

# ISSUES IN THE DELIVERY OF SERVICES TO SELECTED GROUPS OF ADOLESCENTS

## Contents

	<i>Page</i>
Introduction .....	159
Adolescents Living in Poverty: Issues in the Delivery of Health and Related Services .....	159
Overview of the Number of Adolescents Living in Poverty .....	161
Health Status of Poor Adolescents .....	165
Limitations of Data and Research on the Health of Poor Adolescents .....	165
Health Status of Adolescents by Family Income Level .....	167
Access to Health Services by Poor Adolescents .....	169
Patterns of Health Care Utilization by Poor Adolescents .....	169
Barriers to Access for Poor Adolescents .....	169
Services and Interventions To Increase Access to Health Services Among Poor Adolescents .....	170
Major Federal Programs Pertaining to Poor Adolescents .....	171
ACTION .....	172
U.S. Department of Health and Human Services .....	173
U.S. Department of Agriculture .....	177
U.S. Department of Labor .....	178
Racial and Ethnic Minority Adolescents: Issues in the Delivery of Health and Related Services . . .	178
Overview of the Number of Racial and Ethnic Minority Adolescents .....	181
Health Status of Racial and Ethnic Minority Adolescents .....	182
Limitations of Data and Research on the Health of Racial and Ethnic Minority Adolescents .....	182
Health Problems Experienced by Racial and Ethnic Minority Adolescents .....	183
Access to Health Services by Racial and Ethnic Minority Adolescents .....	187
Patterns of Health Care Utilization by Racial and Ethnic Minority Adolescents .....	187
Services and Interventions To Increase Access to Health Services Among Racial and Ethnic Minority Adolescents .....	189

	<i>Page</i>
Major Federal Programs Pertaining to Racial and Ethnic Minority Adolescents . . . . .	191
U.S. Department of Health and Human Services . . . . .	192
U.S. Department of Agriculture . . . . .	1%
U.S. Department of Education . . . . .	1%
U.S. Department of Justice . . . . .	1%
Rural Adolescents: Issues in the Delivery of Health and Related Services . . . . .	1%
Special Health Issues for Rural Adolescents . . . . . * * * *	1%
Limitations of Data and Research on the Health of Rural Adolescents . . . . .	1%
Health Problem Experienced by Rural Adolescents . . . . . * . . . . ** . . . . *	197
Access to Health Services by Rural Adolescents . . . . .	198
Major Federal Programs Pertaining to Rural Adolescents . . . . .	199
Conclusions and Policy Implications . . . . .	200
Poor Adolescents . . . . .	200
Racial and Ethnic Minority Adolescents . . . . .	201
Rural Adolescents . . . . .	201
Summary . . . . .	202
Chapter 18 References . . . . .	203

### **Box**

<i>Box</i>	<i>Page</i>
18-A. Research on Resilient Children and Adolescents . . . . .	166

### **Figures**

<i>Figure</i>	<i>Page</i>
18-1. Number of U.S. Adolescents Ages 10 to 18 and Number Living in Poor or Near-Poor Families, by Race/Ethnicity, 1988 . . . * . . * . . . ** . . . . . *	161
18-2. Socioeconomic Status of U.S. Adolescents Ages 10 to 18, by Family Income as a Percent of the Federal Poverty Level, 1988 . . . . .	162
18-3. Family Incomes as a Percent of the Federal Poverty Level by U.S. Adolescents' Living Arrangements, 1988 . . . . .	163
18-4. Family Incomes as a Percent of the Federal Poverty Level by U.S. Adolescents' Race/Ethnicity, 1988 . . . . .	164
18-5. Projected Changes in the Racial and Ethnic Makeup of the U.S. Population, All Ages, 1982 to 2080 . . . . .	179
18-6. Race/Ethnicity of U.S. Adolescents Ages 10 to 18, 1987 . . . . .	181
18-7. Projected Changes in the Racial and Ethnic Makeup of the U.S. Population Under Age 18, 1982 to 2080 . . . . .	182
18-8. Death Rates for All Causes for U.S. Adolescents Ages 10 to 14, by Race and Sex, 1987..	184
18-9. Death Rates for All Causes for U.S. Adolescents Ages 15 to 19, by Race and Sex, 1987..	184

### **Tables**

<i>Table</i>	<i>Page</i>
18-1. Reported Health Status of U.S. Adolescents Ages 10 to 18 by Family Income, 1988 . . . . .	167
18-2. Reported Restricted-Activity Days Among U.S. Adolescents Ages 10 to 18 by Family Income, 1988 . . . . .	168
18-3. Reported Number of Hospital Discharges Among U.S. Adolescents Ages 10 to 18 by Family Income, 1988 . . . . .	170

## ISSUES IN THE DELIVERY OF SERVICES TO SELECTED GROUPS OF ADOLESCENTS

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### Introduction

OTA's analysis of a wide variety of health problems experienced by U.S. adolescents suggests that the incidence and prevalence of many health problems is greater among some groups of adolescents than others.<sup>1</sup> There is also evidence that U.S. adolescents' access to health services is far from uniform. As discussed elsewhere in this report, for example, many adolescents in poor and near-poor families are unable to obtain adequate health care because they do not have health insurance.<sup>2</sup>

This chapter focuses on three broad groups of adolescents and discusses some of the socioeconomic and cultural factors that may affect their health and access to health and related services. The three broad groups of adolescents are as follows:

- . adolescents living in poverty,
- racial and ethnic minority adolescents, and
- . adolescents living in rural areas.<sup>3</sup>

Without trying to be comprehensive, the chapter identifies some of the special health issues for adolescents who are poor, members of racial or ethnic minorities, or residents of rural areas. It also discusses issues in the delivery of health and related services to these groups of adolescents. Finally, it describes Federal programs pertaining to poor adolescents, racial and ethnic minority adolescents, and adolescents living in rural areas.

It is important to note that the analysis in this chapter is severely limited by a lack of information. In general, systematically collected and analyzed information on socioeconomic and cultural factors important to the appropriate and effective delivery of health services is scarce. Where adolescents are concerned, the problem is even worse.

### Adolescents Living in Poverty: Issues in the Delivery of Health and Related Services

In 1988, more than 8 million U.S. adolescents lived in a poor or near-poor family (see figure 18-1). Poor and near-poor are terms defined in relation to the Federal poverty level, a cash income level which varies with family size and the age of family members. Poor families are families whose income falls below the Federal poverty level. Near-poor families are families whose income falls between 100 and 149 percent of the poverty level.

According to data from the March 1989 Current Population Survey, 26.7 percent of U.S. adolescents in 1988 lived in poor or near-poor families (see figure 18-2). About 17 percent of U.S. adolescents age 10 through 18 in 1988 lived in families with incomes below the Federal poverty level, and nearly 10 percent more lived in families *with* incomes between 100 and 149 percent of the Federal poverty level (106). This means that about 8.27 million of the 31 million U.S. adolescents in 1988 lived in poor or near-poor families—about 5.3 million in poor families and about 3.0 million in near-poor families.<sup>4</sup>

The health and other effects of growing up poor or near-poor are complex and not well understood (154). Because poverty is often associated with low educational level, substandard living conditions, an inadequate social-support network, unemployment, poor nutrition, risk-promoting lifestyle, and diminished access to health care, children growing up in poor or near-poor families probably confront more risk factors and benefit from fewer protective and

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<sup>1</sup>OTA's analysis of selected health problems experienced by U.S. adolescents is presented in chs. 5 through 14 in Vol. II of this Report. For a summary, see app. B, "Burden of Health Problems Among U.S. Adolescents," in this volume.

<sup>2</sup>It is well established that health insurance coverage and ability to pay may determine when or whether a person in this country seeks health care services (125,177). For further discussion of the financial barriers to access confronted by U.S. adolescents, see ch. 16, "Financial Access to Health Services," in this volume.

<sup>3</sup>Clearly, some adolescents fall into more than one of these groups. The rationale for discussing the groups separately is to identify the unique contribution of socioeconomic status, race and ethnicity, and rural residence to health and the delivery and receipt of health and related services.

<sup>4</sup>This calculation is based on the July 1, 1988, civilian population (211).



Photo credit: Mark Charette, Washington, DC

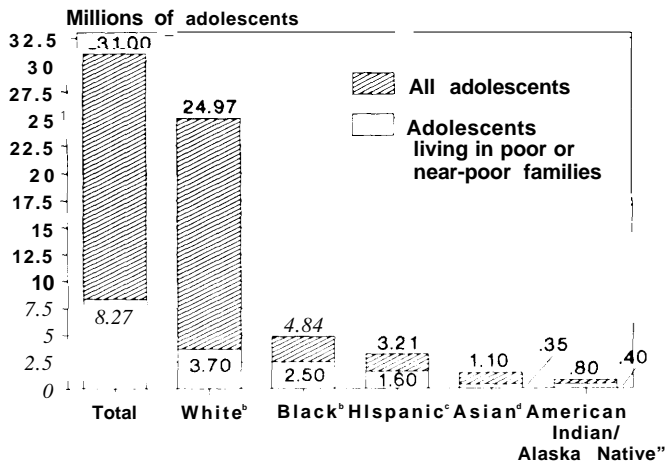
Systematically collected and analyzed information on socioeconomic and cultural factors important to the appropriate and ineffective delivery of health services to U.S. adolescents is scarce.

supportive factors than their more advantaged peers.<sup>5</sup> Some observers have theorized, however, that "poverty acts through the prism of culture" (84a). In

other words, cultural traditions, values, beliefs, and practices can either diminish or accentuate poverty's negative effects. For the most part, systematic

<sup>5</sup>The idea that there is, in addition, a "culture of poverty" (121,145) has been controversial (74,93,273). In the 1960s, Lewis argued that poverty is perpetuated because the children of low-income parents are socialized into a value system and set of behaviors that reduces their motivation to succeed in the labor market (121). This thesis aroused controversy because it was seen as blaming the victims of poverty for their own fate. The structural explanation (i.e., that persistent poverty in individual families and certain communities can be explained by such factors as the structure of the welfare system, the economic structure of low-paid jobs, and the location of jobs) has been a major alternative to the culture of poverty in explaining the persistence of poverty (74,93). Wilson, among others, has recognized a relationship between certain aspects of economic change (specifically, the loss of manufacturing jobs in central cities) and the set of behaviors, attitudes, and social perceptions of the impoverished communities particularly affected by these aspects of change (273,273a). In this process, captured by the term "concentration effects" (273a), "neighborhoods that have few legitimate employment opportunities, inadequate job information networks, and poor schools not only give rise to weak labor force attachment but also raise the likelihood that people will turn to illegal or deviant activities for income, thereby further weakening their attachment to the legitimate labor market. A jobless family in such a neighborhood is influenced by the behavior, beliefs, orientations, and social perceptions of other disadvantaged families disproportionately concentrated in the neighborhood" (73a). These attitudes, beliefs and behaviors affect behaviors related to the workforce and to poverty (e.g., less investment in formal education leads to less ability to obtain a job in the growing service sector of the economy; the lack of marriageable [i.e., employed] males is a factor in out-of-wedlock pregnancies and births). Wilson has limited discussion of concentration effects to the so-called "underclass" living in "urban ghettos," in which an impoverished urban ghetto is a census tract in which at least 40 percent of families live below the Federal poverty level (273). Thus, any effects of poverty on behaviors and values would apply only to a relatively narrow band of poor families (165a). A full exploration of the varying definitions of the urban underclass (13,71,78,93,273,275) and other explanations of the persistence of poverty in selected groups is beyond the scope of this Report. Interested readers are referred to the recent volume edited by Jencks and Peterson for much of the latest thinking on these issues, including chapters on the impact of living in an urban underclass neighborhood on out-of-wedlock adolescent pregnancy (93).

Figure 18-1—Number of U.S. Adolescents Ages 10 to 18 and Number Living in Poor or Near-Poor<sup>a</sup> Families, by Race/Ethnicity, 1988<sup>b</sup>



<sup>a</sup>Poor and near-poor are terms defined in relation to the Federal poverty level, a cash income level which varies with family size and the age of family members. Poor families are families with incomes below the Federal poverty level. Near-poor families are families with incomes from 100 to 149 percent of the Federal poverty level.

<sup>b</sup>This figure shows the approximate number of U.S. adolescents and adolescents living in poor or near-poor families. The population estimates for white and black adolescents are slight overcounts because they include Hispanics, who are also shown separately.

<sup>c</sup>Persons of Hispanic origin may be of any race.

<sup>d</sup>Asian/Pacific Islander includes Filipinos, Chinese, Vietnamese, Koreans, Japanese, Asian-Indians, and "others." The Census Bureau is unable to calculate the number of Asian and Pacific Islanders who are ages 10 through 18 for periods beyond 1980. OTA's rough estimate that there are approximately 1.100 million Asian and Pacific Islanders ages 10 to 18 is made by applying the estimated proportion of Asian and Pacific Islanders who were ages 10 to 18 in 1980 (15.9 percent, derived by taking 9/17ths of the proportion of the Asian and Pacific Islander population who were under 18 in 1980 (30.2 percent)) to the estimated total population of Asian and Pacific Islanders as of July 1, 1969. Better estimates of the 10- to 18-year-old Asian and Pacific Islander population of the United States will be available from 1990 census statistics.

<sup>e</sup>Because of the small number of American Indians and Alaska Natives sampled for the Current Population Survey (CPS), and various limitations of the survey design, the poverty estimates for this group have a large standard error (that is, they may be unreliable). The proportion of adolescents in families with incomes less than 150 percent of poverty could be between 41 and 61 percent (108). However, the high rate of poverty among American Indians and Alaska Natives found through the CPS is consistent with estimates from other sources (199).

SOURCE: Office of Technology Assessment, 1991, based on data from the following sources: Adolescent population counts: U.S. Department of Commerce, Bureau of the Census, *U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin: 1989 Current Population Reports, Series P-25, No. 1057*, by F.W. Hollmann (Washington, DC: U.S. Government Printing Office, March 1990); S. Sue and N. Zane, "Health and Related Services for Asian American Adolescents," contract paper prepared for the Office of Technology Assessment, U.S. Congress, Washington, DC, November 1989; F. Hollmann, Demographer, Bureau of the Census, U.S. Department of Commerce, personal communication cited in F. Butterfield, "Asians Spread Across a Land, and Help Change It," *New York Times*, Sunday, Feb. 24, 1991, p. 22. Number of adolescents living in poor or near-poor families: R. Kronick, Adjunct Professor, University of California, San Diego, CA, calculations based on U.S. Department of Commerce, Bureau of the Census, March 1989 Current Population Survey public use files, 1990.

investigations into whether and how variations in socioeconomic status cause differences in health-related behaviors and attitudes have not focused on adolescents (but see 103). Findings concerning the beliefs and behaviors that characterize the average adults in a population may not be applicable to the adolescent children of those adults.

