

PREVENTION OF DRUG USE AND PROBLEMATIC USE



Isidore Obot and Joanne Csete

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As member states of the United Nations take stock of the drug control system, a number of debates have emerged among governments about how to balance international drug laws with human rights, public health, alternatives to incarceration, and experimentation with regulation.

This series intends to provide a primer on why governments must not turn a blind eye to pressing human rights and public health impacts of current drug policies.

PREVENTION OF DRUG USE AND PROBLEMATIC USE

Prevention of drug use, particularly among young people, is almost always a central goal in national policies on illicit drugs, as well as in international declarations and resolutions on drug control. Political leaders and the public usually strongly support drug prevention as a drug policy pillar. Governments and non-governmental organizations in many countries have invested in a wide range of prevention strategies and programs.

INTRODUCTION

Prevention of drug use, particularly among young people, is almost always a central goal in national policies on illicit drugs, as well as in international declarations and resolutions on drug control. Political leaders and the public usually strongly support drug prevention as a drug policy pillar. Governments and non-governmental organizations in many countries have invested in a wide range of prevention strategies and programs.

As noted by the United Nations Office on Drugs and Crime (UNODC) in its 2013 guidelines on drug use prevention, in recent decades there have been many advances in the science of drug use prevention, including a realization that just recounting the dangers of drugs to young people—a method used frequently in the past—is simplistic and ineffective.¹ UNODC and others note that there are many methodological challenges in determining effectiveness of prevention approaches, and there are unfortunately relatively few rigorous studies of drug prevention efforts in countries of the Global South.

This paper summarizes elements of a growing consensus among international bodies on what constitutes good practice in drug prevention programs. It also assesses some of the challenges of drawing lessons from the existing body of published work on the subject.

¹ UN Office on Drugs and Crime. *International standards on drug use prevention*. Vienna, 2013, p 1.

WHAT THE UNITED NATIONS AND OTHER INTERNATIONAL BODIES SAY

The UN drug conventions state prevention of “drug abuse” as one of their central objectives. The preamble of the 1961 Single Convention asserts that the convention is motivated by governments’ desire “to prevent and combat” the “evil” of drugs.² The convention enjoins ratifying states to “give special attention and take all practicable measures for the prevention of abuse of drugs.” Toward this end, states should:

take all practicable measures to assist persons whose work so requires to gain an understanding of the problems of abuse of drugs and of its prevention, and shall also promote such understanding among the general public if there is a risk that abuse of drugs will become widespread.³

The Commission on Narcotic Drugs (CND) has repeatedly called for prevention of drug use to be a central element of national drug policy. Most recently, in 2014, a CND resolution called for expansion of government and donor support to prevention programs guided by UNODC’s 2013 technical document on prevention. That resolution emphasizes that prevention programs must be “based on scientific evidence.”⁴ It further underscores that “the effectiveness of drug abuse prevention programmes and policies is evaluated in a very small minority of cases” and calls for more investment in rigorous and

“...in 2014, a CND resolution called for expansion of government and donor support to prevention programs... That resolution emphasizes that prevention programs must be ‘based on scientific evidence.’”

2 United Nations. Single Convention on Narcotic Drugs (as amended by the 1972 protocol amending the Single Convention). Passed pursuant to Economic and Social Council resolution 689 J (XXVI), 1961.

3 Ibid., Art. 38.

4 UN Commission on Narcotic Drugs. Promoting prevention of drug abuse based on scientific evidence as an investment in the well-being of children, adolescents, youth, families and communities. Resolution 57/3, March 2014.

independent evaluation of these programs.⁵ The resolution also takes note of a range of possible strategies for drug use prevention, including “activities in different social settings, such as schools, families, and workplaces, and using different means, including with the support of the media, and of targeting different age groups and groups at different levels of risk.”

UNODC’s 2013 prevention guidelines add to a body of United Nations documents intending to translate scientific evidence into program guidance of drug prevention, including UNODC technical papers on family skills training for drug use prevention (2010),⁶ UNODC guidance on school-based prevention programs (2004),⁷ International Labour Organization (ILO) documents on managing drug use in the workplace (1996),⁸ and a summary of effectiveness of drug prevention interventions by the World Health Organization (WHO) (2002).⁹

In addition to UNODC, a number of international authorities have in recent years developed standards for the planning, implementation, and evaluation of drug prevention programs. The drug prevention program guidelines of the European Union note that technical guidance is especially needed in the prevention area because “the overall predominance of interventions in Europe that lack, or have only a weak, evidence base, as well as the weak implementation of prevention in general are striking.”¹⁰ The document further notes that a strong evidence base is necessary to prevent harmful effects of unsound programs.¹¹ The guidelines for school-based drug prevention of the Inter-American Drug Abuse Control Commission (CICAD) of the Organization of American States emphasizes the need for scientific evidence-based programs and enjoins member states to invest in rigorous monitoring and evaluation of all interventions “over the short, medium, and long terms.”¹²

