**Project Tujiimize: A Community-Driven, Design Thinking–Informed Approach to Adolescent Cannabis Use Prevention in Kisumu County, Kenya**

**Abstract:**

**Background:**

Cannabis use among adolescents is a growing public health concern in low-resource settings, including Kisumu County, Kenya. Early initiation is often linked to peer pressure, media influence, and limited mental health education. Project Tujiimize was launched as a community-driven initiative to assess patterns of adolescent cannabis use and co-design locally appropriate, youth-informed interventions. The project aims to: (1) assess prevalence, risk factors, and perceptions of use; (2) identify education gaps and support systems; (3) implement youth-preferred strategies for prevention; and (4) empower parents and teachers to support students affected by cannabis use. A Design Thinking framework was used to explore the problem space and guide future intervention development.

**Methods:**

A cross-sectional survey was administered to 98 students across two urban high schools in Kisumu County, with three additional schools planned to reach a target sample of 250. Participants included 83 males, 14 females, and one respondent who preferred not to disclose their gender. The structured questionnaire collected data on demographics, cannabis exposure and motivations, perceptions of harm, and preferred prevention strategies. Findings will inform the design of school-based interventions, peer mentorship programs, and parental engagement efforts.

**Results:**

Most respondents (73.5%) were aged 15–17, and the majority (83.7%) reported never having used cannabis. Among users, reported consequences included poor academic performance, anxiety, memory issues, and encounters with law enforcement. Peer pressure was cited as the primary driver of use (91.8%), followed by emotional distress (26.5%) and curiosity (12.2%).

Initial cannabis information most commonly came from media (51%), followed by schools (30%), friends (24.5%), and family (4.1%). Awareness of cannabis-related harms was high, especially regarding mental health effects (70.8%), addiction (64.6%), academic performance (47.9%), and criminal risk (33.3%). A family history of substance use was reported by 54% of respondents.

Students expressed strong preferences for prevention through counseling services (65.2%), school-based education (26.1%), parental involvement (23.9%), and to a lesser extent, law enforcement (15.2%). Schools were identified as the most trusted source of information (81.6%).

**Discussion/Conclusion:**

The results highlight both the vulnerabilities and resilience of adolescents in Kisumu County regarding cannabis use. While many students reported never using cannabis and expressed strong disapproval of it, a subset face direct exposure and adverse outcomes. Community-based, school-centered interventions aligned with student-identified needs, such as counseling and peer support, show strong potential for impact. Design Thinking proved useful in exploring the social and structural drivers of cannabis use, and will be used to iteratively refine intervention content and delivery based on student feedback. Expanding Project Tujiimize across schools, while maintaining its participatory, locally grounded framework, could meaningfully contribute to improved adolescent mental health and substance use prevention in similar contexts.

**Keywords:** Cannabis use, adolescent mental health, community intervention, prevention strategies, Kenya

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