

**RAND**

*Forgotten Ages,  
Forgotten Problems*

*Adolescents' Health*

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## Summary

American health needs—what they are and how they can be met—have come to the forefront of the national agenda. Medical expenditures have soared over the past decade; nevertheless, increasing numbers of Americans lack adequate insurance to cover the costs of health care. Adolescents, more and more of whom fall within the categories of the uninsured or underinsured, face additional barriers to obtaining appropriate care, barriers that stem from the kind of health problems adolescents are most likely to face and the difficulty of finding effective ways of preventing or treating those problems.

This monograph examines what is known about the major causes of adolescent morbidity and mortality with a view to assessing the adequacy of current efforts aimed at improving adolescent health and identifying further initiatives to improve our results. It begins with two assumptions: (1) that adolescent health encompasses far more than the absence of physical disease or disability, and (2) that it includes mental and social, as well as physical, well-being. This view of adolescent health implicitly calls for including both behavioral problems and mental disorders among the health community's concerns, a shift in focus that is increasingly endorsed by international and national organizations concerned with health issues. Recent data, which show that the principal causes of adolescent mortality are the result of adolescent behavior, support this shift as well.

## Major Causes of Adolescent Mortality and Morbidity

Adolescents start out in good health relative to the rest of the population: Expected deaths for 10- and 11-year-olds are lower than those for any other age. As adolescents grow older, however, their risk of dying increases; the mortality rate for 15- to 19-year-olds is three times that for 10- to 14-year-olds. These differences reflect the fact that proportionately more older adolescents engage in high-risk behavior and are the victims of violence.

Seventy-five percent of all adolescent deaths are attributable to three causes: unintentional injuries (particularly injuries from motor vehicle accidents), homicide, and suicide. Each is more likely to occur among older adolescents; each is also a behavioral phenomenon that is linked with various risk-taking activities and/or negative emotional states (e.g., drug use, drinking and driving,

use of weapons, depression, conduct disorders). Other threats to the health of America's youth include various manifestations of the "new morbidity": drug use (including use of the licit drugs alcohol and cigarettes), violent behavior, unsafe sexual activity, and mental disorders. Such problems often go together: Drug use raises the risk of unsafe sexual behavior; teens with mental health problems often use drugs, and teens who use drugs often have mental health problems. Such problems also afflict substantial proportions of young people. Nearly one-fifth of the nation's high school seniors smoke every day, and about 30 percent are binge drinkers—practices that put them at great risk for developing a long-term addiction to tobacco or engaging in high-risk driving and sexual practices. Over half of the nation's high schoolers are sexually active, but few use condoms or other protective devices consistently. As a result, about one million teenage girls become pregnant each year and the risk of contracting acquired immunodeficiency syndrome (AIDS) or other sexually transmitted diseases (STDs) has increased substantially. In addition, about one in five adolescents suffers from a diagnosable mental disorder, which can develop into life-threatening problems or severely impede the young person's ability to negotiate the developmental tasks of adolescence.

## **Adolescent Health Care Insurance and Access to Services**

The new morbidity affects young people from all ethnic and demographic groups. However, its consequences can be particularly severe for teenagers who lack the resources to get help. Poor and near-poor adolescents, about one-third of whom lack coverage for health care, suffer disproportionately from monetary barriers to access. Nevertheless, a substantial proportion of middle-income teenagers also lack insurance—almost 30 percent of uninsured adolescents live in families with incomes at 200 percent of the poverty level or above.

Access to care is further restricted by limitations on coverage (particularly for many preventive and mental health services), by payment policies that promote expensive hospitalization over less costly community- or family-based treatment services, by adolescent concerns about confidentiality, and by physician failure to identify emotional or behavioral problems, plus adolescent and parental failure to seek help for them.

Given these barriers to care, many people advocate alternative health care systems for adolescents. Comprehensive health care centers that provide multiple services at a single site ("one-stop shopping") have been the most thoroughly studied. While they appear to be an effective strategy for reaching

poor teenagers and for getting them needed services, little is known about their effect on improving adolescent health outcomes.

## **Treatment and Prevention for High-Risk Behaviors and Mental Disorders**

Little also is known about the effectiveness of treatment for substance abuse or mental disorders. Evaluations of drug treatment programs have largely ignored adolescents; they have also focused on such substances as heroin, which few adolescents use. Studies of mental health services for adolescents have been plagued by methodological flaws that make it difficult to identify program-induced gains. Thus, we still lack solid evidence about what treatment regimes work, how long the effects last, and which problems and which adolescents are helped.

Prevention programs have shown modest success in curbing drug use, but the effects tend to erode after one or two years. They are more effective at delaying or reducing cigarette and marijuana use than drinking; they also work better for nonusers and experimenters than for more committed users. Prevention programs aimed at reducing sexual activity and teenage pregnancy appear to have had limited influence, but those that provide condoms and foster their use may be more successful at curbing both the spread of STDs and pregnancy rates.