5 Ibid.

6 UN Office on Drugs and Crime. *Compilation of evidence-based family skills training programs*. Vienna, 2010.

7 UN Office on Drugs and Crime. *School-based education for drug use prevention*. Vienna, 2004. At: https://www.unodc.org/pdf/youthnet/handbook_school_english.pdf

8 See, e.g., International Labour Office. *Management of alcohol- and drug-related issues in the workplace*. Geneva, 1996. At: <http://www.coe.int/T/DG3/Pompidou/Source/Activities/Workdrug/codeofpracticeilo.pdf>

9 D Hawks, K Scott, M McBride. *Prevention of psychoactive substance use: a selected review of what works in the area of prevention*. Geneva: World Health Organization, 2002. At: http://www.who.int/substance_abuse/publications/en/prevention_substance_use.pdf?ua=1

10 European Union, European Monitoring Centre for Drugs and Drug Addiction. *European drug prevention quality standards: a manual for prevention professionals*. Lisbon, 2011, p 43.

11 Ibid.

12 Organization of American States, Inter-American Drug Abuse Control Commission. *CICAD hemispheric guidelines on school-based prevention*. Washington, DC, 2005. At: <http://cicad.oas.org/Main/Pubs/DR/Guidelines-School-Prev-eng.pdf>

RESEARCH ON DRUG PREVENTION PROGRAMS: WHAT WORKS?

Concerns about the evidence base of programs

The vast majority of published, peer-reviewed studies of drug prevention interventions come from the United States. This is partly because the U.S. government in the 1990s established a policy of offering drug prevention funding to school districts only if they chose programs that were rigorously evaluated and thus “evidence-based.”¹³ This policy came in the wake of negative evaluations of a program in which the government had invested heavily.

The D.A.R.E. (Drug Abuse Resistance Education) program was developed at the initiative of the Los Angeles Police Department for police officers to teach in schools to pre-teen students (fifth and sixth grade in the American system).¹⁴ In its original version, the program was heavily centered on teaching children to “say no” to drugs and also had sessions on building self-esteem. Its goal was to prevent all use of illicit drugs. D.A.R.E. was generally very well received by parents, politicians, and the public, and by the late 1990s, about 80 percent of school districts in the United States were using D.A.R.E. The program was backed by hundreds of millions of federal dollars, and it was estimated to be used or closely imitated in over 50 countries.¹⁵

Over time, however, numerous evaluations of D.A.R.E. indicated that it had little effect on young people’s drug using behavior or that the small effect it had dissipated quickly over time.¹⁶ Remarkably, though the program was widely discredited and criticized in the media, it remained in use in many districts and is still quite widely used in 2015.¹⁷ Nonetheless, the fallout from the criticisms of D.A.R.E. led the “Safe and Drug-Free Schools and Communities” program of the U.S. Department of Education to establish

13 AG Gandhi, E Murphy-Graham, A Petrosino et al. The devil is in the details: Examining the evidence for “proven” school-based drug abuse prevention programs. *Evaluation Review* 31(1):43-74, 2007.

14 CH Weiss, E Murphy-Graham, A Petrosino, AG Gandhi. The fairy godmother — and her warts: making the dream of evidence-based policy come true. *American Journal of Evaluation* 29(1):29-47, 2008.

15 Ibid.; K Zernike, “Anti-drug program says it will adopt a new strategy,” *New York Times*, 15 February 2001.

16 See, e.g., RR Clayton, AM Cattarello, BM Johnstone. The effectiveness of Drug Abuse Resistance Education (Project D.A.R.E.): 5-year follow-up results. *Preventive Medicine* 5(3):307-318, 1996; SL West, KK O’Neal. Project D.A.R.E. outcome effectiveness revisited. *American Journal of Public Health* 94(6):1027-1029, 2004.

17 R Kumar, PM O’Malley, LD Johnson, VB Laetz. Alcohol, tobacco and other drug use prevention programs in U.S. schools: a descriptive summary. *Prevention Science* 14:581-592, 2013; see also D.A.R.E. America, “Empowering children to live healthy lives: D.A.R.E. annual report 2010,” Los Angeles, 2011; and summaries of recent events in the U.S. and internationally at www.dare.org.

