Brief Number One:
Youth Problems Can Be Prevented

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Youth Problem Behaviors

The most common and costly problems of human behavior include aggressive social behavior, risky sexual behavior, depression, substance abuse, academic failure, school dropout, and crime. Each of these problems affects millions of people and causes pain and suffering both to the person with the problem and those around them.

Problem behaviors do not exist in a vacuum: youth with one problem are also likely to have others (Biglan et al., 2004). For example, data obtained from the Oregon Healthy Teens survey (Boles, Biglan, & Smolkowski, 2006) indicates that, among the 9% of Oregon eighth graders who reported smoking, 95% reported at least one other problem. Among the 9% of Oregon eighth graders reporting antisocial behavior, 86% reported at least one other problem.

Although fewer than 20% of youth have multiple problems, that group of youth accounts for over 75% of drunk driving, violent crime, total arrests, and health problems associated with drug or alcohol use and improper needle use. If we do nothing to halt development of these problems or treat them more effectively when they do occur, we will continue to incur enormous costs. If we fail to ensure that at-risk youth receive appropriate prevention and treatment for family, mental health, or substance use problems, then they will struggle academically, drop out of school, get into trouble with the law, and enter the corrections or child welfare system, incurring huge financial and human costs in the process.

The Cost of Youth Problem Behaviors

The cost of these behaviors is substantial. While youth suffer with depression, pain, rejection, injury, and even death, their family members experience conflict, sadness, and anxiety. Crime victims undergo harm, sometimes grievously. In 2004, economist Ted Miller calculated the costs of problem behaviors occurring in 1998 by all youth. He included violent crime, property crime related to substance abuse or violence, binge drinking, heroin/cocaine abuse, high-risk sexual behavior, smoking, high school dropouts, and suicide attempts (Miller, 2004). He included the cost of medical treatment, use of government and community resources, loss of work, and decline in quality of life. With one exception (smoking), Miller also included the costs that would continue beyond 1998 due to that problem behavior. For example, an assault that left a victim paralyzed would result in continuing costs throughout that victim's life. Even without including the long-term cost of smoking, Miller's estimate came to $435.3 billion.

The mental, emotional, and behavioral disorders leading to these multiple problems begin early: 75% of adult disorders start by age 24; half of them by age 14. The first symptoms usually start to emerge two-to-four years before a diagnosable disorder does. Currently, 14 to 20% of young people have a disorder that can lead to these expensive problems.

Prevention through the Life Span

The good news is that these serious multiple problems are preventable. Most problems have common risk factors. Three of the most prominent risk factors are stress, poverty, and family conflict. Research has shown that at every phase of young people's development—from conception through adolescence—there are interventions that can prevent the development of these costly problems.

For example, when a woman becomes pregnant and through the first few years of her child's life, available programs include pregnancy education and prevention, prenatal care, nurse home visitation, early childhood interventions, and parenting skills training. Effective parenting programs exist for parents with children of all ages. Additionally, as children reach school age, they can receive social and behavioral skills training and classroom-based curricula to prevent substance abuse and aggressive behavior. From early adolescence through young adulthood, young people can benefit from programs to help prevent and/or cope with depression. Intensive programs exist for those who are facing the onset of schizophrenia. Prevention focused on specific family adversities (e.g., grief, divorce, parental substance use or incarceration, or parental psychopathology) is available to help young people at all stages of development. Finally, policies exist to help children and families at each developmental stage. For example, there is clear evidence that raising the cost of tobacco and alcohol reduces the number of young people who smoke or drink.

Most evidence-based preventive interventions prevent a range of problems. We describe just a few of those here.

Examples for Families

Nurse Family Partnership offers nurse visitation with mothers during pregnancy and the first two years of their children's lives. The focus is on prenatal care, maternal smoking, mothering, contraception, and work life. Evaluations in three randomized trials for poor, teenager single mothers found significant effects on abuse and neglect, children's behavioral development, mother's economic wellbeing, the time to next baby, and children's arrest as adolescents (Olds et al., 2004).

Triple P (Prinz, Sanders, Shapiro, Whitaker, & Lutzker, 2009) is a community-wide system of parenting support that includes brief media communications, brief advice for specific problems, and extensive interventions when needed. Multiple randomized trials have shown benefit, including a randomized controlled trial in 18 South Carolina counties, where Triple P stopped a rising trend of substantiated child-maltreatment among the counties using Triple P, compared to counties that did not receive it.

Strengthening Families (Spoth, Redmond, & Shin, 2001) is a group-based parenting program for parents of early adolescents that produced benefits up to six years later. It reduced tobacco, alcohol, and drug use—including methamphetamine use and reduced delinquency. In a cost-effectiveness survey, Aos, Lieb, Mayfield, Miller, and Pennucci (2004) noted the program produced a savings of $7.82 for each dollar invested and a total savings of $5,805 per youth.

The **Family Check-Up** (Dishion et al., 2008) provides parenting support to families of adolescents via a family resource center in middle schools. Effects as much as five years later include reduced substance use, fewer arrests, better school attendance, and academic

performance. In their cost-effectiveness review, Aos et al. (2004) found a savings of $5.02 per dollar invested and a total savings of $1,938 per youth.

New Beginnings is a small group program for divorcing families, with emphases on learning new skills and applying them in the family. It has shown numerous benefits for families. For example, children in families that received New Beginnings were less likely to use marijuana compared to the control group (Wolchik et al., 2009).

Depression prevention. Clarke et al. (2001) found that a group program for adolescent offspring of depressed parents could reduce the incidence of depression to a level no higher than for adolescents whose parents were not depressed.

