



# Preventing Problem Behaviors: Effective Strategies And Programs For Children And Adolescents

Special Report

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High rates of violence, school failure, drug use, and pregnancy among American youth are troubling, costly, and frustrating. Perhaps no time in history has the need to prevent problem behaviors among the nation's youth been greater.

Ample evidence suggests science-based prevention programs can help reduce the use of alcohol, cigarettes, and other drugs; decrease alcohol-related auto accidents; and lower pregnancy rates and improve the health of babies born to teenage mothers.

But many programs used throughout the nation to prevent adolescent problem behavior do not embrace the principles that researchers say are the keys to success, and many fail to produce hoped-for results.

## Characteristics of Effective Prevention

Research identifies several programs that help prevent problem behaviors, but they can be costly and difficult to replicate, leading many agencies to create or adapt their own prevention programs. Key characteristics of effective prevention programs include:

- **Comprehensive programming:** A range of interventions are employed to address all risk factors and other issues. For example, programs for preventing teenage pregnancies may focus on increasing awareness, promoting skill development, and providing reproductive health services. Settings that influence youth behavior – schools, community, family, peers – are also addressed.
- **Varied teaching methods:** Effective prevention includes interactive instruction<sup>1</sup> and active, hands-on experiences to increase participants' skills.<sup>2</sup> Skill development varies according to the behaviors addressed. For example, resistance skills, such as the ability to be assertive, are important in drug use prevention, while cognitive, language, and social skills facilitate school achievement.
- **Sufficient program intensity:** Children and adolescents must be exposed to a sufficient amount of an interven-

tion. The greater the need, the greater the dosage required. Effective programs generally include follow-up sessions to support skills learned or to develop new ones so gains are less likely to wane over time.

- **Theory-driven, scientifically justified:** Once the risk factors and causes are identified, effective programs are based on scientifically-tested strategies shown to help prevent the problem behavior, rather than simply on logic and past experience.
- **Positive relationships:** Effective programs promote strong, positive relationships. Some seek to improve parent-child relationships and parenting skills. Others focus on developing positive relationships between children and their peers, teachers, and members of their community. Studies of drug use suggest it is important for a child to have a strong relationship with at least one adult.<sup>3</sup>
- **Appropriate timing:** Prevention programs are most effective when they are relevant to a child's intellectual, cognitive, and social development – and they are delivered before problem behaviors surface.
- **Socioculturally relevant:** Successful programs are relevant to those they serve in terms of sensitivity to cultural factors, how the intervention is received, and the individual needs of children.<sup>4</sup> Community participation in planning may ensure that specific needs are met.
- **Outcome evaluation:** Without outcome evaluation a program may mistakenly "appear" to be effective. Evaluations that emphasize continuous improvement supply helpful information on how to refine the program.
- **Well-trained staff.** Successful outcomes demand competent, sensitive, and well-trained workers who are given sufficient support and supervision. High turnover and low morale can compromise even a highly-trained, competent staff.

### Community Prevention Programs

Preventing drug and alcohol abuse, violence, and other serious problems among large numbers of youth requires a broader focus than individual psychological issues. Successful interventions involve program staff and community residents and combine a number of strategies across multiple settings to address risk factors that influence youth behavior.

Studies suggests both research-driven programs directed by professionals at universities or research institutions and community-driven programs often conducted in schools and other local settings by agencies or community coalitions can reduce rates of adolescent pregnancy, substance abuse, and other problem behaviors among adolescents. In practice, however, many community-level programs do not achieve these outcomes.

### Research-Driven Prevention

Research-driven programs typically use designs that include comparison or control communities to more precisely measure the impact of the intervention. Several programs of this type have been effective in preventing problem behaviors among adolescents. For example:

- **Substance abuse:** Alcohol, cigarette, and marijuana use were significantly lower among adolescents in 26 Kansas City, Missouri communities who participated in the Midwestern Prevention Project, which included school-based social skills training, parent training in communication skills, and changes in local laws regulating the availability of alcohol and tobacco. Lower marijuana and cigarette use was also seen three years after intervention.<sup>5</sup>
- **Smoking:** Smoking was significantly lower among Oregon adolescents exposed to a school-based anti-smoking program and a community program compared to those who were exposed only to the school-based program.<sup>6</sup> The community program included a public awareness campaign, anti-tobacco activities, a component designed to encourage parents to discourage smoking, and activities to reduce youth access to tobacco.
- **High-risk drinking:** A California initiative, the Prevention of Alcohol Trauma project, reduced alcohol-related accidents among adolescents. The project featured community education, tougher enforcement of drunk driving laws, and training bar employees to be more responsible about who they serve. Alcohol-related auto accidents

fell about 10% a year over the project's five-year lifespan, alcohol-related crash arrests dropped 6%, and sales of alcoholic beverages to minors declined significantly.<sup>7</sup>

### Community-Driven Prevention

Several community-driven coalitions have documented successes in reducing problem behaviors among adolescents and improving child health. For example:

- **Pregnancy and healthy births:** The Hampton, Virginia Healthy Families Partnership included a hospital, public libraries, public schools, neighborhood organizations, and the United Way, and provided home visitation, parent education, and teen pregnancy prevention programs. Of intervention mothers, 85% had no pregnancy risk factors compared to 50% of control mothers, and 18% of intervention mothers had birth complications compared to 40% of the controls.<sup>8</sup>
- **Immunizations:** CINCH, a coalition to improve child health outcomes in eastern Virginia communities, increased immunization rates from 49% to 66% in Norfolk over a two-year period. It began with community needs assessment. Household surveys funded by the Center for Disease Control were conducted, and local institutions, agencies, and businesses funded interventions.<sup>9</sup>

### But Many Interventions Are Ineffective

Unfortunately, despite these successes, many other community-level programs produce marginal or no positive outcomes at all.

One review, for example, reported that only nine of 17 anti-drug programs achieved positive outcomes. Programs with positive outcomes tended to be multi-component interventions, whereas those that failed were more narrow and focused on community public education or organizing or training community leaders for prevention.<sup>10</sup>

Reviews of community-level prevention programs recommend improving, rather than abandoning, the interventions. Suggested improvements include expanding the use of best practices and bridging the gap between what is known about prevention – what works and what does not – and what is practiced. Yet, for example, findings that Drug Abuse Resistance Education (DARE) programs are less effective than other anti-drug programs has not stopped DARE from being adopted by 70% of U.S. school districts. Training, technical assistance in implementation, and more user-friendly interventions are some of the suggestions for narrowing the gap.

### Family-Strengthening Approaches

Strong families and effective parents cloak children in protective factors, promote resiliency, and reduce problem behavior. Protective factors include positive parent-child relationships, strong parental supervision, consistent discipline, communication of family values, and when parents help children develop dreams, goals, and purpose in life. Unfortunately, at a time when youth problems are high, parents are spending less time parenting and less time at home. Some also report feeling powerless – that they cannot compete with the influence exerted by their children’s peers and entertainment media.

Research suggests, however, that parents and families can wield considerable influence. For example, concern about parent disapproval of alcohol and drug use is the primary reason children do not drink or abuse drugs, even into the 12<sup>th</sup> grade.<sup>11</sup> Likewise, a strong family environment has been found to be a major reason why youth avoid delinquent and unhealthy behaviors.<sup>12</sup>

### Family Interventions

The effectiveness of family interventions in reducing adolescent problem behavior was examined in two major federal studies: The Center for Substance Abuse Prevention’s Prevention Enhancement Protocols System (PEPS) and the National Institute of Justice, Office of Juvenile Justice and Delinquency Prevention’s Strengthening America’s Families Project.

The studies report that a number of family interventions reduce the risk of adolescent problems, including violent and delinquent behaviors, substance abuse, suicide, teen pregnancy, and school failure. Successful programs promote family protective and resiliency factors in addition to helping to reduce family risk factors. Yet, only 10% of the parenting and family interventions developed over the past 20 years are used by community agencies.<sup>13</sup>

In addition to individual programs, several approaches supported by strong evidence of positive outcomes include:

- **Behavioral parent training:** Skills training focuses on making cognitive, affective, and behavioral changes in the parent. This encourages practices such as increasing positive interactions with children through play, rewarding children for good behavior, making clear requests, and clearly explaining consequences. Studies show the approach works best with children ages 3 years to 10. About two-thirds of children exposed to the behavioral training approach show clinically significant improvements.

Adding sessions to address parents’ own issues tends to increase the effectiveness of the approach.<sup>14</sup>

- **Family skills training:** Behavioral parent training is combined with social and life skills training for children and family practice sessions. Parents learn therapeutic play, and children learn how to manage anger, accept and give criticism and praise, solve problems, and be assertive. Family practice time explores issues such as discipline and communication. Studies suggest each component influences different outcomes. Parent training reduces conduct disorders, child training improves social competency, and family practice sessions improve family relationships.<sup>15</sup>

Adding family-focused programs to community or school-based prevention programs increases their effectiveness by allowing them to address more risks and strengthen protective and resiliency factors. For example, improved social cognitive skills among third graders and a reduction in serious conduct disorders were achieved by Fast Track, a large prevention program that incorporates a parenting program with teacher training to reduce conduct disorders.

### Principles Of Effective Family Interventions

Effective family-focused programs share several characteristics:

- Comprehensive, multi-component programs are more effective than single-component interventions.
- Family-focused programs are more effective for families with relationship problems than child-focused or parent-focused programs.
- Addressing ways to improve family relations, communication, and parental monitoring are key components.
- Outcomes are more likely to be long-lasting when programs produce cognitive, affective, and behavioral changes in ongoing family dynamics and environment.
- The greater the risks faced by families, the more intensive an intervention needs to be.
- When parents are very dysfunctional, programs tend to be more effective when begun prenatally or in early childhood.