“...many drug prevention experts have criticized the inclusion of poorly evaluated programs among those the United States judges to be ‘evidence-based.’”

its requirement for “evidence-based” drug prevention as a condition of federal funding for drug prevention programs. Specifically, federally supported programs had to have been subjected to rigorous evaluation with respect to the outcomes of preventing drug use and preventing violence.¹⁸

While in theory this policy should have facilitated the creation of a body of excellent evaluations, many drug prevention experts have criticized the inclusion of poorly evaluated programs among those the United States judges to be “evidence-based.”¹⁹

Some of the programs accepted as “evidence-based” were evaluated only once or very few times, or in evaluations where positive results were “cherry-picked” and negative results were not presented, or where there was no peer review. The lists fail to require independent, outside evaluations and do not take account of the conflicts of interest inherent in evaluations conducted by the creators of the program, including in cases where the program creators stood to profit financially from a positive evaluation for their program. Perhaps most importantly, the programs were chosen more because they accorded with the abstinence-only orientation of U.S. drug policy than because of their proven effectiveness.

In some cases, these weaknesses have not kept evaluations from being published, and so many of the same criticisms are raised by some experts and scholars about the published drug prevention literature. Top-rated academic journals such as *Addiction* have hosted frank discussions on how to deal with a United States-centered prevention literature plagued by “pseudoscience” and flawed, ideologically influenced research.²⁰

¹⁸ Gandhi et al., op.cit.

¹⁹ Gandhi et al., *ibid.*; Weiss et al., op.cit.; DD Hallfors, M Pankratz, S Hartman. Does federal policy support the use of scientific evidence in school-based prevention programs? *Prevention Science* 8:75-81, 2007; R Skager. Replacing ineffective early alcohol/drug education in the United States with age-appropriate adolescent programmes and assistance to problematic users. *Drug and Alcohol Review* 26:577-584, 2007.

²⁰ H Holder. Prevention programs in the 21st century: what we do not discuss in public. *Addiction* 105:578-581, 2009; DM Gorman. Understanding prevention research as a form of pseudoscience. *Addiction* 105:582-583, 2009; S Andréasson. Premature adoption and dissemination of prevention programs. *Addiction* 105:583-584, 2009. See also, for example, Hallfors et al., op.cit., in *Prevention Science*.

The abstinence goal—reality or dream?

Drug prevention programs in the United States and those inspired by the American experience are often designed with the goal of preventing all use of drugs among young people, which some experts regard as unrealistic. The European Union’s drug monitoring body notes, for example, that the aim of prevention programs in Europe “is not solely to prevent substance use, but also to delay initiation, reduce its intensification, or prevent escalation into problem use.”²¹ As Skager notes, the abstinence goal may be unrealistic since young people are likely to try drugs at some point, but “debate about whether this is a realistic goal is off the table” in the political environment of the United States.²² A prominent expert with prevention program experience in the United States, Canada, Sweden, and Australia, observed:

The main goal of any alcohol, tobacco, or drug use prevention program for youth should be to reduce levels of harm, both to the user ... and to others. The means to this end may be preventing the use of the substance altogether, or limiting or shaping it, or insulating the use from harm. Whatever means the program adopts, the program should be designed on the basis of an assessment of the dimensions of harm related to the substance use (taking into account delayed harm) in the target population, and measurement of changes in the attributable harm should be included in the evaluation.²³

The preponderance of United States-based studies in the prevention literature—and the programs analyzed—are focused primarily on abstinence from drug use and not on prevention of drug-related harms or prevention of problematic use. This abstinence-oriented focus may limit the generalizability of U.S. programs and evaluations of programs for use in places where prevention goals are broader.²⁴

21 European Union, European Monitoring Centre for Drugs and Drug Dependence. “What is drug prevention?” (web-based information). At: <http://www.emcdda.europa.eu/topics/prevention#>

22 Skager, op.cit., p 581.

23 R Room. Preventing youthful substance use and harm — between effectiveness and political wishfulness. *Substance Use and Misuse* 47:936-43, 2012; see also R Midford. Is this the path to effective prevention? *Addiction* 103:1169-1170, 2008.

24 T Babor, J Caulkins, G Edwards et al. *Drug policy and the public good*. New York: Oxford University Press, 2010, p 117.

Characteristics of good drug prevention activities

Whatever its flaws, the body of peer-reviewed literature on drug prevention programs has been reviewed, analyzed, and meta-analyzed repeatedly. Groups of scholars and other institutions have attempted to draw some conclusions from this literature as to qualities of good drug prevention programs. The summary below relies heavily on analyses by the European Union's drug research body,²⁵ Babor and colleagues in their authoritative 2010 review of the global literature,²⁶ UNODC,²⁷ and the Cochrane Collaboration, an internationally recognized body that conducts systematic reviews of health and medical evidence.²⁸ An older review conducted for WHO by Hawks et al.²⁹ is referred to in some of these more recent reviews. Though there are many other approaches to drug prevention, only school-based education/information programs, media programs/campaigns, and school-based drug testing are considered here. These programs illustrate many of the challenges and opportunities of drug prevention interventions.