The relatively modest results of treatment and prevention efforts aimed at high-risk behaviors and mental disorders stem, in part, from their complex causality. Numerous factors have been identified as contributors to drug use: suicide, risky driving, poor mental health, violence, and early or high-risk sexual activity. They include such diverse influences as early onset of deviant behavior, association with deviant peers, societal norms and parental attitudes that promote or tolerate high-risk behavior, beliefs that risky actions will not bring harm, family problems, difficulties at school, and genetic vulnerability. Risk or protective factors that are bound up with familial dynamics, community and social norms, or school experiences are difficult to modify; they are typically beyond the province of the health care providers who see adolescents when they happen to show up in their office or clinic.

Viewing the new morbidity as a public health problem opens the door to coordinated prevention and treatment efforts that may involve families, schools, community agencies, and the media, as well as health professionals. Such coordination is essential if we are to address the multiple forces that foster emotional and behavioral problems. Rather than fostering hospitalization as the

dominant strategy for treating teenagers with mental health or substance abuse problems, we need to promote community-based or school-linked systems of care that recognize the interrelatedness of many adolescent problems. Such systems should provide integrated services for both family and child; they also need to overcome the fragmentation caused by multiple and overlapping delivery.

For prevention programs aimed at entire cohorts of adolescents, as well as early intervention efforts for younger children, including schools in a coordinated program is particularly important. Schools are where most children can be found and where problems can be identified before they become critical. Moreover, some school environments exacerbate emerging problems, while others provide countervailing social climates or rewards for productive behavior. Hence, efforts to modify school practices and norms may help curb high-risk behavior.

Better training in adolescent medicine, including how to communicate with teenagers, may improve the health professional's ability to identify and cope with mental disorders, sexually at-risk teens, and drug abuse. Being able to see the doctor in a setting that fosters communication between health care provider and patient (teen clinics, school-linked health clinics, community-based centers) clearly helps teens talk more freely about personal matters, respond more positively to the doctor, and feel more satisfied with the quality of care received (Ershoff et al., 1992).

If they lack the insurance coverage to get through the door, however, few teens will benefit from greater professionalism and more coordinated services. Current efforts to reform the health care system should aim at both reducing the number of uninsured and underinsured adolescents and providing a basic floor of preventive and mental health services for behavioral, emotional, and physical problems.

## **Research Needed for Understanding How to Improve Adolescent Well-Being**

Making substantial inroads on the new morbidity also requires a deeper understanding of how its component problems arise and the kind of programs that help prevent or cure them. Research efforts that we believe will further these goals—and should receive high priority—include longitudinal studies aimed at clarifying the causes and course of high-risk behavior and mental

disorders, as well as interventions designed specifically for young children and adolescents.

We need a better understanding of how early childhood factors interact and compare with adolescent attributes and experiences in predicting later adolescent problems, as well as which antecedents contribute to only one problem or to several problems. We also need better information about which factors contribute to the *escalation* of high-risk behavior, not just its onset. Because AIDS and pregnancy increasingly threaten younger teenagers, we particularly need longitudinal data on the patterns and antecedents of sexual activity for adolescents under the age of 15.

Although basic research will yield a stronger theoretical and empirical foundation for developing more effective interventions, we should not forgo testing plausible approaches now. Among the more important approaches are (1) AIDS and pregnancy risk-reduction programs for all adolescents; (2) early interventions aimed at strengthening the child's bonds with family and school; and (3) clinical trials of treatments for substance abuse and mental health problems.

Because information alone rarely produces changes in behavior, AIDS prevention programs need to do more than explain how AIDS is acquired and exhort young people not to engage in high-risk behavior. They also need to help young people overcome barriers to practicing safe sex, such as embarrassment about buying and using contraceptives and inability to ask one's partner to use a condom. Specific interventions should be designed for sexually active teens who are difficult to reach (e.g., dropouts, runaways, the homeless), as well as for the in-school population.

Treatment programs for substance abuse and mental disorders need to be designed specifically for adolescents and to take into account their developmental capabilities and limitations. Evaluations of such programs should assess both short- and long-term effectiveness, compare the efficacy of different therapeutic regimes, and assess which regimes work better for which kids and which problems.

We also need to develop and assess early interventions aimed at providing children with a solid foundation for healthy growth and development *before* they reach puberty. Several plausible models for improving familial and school environments already exist; what we lack is sufficient evidence about their long-term effectiveness and how they can be improved.

The most credible and useful information about each of these strategies for promoting adolescent health will come from studies that employ random assignment to treatment and control groups. Although experimental designs are costly and difficult to implement, they provide strong evidence about whether the programs themselves have brought about change. Lacking such evidence, we run the risk of promoting ineffective, or even harmful, interventions.