### Overview of the Number of Adolescents Living in Poverty

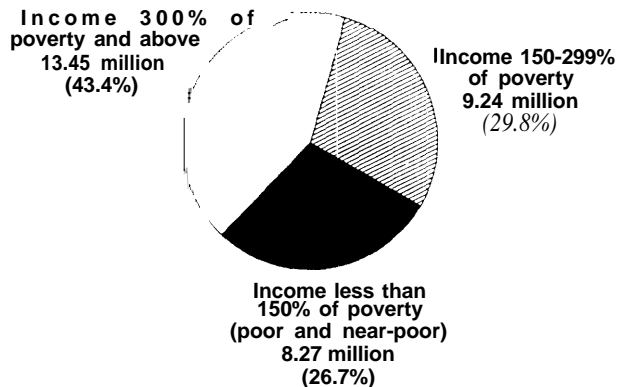
Official estimates of the number of people living in poverty in the United States are available from the Bureau of the Census within the U.S. Department of Commerce.<sup>6</sup>The Bureau of the Census conducts a

census of the entire U.S. population every 10 years. The 1980 census included data on sex, race, and marital status from the entire enumerated population and more detailed information on income, education, housing, and other topics from a 20-percent sample of the population (238a). The Bureau of the Census also conducts the Current Population Survey, a monthly household survey of a sample of the civilian noninstitutionalized population, to obtain estimates of characteristics of the labor force, the population as a whole, and various subgroups of the population.<sup>7</sup> Annual data on the number and characteristics of people living in poverty, based on income during the previous year, are obtained in the March supplement to the Current Population Survey (150,210).

<sup>6</sup>The official government definition of poverty is based on cash income levels for families of different sizes. It was established in the mid-1960s and has not been modified substantially since then (150). Responsibility for changing poverty concepts and definitions rests with the Office of Management and Budget. The definition of poverty has been the subject of numerous congressional hearings and reports (150,198). It is beyond the scope of this report to address the questions that have been raised.

<sup>7</sup>As a household survey of the civilian noninstitutionalized population, the Current Population Survey does not include individuals in institutions (e.g., correctional institutions, detention homes, and training schools for juvenile delinquent youths, homes for dependent and neglected children, homes and schools for the mentally or physically handicapped, or homes for unwed mothers).

**Figure 18-2-Socioeconomic Status of U.S. Adolescents Ages 10 to 18, by Family Income as a Percent of the Federal Poverty Level, 1988<sup>a</sup>**



<sup>a</sup>Family income is expressed in relation to the Federal poverty level. The Federal poverty level is based on cash income levels for families of different sizes. In 1968, the Federal poverty level was \$9,431 for a family of three.

SOURCE: Office of Technology Assessment 1991, based on R. Kronick, Adjunct Professor, University of California, San Diego, CA, calculations based on U.S. Department of Commerce, Bureau of the Census, March 1989 Current Population Survey public use files, 1990.

As shown in figure 18-3, the risk of being poor or near-poor for U.S. adolescents is greatly related to family composition. Adolescents living in mother-headed families without fathers and adolescents on their own are at much greater risk of being poor or near-poor than adolescents living with both parents or their father only (13,106). In 1988, nearly two-thirds of the adolescents who lived with their mother only and two-thirds of the adolescents living with neither parent (or married and living with their parents<sup>8</sup>) lived in families with incomes that fell below 150 percent of the poverty level. That same year, about one-fourth of the adolescents in father-headed families without mothers were in families with incomes below 150 percent of the Federal poverty level. Adolescents living in two-parent families are at the lowest risk of being poor or near-poor; in 1988, about 15 percent of the adoles-

cents living with both parents were in families with incomes below 150 percent of the poverty level.

Family composition affects not only the risk of being poor or near-poor but the dynamics of poverty. Available research on the dynamics of income and poverty indicates that the presence of two parents in a family offers children substantial (though not absolute) protection from sustained poverty (154). Poverty among two-parent families fluctuates widely from year to year and is highly dependent on wages and other income (including Aid to Families With Dependent Children (AFDC)) (154). In contrast, poverty among female-headed families without fathers reflects the vulnerability of having only one parent, usually a mother who is a low-wage earner, as the sole source of economic support (154). Female adolescents who bear children out of wedlock are at particularly great risk of living in poverty.<sup>9</sup>

Data from the March 1989 Current Population Survey indicate that certain groups of racial and ethnic minority adolescents are far more likely than white, non-Hispanic adolescents to be living in families with incomes at or near the Federal poverty level. As shown in figure 18-4, about half of Hispanic adolescents, half of black, non-Hispanic adolescents, half of American Indian and Alaska Native adolescents, and one-third of Asian adolescents in the United States lived in poor or near-poor families in 1988 (106). That same year, less than one-fifth of white, non-Hispanic adolescents lived in poor or near-poor families.

Data from the March 1989 Current Population Survey indicate that some parts of the country have a higher percentage of adolescents living in poor or near-poor families than others. The South<sup>10</sup> has a higher percentage of adolescents who live in poor or near-poor families than the West<sup>11</sup> or North<sup>12</sup>: 31.7 percent of adolescents living in the South, 26.4 percent of adolescents living in the West, and 22.9

<sup>8</sup>When adolescents are married, even if they are living with their parents, they are usually considered to be a separate family for purposes of the Current Population Survey.

<sup>9</sup>As discussed in ch. 10, "Pregnancy and Parenting: Prevention and Services," in Vol. II, about 65 percent of the approximately 500,000 births to U.S. adolescents in 1988 were out-of-wedlock births (240).

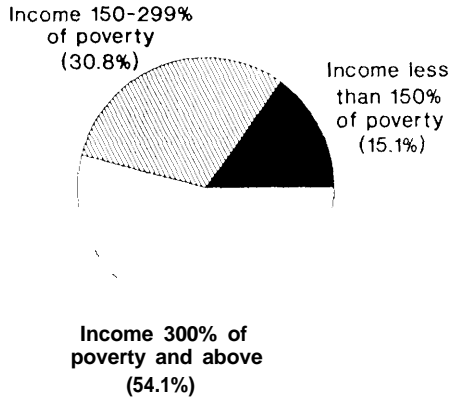
<sup>10</sup>The South includes Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia (107).

<sup>11</sup>The West includes Alaska, Arizona, California, Colorado, Idaho, Hawaii, Montana, New Mexico, Oregon, Nevada, Utah, Washington, and Wyoming (107).

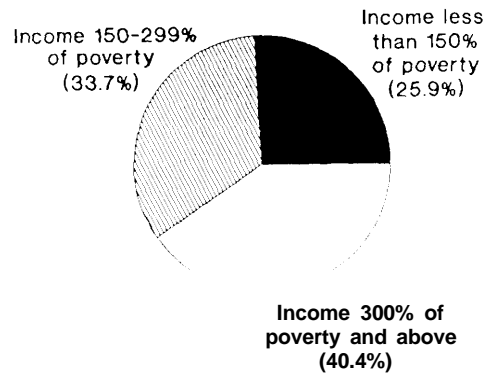
<sup>12</sup>The North includes Connecticut, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Dakota, Nebraska, Ohio, Pennsylvania Rhode Island, South Dakota, Vermont, and Wisconsin (107).

**Figure 18-3-Family Incomes as a Percent of the Federal Poverty Level by U.S. Adolescents' Living Arrangements, 1988\***

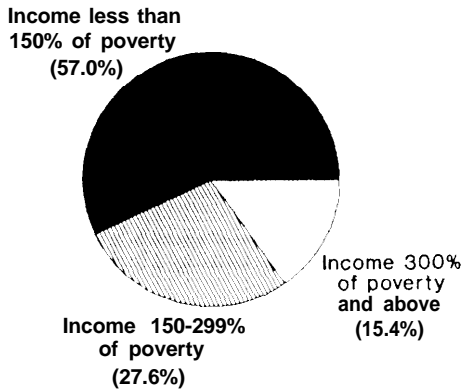
**Incomes of families in which adolescents are living with both parents**



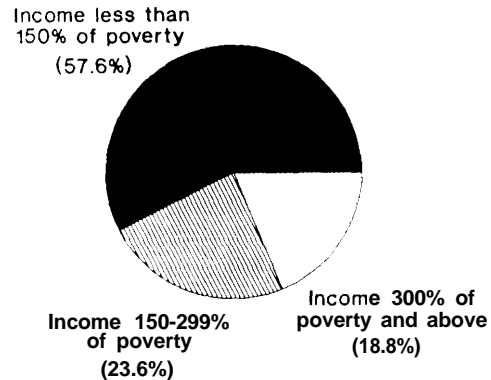
**Incomes of families in which adolescents are living with their father only**



**Incomes of families in which adolescents are living with their mother only**



**Incomes of families in which adolescents are not living with parents or are married and living with their parent(s)**



NOTE: Figures may not add to 100 percent because of rounding error.

\*Family income is expressed in relation to the Federal poverty level. In 1988, the Federal poverty level was \$9,431 for a family of three.

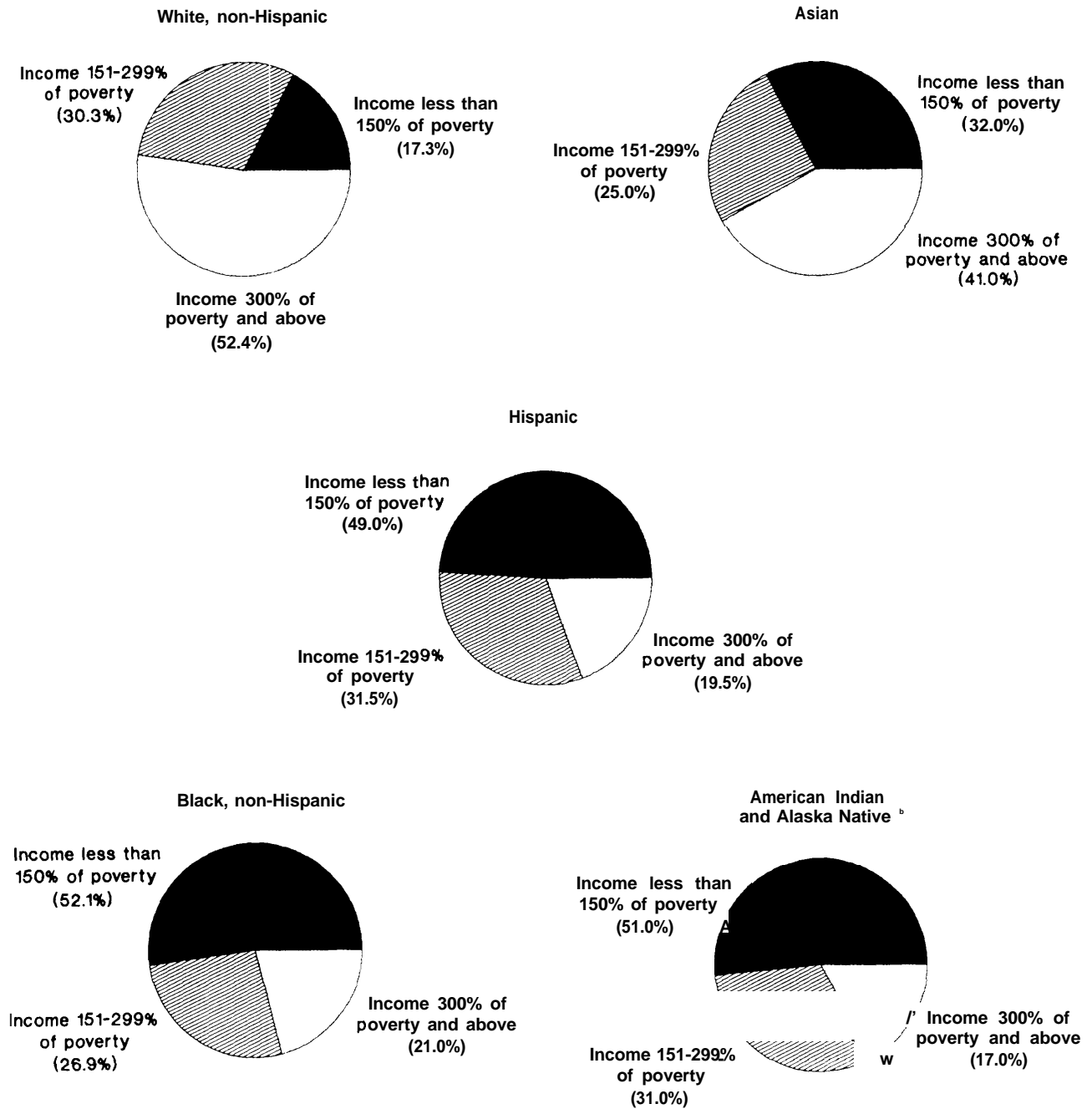
SOURCE: Office of Technology Assessment, 1991, based on R. Kronick, Adjunct Professor, University of California, San Diego, CA, calculations based on U.S. Department of Commerce, Bureau of the Census, March 1989 Current Population Survey public use files, 1990.

percent of adolescents living in the North live in poor or near-poor families (107).<sup>13</sup> It is important to note that these comparisons are based on the official definition of poverty, which does not take into

account variations in the cost of living across regions or across residential areas (i.e., urban, suburban, rural) within regions. Differences in the cost of living in different areas can be quite substantial.

<sup>13</sup>Data from Midwestern States are not reported as a separate group because of the low numbers of adolescents sampled from Midwestern States; data from these States are reported as part of other regions to increase the reliability of the data (107).

Figure 18-4-Family Incomes as a Percent of the Federal Poverty Level by U.S. Adolescents' Race/Ethnicity, 1988a



<sup>a</sup>Family income is expressed in relation to the Federal poverty level. In 1988, the Federal poverty level was \$9,431 for a family of three.

<sup>b</sup>Because of the small number of American Indians and Alaska Natives sampled for the Current Population Survey and various limitations of the survey design, the estimates for this group may be unreliable. The proportion with incomes less than 150 percent of poverty could be between 41 to 61 percent (108). However, the high rate of poverty among American Indians and Alaska Natives found through the Current Population Survey is consistent with estimates from other sources (204).

SOURCE: Office of Technology Assessment, 1991, based on R. Kronick, Adjunct Professor, University of California, San Diego, CA, calculations based on U.S. Department of Commerce, Bureau of the Census, March 1989 Current Population Survey public use files, 1990.



Thus, the impact of living in a family whose income falls below the Federal poverty level may differ depending on where one lives.

### **Health Status of Poor Adolescents**

#### **Limitations of Data and Research on the Health of Poor Adolescents**

Existing data on the health status of poor adolescents and research on the health effects of poverty have a number of significant limitations. As discussed elsewhere in this report, there is no regular monitoring of U.S. adolescents' health, and information on the health status of U.S. adolescents is often not available.<sup>14</sup> National data on the health status of U.S. adolescents by income level are practically nonexistent.

Data on births, deaths, various indicators of health status, and the utilization of health resources are collected on an ongoing basis by the National Center for Health Statistics in the U.S. Department of Health and Human Services (DHHS). Much of the data collected by the National Center for Health Statistics is not analyzed in terms of income level.<sup>15</sup> Thus, for example, the major Federal report on health indicators in the *United States—Health, United States*—tabulates mortality and most morbidity statistics by age, sex, and race but not by income or other factors indicative of socioeconomic status (156,238a).