School-based prevention education: School-based education/information programs are among the most widespread prevention programs in the world. The December 2014 Cochrane review of 51 studies involving over 127,000 participants distinguished four kinds of school-based programs: (1) *knowledge*-focused programs that assume information will lead to behavior change; (2) *social competence* programs that teach “self-management” and social skills, goal setting, problem solving, and good decision making, as well as cognitive skills to resist negative external influences; (3) programs focused on *social norms* (or *social influence*) that use normative education (partly about correcting students' ideas about rates of drug use among people in their world), recognition of high risk situations, and practicing refusal skills; and (4) *combined* methods that use some elements of all three approaches.³⁰ The programs studied were mostly of one or two years duration and virtually all from the United States. Though the authors commented that many of the studies in the review were not thoroughly reported, they put forward the following conclusions:

25 EU/EMCDDA, *European drug prevention quality standards*, op.cit.

26 Babor et al., op.cit.

27 UN Office on Drugs and Crime, *International standards*, op.cit. (note 1).

28 F Faggiano, S Minozzi, E Versino, D Buscemi. Universal school-based prevention for illicit drug use. *Cochrane Database of Systematic Reviews* 2014, Issue 12. Art. No.: CD003020. DOI: 10.1002/14651858.CD003020.pub3; S Gates, J McCambridge, LA Smith, D Foxcroft. Interventions for prevention of drug use by young people delivered in non-school settings. *Cochrane Database of Systematic Reviews* 2006, Issue 1. Art. No.: CD005030. DOI: 10.1002/14651858.CD005030.pub2; and see more at: http://summaries.cochrane.org/CD003020/ADDICTN_school-based-prevention-for-illicit-drug-use#sthash.5Bu5bF1m.dpuf

29 Hawks et al., op.cit. (note 9).

30 Faggiano et al., *ibid.*

- Knowledge-based programs showed no effect on drug use or intention to reduce drug use.
- Social competence programs, which were in the majority in this sample, tended to produce results showing some reduction in use and intention to use, but they were statistically significant in very few cases. Social norms programs had similarly null or weak effects.
- Some programs that combined the three methods or combined the social competence and social norms method showed results in preventing marijuana use over a several-year period.³¹

Based on a smaller number of studies of school-based programs geared for early adolescence, UNODC concluded that the programs with the strongest effect on reducing drug use were those with interactive methods—not just lecturing at students—in a structured course of 10 to 15 weekly sessions, possibly with refresher sessions later, with opportunities to practice skills and talk about perceived risks.³² UNODC emphasizes that “fear arousal” through knowledge-based programs alone is not likely to be effective in reducing drug use, just as building self-esteem alone is not likely to work.³³ The guidelines stress that many “powerful risk factors” for initiating drug use—for example, biological processes, mental health disorders, family neglect and abuse, and poor attachment to school and community—are “largely out of the control of the individual.” Therefore, no amount of preaching about behavior change without addressing risk factors is likely to be successful in preventing drug use.³⁴ Perhaps influenced by the D.A.R.E. experience, UNODC also concludes that having police deliver lessons is not a best practice.

In their 2010 review, Babor et al. echoed the conclusion that knowledge-based programs are ineffective alone. Looking at a number of skills-based programs, they found that the vast majority of them did not have any effect on lifetime cannabis use, but some had a statistically significant effect on lifetime use of other illicit drugs.³⁵ Among the programs for which these authors found a significant effect on lifetime drug use (other than cannabis) were Project ALERT and “Towards No Drug Abuse” (TND), two United States-based

³¹ Ibid.

³² UNODC, *International prevention standards*, op.cit. (note 1).

³³ Ibid., p. 23.

³⁴ Ibid., p. 2.

³⁵ Babor et al., op.cit., pp. 110-111.

programs. Later in-depth studies of both these programs called into question the statistical methods on which their positive results were based.³⁶ Babor et al. note that there are very few studies that can claim long-term benefits because in general published evaluations do not have sufficiently long follow-up periods.³⁷

The European Union “best practice” summary echoes the findings of the Cochrane review, adding that peer-led components of school-based, skills-focused programs seemed to have the greatest possibility for impact on drug use and drug-related harms.³⁸

The earlier review for WHO by Hawks et al. emphasized that the information in school-based programs had to be grounded in the reality of young people’s lives and their perceptions of the risks and benefits of drugs.³⁹ These authors recommended that the design of school-based programs be preceded by formative research with meaningful involvement of young people to ensure reality-based curricula.

