lamu?
2. How has using stimulants for sexual activities affected your financial stability or employment status?
3. Has your stimulant use for enhancing sexual performance led to any legal issues or involvement with law enforcement? Please describe.
4. Are you currently enrolled in any educational program? If not, what are the reasons preventing you from continuing your education, and how interested are you in resuming it? What factors would influence your decision to return to education?
5. How would you describe your current relationship with your family, and what specific challenges or barriers affect maintaining a healthy relationship? What support or interventions do you believe would improve these family relationships?
6. Do you currently possess your identification documents (e.g., national ID, birth certificate, etc.)? If not, what are the reasons for not having these documents?
7. How has the lack of identification documents impacted your ability to access services or opportunities?

Annexe 6: Interview Guide for interviewing other key informants

Background Information

- Key informant's **name and** affiliation.
- Professional background and experience related to the community and stimulant use for sexual activities.

1. Contexts of sexualised stimulant use

- How would you describe the social dynamics and community norms regarding stimulant use in sexual activities?
- Are there any cultural factors influencing these dynamics?
- Based on your observations or experiences, what are the common patterns of stimulant use for sexual activities?
- Are there specific stimulants that are more prevalent in this context?

2. Risks and risk behaviours

From your perspective:

- How does stimulant use affect mental health?
- What are the sexual health implications of using stimulants in sexualized settings?
- How does stimulant use influence the risk of contracting HIV?
- Are there any other general health impacts associated with stimulant use during sexual activities?
- Have you observed any trends or patterns in health outcomes?

3. Service needs

- Are there existing healthcare or support services for individuals engaged in stimulant use for sexual activities?
- What are the perceived barriers to accessing these services?
- In your opinion, are there specific needs or gaps in the current support infrastructure for this population?
- Based on your knowledge, what interventions or strategies do you believe could address the identified needs related to stimulant use in sexual activities?
- Are there any successful initiatives or best practices that could be replicated?