One of the few national surveys sponsored by the National Center for Health Statistics that does collect morbidity data by family income is the National Health Interview Survey. The National Health Interview Survey uses personal household interviews to obtain information from a sample of the civilian noninstitutionalized population on personal and demographic characteristics and various health topics (238a). This survey has a number of

limitations. As a household survey, it does not include individuals who are homeless or in institutions. For individuals under age 17, information is collected from a proxy respondent, typically a parent or guardian.

The prevailing stereotype of poverty is as an inner city phenomenon, and much of the research on poor people has focused on poor people living in urban areas. Thus, it has often overlooked poor people in rural or suburban areas. In fact, a substantial percentage of poor families with children live in rural areas (30 percent in 1987) or suburban areas (28 percent in 1987) (13). Urban areas tend to have high concentrations of racial and ethnic minority poor people. Thus, much research on the poor has focused disproportionately on people from racial and ethnic minorities. There have been few attempts by researchers to examine poverty's unique impact on adolescents' physical or mental health status, apart from the effects of such factors as family structure, race and ethnicity, and place of residence.

Another problem is that many researchers rely on impressionistic criteria, such as the apparent socioeconomic characteristics of neighborhoods, for determining adolescents' socioeconomic status instead of using multiple criteria including family income levels (146). Adolescents themselves often do not know enough about the details of their parents' employment to permit accurate assessment of their family's economic status.

Finally, it should be noted that much of the research on adolescents living in poverty has focused on the "failures" (e.g., individuals who drop out of school, individuals who exhibit emotional or behavioral problems, individuals who remain dependent on welfare) rather than the successes. These "failures," however, are not representative of all poor adolescents.<sup>16</sup> While the deficit model can

<sup>14</sup>Data on adolescent health are not collected in any single place, and for many important problems (e.g., nonfatal accidents, sexually transmitted diseases, mental health problems, delinquency), there are no reliable sources of national data. The problems with available information on adolescent health are summarized in app. c, 'Issues Related to the Lack of Information About Adolescent Health and Health and Related Services,' in Vol. I. Sources and limitations of national data sources on specific aspects of adolescents' health are discussed in each chapter in Vol. II.

<sup>15</sup>The National Health Examination Survey conducted from 1966 to 1970 used a variety of direct physical examinations and clinical and laboratory tests, to obtain information on the measures, including health status of a representative national sample of U.S. adolescents ages 12 to 17. This survey did obtain information on family income, but data from that survey are now over 20 years old. The National Health and Nutrition Examination Survey (NHANES) was initiated as a successor to the National Health Examination Survey in 1971. NHANES III, currently underway, will include questions related to income, but the sample of 3,200 adolescents ages 12 to 19 (56) may be too small to allow meaningful comparisons by income level.

<sup>16</sup>Many children who grow up in welfare-dependent families, for example, do not become welfare-dependent themselves as adults. One study found that 42 percent of black females and 27 percent of white females growing up in highly welfare-dependent families—i.e., defined as families who relied on welfare for at least 25 percent of average total family income in the years between the time the child was between the ages of 10 and 17—did not receive any welfare between the ages of 24 and 30 (196). Only 19 percent of black daughters and 26 percent of white daughters in highly welfare-dependent families in this 1984 analysis became highly welfare-dependent themselves (1%).

### **Box 18-A-Research on Resilient Children and Adolescents**

It is well established that some children from impoverished homes or neighborhoods, dysfunctional families, or other adverse circumstances grow up to become mentally and socially healthy adults. Such individuals have sometimes been called “resilient” or “invulnerable” (59,126,238).

Although there has been little longitudinal research tracking children and adolescents from disadvantaged homes and neighborhoods and comparing their long-term outcomes with outcomes among individuals from nondisadvantaged homes, the research that has been conducted generally suggests that two important variables for helping children overcome adverse circumstances are having access to supportive individuals and networks and having personal characteristics that enable one to draw upon this support (e.g., social competence, greater intelligence).

A 30-year longitudinal study of children born on the Hawaiian island of Kauai in 1955 identified 30 percent of the children as high risk because they had experienced four more selected risk factors—e.g., experiencing moderate to severe perinatal stress, growing up in chronic poverty, having parents with no more than an eighth grade education, and having family environments characterized by discord, divorce, or parental alcoholism or mental illness (268). *Many of these* high-risk children subsequently experienced problems such as behavioral or learning problems, delinquency, mental health problems, or teenage pregnancy. By the time they were assessed at age 18, however, one-third had grown into competent young adults. By the time the cohort was assessed at age 30, additional numbers of children who had experienced problems during their teens were better off than they had been at age 18. The study identified a number of factors that seemed to protect these children from the potentially negative effects of their environments. Protective factors included the following:

- constitutional Characteristics of the children themselves (e.g., a temperament that elicits positive responses from others),
- environmental factors (e.g., having fewer siblings),
- having the opportunity to establish a close relationship with at least one caring adult (not necessarily a parent), and
- the availability of social support outside of the immediate family.

Another longitudinal study followed 456 economically disadvantaged boys (all white) from adolescence until age 47 (59). From this sample, 75 individuals were identified as high-risk because they had experienced at least 10 negative family characteristics—ranging from a lack of parental supervision, to having an alcoholic father, or having high numbers of social agency contacts. Preliminary data indicate that boys who were rated as most competent as adults tended also to have been rated as competent as boys and were less likely to have exhibited emotional problems as boys.

Another study involved interviews of 68 rural black adolescents who had been identified by their teachers as being academically and socially successful indicated that the adolescents had supportive family relationships, extensive social networks outside of the family, active participation in school and church activities, a strong future orientation, and identification with positive role models (117). This was a cross-sectional study rather than a longitudinal one and did not follow the adolescents over time. The study also did not provide information on less successful adolescents. Thus, it is not really possible to determine the variables that actually led to the adolescents’ success.

Hopeful findings about resilient children and adolescents should not be taken to suggest that “extreme poverty ultimately presents no problems to the next generation or that benign neglect is an appropriate solution to desperate social problems” (126). Instead they should be taken to suggest that need for additional research to improve the knowledge of the factors that make a long-term difference in the lives of children and adolescents growing up in poverty or other adverse circumstances. The findings from such research could be used to design societal interventions that enable such children and adolescents to live healthier and longer lives (126).

provide critical information about needs and the etiology of problems, the pronounced lack of information about the variables associated with positive outcomes limits the identification of pathways to health and the maintenance and support of health-enhancing characteristics.

Research on so-called “resilient” children and adolescents is summarized in box 18-A. This research generally suggests that having access to supportive individuals and networks and having the ability to draw upon this support (social competence, greater intelligence) are factors that help children

Table 18-1—Reported Health Status of U.S. Adolescents Ages 10 to 18, by Family Income, 1988<sup>a</sup>

Family income and age	Number of persons at family income levels	Reported health status (percent distribution)				
		Excellent	Very good	Good	Fair	Poor <sup>b</sup>
<i>Under \$10,000</i>						
All ages (10 to 18) . . . . .	3,676,000	35.3%	25.6%	31.9840	6.3%	- .
10 to 14 years . . . . .	1,807,000	35.8	24.4	33.7	5.1	- .
15 to 18 years . . . . .	1,869,000	34.8	26.7	30.2	7.3	- .
<i>\$10,000 to \$19,999</i>						
All ages (10 to 18) . . . . .	4,880,000	42.9%	27.8%	24.8%	3.9%	—*
10 to 14 years . . . . .	2,633,000	44.5	29.0	23.4	2.4	.
15 to 18 years . . . . .	2,247,000	41.0	26.4	26.5	5.6	-
<i>\$20,000 to \$34,999</i>						
All ages (10 to 18) . . . . .	7,491,000	53.1%	27.4%	17.0940	2.3%	—*
10 to 14 years . . . . .	4,213,000	55.1	26.6	16.1	2.2	—*
15 to 18 years . . . . .	3,278,000	50.5	28.5	18.2	2.4	—*
<i>\$35,000 or more</i>						
All ages (10 to 18) . . . . .	10,576,000	63.0%	23.7%	12.3%	0.9%	.
10 to 14 years . . . . .	5,665,000	64.4	22.7	11.8	0.9	-
15 to 18 years . . . . .	4,911,000	61.3	24.8	12.9	0.9	-

<sup>a</sup>The data presented in this table are from the National Health Interview Survey, a continuing nationwide sample survey of the civilian noninstitutionalized population in which personal household interviews are used to collect data on demographic characteristics, illness, injuries, utilization of health resources, and other health topics. This survey uses proxy interviews (generally with a parent) for all persons under age 18.

<sup>b</sup>Entries marked with an asterisk did not meet the requisite standard for reliability.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics, unpublished data from the 1988 National Health Interview Survey, Hyattsville, MD, 1989.

overcome adverse circumstances. Further research to identify the components of resiliency among adolescents from disadvantaged backgrounds could be helpful in developing effective interventions.

### Health Status of Adolescents by Family Income Level

As noted above, the National Health Interview Survey is one of the few sources of national data on U.S. adolescents' health status by family income level. The National Health Interview Survey is a survey of a sample of the civilian noninstitutionalized population and thus does not include adolescents who are homeless or in institutions (e.g., correctional institutions for juvenile offenders, homes for dependent and neglected children, homes and schools for the mentally or physically handicapped, or homes for unwed mothers). As discussed elsewhere in this report, homeless adolescents are at high risk of experiencing a variety of physical and mental health problems and typically lack access to a regular source of health care.<sup>17</sup> Adolescents in juvenile justice facilities are also at particular risk.<sup>18</sup>

In the 1983 and 1985 National Health Interview Surveys, U.S. adolescents ages 10 to 18 from poor families were significantly less likely to be reported to be in excellent health than were adolescents from nonpoor families (37.5 percent of poor v. 55.9 percent of nonpoor) (157). Adolescents from poor families were also considerably more likely to be reported to be in fair or poor health than were adolescents from nonpoor families (7.3 percent of poor v. 2.3 percent of nonpoor) (157).

The 1988 National Health Interview Survey had similar findings. As shown in table 18-1, adolescents in families with incomes under \$10,000 were far less likely than adolescents in higher income families to be reported to be in excellent health. Adolescents in families with incomes under \$10,000 were also far more likely than other adolescents to be reported to be in fair health (238).

The 1988 National Health Interview Survey further found that adolescents in the lowest income families experienced more restricted-activity days due to acute and chronic conditions than did adolescents in higher income families. As shown in

<sup>17</sup>See ch.14, 'Hopelessness: Prevention and Services,' in Vol. II.

<sup>18</sup>See ch.13, 'Delinquency: Prevention and Services,' in Vol. II.

**Table 18-2—Reported Restricted-Activity Days Among U.S. Adolescents  
Ages 10 to 18, by Family Income, 1988<sup>a</sup>**

Family income and age	Reported restricted-activity days per person		
	All restricted-activity days <sup>b</sup>	Bed-disability days <sup>c</sup>	School- or work-loss days <sup>d</sup>
<i>Under \$10,000</i>			
All ages (10 to 18) .....	11.8	5.8	6.7
10 to 14 years.....	11.4	5.7	6.9
15 to 18 years .....	12.3	5.8	6.5
<i>\$10,000 to \$19,999</i>			
All ages (10 to 18) .....	9.1	4.2	5.0
10 to 14 years .....	8.1	3.8	4.5
15 to 18 years .....	10.4	4.7	5.7
<i>\$20,000 to \$34,999</i>			
All ages (10 to 18) .....	8.4	4.0	4.8
10 to 14 years .....	8.6	3.9	4.5
15 to 18 years .....	8.2	4.2	5.3
<i>\$35,000 or more</i>			
All ages (10 to 18) .....	8.0	3.9	4.1
10 to 14 years .....	7.5	3.8	4.2
15 to 18 years .....	8.6	4.0	4.1

<sup>a</sup>The data presented in this table are from the National Health Interview Survey, a continuing nationwide sample survey of the civilian noninstitutionalized population in which personal household interviews are used to collect data on demographic characteristics, illnesses, injuries, utilization of health resources, and other health topics. This survey uses proxy interviews (generally with a parent) for all persons under age 18.

<sup>b</sup>Restricted-activity days are unduplicated counts of bed-disability, work-loss, and school-loss days, as well as other days during which a person cuts down on his or her usual activities.

<sup>c</sup>A bed-disability day is a day on which a person stays in bed for more than half of the daylight hours (or normal waking hours) because of a specified illness or injury.

<sup>d</sup>A school-loss day is a day on which a child did not attend school for at least half the normal school day because of a specific illness or injury. A work-loss day is a day on which a person did not work at his or her job for at least half of the normal workday because of a specific illness or injury.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics, unpublished data from the 1988 National Health Interview Survey, Hyattsville, MD, 1989.

table 18-2, adolescents in families with incomes under \$10,000 were reported to experience an average of 11.8 restricted-activity days per person in 1988 (238). This average included 6.7 school-loss days per person. Adolescents in families with incomes of \$10,000 or more were reported to experience fewer restricted-activity and school-loss days than adolescents in the poorest families.

Overall, the 1988 National Health Interview Survey found that 9.8 percent of adolescents in families with incomes under \$10,000 and 5.1 percent of adolescents in families with incomes of \$35,000 or more were reported to experience activity limitations as a result of chronic conditions (238). The 1983 and 1984 National Health Interview Surveys found that adolescents in poor families were significantly more likely to suffer from chronic disabling

conditions—e. g., mental disorders, diseases of the respiratory system, and diseases of the musculoskeletal system and connective tissue—than were non-poor adolescents (8.8 percent of poor v. 6.0 percent of nonpoor) (157).<sup>19</sup>

Some researchers have found that adolescents living in poverty are at increased risk of attending schools which are characterized by “poorly prepared teachers, inadequate educational facilities, ineffective administrators, and low teacher expectations” (71).<sup>20</sup> Some poor adolescents may have to drop out of school because of family economic problems (71). Others may drop out because of academic difficulties, disciplinary problems, or pregnancy (272). Adolescents who drop out of school or otherwise become educationally disadvantaged are likely to be unprepared to fill available jobs (119).

<sup>19</sup>Chronic physical health problems among adolescents are discussed in ch. 6, “Chronic Physical Illnesses: Prevention and Services,” in Vol. II,

<sup>20</sup>For a discussion of how school environments affect adolescents, see ch. 4, “Schools and Discretionary Time,” in Vol. II.

Poor urban neighborhoods are frequently typified by high rates of crime, decaying and crumbling buildings, open drug sales, and lack of employment and educational opportunities (124, 130, 142). Living in a poor inner-city area increases the likelihood that an individual will be a victim of crime. For crimes of violence, the victimization rate for adolescents in inner cities is higher than that for residents of urban and suburban areas (71).

Living in poverty, especially in urban areas, is associated with an increased likelihood of early sexual activity and teenage pregnancy (68, 141).<sup>21</sup> The causal relationships between poverty and increased levels of teenage pregnancy are not well understood. There is some evidence that adolescents from socioeconomically disadvantaged families tend to initiate sexual activity at an earlier age than adolescents from nondisadvantaged families (149a). There is also some evidence that adolescents from poor families may be less likely than adolescents from other families to use some form of contraception at first intercourse (84) or to continue using contraception (52). Poor adolescents who become pregnant are less likely to have an abortion and less likely to give their child up for adoption than adolescents from less disadvantaged backgrounds (149a).