The experts cited above and others have also noted that it is important in both school-based education and media campaigns to avoid exaggerating the harms of drug use because hyperbolic “scare” allegations will undermine the credibility of the lessons or messages.⁴⁰ That is, young people living in a world where their peers or older people are not perfectly abstinent will observe recreational drug use and conclude that the consequences are not catastrophic, in contrast to what may be the school-based or media program’s description of horrific disfigurement or diminishment of mental capacities associated with drug use. The contrast may make it hard to believe the messages.

“...it is important in both school-based education and media campaigns to avoid exaggerating the harms of drug use because hyperbolic ‘scare’ allegations will undermine the credibility of the lessons or messages.”

36 DM Gorman. Is Project Towards No Drug Abuse (Project TND) an evidence-based drug and violence prevention program? A review and reappraisal of the evaluation studies. *Journal of Primary Prevention* 35:217-232, 2014; DM Gorman, E Conde. The making of evidence-based practice: the case of Project ALERT. *Child and Youth Services Review* 32(2):214-222, 2010.

37 Babor et al., op.cit., p 110.

38 EU/EMCDDA, Best practice portal (school children), <http://www.emcdda.europa.eu/best-practice/prevention/school-children>

39 Hawks et al., op.cit., p 42.

40 See, e.g., K Resnicow and G Botvin. School-based substance use prevention programs: why do effects decay? *Preventive Medicine* 22:484-490, 1993; JH Brown and AM Clarey. The social psychology of disintegrative shaming in education. *Journal of Drug Education* 42(2):229-253, 2012; M Rosenbaum. *Safety first: a reality-based approach to teens and drugs*. New York: Drug Policy Alliance, 2014.

Mass media approaches: There is little evidence from any of the expert reviews consulted here that mass media-delivered information alone has a significant effect on drug use behaviors, particularly where other influences are pervasive in society.⁴¹ In fact, UNODC, noting the importance of formative research to inform good media messaging and a good theory of change, asserts that badly conceived media campaigns “can worsen the situation by making the target group resistant to or dismissive of” drug prevention interventions.⁴² The European Union’s standards on prevention programs note that while in some countries prevention consists of media campaigns about the dangers of drug use, “there is currently no evidence to suggest that the sole provision of information on drug effects has an impact on drug use behaviour, or that mass media campaigns are cost-effective.”⁴³ According to the European standards, media—local or national—should be engaged as a complement or support to comprehensive efforts involving skill-building, service provision, and awareness.

Part of the challenge in knowing best practices in media campaigns is the notorious difficulty of making causal conclusions about the impact of a media intervention, even when there are abundant resources to conduct evaluations.⁴⁴ A program over which considerable scholarly energy and debate have been expended to learn lessons is the \$1.2 billion U.S. National Youth Anti-Drug Media Campaign (NYADMC) of 1999 to 2004, a government program inspired by a long-running advertising campaign of the NGO Partnership for a Drug-Free America.⁴⁵ NYADMC used many media outlets, but most of the ads were on television and radio, and most highlighted the purported dangers of drug use. For example, in the heat of the post-September 11, 2001 anti-terror fervor in the United States, some ads in the campaign depicted people who use drugs as supportive of terrorism since drug market proceeds are used to fund terrorist activities.⁴⁶ A midterm evaluation had indicated that the campaign, which was designed to prevent or delay use of drugs among young people, was not effective with respect to these goals and

41 See, e.g., Babor et al., *op.cit.*, p 115; UNODC, *Prevention standards*, *op.cit.*, pp 32-33.

42 UNODC, *ibid.*, p 33.

43 EU/EMCDDA, *European drug prevention quality standards*, *op.cit.*, p 19.

44 Z Sloboda. Commentary on Stephen Magura’s “Failure of intervention or failure of evaluation: a meta-evaluation of the National Youth Anti-Drug Media Campaign evaluation.” *Substance Use and Misuse* 47(13-14):1434-1435, 2012.

45 LN Sacco, K Finklea. Reauthorizing the Office of National Drug Control Policy: issues for consideration. Washington, DC: Congressional Research Service, 2014; M Eddy. War on drugs: the National Youth Anti-Drug Media Campaign. Washington, DC: Congressional Research Service, 2003; see also Babor et al., *op.cit.*, and Government Accountability Office. ONDCP media campaign: Contractor’s national evaluation did not find that the Youth Anti-Drug Media Campaign was effective in reducing youth drug use, Washington, DC, 2006.

that ads needed to be better field-tested.⁴⁷ The campaign was also redesigned to focus particularly on marijuana, which was thought by U.S. drug policy leaders at the time to be the “gateway” to other drugs.⁴⁸