- Shaping programs to suit cultural traditions of families improves recruitment, retention, and sometimes effectiveness.
- Incentives, such as food, child care, and transportation, help improve rates of family recruitment and retention.
- Program effectiveness is greatly influenced by the characteristics of the trainers, such as the trainer's confidence, warmth, humor, and empathy.
- Interactive skills training, such as role playing or family practice sessions, are more effective and appealing than didactic lecturing.
- A collaborative process that encourages families to identify their own solutions helps strengthen relationships between the program and families.

### Conclusions

Prevention programs, when carefully designed and implemented, can reduce problem behavior among children and adolescents. Programs that are the most effective engage children and the environments that influence them, address a range of risk factors, and promote protective and resiliency factors.

A gap between science and practice limits effectiveness. Identifying cost-effective ways to implement evidence-based interventions and offering agencies technical assistance might narrow the gap so more children might avoid behavior problems that threaten their well-being and future.

### References

Wandersman, A., & Florin, P. (2003). Community interventions and effective prevention. *American Psychologist*, 58, pp. 441-448.

Nation, M., Crusto, C., Wandersman, A., Kumpfer, K., Seybolt, D., Morrissey-Kane, E. & Davino, K. (2003). What works in prevention: Principles of effective prevention programs. *American Psychologist*, 58, pp. 449-456.

Kumpfer, K., & Alvarado, R. (2003). Family-strengthening approaches for the prevention of youth problem behaviors. *American Psychologist*, 58, pp. 457-465.

*This Special Report, written by Jeffery Fraser, is based on the above-referenced publications. It is not intended to be an original work, but a summary for the convenience of our readers. References noted in the text:*

- <sup>1</sup> Tobler, N.S., & Stratton, H.H. (1997). Effectiveness of school-based drug prevention programs: A meta-analysis of the research. *Journal of Primary Prevention*, 18, pp. 3-31.
- <sup>2</sup> Dusenbury, L. & Falco, M. (1995). Eleven components of effective drug abuse prevention curricula. *Journal of School Health*, 65, pp. 420-425.
- <sup>3</sup> National Institute on Drug Abuse. (1997). *Preventing drug use among children and adolescents: A research-based guide*. Washington, DC: National Institute on Drug Abuse.
- <sup>4</sup> Resnicow, K., Solar, R., Braithwaite, R. Ahluwalia, J., & Butler, J. (2000). Cultural sensitivity in substance abuse prevention. *Journal of Community Psychology*, 28, pp. 271-290.
- <sup>5</sup> Pentz, M.A. (1998). Preventing drug abuse through the community: Multicomponent programs make the difference. In A. Sloboda & W.B. Hansen (Eds.), *Putting research to work for the community* (NIDA Publication No. 98-4293; pp. 73-86). Rockville, MD: National Institute on Drug Abuse.
- <sup>6</sup> Biglan, A., Ary, D.V., Smolkowski, T.D., Duncan, T., & Black, C. (2000). A randomized controlled trial of a community intervention to prevent adolescent tobacco use. *Tobacco Control*, 9, pp. 24-32.
- <sup>7</sup> Holder, H.D., Saltz, R.F., Grube, J.W., Voas, R.B., Gruenewald, P.J., & Treno, A.J. (1997). A community prevention trial to reduce alcohol-involved accidental injury and death: Overview. *Addiction*, 92(Suppl.2), S155-S171.
- <sup>8</sup> Galano, J., & Huntington, L. (1997). *Healthy Families Partnership evaluation: A summary*. Hampton, VA: Healthy Families Partnership.
- <sup>9</sup> Butterfoss, F.D., Morrow, A.L., Rosenthal, J., Dini, E., Crews, R.C., Webster, J.D., & Louis, P. (1998). CINCH: An urban coalition for empowerment and action. *Health Education & Behavior*, 25, pp. 212-225.
- <sup>10</sup> Pentz, op. cit.
- <sup>11</sup> Johnson, L.D., O'Malley, P.M., & Bachman, J.G. (2001). *National survey results on drug use from the Monitoring the Future study, 1975-2000: Vol. I. Secondary school students* (NIH publication No. 2000). Rockville, MD: National Institute on Drug Abuse.
- <sup>12</sup> Center for Substance Abuse Prevention. (2000). *The national cross-site evaluation of high risk youth programs: Final report*. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration.
- <sup>13</sup> Kumpfer, K.L. (2002). Prevention of alcohol and drug abuse: What works? *Journal of Substance Abuse*, 23(Suppl. 3), pp. 25-44.
- <sup>14</sup> Webster-Stratton, C., & Taylor, T. (2001). Nipping early risk factors in the bud: Preventing substance abuse, delinquency, and violence in adolescence through interventions targets at young children (0-8 years). *Prevention Science*, 2, pp. 165-192.
- <sup>15</sup> Kumpfer, K.L., & Alder, S. (2003). Dissemination of research-based family interventions for the prevention of substance abuse. In Z. Sloboda & W.J. Bukoski (Eds.), *Handbook of drug abuse prevention* (pp. 75-119). New York: Kluwer Academic/Plenum.