There is little information available about the relationships between social class and income differences and the use of alcohol, illegal drugs, or tobacco.<sup>22</sup> There is some evidence from One longitudinal study, however, that amount of available spending money and family income are positively related to substance use, presumably because adolescents with more economic resources are more able to purchase alcohol or drugs. However, another study found that working class adolescents were more likely to use hard drugs, but this difference by family income was found for only 1 year of the longitudinal survey (51). Yet another study found that lower income adolescents are more likely to smoke cigarettes than adolescents from families with higher incomes (55).

A number of researchers have found no relation between social class and self-reported delinquency

(e.g., 81,269), but others have found that poorer adolescents are more likely than those of higher incomes to commit serious crimes.<sup>23</sup>

## **Access to Health Services by Poor Adolescents**

### **Patterns of Health Care Utilization by Poor Adolescents**

Although data on the patterns of health care utilization among poor adolescents in this country are scarce, these patterns appear to differ from the patterns among nonpoor adolescents (157). The 1983 and 1984 National Health Interview Surveys found that even though adolescents in the lowest income families are reported to be in poorer health than other adolescents, they are somewhat more likely than nonpoor adolescents to wait 2 or more years between physician contacts (157). On average, poor adolescents waited 2 years between physician visits and nonpoor adolescents waited 1.8 years (157). Furthermore, poor adolescents whose activities are limited by chronic health problems are reported to have significantly fewer physician visits (5.3 visits per person per year) than nonpoor adolescents whose activities are similarly limited (7.3 physician visits per person per year) (157).

Interestingly, the 1988 National Health Interview Survey found that adolescents ages 10 to 18 in families with incomes under \$10,000 had more hospital stays reported than adolescents in families with higher incomes. As shown in table 18-3, even when hospital stays for deliveries are excluded, poor adolescents in families with incomes under \$10,000 had more hospital stays than other adolescents. This finding suggests that when poor adolescents do finally seek care, their health problems may be more severe, but alternative explanations are possible (238).

### **Barriers to Access for Poor Adolescents**

Lack of money is a major barrier to access to health services for poor adolescents. For some adolescents, including poor ones, the effect of lack of money on having access to services is attenuated by health insurance. As discussed elsewhere in this report, however, significant numbers of U.S. adoles-

<sup>21</sup>For a general discussion of pregnancy among adolescents, see ch. 10, "Pregnancy and Parenting: Prevention and Services," in Vol. II.

<sup>22</sup>For a general discussion of the use of alcohol, illegal drugs, and tobacco among adolescents, see ch. 12, "Alcohol, Tobacco, and Drug Abuse: Prevention and Services," in Vol. II.

<sup>23</sup>Data on delinquency and studies examining the relationships between family income and delinquency are discussed in ch. 13, "Delinquency: Prevention and Services," in Vol. II.

**Table 18-3-Reported Number of Hospital Discharges Among U.S. Adolescents Ages 10 to 18, by Family Income, 1988<sup>a</sup>**

	Reported number of hospital discharges per 100 persons <sup>b</sup>	
	All causes	Excluding deliveries
<i>Under \$10,000</i>		
All ages (10 to 18) . . . . .	6.9	4.7
10 to 14 years . . . . .	—*	—*
15 to 18 years . . . . .	10.6	6.3
<i>\$10,000 to \$19,999</i>		
All ages (10 to 18) . . . . .	6.1	4.2
10 to 14 years . . . . .	—*	—*
15 to 18 years . . . . .	10.7	6.5
<i>\$20,000 to \$34,999</i>		
All ages (10 to 18) . . . . .	4.0	3.6
10 to 14 years . . . . .	3.6	3.5
15 to 18 years . . . . .	4.5	3.8
<i>\$35,000 or more</i>		
All ages (10 to 18) . . . . .	3.4	3.2
10 to 14 years . . . . .	1.7	1.7
15 to 18 years . . . . .	5.3	5.0

<sup>a</sup>Data are from the National Health Interview Survey, a nationwide sample survey of the civilian noninstitutionalized population in which personal household interviews are used to collect data on demographic characteristics, illnesses, injuries, utilization of health resources, and other health topics. The National Health Interview Survey defines a hospital discharge as any continuous stay of a night or more in a hospital as an inpatient. The discharges shown in this table are discharges from short-stay hospitals (i.e., hospitals or hospital departments in which the type of service provided is general; maternity; eye, ear, nose, and throat; children's; or osteopathic).

<sup>b</sup>Entries marked with an asterisk did not meet the requisite standard for reliability.

SOURCE: U.S. Department of Health and Human Services, Public Health Services, Centers for Disease Control, National Center for Health Statistics, unpublished data from the 1988 National Health Interview Survey, Hyattsville, MD, 1989.

cents are without private or public health insurance, and adolescents in poor or near-poor families are much more likely to lack health insurance than others.<sup>24</sup> In 1988, about one-third of the 5.3 million U.S. adolescents living in poor families--or about 1.7 million adolescents--did not have health insurance coverage (107). That year, an additional 932,000 adolescents in near-poor families were also without coverage (107).

As discussed elsewhere in this report, adolescents who have health insurance coverage, whether private or public, do not always have access to the

services they need.<sup>25</sup> Private health insurers often place restrictions on the services most likely to be needed by adolescents (e.g., mental health care, substance abuse treatment, maternity care and related services, preventive services, services provided by nonphysician providers, and dental care). Even if appropriate benefits are available, adolescents who are concerned about confidentiality may be reluctant to seek care from providers if their private health plan requires parents to submit a claim for reimbursement (as most do). The services offered to eligible adolescents by Medicaid vary widely by State.

Distance from service sites and lack of access to transportation--either because good public transportation is unavailable or because available transportation is costly--are also potentially important barriers to seeking care for people who are economically disadvantaged. In addition, certain types of services, such as mental health services, may be less available in poor areas (34). Although data specific to adolescents are generally lacking, it seems reasonable to assume that these concerns are also important barriers to service for poor adolescents.

### Services and Interventions To Increase Access to Health Services Among Poor Adolescents

Various approaches have been developed to address the health-related needs of adolescents living in poverty. Apart from Medicaid and other Federal programs for low-income people discussed in the next section of this chapter, there have been some attempts to make health and related services more accessible to adolescents living in poverty by providing affordable, comprehensive services in community-based settings.<sup>26</sup>

As discussed elsewhere in this report, a national demonstration project funded for 4 years beginning in 1982 by the Robert Wood Johnson Foundation enabled 20 teaching hospitals to work in concert with 54 community-based agencies to implement programs of community-based, comprehensive services for young people in inner-city communities

<sup>24</sup>For a discussion of the number of poor and other adolescents without health insurance, see ch. 16, "Financial Access to Health Services," in this volume.

<sup>25</sup>The barriers to utilization of services by adolescents with health insurance coverage are discussed in ch. 16, "Financial Access to Health Services," in this volume.

<sup>26</sup>Additional information on efforts to deliver comprehensive health and related services to adolescents is presented in ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," in this volume.

believed to be at high risk for serious socioeconomic and medical problems (49,1 16,187).<sup>27</sup>

In the first 2 years of the comprehensive clinics' operation, about two-thirds (64 percent) of the young people who visited the clinics were ages 15 to 19; the clinics were also used by young people ages 20 to 24 (21 percent of patients) and ages 10 to 14 (15 percent of patients) (49). Researchers found that adolescents attending the Robert Wood Johnson-funded comprehensive clinics that were specially geared toward adolescents were more likely to disclose behavioral and lifestyle problems to their clinical providers than adolescents attending comparison sites; consequently, larger proportions of adolescents attending the comprehensive clinics received care for such problems (49). Despite their better identification and treatment capabilities for adolescents, however, the comprehensive clinics were not able to effect greater improvements in selected health problems (including persistent depressive symptoms, unmet contraceptive needs, and heavy alcohol or drug use) than the comparison sites (49). The researchers were also disappointed in the ability of the comprehensive clinics to reach adolescent male clients, as adolescent males in inner cities are at especially high risk of problem behaviors.

Earls and colleagues suggest three reasons for the failure of the Robert Wood Johnson-funded projects failed to demonstrate differences in health outcomes: 1) the followup period of 1 year may have been too brief; 2) lack of adolescent-specific skills among primary care providers (and lack of time for funded providers to develop specialized skills); and 3) it may be difficult for medical clinics alone to make a difference in difficulties that are deeply embedded in the economic and social contexts from which some adolescents come (49).

Recently, the Robert Wood Johnson Foundation began funding a longer-term project that placed adolescent clinics in school settings in medically underserved areas. This project is still underway, and the health outcomes for adolescents attending the school-linked clinics have not been evaluated.

Several nongovernmental programs have sought to provide poor inner-city adolescents with alter-

natives to poor urban street life and to enhance their life options.

- The privately funded Kansas City Youthnet program uses extensive outreach to recruit young people in poor urban areas to participate in programs of athletics, dance, theater, and art instead of joining drug gangs (89). In its first year, the Kansas City Youthnet program contacted some 3,000 adolescents ages 13 to 16.
- A program sponsored by the Youth Services Unit of the Bayview-Hunter's Point Foundation provides daily counseling to 12- to 22-year-olds living in poverty in the San Francisco area and experiencing difficulty in school or with the juvenile justice system as a result of involvement with drugs (16). This program provides a range of additional services, including recreation, mutual support groups, and opportunities to perform court-required community service or restitution activities.
- The University of Illinois at Chicago sponsored a workshop on medical careers for inner-city teens designed to encourage students to ignore negative messages, and pursue positive options (181). Students were introduced to black medical students who had grown up in poverty, given tours of the medical school, and provided with advice about how to prepare for college.

Unfortunately, none of these programs for poor inner-city adolescents has been systematically evaluated.

### ***Major Federal Programs Pertaining to Poor Adolescents***

In 1989, OTA held a workshop on the Federal role in adolescent health and conducted a survey of numerous Federal agencies thought to be involved in adolescent health. As discussed in the next chapter of this Report, many Federal agencies have programs that are relevant to U.S. adolescents, but it is almost impossible to get a firm sense of the impact of Federal programs on adolescents' lives.<sup>28</sup> Few Federal agencies were able to break out amounts budgeted specifically for adolescents, and OTA found both overlap and fragmentation in the overall Federal approach to adolescent health issues. The

<sup>27</sup>The evaluation of the Robert Wood Johnson Foundation program for high-risk young people and its support of SLHCS is described in more detail in ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Health Services to Adolescents," in this volume.

<sup>28</sup>The findings of the OTA survey of Federal agencies thought to be involved in adolescent health is described in ch. 19, "The Role of Federal Agencies in Adolescent Health+" in this volume.

Federal agencies surveyed by OTA were not asked to disaggregate program information as it applied to adolescents of differing socioeconomic levels. Their general inability to provide adolescent-specific information, however, makes it doubtful that they would have been able to provide adolescent-specific information by income level.

Various programs of DHHS and other Federal agencies that are intended to help low-income persons are described below to provide a rough sense of the Federal approach to the issues affecting poor and near-poor adolescents. <sup>29</sup> Unfortunately, the description or programs below provides little sense of the actual impact of Federal programs on the lives of individual adolescents living in poor and near-poor families. One way to get a sense of that would be to conduct an interview survey of poor adolescents in which their use of federally funded programs could be assessed in relation to their needs.

## ACTION

ACTION administers several Federal domestic volunteer service programs that provide human services to disadvantaged, poor, and elderly Americans. ACTION's Office of Domestic Operations sponsors a number of efforts that affect adolescents. In fiscal year 1988, there were 469,000 ACTION volunteers, and ACTION had a budget of about \$163 million (1). With this budget, ACTION supported the Retired Senior Volunteer Program (\$30.6 million), the Foster Grandparent Program (\$57.4 million), the Senior Companion Program (\$23.1 million), Volunteers in Service to America, the Student Community Service Program, Citizen Participation Program and the Program Demonstration and Development Division (1). Although ACTION's budget is not broken down in a format that separated expenditures, the agency estimates that its fiscal year 1990 budget request for adolescents was about \$16 million (5).

The Retired Senior Volunteer Program provides opportunities for retired persons age 60 and over to serve as volunteers in schools, museums, libraries, hospices, and a range of other public and private nonprofit organizations (1). In 1988, there were about 750 projects involving about 400,000 volunteers. Information on the number of adolescents served by these projects is not available. However,

some of the projects emphasize substance abuse prevention and intergenerational assistance.

The Foster Grandparent Program provides direct benefits (e.g., stipend, transportation, meal assistance, annual physical examination) to low-income individuals ages 60 and over who work 20 hours a week with children and adolescents who have special needs (1). In fiscal year 1988, the Foster Grandparent Program sponsored 252 projects (1). That year, the program served about 70,000 young people, including about 25,500 ages 6 through 12 and 15,400 ages 13 through 20 (2). Typically, the youth served by the program are at risk of drug or alcohol use, are in the delinquent detention system, are pregnant or parenting, or are mentally, physically, or emotionally disabled (1).

The VISTA program tries to help low-income people become self-sufficient by supporting projects sponsored by local public and private nonprofit organizations (1). In fiscal year 1988, there were 612 VISTA projects and 5,048 VISTA volunteers (1). That year, 244 VISTA projects focused on youth. As of August 31, 1989, 15 VISTA projects involving 66 volunteers were focusing on juvenile health, including the prevention of adolescent pregnancy, substance abuse, suicide, and violence (5).

The Student Community Service Program, a program begun in 1987, funds projects that enable high school and college student to work as volunteers to help eliminate poverty-related problems. As of October 1, 1989, ACTION was funding 121 Student Community Service Projects (3,4). For fiscal year 1990, the estimated budget for the Student Community Service Program was \$893,000 (24). In 1988, an estimated 28,000 students provided more than 850,000 hours of community service in various settings, such as Head Start programs, juvenile diversion programs, shelters, and soup kitchens (1).

ACTION's Program Demonstration and Development Division was created, in part, to award demonstration grants to organizations that have the potential to generate volunteer activity within a community and have the ability to serve as a model for other organizations. In fiscal year 1988, the Division awarded \$2.6 million in demonstration and other grants for 79 projects (1). Thirteen grants

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<sup>29</sup>Many, if not most, Federal health-related programs for adolescents are probably directed to or have an emphasis on low-income adolescents. This approach is consistent with the Federal emphasis on providing a "safety net" for those who are the most disadvantaged in this country (e.g., 180).



supported projects using volunteers to establish illicit drug use prevention networks either statewide or in low-income communities. Three grants supported efforts to alleviate problems faced by at-risk youth (e.g., youth in foster care). One supported a network to place low-income youth with volunteer mentors.

The role of ACTION, and other Federal and local agencies, in promoting youth service opportunities for adolescents should be expanded by passage of the National and Community Service Act of 1990 (Public Law 101-610). The legislation emphasized opportunities for disadvantaged children, adolescents, and young adults,

### U.S. Department of Health and Human Services

Each of the following four major components of DHHS has programs relevant to low-income populations:

- the Family Support Administration (FSA),
- the Health Care Financing Administration (HCFA),
- the Office of Human Development Services (OHDS), and
- the Public Health Service (PHS).<sup>30</sup>

Family Support Administration (FSA)-FSA in DHHS administers various programs intended to strengthen the American family, especially low-income families (213). According to FSA, the major thrust of its efforts is to prevent chronic welfare dependency through the provision of support services (212).