The final evaluation of the program, which was conducted by academic experts, peer-reviewed, and reported in the *American Journal of Public Health*, concluded that the campaign reached a very large swath of American youth but that it did not reduce or delay use of marijuana or other drugs.⁴⁹ Contrary to the program’s objectives, there was some evidence of pro-marijuana attitudes associated with exposure to the campaign. The evaluators speculate that the ubiquity of the ads may have given younger adolescents the idea that marijuana use was extremely widespread among older teens and was thus something worth trying.⁵⁰ There were many debates in academic journals and in policy discussions about this evaluation,⁵¹ though its findings were largely confirmed by the Government Accountability Office (GAO), the non-partisan audit arm of the U.S. Congress.⁵² The White House Office of National Drug Control Policy criticized the evaluation, noting that the program had been improved significantly in ways that were not examined in the evaluation and that some of the criticisms of the program came from “adversaries...who advocate the legalization of drugs.”⁵³ One clear lesson about drug prevention media campaigns, as with other prevention programs, is that understanding decision-making about these programs requires understanding the political context in which they are implemented.

46 Ibid.

47 Eddy, *ibid*.

48 R Hornik, L Jacobsohn, R Orwin et al. Effects of the National Youth Anti-Drug Media Campaign on youths. *American Journal of Public Health* 98(12):2229-2236, 2008.

49 Ibid.

50 Ibid.

51 See, e.g., article and commentaries in vol. 47 no. 13-14 of *Substance Use and Misuse*, pages 1414-1438, especially by S Magura, Z Sloboda, R Hornik and R Orwin.

52 Government Accountability Office, *op.cit.* (note 41).

53 Letter from ONDCP director John P. Walters, 10 August 2006, reproduced in GAO, *op.cit.*, pp 65-71.

“...in schools with “for cause” testing—targeted testing of students judged to be at high-risk of drug use—there was some moderate reduction in marijuana use among the targeted populations, but drug testing overall in this sample was associated with higher use of illicit drugs other than marijuana.”

Drug testing in schools: Reviews by both Babor et al. and UNODC conclude that there is no evidence that drug testing in schools reduces or delays drug use, though studies are few.⁵⁴ Since those reviews were completed, two other studies using U.S. data have been published. Sznitman and Romer found, using nationwide data, that students’ perception that drug testing was conducted in their schools (the self-reported variable of interest) was not associated with reduced initiation or escalation of drug use.⁵⁵ A second piece of research used nationally representative data on adolescents who were in the long-term study of young people’s behaviors called Monitoring the Future from 1998 to 2011. This study concluded that in schools with “for cause” testing—targeted testing of students judged to be at high-risk of drug use—there was some moderate

reduction in marijuana use among the targeted populations, but drug testing overall in this sample was associated with higher use of illicit drugs other than marijuana.⁵⁶ The authors recommend that until more research can clarify these apparently contradictory results, schools should be very cautious about using drug testing.⁵⁷ Random drug testing among school children raises many human rights concerns, including consent procedures for legal minors and confidentiality of results, as well as technical concerns related to the risk of testing errors or misinterpretation of results.⁵⁸

54 Babor et al., op.cit., p 114; UNODC *Prevention standards*, op.cit., pp 24-25.

55 SR Sznitman, D Romer. Student drug testing and positive school climates: testing the relation between two school characteristics and drug use behavior in a longitudinal study. *Journal of Studies on Alcohol and Drugs* 75:65-73, 2014.

56 YM Terry-McElrath, PM O’Malley, LD Johnston. Middle and high school drug testing and student illicit drug use: a national study 1998-2011. *Journal of Adolescent Health* 52(6):707-715, 2013.

57 Ibid.

58 S Levy, L Sherritt, BL Vaughan et al. Results of random drug testing in an adolescent substance abuse program. *Pediatrics* 119(4):e843-48, 2007

