Youth substance use prevention interventions: Opportunities and challenges

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The United Nations estimates that 1 in 20 adults, or a quarter of a billion people between the ages of 15 and 64 years, used at least one illicit drug in 2014, this number does not include tobacco and alcohol (UNODC, 2016). During the same year, more than 22 million Americans aged 12 and older self-reported needing treatment for alcohol or illicit drug use (SAMHA, 2016). Annually, drug abuse and addiction cost the USA society more than 200 billion US dollars in the healthcare, criminal justice, and legal systems, and in lost workplace production/participation (Office on National Drug Control Policy, 2011). The rippling social and health effects of abusing alcohol and other drugs not only negatively impact the individual users but their families, communities and society at large. Preventing the onset of substance abuse is the most effective tool we have at our disposal to avoid these negatives consequences and to support children and youth to live healthy productive lives. Evidence-based prevention interventions have been found to effectively prevent or reduce the risk of developing behavioral health problems, such as underage alcohol use, tobacco use, prescription drug misuse and abuse, and illicit drug use (SAMSHA, 2016).

Societies and governments across the globe share a concern for their youth but they often do not have access to efficacious and effective prevention interventions. In their place, they tend to implement an eclectic repertoire of planned and not so well planned activities grouped under the rubric of substance use prevention. For example, a shared strategy across many countries is to invite community members in recovery to share testimonials about their substance abuse recovery journeys to classrooms or large school assemblies. Such prevention efforts–although commendable for their highly personal and often moving content–tend not to lead to lasting change in the targeted population (Tibbis, 2016). Because such efforts are not systematically delivered and are rarely evaluated, organizers do not know if the information sharing sessions or similar strategies are efficacious in preventing the use of alcohol, tobacco and other drugs.

In resource rich counties, prevention science has made great strides and continues to evolve and mature into its own scientific field of study and practice. Prevention specialists have accumulated sufficient evidence to know what works, with whom it works, when and where it works. For example, there is sufficient evidence to know that skill based youth interventions and family interventions can be very helpful in preventing youth substance use (Das et al., 2016). A good number of youth prevention programs are manualized, school-based and include some variation of social skills training with the intent to teach how to resist drug offers, and to make good decisions about selecting alternatives to drug use (Pentz, 2009). Developmentally, it has been known for some time that the ideal age to intervene is in preadolescence and adolescence, more precisely with children between the ages of 12 and 14 (Marsiglia et al., 2011; Gottfredson & Wilson, 2014). This accumulated knowledge has generated a rising sense of optimism about interventionists and their community partners' ability to design and evaluate interventions capable of preventing the use of alcohol, tobacco, marijuana and other drugs (Botvin, 2004).

The Society for Prevention Research, a US-based professional organization, has developed and continually updated a set of very useful prevention standards (Flay et al.,2005; Gottfredson, et al., 2015). In the US and in other resource rich countries, although these standards are not universally followed or consistently applied, they are seen as a sort of gold standard for substance use prevention. The European Society for Prevention Research also provides support and training to its members to develop and test evidence-based interventions. Many academic and non-academic researchers and their community partners are designing and testing innovative interventions around the globe. In some cases, promising practices exists but have not been evaluated yet, and often communities and practitioners do not have the capacity and resources to develop much needed "practice based evidence" (Marsiglia & Booth, 2015). Although the

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phrase "evidence-based interventions" has entered the prevention field to stay, at the global level most children and youth continue to have very limited access to efficacious substance use prevention interventions (UNODC, 2016). Even when imported evidence-based interventions are available to low and middle income counties, those interventions often tend to lack cultural relevancy and they cannot be implemented with the desired levels of fidelity for optimal results (Marsiglia & Booth, 2015).

The expanding efforts to legalize, decriminalize or medicalize the use of cannabis around the globe are adding complexity to the existing youth drug use prevention challenges. Whole countries, jurisdictions within countries, and cities within jurisdictions have enacted their own versions of legalization, decriminalization or medical use of cannabis or are considering one or more of those options (UNODC, 2016b). Practitioners, researchers and governments are consequently reexamining the role of prevention and assessing how prevention can help children and youth sort through contradictory messages about cannabis use. Thus, the decriminalization, legalization and medicalizations of cannabis provides a renewed opportunity for rethinking and redesigning efficacious prevention interventions. These considerations are not offered as part of the sometimes polarized cannabis legalization debate. They are part of a broader reflection about the state of youth substance use prevention, introducing the legalization of cannabis as one more variable to consider.

The substance use prevention field does not have a lack of evidence-based interventions. The list of youth substance use evidence-based interventions in the US and in other high income countries is already very extensive (See the National Registry of Evidence-based programs and Practices (http://www.samhsa.gov/nrepp). The main prevention challenges are about dissemination, implementation, sustainability and the capacity to be dynamic and responsive to fast changing societies (Cooper, et al., 2015). Effective and efficient training of implementors through the use of available technology is key but equally important is to revisit the concept of fidelity to the manual in light of the rich diversity that exists between communities within a country and between countries. Globalization with all of its shortcomings provides rich opportunities for international collaboration in intervention prevention research. What do young people have in common across borders and what is unique to their own local culture? Cultural program adaptation efforts provide a platform for collaborators from different societies to develop horizontal and postcolonial research partnerships that will be mutually beneficial. Cultural adaptation studies will only be useful if they include a dissemination and sustainability plan. It is time to move beyond the academic silos and to be fully engaged with communities in the development and ongoing evaluation of prevention interventions that respond to the challenges of our times.

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