FSA's Office of *Family Assistance* administers the Aid to Families With Dependent Children (AFDC) program and the Job Opportunities and Basic Skills Training (JOBS) program. AFDC, which is funded jointly by the Federal and State governments, is the largest cash assistance program serving needy families with children (215). Under Title IV-A of the Social Security Act, AFDC funds are made available to States to maintain and strengthen family life by providing financial assistance and care to needy dependent children in their homes or the homes of caretakers relatives. AFDC has a twofold statutory mission: 1) to assist families

with dependent children meet an immediate financial need; and 2) to help parents in these families become self-sufficient (213). AFDC programs are administered by the States, and States have wide latitude in deciding how their AFDC programs are to be organized and administered, who is eligible for aid, and how much aid eligible persons receive (215). In fiscal year 1987, 33 percent (2.5 million children) of the child recipients were ages 10 through 18 (215). Another 121,000 adolescents (85 percent of whom were females) received AFDC benefits as heads of household (215).

Under the Family Support Act of 1988 (Public Law 100-485), States can begin to replace their AFDC programs with a comprehensive education, job training, and work experience program known as the JOBS program (213). The JOBS program is designed to provide AFDC families the opportunity to take part in education, job training, and work experience programs that will help them avoid long-term dependence on public assistance programs. Young mothers with children over age 3 with child care services and out-of-school youth ages 16 and over in AFDC homes are expected to participate (212). All States were required to have a JOBS program by October 1, 1990 (213). As discussed elsewhere in this Report, the JOBS program, if well-implemented, could have a substantial impact on adolescent parents.<sup>31</sup>

FSA's Office of *Child Support Enforcement* supports State efforts to enforce support obligations owed by absent parents to their children (213). Under the Child Support Enforcement Program, established in 1975 as part D of title IV of the Social Security Act, States and territories provide direct services to individuals and families to enable them to collect child support from absent parents (214). FSA's Office of Child Support Enforcement helps States to develop, manage, and operate their programs, and the Federal Government shoulders the preponderant share of administrative costs of the program (\$745 million (70 percent of the total) in fiscal year 1987 [214]). An estimated 8.8 million mothers rearing children alone could potentially benefit from these services, but the number of

precognition of existing Federal fragmentation in attempts to assist poor families, the DHHS recently announced a **reorganization** of several DHHS programs for children and families (225). The **reorganization** was not complete as this Report went to press. The programs intended to be affected included the Family Support Administration, the Office of Human Development Services, and the maternal and child health block grants program in the Bureau of Maternal and Child Health (HRSA) (225). Medicaid and programs outside DHHS would not be affected by the reorganization.

<sup>31</sup>See ch. 10, "Pregnancy and Parenting: Prevention and Services," in Vol. II.

adolescents potentially affected is unknown. In fiscal year 1987, \$3.9 billion in child support was collected and \$278.5 million was returned to AFDC families, the net amount returned to families with *adolescent* children is not available. Another \$2.5 billion was collected on behalf of non-AFDC families (214), but the net amount returned to families with adolescents is not available.

FSA's Office of Community Services administers several programs intended to assist poor people, including the community services block grant. Though the community services block grant, FSA provides annual Federal funding to States, territories, Indian tribes, and tribal organizations to help them provide a wide range of services and activities to local communities to assist low-income persons (213). Community service block grant funds are primarily used to meet employment, education, housing, income management, energy, health, and emergency needs of the poor (213). What portion of block funds goes to meet the needs of poor and near-poor adolescents is not known.

FSA's Office of Community Services also administers discretionary community service grants, low-income home energy assistance grants, and emergency community services for the homeless grants. Discretionary community service grants are made directly to public and private nonprofit organizations for a wide range of activities, including economic development, rural housing, rural community facilities, assistance to migrants and seasonal farm workers, community food and nutrition, projects that involve innovative approaches to deal with particularly critical needs or problems of the poor, and recreational activities for low-income youth (213). The low-income energy assistance program provides Federal grants to States, territories, Indian tribes and tribal organizations that wish to assist low-income households in meeting the costs of home energy. The emergency community services homeless grant provides annual funds to States, territories, and federally recognized Indian tribes to provide comprehensive services (emergency food and shelter, employment and educational training,

medical care, counseling, case management, and related services) to homeless individuals and families.<sup>32</sup> In part because these programs almost all involve grants to States and/or other entities (e.g., Indian tribes), the amounts expended specifically for adolescents are generally not available from the Federal Government.<sup>33</sup>

Health Care Financing Administration (HCFA)-HCFA in DHHS administers Medicaid, a Federal/State program established in 1965 under Title XIX of the Social Security Act to increase access to health services for poor people (218).

In 1988, there were about 23 million Medicaid recipients, including about 10 million dependent children under age 21, and total benefit payments were \$51.6 billion (\$29 billion Federal and \$22.6 billion State moneys) (219). An estimated 4.58 million U.S. adolescents ages 10 to 18 had Medicaid coverage at some point in time during fiscal year 1988; and Federal and State Medicaid expenditures for these adolescents totaled approximately \$3.322 billion (220). In 1988, HCFA estimated that adolescents made up 17.1 percent of Medicaid enrollment and accounted for 6.9 percent of national Medicaid expenditures (220).<sup>34</sup>

Title XIX of the Social Security Act requires that, in order to receive Federal matching funds, States offer a specified minimum benefit package in their Medicaid program. In addition to offering hospital inpatient and outpatient services, physician services, skilled nursing home care for adults, laboratory and X-ray services, nurse midwife services, family planning services, rural health clinic services, and transportation services, State Medicaid programs must provide early and periodic screening, diagnosis, and treatment services for eligible individuals under age 21 (218). Under Medicaid's Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program, eligible children must be screened and treated for vision, hearing, and dental problems; their growth and development must be checked; and they must be immunized against infectious diseases (218,219). The funding of abortions under Medicaid is prohibited.

<sup>32</sup>Federal programs for homeless adolescents are addressed in ch. 14, "Homelessness: Prevention and Services," in Vol. II.

<sup>33</sup>In addition to being involved in these legislatively mandated programmatic efforts, FSA oversaw a panel on teen pregnancy prevention. Materials developed during the initiative, which took place during the Reagan administration were transferred to the Office of Adolescent Pregnancy in the Public Health Service.

<sup>34</sup>For further discussion see ch. 16, "Financial Access to Health Services," and app. C, "HCFA's Method for Estimating National Medicaid Enrollment and Expenditures for Adolescents Ages 10 Through 18," in this volume.

Although the Medicaid program is funded by the State and Federal Governments, it is administered by the States. States have broad discretion in determining, within Federal guidelines, which groups their Medicaid programs will cover and the financial criteria for Medicaid eligibility. States are required, however, to provide Medicaid coverage for most recipients of Federal and/or State income maintenance assistance programs, including recipients of AFDC, recipients of adoption assistance and foster care under Title IV-E of the Social Security Act. States are also required to cover children ages 1 through 6 and pregnant women who meet the State's AFDC financial requirements, and to cover pregnant women (and infants to age 2) if their income is at or below the Federal poverty level.

Enrollment in Medicaid appears to have a strong effect on the utilization of health care by poor adolescents, increasing their level of utilization to levels similar to those of nonpoor adolescents (157). As discussed elsewhere in this report, however, many adolescents living in poverty are not covered by Medicaid.<sup>35</sup> In 1988, fewer than half of U.S. adolescents living in families with incomes below the Federal poverty level were covered by Medicaid (107). Even among adolescents in the poorest families, those with incomes under half the poverty level, only half are covered by Medicaid.

Furthermore, even for adolescents who are eligible, Medicaid does not ensure access to health services. One problem is that coverage of some services (e.g., dental services, mental health services) is limited (203). Another problem for poor adolescents who are eligible for Medicaid is low levels of physicians' participation in the Medicaid program (200,276). Physician participation in Medicaid is particularly low among two specialties of importance to adolescents, gynecologists and psychiatrists (200). Other potential barriers to the utilization of services include adolescents' concerns about confidentiality.<sup>36</sup>

Office of Human Development Services (ODDS)---OHDS within DHHS oversees various social and economic development programs for poor children and youth, families, Native Americans, persons living in rural areas, disabled people and elderly

people (226). Like FSA, this agency sees as its major mission the promotion of self-sufficiency among the people it serves (223). In fiscal year 1988, appropriations for OHDS programs were \$5.2 billion (226). The largest appropriation was for social services block grants (\$2.7 billion), followed by appropriations for the Administration for Children, Youth, and Families (\$1.5 billion), family social services (\$811 million), the Administration on Developmental Disabilities (\$92.9 million), and the Administration for Native Americans (\$29.7 million). Comprehensive counts of OHDS services specifically for adolescents---thus, including low-income adolescents---cannot be readily provided. It is likely, however, that many OHDS services provided to adolescents are provided to low-income adolescents.

The social services block grant program, authorized under Title XX of the Social Security Act as amended by the Omnibus Budget Reconciliation Act of 1981 (OBRA-81, Public Law 97-35), provides Federal assistance to States for social services directed at five goals: 1) achieving or maintaining economic self-support; 2) achieving or maintaining self-sufficiency; 3) preventing or remedying neglect, abuse, or exploitation of children or adults; 4) preventing or reducing inappropriate institutional care by providing for community-based care, home-based care or other forms of low-intensity, lower cost care; and 5) securing referral for institutional care, where appropriate (222). States and other jurisdictions that are eligible to receive social services block grant funds are given wide discretion in determining what services will be provided, who will be eligible for services, and how the funds will be distributed within the State (222). OBRA-81 eliminated Federal mandates regarding priority recipients and eliminated provisions relating to the targeting of services not all services to low-income individuals or families. There is little information on the use of Title XX funds by States. According to OHDS, however, 22 States used fiscal year 1988 social services block grant funds to provide indigent children and adults with supportive health services to identify health needs and services available to help people remain in their own homes; secure admission to medical institutions; assess the appropriateness of institutional placements; and ensure

<sup>35</sup>See ch.16, "F--- Access to Health Services," in this volume.

<sup>36</sup>See ch. 17, "Consent and Confidentiality in Adolescent Health Care Decisionmaking," in this volume.

the continuity of treatment (223). The number of adolescents affected is unknown.

OHDS' *Administration for Children, Youth, and Families* administers a number of programs relevant to children and adolescents (226). The Administration's Head Start Bureau funds the Head Start program for low-income preschool children. The Administration's Family and Youth Services Bureau administers the Runaway and Homeless Youth Act, which seeks to address the crisis needs of runaway and homeless youth and their families.<sup>37</sup> In fiscal year 1988, about 340,000 young people were served by the 327 federally funded runaway centers across the country (226). Funding for the centers was about \$22 million (226).

The Administration's Children's Bureau administers provisions of the Child Abuse Prevention and Treatment Act and has within it the National Center on Child Abuse and Neglect (226). The Children's Bureau provides Federal support for child welfare services (including funds for Title IV-E foster care maintenance and adoption subsidies for children who are hard to place) and provides Independent Living Formula Grants to States that assist adolescents in foster care make transitions into the world of work (223). How many poor adolescents are affected is unknown.

OHDS' *Administration on Developmental Disabilities* administers the Developmental Disabilities Act and supports programs for developmentally disabled persons of all ages. How many poor adolescents are affected is unknown.

OHDS has several special initiatives for adolescents using discretionary funds. It maybe that many of these programs focus on adolescents who are already low-income or who, by reason of their own behaviors or life circumstances, are at risk of eventually becoming dependent on public assistance. In 1986, OHDS and other agencies in DHHS funded the Youth Self-Sufficiency initiative (Youth 2000) in concert with the U.S. Department of Labor and others (e.g., the Business Roundtable). A public-private partnership was formed to discuss the needs of at-risk youth and to ensure their economic and social self-efficiency, and several grants were

made to attempt to meet the multiple needs of youth in a comprehensive manner.

Public Health Service (PHS)---PHS supports a wide variety of efforts to improve the physical and mental health of Americans. At least two PHS agencies administer programs that are specifically intended to help poor people:

- the Health Resources and Services Administration (HRSA), and
- the Office of the Assistant Secretary of Health (OASH).

*The Health Resources and Services Administration (HRSA)*--HRSA oversees a number of programs of general health services and resources issues relating to access, equity, quality, and cost of care.

HRSA's *Bureau of Health Care Delivery and Assistance* supports States and communities in their efforts to plan, organize, and deliver health services to medically underserved populations and to special populations at risk (e.g., undeserved pregnant women and children, homeless people). The Bureau's Division of Primary Care supports the provision of primary health care services to low-income persons by providing Federal funds for community and migrant health centers (about \$426 million in fiscal year 1988) (422). The Bureau's Division of Special Populations Program Development provides Federal grants to organizations to provide health care for the homeless programs (\$60 million in fiscal year 1988), comprehensive perinatal care programs for low-income pregnant women and children (\$20 million in fiscal year 1988), and other services (242). Specific funding for adolescent health initiatives is not available. On the basis of the average number of adolescent visits to community health centers (CHCs) and migrant health centers, however, the Bureau of Health Care Delivery and Assistance estimates that it spent about \$33 million on medical care for adolescents in 1988 (242).

CHCs provide primary health care services (including primary medical care and ancillary services such as laboratory test and X-ray services, plus preventive dental services and family planning services) to medically underserved, disadvantaged populations (241).<sup>38</sup> CHCs are located in areas of the

<sup>37</sup>See ch.14, "Homelessness: Prevention and Services," in Vol. II for discussion of runaway and homeless youth centers funded under this act.

<sup>38</sup>BRA.81 (Public Law 96-35) established a primary care block grant program, and States were given the option to receive block grant funds for CHCs or to administer CHCs under section 330 of the Public Health Service Act.

country where there are financial and/or geographic barriers to primary care for a substantial part of the population; they are staffed by personnel on assignment from the National Health Service Corps. About 6 million individuals receive services at CHCs annually (24 1). Migrant health centers provide comprehensive primary health care to migrant and seasonal farmworkers. The centers are located in over 300 rural areas in 35 States and Puerto Rico and serve about 450,000 migrant and seasonal farmworkers (about 15 percent of the migrant and seasonal farmworker population) annually (242). In 1989, according to the Bureau of Health Care Delivery and Assistance, 814,000 adolescents received medical care in community and migrant health centers; of these adolescents, 117,000 females ages 10 to 14 received family planning services (242). At least 121,000 adolescents received dental care in these centers in 1989 (242).

HRSA's *Bureau of Maternal and Child Health* (formerly the Office of Maternal and Child Health (227a)) administers the maternal and child health block grant programs authorized by Title V of the Social Security Act. It awards maternal and child health block grants to States "to assure access to quality maternal and child health services, especially for those with low incomes and living in areas with limited availability of health services. In fiscal year 1988, the appropriation for the maternal and child health services block grant program was \$526 million (240a). Eighty-five percent of this appropriation (\$444.3 million) was allocated to State health agencies to assist them in promoting, improving, and delivering maternal and child health services for children with special health needs, and 15 percent (\$82.3 million) was set aside for the Bureau of Maternal and Child Health to award on a competitive basis to support special projects of regional and national significance (SPRANS) which contribute to the health of mothers, infants, and children and children with special needs (240a). The amount specific to poor adolescents is not known.