CONCLUSIONS AND RECOMMENDATIONS

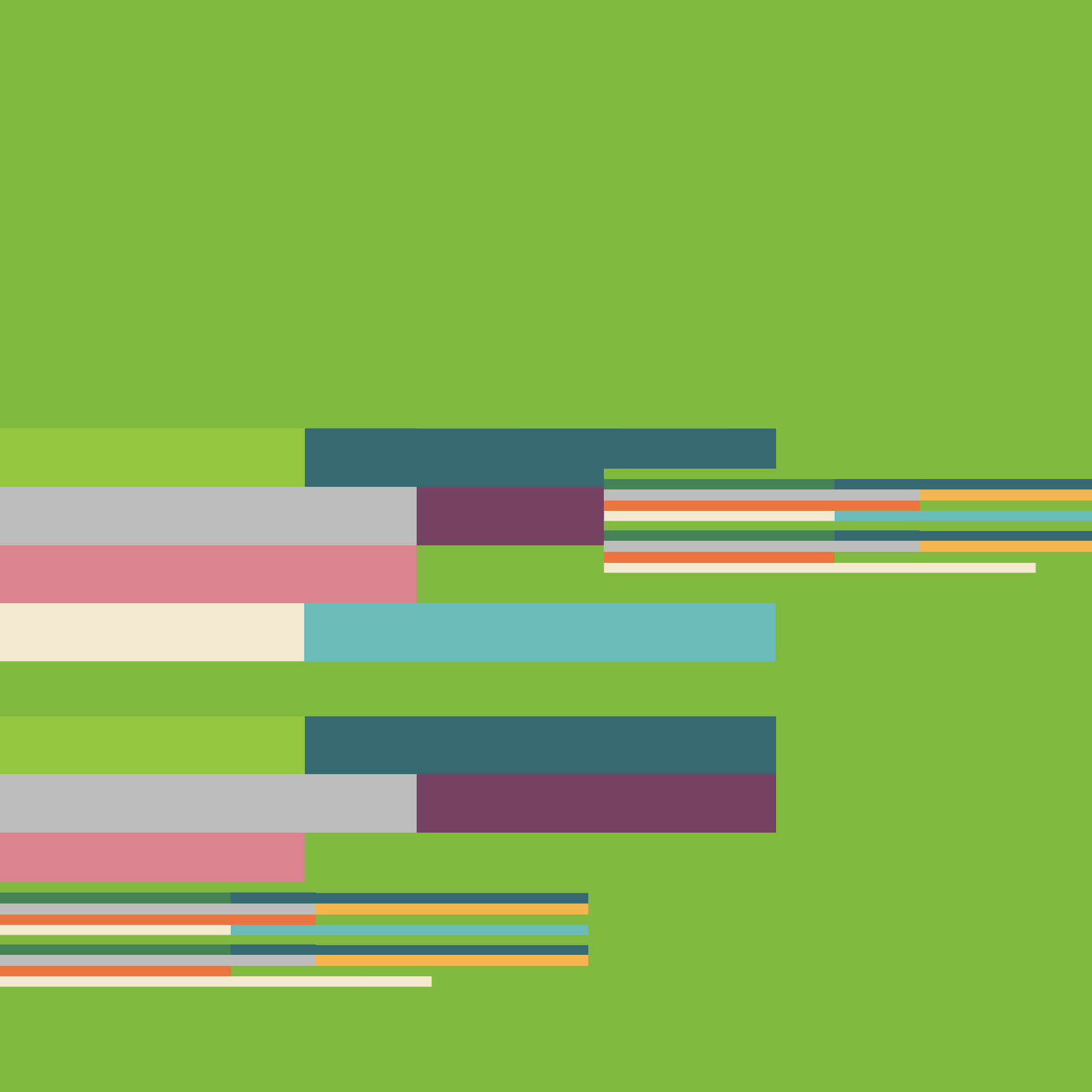
Prevention programs are and should be an essential part of drug policy. In low- and middle-income countries, policymakers often evince an interest in drug prevention, but few governments have invested in scaling up programs.