Multidimensional Treatment Foster Care (MTFC) places court-ordered youth in homes of foster parents well trained in behavior management and continuously supported by program staff (Chamberlain, 2003). The young people's parents receive the same behavior management training and support from staff. The program's key features include daily monitoring of the youth's behavior and consistent consequences, even for minor infractions. When ready, the adolescent makes a gradual return home. Randomized controlled trials show that the program results in fewer arrests, less crime, and less delinquent behavior. MTFC also has shown clear economic benefits in reducing incarceration and crime victim costs: Compared with typical community placements, MTFC has shown savings of $10.88 for each dollar spent, for a total savings of $24,290 per youth.

Examples for Schools

The **Good Behavior Game** (Kellam et al., 2008) rewards teams of students for brief periods of on-task, cooperative behavior. The rewards are as simple as a little extra recess time. The game dramatically increases children's cooperation and concentration. Shep Kellam and his colleagues at Johns Hopkins University used the game in first grade classrooms in Baltimore inner-city schools. In their randomized controlled trial where some classrooms got the game and others did not, they found that those who got the game abused drugs less, committed fewer crimes, and were less likely to be depressed when they were adults. A little reinforcement for prosocial behavior in first grade changed the entire life trajectory of some of these children.

Aban Aya is a school and community intervention for high-poverty African American neighborhoods in Chicago (Segawa, Ngwe, Li, & Flay, 2005). The intervention included social skills training; in-service training of school staff; a task force to develop policies, conduct schoolwide fairs, seek funds for the school, and conduct field trips; and parent training workshops. The program brought about significant effects on violence, drug use, and boys' recent sexual intercourse.

The Need for Nurturing Families, Schools, Neighborhoods, and Workplaces

The interventions described here represent only a few of the advances that behavioral sciences have made in the past 40 years. Behavioral and biological scientists have studied all of the most common and costly problems of human beings. They have made great advances in the treatment and prevention of psychological problems like depression and anxiety; behavioral problems like antisocial behavior, substance abuse, marital conflict, and child abuse; and physical illnesses, like obesity, cardiovascular disease, diabetes, and cancer.

The evidence from all of these areas converges on a surprisingly simple conclusion. We can prevent an enormous proportion of the problems that confront us by increasing the prevalence of nurturing environments (Biglan & Hinds, 2009). Nurturing environments minimize biological and psychological toxins or stressors, richly reinforce prosocial behavior, teach prosocial values and skills, and foster psychological flexibility.

Stressful and biologically toxic conditions can make it impossible for people to thrive. Biologically harmful conditions include high levels of lead (Glenn & Biglan, under preparation), low levels of omega 3 fatty acid, and inadequate nutrition. They affect young people's cognitive and physical development and make academic failure, aggression, depression, and substance use more likely. Too many children and adults encounter psychologically stressful conditions such as threats, physical and sexual abuse, conflict, and criticism. Recent research on neuroscience makes clear that such psychological stressors harm people's biological functioning. For example, economic disparities are associated with a greater risk of cardiovascular disease. Such stressors increase the likelihood that young people will develop problems with aggression, depression, and drug use. Our public policies and programs need to make our nation's highest priority the reduction of stressful and toxic conditions in families, schools, workplaces, and neighborhoods.

Richly reinforce prosocial behavior. Forty years of behavioral science research show that positive reinforcement is essential for human wellbeing. Every effective prevention or treatment intervention involves the interventionist reinforcing people's change efforts, and every effective parenting or school-based program increases positive reinforcement for prosocial behavior. Parents learn to use simple rewards, like stickers, praise, or simply time spent with their children to help children learn virtually everything they need to learn—dressing themselves, doing homework or chores, cooperating with others, and much more.

If positive reinforcement sounds dry and technical, the word love is a pretty good approximation of what we are discussing. Not a love that flows from feeling good about the other person—as in a romance—but a love that involves caring for, supporting, and listening to another person even when it takes some effort—more like the love a mother shows an infant. Our communities will become more nurturing when they encourage everyone to adopt this caring and supportive stance when dealing with everyone they encounter.

Teach and promote prosocial behavior. Effective prevention and treatment interventions help people develop more prosocial behavior. Once we realize the benefits of promoting prosocial behavior, we can begin to think about the ways that our environments do and do not encourage such behavior. A steady diet of violent entertainment increases aggressive behavior (Huesmann, Eron, Klein, Brice, & Fischer, 1983). Teaching children ways to deal with conflict nonviolently reduces aggressive behavior (e.g., Cooke et al., 2007).

Beyond the programs and practices that promote prosocial behavior, as a general rule we should seek to encourage policymakers, parents, and citizens to determine ways to promote prosocial behavior. Do our schools actively promote such behavior? Do they promote volunteering? Can we teach people to forgive others rather than carry grudges that prolong conflict? Are models of prosocial behavior widely available in families, schools, and media? Do these models receive the recognition needed to encourage others to be prosocial?

Psychological flexibility. Nurturing environments foster psychological flexibility. Psychologically flexible people do not attach rigidly to their beliefs and thus can adjust flexibly to the demands of the situation. Because they are not fused to their beliefs, they are

more tolerant of others. They are clear about their own values and act in the service of those values, even when doing so feels difficult or frustrating. They tend not to criticize or complain about other people's behavior. Because they are less judgmental, they are less likely to punish or hurt others and more likely to praise, support, attend to, and care for others.

Recent work in mindfulness therapies, such as Acceptance and Commitment Therapy (Hayes, Strosahl, & Wilson, 1999), shows that when people receive help with adopting this type of acceptance, they become more flexible in making their way in the world. Rather than focusing on feeling good, they focus on acting in the service of their values. Research shows the benefit of this approach to life for people with all kinds of problems, including anxiety, depression, diabetes, cigarette smoking, hallucinations, and even epilepsy.

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