Office of the Assistant Secretary of Health (OASH)--OASH's Office of Population Affairs carries out

Public Health Service Act Title X and Title XX programs related to adolescent pregnancy, family planning, and population research. The Office of Population Affairs provides Title X funds to public or private nonprofit organizations operating family planning projects for low-income individuals and encouraging family participation when possible.<sup>39</sup> Approximately one-third of all Title X money is specific to adolescents. As of 1989, organizations receiving Title X funds were prohibited from using the money to provide counseling and referral for abortion services except in medical emergencies (54 FR 35440-35441). In a 5-4 decision on May 23, 1991, the U.S. Supreme Court upheld this regulation, despite the concern of some dissenting judges that the regulation "raises serious First Amendment [free speech] concerns."<sup>40</sup>

The Office of Population Affairs also distributes Public Health Service Act Title XX funds for adolescent family life demonstration projects. An average of 60 demonstration grants and seven research grants are funded under Title XX each year. Projects funded under Title XX attempt to establish innovative, comprehensive, and integrated health care services for pregnant and parenting adolescents under age 17. Abstinence from premarital sexual intercourse and adoption as an alternative to abortion are encouraged. Title XX money cannot be used to provide abortion, abortion counseling, or abortion referrals, and adolescents must obtain parental consent before participating in any Title XX program. Title XX programs are not limited to low-income individuals, but Congress has suggested that service areas with a high proportion of low-income families should receive priority when grant applications are considered (Public Health Service Act, Title XX, Sec. 2005).

## U.S. Department of Agriculture

The U.S. Department of Agriculture administers a wide range of programs related to farms, nutrition, food, hunger, rural development and the environment. Several programs to make food assistance available to low-income people are administered by

<sup>39</sup>For further discussion of services provided to pregnant and parenting adolescents under Titles X and XX of the Public Health Service Act, see ch. 10, "Pregnancy and Parenting: Prevention and Services," in Vol. II.

@Justice O'Connor, as cited in *The New York Times*, "Excerpts From Court Ruling Curbing Family Planning Clinics," May 24, 1991, p. A19. In essence, the Federal regulation upheld by the Court bars employees of federally financed family planning clinics from all discussion of abortion with their patients; requires them to inform any woman who inquires about abortion that "the project does not consider abortion an appropriate method of family planning" and requires a referral to prenatal care (L. Greenhouse, "Five Justices Uphold U.S. Rule Curbing Abortion Advice," *The New York Times*, p. A19, May 24, 1991).

the Department's Food and Nutrition Service within the Office of the Assistant Secretary, Food and Consumer Services. Such programs include the Food Stamp Program, the National School Lunch and Breakfast Programs., and the Special Supplemental Food Program for Women, Infants, and Children.

The Food Stamp Program provides low-income individuals and families with children with noncash transfers that can be used only for food. For those participating, the program has been associated with significant improvements in dietary intake (197). According to the U.S. Department of Agriculture's 1977-78 Nationwide Food Consumption Survey, however, only 12 percent of low-income households spending at the full food stamp allotment obtained 100 percent of their recommended dietary allowances, and only a third obtained at least 80 percent (197). Adolescents ages 1.5 to 17 makeup 34 percent of the participants in the Food Stamp Program (206). But all eligible adolescents may not benefit; in 1979, less than 60 percent of all poor households participated in the Food Stamp Program (195). Some observers have suggested improving nutrition for low-income youth by increasing food stamp benefit levels or making sure that people who are eligible receive them (71).

The School Breakfast and School Lunch Programs provide meals for low-income school children free or at a reduced price depending on family incomes. An estimated 24 percent of participants in the School Breakfast Program and 43 percent of participants in the School Lunch Program are in grades 7 through 12 (206). Evaluations of these meal programs have shown that they have a positive effect on the overall caloric intake of participants (195), although they may have other shortcomings.<sup>41</sup> Some observers have suggested extending the programs to all schools in low-income areas (71).

The Special Supplemental Food Program for Women, Infants, and Children is intended to improve the health of low-income pregnant, breastfeeding, and postpartum women, infants and children up to their fifth birthday (206). Federal funds are used to purchase food packages to supplement participants' diets and to provide nutrition education. Females under age 18 make up an estimated 2.8 percent of participants in this program.

Finally, it should be noted that the Department of Agriculture's Extension Service has been developing an agenda to better serve "youth at risk" due to poverty, lack of family support, or negative peer pressure (205).

### **U.S. Department of Labor**

The U.S. Department of Labor has responsibility for fostering U.S. workers' welfare, improving working conditions, and promoting opportunities for employment. The Department *Employment and Training Administration* has responsibilities related to job training and supports employment and training programs for economically disadvantaged youth Titles II-A and II-B and Title IV.

Titles II-A and II-B of the 1982 Job Training Partnership Act authorize block grants to States. Under Title II-A, training services are offered throughout the year to economically disadvantaged adults and youth. In program year 1989, 40 percent (\$715.1 million) of the Title II-A budget was earmarked for adolescents. Title II-B establishes a summer employment program for low-income youth. Funding for Title II-B was \$709.4 million for summer 1990 (258).

Title IV of the Job Training Partnership Act authorizes the Job Corps and various other federally administered programs. The Job Corps provides employment and training in primarily residential centers for disadvantaged adolescents and young adults ages 16 to 21 (259). Health care is also provided by Job Corps. In 1989, the U.S. Department of Labor provided \$741.8 million for the centers, and there were 100,000 participants in the Job Corps. After completing the program, 66.9 percent of the participants were placed in jobs and 16.7 percent went on for further education.

### **Racial and Ethnic Minority Adolescents: Issues in the Delivery of Health and Related Services**

The U.S. population is increasingly coming to be made up of blacks, Hispanics, Asians, and other racial and ethnic minorities. By the year 2000, an estimated 29 to 31 percent of the new entrants into the U.S. workforce will be from racial and ethnic

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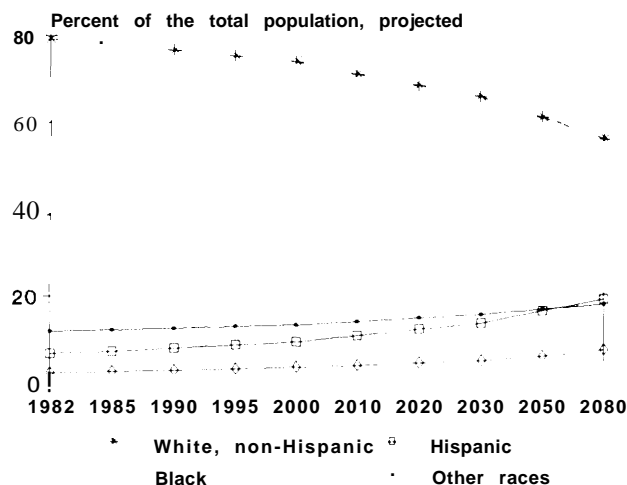
<sup>41</sup>See ch. 7, "Nutrition and Fitness Problems: Prevention and Services." in VOI. II.

minority groups, a figure twice that of only a few years ago (66,67). Overall, 26 percent of the workforce-and 26 percent of the overall U.S. population-in 2000 is expected to be from racial and ethnic minority groups and the proportions of blacks, Hispanics, and other minorities (i.e., Asians) are expected to climb steadily throughout the 21st century (67) (see figure 18-5).

What are the implications of these demographic trends for U.S. health policymakers? Currently, about 30 percent of American adolescents ages 10 through 18 are members of racial and ethnic minorities (21 1). By the year 2010, as many as 38 percent of Americans under the age of 18 will belong to minority groups. This trend is promising in that it will increase the cultural diversity of the United States. But, as noted earlier in this chapter, about half of black, Hispanic, American Indian and Alaska Native, and one-third of Asian adolescents live in poor or near-poor families (see figure 18-3). At least in part because these adolescents live in poverty, and for other reasons which are not entirely clear, black, Hispanic, and American Indian adolescents are at increased risk of experiencing a range of health-related problems, including physical health problems, psychosocial problems, criminal victimization, and teen pregnancy. If the percentage of racial and ethnic minority adolescents increases and the social economic status of racial and ethnic minority groups does not improve, U.S. adolescents' need for publicly financed health care will continue to grow.<sup>42</sup>

Even if the socioeconomic status of racial and ethnic minority groups does improve, there may be a need for "culturally competent" health services for racial and ethnic minority adolescents. The need for culturally sensitive and locally appropriate health services has recently become an increasingly common topic of discussion (e.g., 44,86,185). Questions that have arisen include the following: Are there alternatives to mainstream health care in the United States that are used within particular cultures? Do cultural factors affect some populations' willingness to use certain types of services (e.g., mental health services)? Are there certain cultural norms, strengths, or traditions (e.g., strong, traditional families or church involvement) that "protect" individuals in certain groups from health risks? Are there genetic, cultural, or historic factors

**Figure 18-5-Projected Changes in the Racial and Ethnic Makeup of the U.S. Population, All Ages, 1982 to 2080**



SOURCE: Office of Technology Assessment, 1991, based on U.S. Department of Commerce, Bureau of Census, *Projections of the Hispanic Population: 1983 to 2080*, Current Population Reports, Population Estimates and Projections, Series P-25, No. 995 (Washington, DC: U.S. Government Printing Office, 1986).

that put individuals at risk for health problems? Does the mainstream health care system have certain characteristics that make it less accessible to or less effective for certain population groups? What culture-specific innovations in service delivery have been found to be effective in addressing the health needs of certain groups?

Data on the utilization of health services by racial and ethnic minority adolescents are limited, but existing data suggest that racial and ethnic minority adolescents confront not only economic barriers but also cultural barriers to access. Minority providers and providers trained in cultural awareness are few. Some of the cultural traditions and institutions of different racial and ethnic minority groups---strong family and community ties, for example---may turn out to be resources on which programs that provide health and health-related services can capitalize to provide effective services.

The focus of the discussion that follows is on the delivery of health and related services to five categories of racial and ethnic minority adolescents in which Congress expressed particular interest:

- . black adolescents,
- . Hispanic adolescents,
- . Asian adolescents.

<sup>42</sup>OTA knows of no adolescent population projections based on socioeconomic status.

- American Indian and Alaska Native adolescents, and
- Native Hawaiian adolescents.<sup>43</sup>

The health and other effects of belonging to a racial or ethnic minority group have not been fully investigated. It is important to note, however, that racial and ethnic minorities and American Indians have been the target of much racism and discrimination in this country (71,185,191). Although civil rights legislation in the 1960s legally removed racial barriers in access to voting and public accommodations, discrimination in many aspects of American life remains (58). Blacks, the largest minority group in the United States, were defined as subordinate and inferior to whites by a racial **caste** system introduced by slavery (71,72). Asians were legally prohibited from immigrating to the United States by the Chinese Exclusion Act of 1882 and the Oriental Exclusion Act in 1924 that banned all immigration to the United States from Asia. The internment of Japanese families during World War II targeted Japanese Americans for separation from the larger society (148). Throughout the Nation's history, Federal Government policies undermined American Indian cultures (199). Native languages were prohibited from being taught in schools, religious ceremonies and traditional **practices were** discouraged, and populations were relocated. The impact of the loss of culture faced by many Indians has been cited **as a** chief contributor to many of the health and social problems confronting the American Indian population today.

Recent immigrants to this country may have problems related to their immigration experience. The immigration experience sometimes exposes individuals to special risks that may cause or exacerbate health and mental health problems. Many immigrants from Southeast Asia, for example, left Vietnam, Laos, and Cambodia under extremely adverse and dangerous circumstances; the experience of having been physically and sexually assaulted by **sea** pirates is not uncommon among



Photo credit: Capitol Hill Arts Workshop, Washington, DC

**Adolescence is a crucial period for identity formation, and an individual's racial or ethnic minority status takes on a new importance during adolescence.**

adolescent refugees escaping from these war-torn countries (20,62). Many adolescent refugees from Central America left to escape from the horrors of war and economic privation and separated from their families (260). These recent immigrants may have language and other difficulties adjusting to American culture.

Adolescence is a crucial period for identity formation (185). As pointed out by Spencer and

<sup>43</sup>The attribution of race or ethnicity is sometimes rather arbitrary. For example, many 'blacks' have white ancestors. Hispanic people can have White or black ancestry, and American Indians may also have black or white ancestors. Use of these limited categories obscures the diversity found within minority groups (266). Terminology may also change over time. For example, some black Americans are coming to prefer the designation "African-American" over 'black.' The term 'African-American' could, for example, be used to distinguish some individuals who are U.S. citizens from some recent immigrants from Africa and the Caribbean. Because the term 'black' is still used by the Federal Government to collect and calculate population, health, and other statistics, and because potential distinctions among "African-Americans" and other "blacks" is as yet not clear, the term "black" has also been used in this Report. Finally, it is important to note that, in terms of Federal health policy, American Indians have a somewhat different relationship with the Federal Government than do other racial or ethnic minorities. In large part, Indian tribes function as "domestic dependent nations," and the U.S. Supreme Court has ruled that special programs for the benefit of Indians are not racial in nature but based on a unique political relationship between Indian tribes and the Federal Government (*Morton v. Mancari*, 417 U.S. 535 [1974]; see 199).



Dornbusch in their review entitled “Challenges in Studying Minority Youth,” an individual’s racial or ethnic minority status takes on a new importance during adolescence (185):

The adolescent’s awareness of minority status is qualitatively different from that of the child. Very young children often think of their race. . . as mutable, something that may change as they grow. . .

In contrast to young children, adolescents have the ability to interpret cultural knowledge, to reflect on the past, and to speculate about the future. With cognitive maturity, minority adolescents are keenly aware of the evaluations of their group made by the majority culture. . .

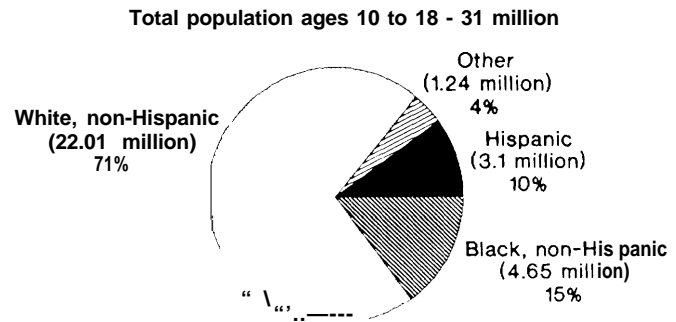
The minority adolescent’s awareness of . . . [the majority culture’s] negative appraisals [of the minority group], of conflicting values, and of restricted occupational opportunities can affect life choices and the strategies selected for negotiating a life course.