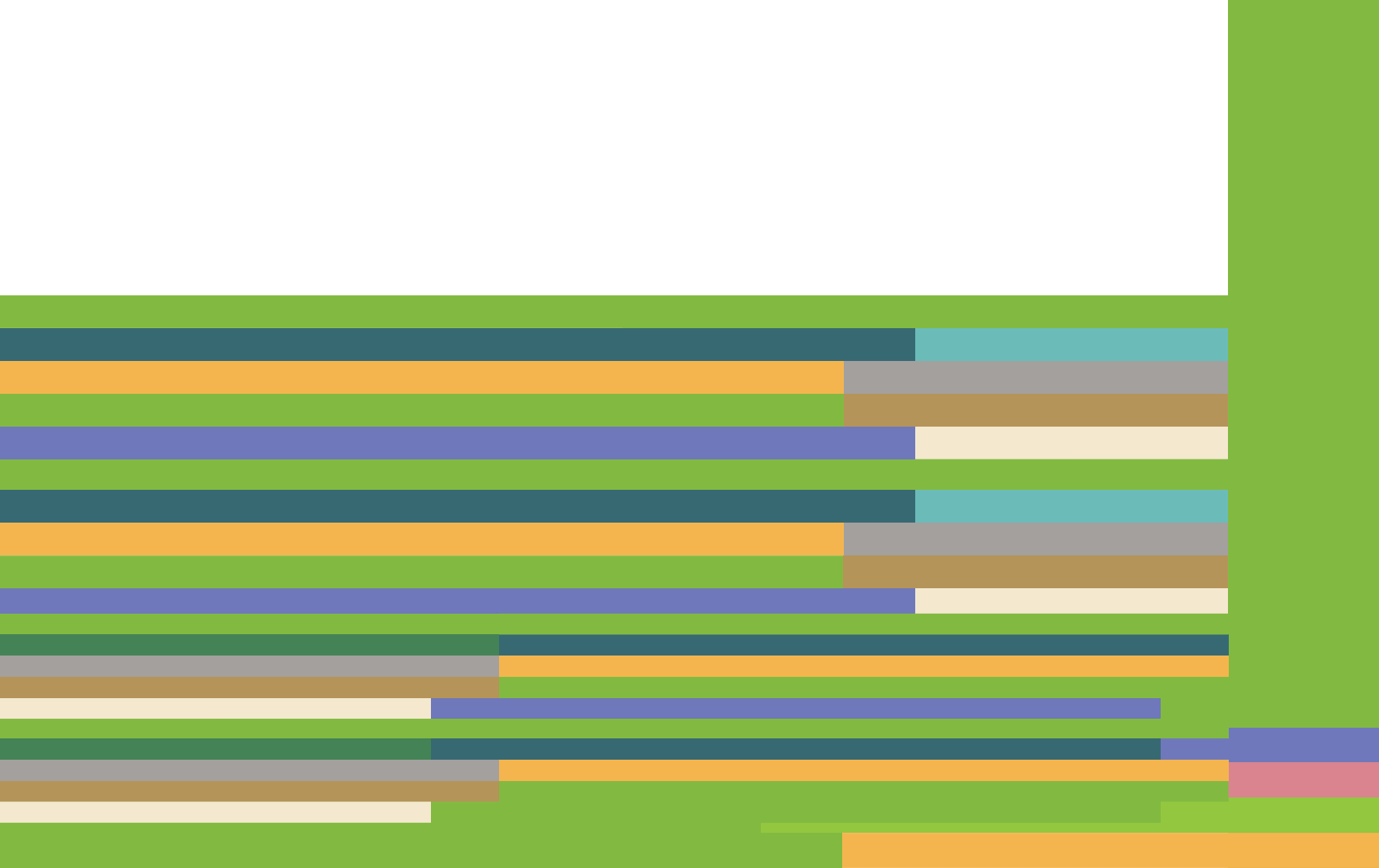


In high-income countries, particularly the United States, there has been large-scale investment in programs for which there is little scientific evidence of effectiveness. In spite of their shortcomings, these programs continue to attract government support perhaps because they satisfy parents and political and community leaders as a visible critique of drugs and a form of outreach to young people. But programs that merit scale-up in the Global South as well as the Global North are those for which the design and content are based on a rigorous analysis of the real-life situations from which drug use emerges. As noted by Babor et al., effective programs are those that are likely to “provide an early intervention within the proximal social environment, either the classroom or the family, and that focus on positive social and behavioral development [and] are potentially important for delaying use and limiting harm.”⁵⁹

The scientific literature on drug prevention programs indicates that there remain many methodological challenges to determining the effectiveness of programs, and there are prominent evaluations in the literature that continue to stir controversy. Nonetheless, there is some consensus with regard to both school-based and mass media programs around a few points:

- **To achieve public health goals, drug prevention should focus not only on preventing all use of drugs—which is unlikely to be a realistic goal in most settings—but also on preventing or reducing problematic use and the harms of drug use. In this regard, abstinence-oriented programs, of which there is long experience in the United States and a number of other countries, may not be the most appropriate approaches.**
- **It is not effective simply to scare young people with accounts of the dangers of drugs, and it is not productive to exaggerate those dangers in prevention programs. Young people have a right to evidence-based, reality-based information that can help them prevent drug-related harms throughout their lives.**
- **Evaluations of prevention programs suggest strongly that the content of educational programs should be based on formative research that clarifies the particular reality of initiation of drug use and factors influencing continued and problematic use. This step adds cost to program design, but there is no “one size fits all” in drug prevention. Meaningful participation of young people should be a central element of this formative research as well as of other stages of the design, implementation, and evaluation of prevention programs. Effective programs for young people must take account of their real-life perceptions of the risks of drugs, the pressures they face day to day, and the other information they encounter about drugs. There is no way to document these realities without young people’s meaningful participation, which entails establishing a relationship of trust with them.**
- **Prevention programs should ideally be thoroughly and independently tested before implementation, including rigorous assessment by expert evaluators who are independent of the program’s creators or funders.**
- **Most reviews of prevention programs conclude that combined approaches in a coherent multifactorial strategy—improving reality-based knowledge of drug use and drug-related harms, ensuring access to counseling and other services, endeavoring to remove risk factors in schools and other places where young people congregate, improving parents’ capacity to have reality-based conversations with young people, etc.—are likely to be more effective than only providing information or building skills of young people.**





Open Society Foundations

224 West 57th Street

New York, NY 10019 USA

+1 212 548 0600

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