Targets for Intervention to Prevent Problematic Cannabis Use: Exploring the Complex Relationships between Socio-cultural, Neurocognitive, and Behavioral Factors.

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In 2021, nearly 900,000 adolescents aged 12 to 17 initiated cannabis use (CU) and approximately 16 million Americans met criteria for CU disorder in the past 12 months (1). Preventing cannabis use, and particularly early onset of CU, remains a priority, as it has been linked to an increased risk of experiencing negative consequences, including cannabis dependence, neurocognitive impairments, chronic psychosis disorders, poor educational outcomes, diminished life satisfaction and achievement (2-4). While there is a substantial body of knowledge regarding the factors contributing to the initiation of CU or the transitions from use onset to development of CU disorders, further interdisciplinary research is warranted to gain a more comprehensive understanding of the intricate interactions of factors at multiple levels and the mechanisms that lead to drug use and mental health related disparities. In this session, we will present examples of team science work that explores the interplay of structural, psychosocial, neurobiological, and interpersonal factors that might explain disparities in CU and its consequences. The first study underscores the role of parents in drug use prevention and discusses significant differences in the likelihood of receiving drug use-information from their parents about the risk associated with drug use among adolescents from intersecting risk taking, racial-ethnic identities and socio-economic position groups. The second study, among adolescents participating in the Adolescent Brain Cognitive Development Study, identifies neurocognitive risk for the development of internalizing and externalizing problem behaviors and CU expectancies, and examines the moderating role of family conflict in the link between neurobiological risk, externalizing and internalizing pathways and CU expectancies. Finally, in the third study, conducted among a sample of Hispanic/Latino adolescents, examines the moderating effect of neighborhood disadvantage on the relationship between decision-making and CU outcomes. Overall, our work emphasizes that mitigating the societal impact of CU among adolescents, requires concerted interdisciplinary efforts that address the intricate interplay of factors across multiple levels of influence. This knowledge is crucial for designing and implementing effective interventions that consider systemic and structural barriers affecting marginalized communities, as well as the evolving landscape of cannabis policies.

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