It is particularly important to recognize that racial and ethnic minority adolescents may be faced with “negotiat[ing] a balance between two value systems: that of their own group and that of the majority” (185). Some racial and ethnic minority adolescents may perceive that adhering to the values of the “mainstream culture” is essential to achieving success in that culture but may regard such adherence as forcing them to reject their own ethnic identity (185). Members of minority groups who reject their own culture for that of the “mainstream culture” are sometimes characterized pejoratively by other members of their minority group (e.g., blacks who “act white” may be called “Oreos”; American Indians who “act white” may be called “Apples” Asians who “act white” may be called “Bananas” Hispanics who “act white” may be called “Coconuts”). Some minority adolescents may be faced with conflicting role models; others (e.g., some young black males in the inner city), with a lack of role models (185). Some minority females come to devalue their own appearance (185).

According to Spencer and Dornbusch, “Even when they have a positive *personal* identity. . . , minority adolescents may develop ambivalent or negative attitudes towards their own *group*’ (185).

Of the strategies for dealing with cultural conflict (alienation, separation, assimilation, and biculturalism), the ability to develop “bicultural competence” appears to offer some advantages (185). Biculturally competent individuals would have the

**Figure 18-6-Race/Ethnicity of U.S. Adolescents Ages 10 to 18, 1987**



SOURCE: Office of Technology Assessment, 1991, based on R. Kronick, Adjunct Professor, University of California, San Diego, CA, calculations based on U.S. Department of Commerce, Bureau of the Census, March 1988 Current Population Survey public use files, 1989.

norms of both majority and minority groups available to them; the standard to be used would depend on the situation (185). A requirement to develop a bicultural identity suggests that minority individuals bear an extra load during the critical developmental period of adolescence.

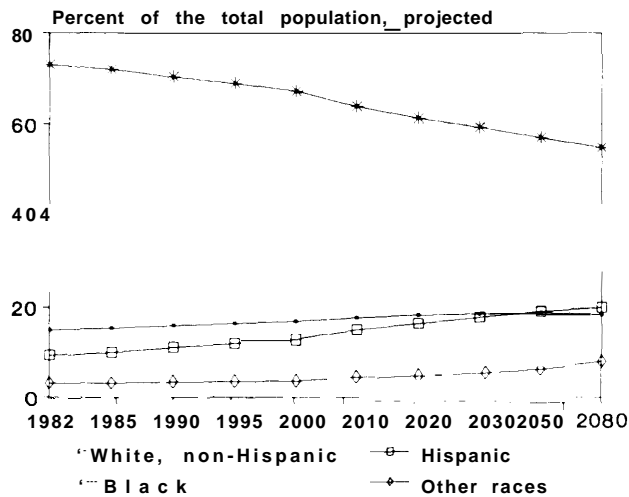
There is some evidence that racial and ethnic minority adolescents today see themselves and their opportunities differently from white adolescents. In a survey of adolescents in grades 7 through 12 in Minnesota, minority adolescents reported worrying more than white adolescents about their future job prospects and their current economic condition; they were also significantly more likely to report being worried about being treated unfairly because of their race (176).

### ***Overview of the Number of Racial and Ethnic Minority Adolescents***

As noted above, according to data from the U.S. Department of Commerce, Bureau of the Census, adolescents who are not “white, non-Hispanic” made up about 30 percent of the country’s 31 million adolescents in ages 10 through 18 in 1987. As shown in figure 18-6, non-Hispanic black adolescents made up 15 percent of the population of 10- to 18-year-olds; Hispanic adolescents (both black and white) made up about 10 percent of the adolescent population; and other adolescents (including Asians) made up 4 percent of the adolescent population (107).

The percentage of U.S. adolescents who are not “white, non-Hispanic” is growing and in a growing number of cities, localities, schools, and regions of

**Figure 18-7—Projected Changes in the Racial and Ethnic Makeup of the U.S. Population Under Age 18, 1982 to 2080**



SOURCE: U.S. Department of Commerce, Bureau of the Census, *Projections of the Hispanic Population: 1983 to 2080, Current Population Reports, Population Estimates and Projections, Series P-25, No. 995* (Washington, DC: U.S. Government Printing Office, January 1986).

the country, those who are *not* “white, non-Hispanic” are numerically dominant. By the year 2010, as many as 38 percent of Americans under the age of 18 will belong to minority groups (see figure 18-7). By the year 2000, Hispanics are expected to be the largest minority group as a result of their high rates of fertility and immigration (73,267,208).

### **Health Status of Racial and Ethnic Minority Adolescents**

#### **Limitations of Data and Research on the Health of Racial and Ethnic Minority Adolescents**

Data and research on the health status and health care utilization patterns of racial and ethnic minority adolescents have several limitations. Data on births and deaths in the United States are collected from the States by the National Center for Health Statistics. The National Center for Health Statistics publishes death rates for 72 causes by race (white, black, all other) by 5-year age groups (including 10 to 14 and 15 to 19), but data on deaths for adolescents in many ethnic groups is not readily available. Historically, national health and health services utilization surveys sponsored by the National Center for Health

Statistics, such as the National Ambulatory Medical Care Survey and the National Health Interview Survey, have provided little reliable data on the health status or health care utilization patterns of adolescents from racial and ethnic minority groups. Data on certain subgroups of minorities, such as refugee adolescents, the largest portion of whom come from Southeast Asia, are nearly nonexistent (20,118,216). Even when race or ethnicity are considered as variables in research, culture, which is sometimes but not always related to race or ethnicity, is rarely considered as a variable (44,131).

Information about specific health concerns of racial and ethnic minority adolescents is greatly limited by a paucity of reliable, population-based data (21,175). Much of the information available about cultural beliefs and practices of different racial and ethnic minority groups is based on data gathered on adult populations. Little is actually known about the beliefs and practices of adolescents in particular. Especially in the case of recent immigrant families, the beliefs of adolescent members may differ substantially from the beliefs of their parents and grandparents.

Until recently, research on the health-related beliefs and practices of black adolescents has generally been conducted on black adolescents living in urban settings, usually in poverty (e.g., 24a,30,31,63,173). It is questionable whether the findings from such research are applicable to the many black adolescents who do not live in central cities and/or are not poor.<sup>45</sup> According to a recent review by Spencer and Dornbusch, the social science research base on American minority adolescents has broadened somewhat to include some suburban and rural black adolescents, well-functioning minority adolescents from blue-collar families, and economically advantaged racial and ethnic minority adolescents (185). Overall, however, the available research base on racial and ethnic minority adolescents is thin.

A particularly critical limitation of much available current research is that the effects on health status and health care utilization of factors related to race or ethnicity are frequently confounded with

<sup>44</sup>According to Cross et al., culture “implies the integrated pattern of human behavior that includes thoughts, communications, actions, customs, beliefs, values, and institutions of a racial, ethnic, religious, or social group” (44).

<sup>45</sup>While 57 percent of blacks overall live in central cities, 18 percent live in nonmetropolitan areas, and another 25 percent live in metropolitan areas, but outside of central cities (209). And while about half of black adolescents lived in families with incomes below or near the Federal poverty level, nearly one-quarter live in incomes that exceeded 300 percent of the poverty level (107).

effects related to socioeconomic status or other sociodemographic factors (64). When interpreting the results of most small-scale research studies, it is difficult to differentiate between the effects of race and ethnicity and the effects of socioeconomic status (131,175,185).

In addition, biases and prejudices of the mainstream culture are sometimes reflected when studying racial and ethnic minority adolescents. For example, theories of adolescent development (e.g., Erikson's theories [53,54]) are based on white adolescents, and so may ignore cultural differences between these and black or other minority adolescents and not provide an appropriate framework for understanding the development of minority adolescents (160, 191). Additional evidence suggests that there may be a tendency for some minority youth with problems to be referred to different service systems than whites. For example, black adolescents with behavioral problems may be more likely to be referred to the juvenile justice system, while white adolescents with behavioral problems may be more likely to be referred to the mental health system (17,44,46).

Another important limitation of existing research is that most studies with ethnic and racial minorities have been conducted using a problem-focused approach that examines minority groups' disproportionate risk of experiencing various problems, frequently using nonrepresentative samples such as clinical populations or adolescents in institutional settings (21,1 17,13 1,185). While the deficit model may be useful for identifying critical areas of need among minorities, it does little to explain the means by which many of these adolescents achieve positive outcomes.

Despite the adversities they confront, many adolescents from poor or otherwise disadvantaged backgrounds have significant cultural and personal strengths that protect them from experiencing some problems or that could potentially attenuate their effects. As noted above, much of the research that does exist on adolescents living in poverty and on racial and ethnic minority adolescents has focused on the "failures" rather than the successes. These failures, however, are not entirely representative. In

order to design services that can capitalize on individual and cultural strengths, it would be helpful to have more information about the factors associated with positive outcomes.

### **Health Problems Experienced by Racial and Ethnic Minority Adolescents**

Information on some of the specific types of problems that have been reported for black adolescents, Hispanic adolescents, Asian adolescents, American Indian and Alaska Native adolescents, and Native Hawaii adolescents is presented below. Despite the severe limitations in available information, there is evidence that adolescents from these racial and ethnic minority groups are at increased risk of experiencing some health problems. The reasons are not entirely clear. Whether there are genetic or cultural factors that contribute to the health problems experienced by racial and ethnic minorities has not been fully investigated.

In some cases, racial or ethnic minority adolescents are at reduced risk of experiencing health problems. For reasons that are unclear, for example, black adolescents appear to have lower rates of alcohol and illicit drug use than white adolescents (21,149,228). Black adolescents are also less likely to die from automobile crashes than white adolescents, at least in part because poor black adolescents and those living in inner cities tend to have less access to cars.<sup>46</sup> Suicide rates for black adolescents, although increasing, are also lower than those for white adolescents (75,232).<sup>47</sup> Asian-American adolescents tend to defer involvement in sexual activity and to have lower rates of pregnancy than white adolescents (189).<sup>48</sup>

**Black Adolescents**—As shown in figures 18-8 and 18-9, black adolescents in this country have considerably higher death rates than white adolescents (238 b). Among all U.S. adolescents, adolescent males ages 15 to 19 have the highest death rates. In 1987, the death rate for all adolescent males ages 15 to 19 was 119.6 deaths per 100,000 population; the death rate for black adolescent males in this age group was 144.2 deaths per 100,000 (see figure 18-9). While young white males die primarily from accidents, young black males die primarily from homicide (71). In addition, black males are much

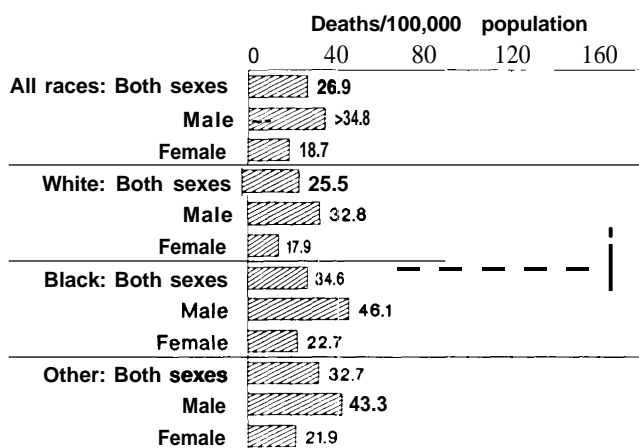
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<sup>46</sup>See ch. 5, "Accidental Injuries: Prevention and Services," in Vol. II for further discussion.

<sup>47</sup>See ch. 11, "Mental Health Problems: Prevention and Services," in Vol. II for further discussion.

<sup>48</sup>See ch. 10, "E-cy and Parenting: Prevention and Services," in Vol. II for further discussion.

**Figure 18-8--Death Rates for All Causes for U.S. Adolescents Ages 10 to 14, by Race and Sex, 1987**

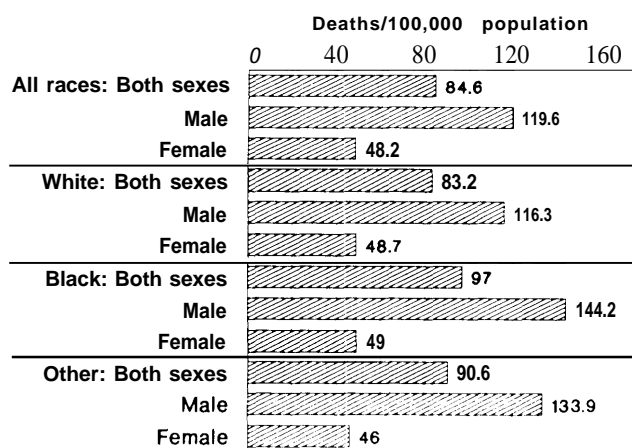


SOURCE: Office of Technology Assessment, 1991, based on U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics, unpublished 1987 mortality data, Hyattsville, MD, 1990.

more likely to be victims of police brutality or killed in confrontations with police than whites (166). Black adolescent males are disproportionately at risk for being victims of crime; they are nearly six times more likely to die from homicide than white adolescent males (235). The risk of death from homicide for black males increases if they reside in high-risk neighborhoods, if they use drugs, if they engage in criminal behavior, and if they live in the North Central region. These disparities diminish considerably, however, when socioeconomic status is held constant (46).<sup>49</sup>

The second leading cause of death among young black males is accidents. The proportion of accidental injury deaths due to nonvehicular accidents (e.g., fires, drownings) is higher among black adolescents than among white adolescents (71). Suicide rates among black adolescents have traditionally been much lower than suicide rates among white adolescents, in spite of blacks' "obvious exposure to greater external stresses of discrimination, poverty, and marginal minority status in American society" (71). What sociocultural factors account for this phenomenon are not known, although it has been suggested that protective factors may have been provided by five institutions (family, church, fraternal and social organizations, community schools,

**Figure 18-9-Death Rates for All Causes for U.S. Adolescents Ages 15 to 19, by Race and Sex, 1987**



SOURCE: Office of Technology Assessment 1991, based on U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics, unpublished 1987 mortality data, Hyattsville, MD, 1990.

and extended kin and social support networks) which characterized the traditionally segregated black community (71).

Mortality rates are only one indicator of adolescents' health status. As noted elsewhere in this report, a broad definition of adolescent health could include aspects of traditional definitions of health (i.e., the presence or absence of physical disease or disability); adolescent problem behaviors (e.g., delinquency, drug use, sexual activity); positive components of health (e.g., social competence); health and well-being from the perspective of adolescents themselves; and social influences on health (e.g., families, schools, communities, policies).<sup>50</sup> But, as noted earlier, reliable population-based information about black adolescents' health status is lacking. Overall, a number of analyses have shown that black adolescents--especially poor black adolescents living in central cities--appear to be at higher risk than white adolescents for many health problems (33,71, 149).

As discussed elsewhere in this report, arrest rates for serious offenses, particularly serious violent offenses, are much higher for black adolescents than for white adolescents, and black adolescents are disproportionately represented in juvenile justice

<sup>49</sup>For further discussion of homicide rates among black adolescents, see ch. 13, "Delinquency: Prevention and Services," in Vol. II.

<sup>50</sup>See box A in Vol. I, "Summary and Policy Options."

facilities (253,257).<sup>51</sup> In 1987, the **arrest** rate for serious violent offenses was about six times higher for black adolescents than for white adolescents (253). One explanation for the racial disparity in arrest rates is that crime rates are strongly associated with low socioeconomic levels and urban location, and both of these factors impinge more profoundly on black youth. Statistics comparing racial groups do not typically control for such demographic factors. A second explanation for the racial disparity is that blacks adolescents are more likely to be arrested than whites engaged in the same behavior (90). When self-reports of offenses are examined, racial disparities are much smaller than those typically reported in arrest statistics (51,105). A third explanation for the racial disparity in arrest and incarceration rates is that antisocial behavior in white adolescents is more likely to be interpreted as an indicator of emotional disturbance and treated as such, whereas black adolescents are more typically referred to the juvenile justice system rather than the mental health system (19,46).

There are significant differences between black and white adolescents in sexual activity, pregnancy, abortion, and childbearing rates. Black adolescents, many of whom are from socioeconomically disadvantaged families, tend to initiate sexual activity at an earlier age, are less likely to use contraceptives, are more likely to experience out-of-wedlock births, and are less likely to have an abortion. Researchers disagree on the relative importance of socioeconomic status and other<sup>52</sup> factors in accounting for these racial differences. **IN** any event, it has been estimated that 40 percent of all black females become mothers before the age of 20; nearly 90 percent of those births are to single mothers (1 11,140).

As discussed elsewhere in this report, black adolescent females are at particularly high risk of experiencing iron-deficiency anemia (60) and obesity.<sup>53</sup>

As noted elsewhere in this report, adolescents who engage in sexual intercourse are at risk of infection with human immunodeficiency virus (HIV)

or other sexually transmitted diseases (STD). Through August 1990, black adolescents accounted for 36 percent of the 568 AIDS cases among U.S. adolescents ages 13 to 19 (236a).<sup>54</sup>

**Hispanic Adolescents**--In general, data on the health of Hispanic adolescents are limited (260). The Hispanic Health and Nutrition Examination Survey (HANES), a special population survey conducted in 1982-84 by the National Center for Health Statistics in DHHS, found that Mexican-American adolescents may experience higher rates of obesity, increasing their risk of eventually developing Type II (adult-onset) diabetes (138,260).

Higher arrest rates for drunkenness have been found for some Hispanic adolescents in comparison with white adolescents, and inhalant abuse is a significant problem for Mexican-American adolescents, especially those living in inner cities (163,169).

High school dropout rates among Hispanic adolescents are high; as many as 45 percent of Mexican-American adolescents drop out in some areas (37,82). In 1989,33 percent of Hispanics ages 16 to 24 were high school dropouts (211a).<sup>55</sup>

There are few data on mental disorders among Hispanic adolescents (175). Nonetheless, there is some evidence that Mexican-American adolescents (but not other Hispanics) report higher levels of depression than whites or blacks (175,260).

In 1980, the overall birth rate for Hispanic adolescents (all races) was about double the rate for non-Hispanic white adolescents and about four-fifths the rate for non-Hispanic black adolescents (192). Through August 1990, Hispanic adolescents (all races) accounted for 18 percent of the 568 AIDS cases among U.S. adolescents ages 13 to 19 (236a).<sup>56</sup>

**Asian Adolescents**--Information concerning the health status of Asian and Asian-American adolescents is quite limited. Asians and Asian-Americans tend to have diets that are high in sodium, possibly increasing their eventual risk of heart disease (35,41). In addition, because Asians may have

<sup>51</sup>See ch. 13, "Del@uenq: Prevention and Services," in Vol. II.

<sup>52</sup>See ch.10, "Pregnancy and parenting: Prevention and Services," in Vol. II fOr further discussion.

<sup>53</sup>See ch. 7, "Nutrition and Fitness Problems: Prevention and Services," in Vol. II.

<sup>54</sup>See ch. 9, "AIDS and Other Sexually Transmitted Diseases: Prevention and Services," in Vol. II for further discussion.

<sup>55</sup>For a further discussion of dropout rates, see ch. 4, "Schools and Discretionary Time," in Vol. II.

<sup>56</sup>See ch. 9, "AIDS and Other Sexually Transmitted Diseases: Prevention and Services," in Vol. II for further discussion.

difficulty maintaining traditional dietary patterns that include sources of calcium not readily available in the United States, their low use of dairy products results in low calcium intake (99,190).

As noted earlier, a systematic national epidemiologic study of mental health problem U.S. adolescents has not been conducted. Asian adolescent refugees have been found to suffer from depressive disorders and a delayed onset of chronic post-traumatic stress disorder syndrome (20). One study indicated that a third of Vietnamese teenage refugees in foster care had experienced clinical depression during their first 18 months in the United States (20). A study of adolescent and young adult Vietnamese refugees in the Philippine Refugee Processing Center prior to their resettlement in the United States indicates that adolescents (ages not specified) who had been in the resettlement camp longer than 3 years scored higher on a depression measure and a psychological symptom checklist than those without camp experience (94).

Asian refugees are also at particularly high risk of experiencing problems such as tuberculosis (122). Health examinations of 80 Indochinese (Cambodian, Vietnamese, or Laotian) adolescent refugees ages 11 to 19 indicated that half had positive tests for tuberculosis, 38 percent had incomplete immunizations, a third tested positive for parasites, and 14 percent tested positive for hepatitis B (62).

American Indian and Alaska Native Adolescents-- A 1986 OTA report entitled *Indian Health Care* found that in almost every Indian Health Service area and on almost every health indicator, the health of American Indians is poorer than that of the U.S. population in general (199).

Studies have found that, although rates vary across tribes, American Indian and Alaska Native adolescents are at increased risk of experiencing mental health problems such as low self-esteem, alienation, depression; they also have high rates of suicide, alcohol and substance abuse, and running away from home (109,112,128,136,202). American Indian adolescents are at high risk of having been physically or sexually abused (202).

Because of the high rates of alcoholism among American Indians, Indian adolescents are at in-

creased risk of having been born with fetal alcohol syndrome (202). High rates of childhood otitis media (ear infections) lead to higher rates of hearing impairment (136,202). Developmental disabilities, such as mental retardation and learning disabilities, occur at higher rates in American Indian and Alaska Native children than in white children (159,172,202).

Mortality due to accidental injuries among American Indian adolescents is high. As discussed elsewhere in this report, American Indian adolescents experience death from accidental injury at nearly twice the rate of black or white adolescents (22).<sup>57</sup> One explanation for this is that Indian adolescents have high rates of drinking and driving (45). In addition, because many of them live in rural areas, Indians are less likely to have speedy access to trauma centers. Road and vehicle conditions have also been mentioned as factors contributing to serious injuries among Indians of all ages.

Nutritious traditional dietary patterns of American Indian communities have generally been lost with increasing contact with non-Indians (22). American Indian adolescents are more likely than non-Indian adolescents to be overweight and to eventually experience and die from adult-onset diabetes (22).

The prevalence of untreated dental disease among American Indian adolescents is high (22). In 1983-84, the Indian Health Service of DHHS conducted a service-wide study of children and found that overall, American Indian children have twice the amount of dental caries as the national average (248). It also found that by the end of adolescence, two out of five young American Indian patients have destructive periodontal disease with bone loss.

In 1986, almost a quarter of the births to American Indians were to females younger than age 20; the adolescent fertility rate appears to be rising, although there is substantial variation across tribes (22).

Native Hawaiian Adolescents--There are more than 200,000 persons of Hawaiian ancestry, or Native Hawaiians, residing in the State of Hawaii, and they comprise nearly 20 percent of the State's

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<sup>57</sup>See ch. 5, "Accidental Injuries: Prevention and Services," in Vol. II.

population (139).<sup>58</sup> The Native Hawaiian population is young and growing, and the Native Hawaiian adolescent population in Hawaii is among the largest ethnic grouping. In 1986, 22 percent of the Native Hawaiian population (an estimated 44,000 individuals) were between the ages of 10 and 18, and 24 percent were ages 9 or younger (139). While there are clusters of predominantly Native Hawaiian communities in Hawaii, the Native Hawaiian population of Hawaii is distributed throughout the islands of Hawaii (139). Native Hawaiians are more likely than other ethnic groups in Hawaii to be poor and are also more likely to receive public assistance (139).

A number of health and related problems particularly affecting Native Hawaiians have been identified by various surveys by the State of Hawaii Department of Health, although adolescent-specific data are scarce (139). Native Hawaiian students persistently perform below statewide averages on standardized achievement tests, and their performance relative to other ethnic groups worsens in the higher grades (75a). Compared to all other State students, a much lower percentage of Native Hawaiian students receive some college education (40 percent versus only 20 percent) (166a). Hearing impairments among Native Hawaiian children, most likely from untreated middle ear infections, have been recognized as a major problem and a probable contributor to poor school performance (139). State of Hawaii Health Department surveys find that other impairments can also be found at relatively high rates among Native Hawaiian children and adolescents ages 5 to 17 (vision, back and spine, upper-extremity/hip), with only Caucasians in Hawaii having higher rates overall and for most categories (139). Native Hawaiians have the highest rate of obesity among ethnic groups in Hawaii, putting them at higher risk of developing Type II diabetes (251).

Native Hawaiian adolescents are more likely than adolescents in other ethnic groups in Hawaii to give birth: in 1987, 5.9 percent of total Native Hawaiian births were to mothers 17 or younger, compared to

2.1 percent for all other ethnic groups combined (77).

Hawaii has examined its adolescent population in relation to delinquent acts and found a disproportionate incidence of arrests among Native Hawaiians who account for 35 percent of all arrests among individuals under age 18 (139).

On the positive side, Native Hawaiian children are more likely than non-Native Hawaiian children to live in family households (139). Among those family systems that build on strong Hawaiian traditions, common characteristics include multiple parenting within an 'ohana (extended family), early indulgence followed by a shift at 2 to 3 years of age to a primarily peer-directed socialization experience, socialization toward a group- and family-oriented values system, and learning experiences that emphasize modeling and mutual participation rather than verbal interaction. Some of the typically Hawaiian values (e.g., cooperation over aggressive individualism) are diametrically opposed to Western cultural characteristics for success in many areas (e.g., education, business) (139). Further, it may be important to note that Hawaiian concepts of health differ from Western' or mainstream U.S. concepts (139). Hawaiian cultural concepts of health are more holistic than Western concepts and include physical and spiritual states (76). There is no word, for example, for 'mental' health or illness (76). This broader conceptualization has had an impact on the delivery of some prevention interventions to Native Hawaiian adolescents (139). However, extensive intermarriage with other ethnic groups has produced a wide variety of beliefs, childrearing patterns, and other practices among Native Hawaiians.

### *Access to Health Services by Racial and Ethnic Minority Adolescents*

#### **Patterns of Health Care Utilization by Racial and Ethnic Minority Adolescents**

Information on the utilization of mainstream health services by racial and ethnic minority adoles-

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<sup>58</sup> Because of the small number of Native Hawaiians living elsewhere in the United States, and because almost all information about Native Hawaiian health status and specialized health services is from sources in the State of Hawaii (139), this discussion of Native Hawaiian adolescents is limited to such adolescents living in the State of Hawaii. According to data from the U.S. Census, 69 percent of all Native Hawaiians living in the U.S. live in Hawaii (139). For purposes of this chapter, in Federal statutes, and for most analyses by the U.S. Department of Commerce, Bureau of the Census, and the Hawaii State Department of Health Health Surveillance Program, a Native Hawaiian is a person of either partial or sole Hawaiian ancestry (139). However, less than 5 percent of the Native Hawaiians are pure Hawaiians, and probably two-thirds would identify themselves as primarily Native Hawaiians, rather than primarily some other ethnic group (139).

cents is quite limited. Even for adult populations, data on the utilization of health services are quite limited, as national surveys have generally not sampled enough individuals from ethnic or racial minority groups to provide meaningful data. As noted earlier, racial and ethnic minority persons disproportionately live in poverty, and many of them experience financial barriers to the utilization of health care. In addition, some of them experience geographic or other nonfinancial (e.g., cultural) barriers to the utilization of services.

Information from a variety of sources, while extremely limited, suggests that the utilization of mainstream health-related services tends to be lower among black and Hispanic adolescents than among white, non-Hispanic adolescents. Black children and adolescents, for example, may be less likely than whites to receive preventive care or appropriate medical services (239). A study of Job Corps participants ages 16 to 22, all of whom were low income, found that blacks were more likely than whites or Mexican Americans to have incomplete immunizations (57 percent of blacks v. 42 percent of Mexican Americans and 51 percent of whites) (61). The National Health Interview Surveys for the years 1985 through 1987 found that blacks under 18 years of age were far less likely than whites of that age to have had a physician contact (239). More disturbing, this was particularly true if they were in fair or poor (as opposed to good to excellent) health (239).<sup>59</sup> These surveys also found that the only large black-white differences in rate of annual physician contacts was for individuals under 18. Blacks under age 18 had about 2.8 physician contracts per person per year, while whites under age 18 had 4.5 physician contacts per person per year (239).

Nearly one-fourth of the Mexican-American adolescents ages 12 to 17 who were surveyed in the Hispanic HANES in 1982--84 reported having no regular source of health care; one-fifth reported that they had not seen a physician within the past 5 years, and about one-third reported that they had not had a preventive care visit within 5 years (138). Some evidence suggests that less acculturated Mexican

Americans are less likely than more acculturated Mexican Americans to use outpatient care for physical or mental health problems. These differences persist even when socioeconomic status is controlled for (267).

Although the population surveyed was not adolescent, it is interesting that one national survey by Louis Harris and Associates found that blacks and Hispanics were less likely to report being completely satisfied with the most recent medical visit on five out of seven measures: travel time, time with physician, information received, quality, and the overall medical visit (11).<sup>W</sup> Similarly, black and Hispanic adults reported more "special access problems" (e.g., in obtaining health insurance and obtaining and financing care for serious illness and emergencies) than did whites (11). The research group that analyzed the survey results suggested that racial and ethnic minorities were experiencing particular difficulties and barriers in obtaining needed health care services, despite the considerable improvements in access they experienced as the result of policy and program changes in the 1960s and 1970s (11).

Adults from some minority groups use informal helping networks (e.g. families, folk healers) to address health problems, although the extent to which racial and ethnic minority adolescents use these networks is not generally known (17). Asian adults with emotional difficulties, for example, often turn to their families for help and turn to outside agencies as a last resort (188). Alternatives to mainstream health services used by Asian-American adults for health problems include herbal medicines, acupuncture, and diet and exercise regimens (189). Whether Asian-American adolescents use these strategies is unknown. Native Hawaiians in general appear to make widespread use of informal sources of care, although the actual level of use of these sources of care by Native Hawaiian adolescents is not known (139).<sup>61</sup>

For the most part, it appears that racial and ethnic minority adolescents who do obtain health and health-related services obtain them through the

<sup>59</sup>White children under age 18 in fair or poor health had an average of 15.5 physician contacts per year, compared to 6.5 physician contacts per year for black children in fair or poor health (239). Survey data were not given separately for 10- to 18-year-olds; thus, it is not clear whether differences existed between younger children and adolescents.

<sup>60</sup>Levels of satisfaction were similar for office waiting time and out-of-pocket cost (11).

<sup>61</sup>While the State of Hawaii is diligent about collecting health status data on an ethnic basis, the issue of health and related services specifically for Native Hawaiians is a relatively recent policy issue and there have been few quantitative analyses of services to Native Hawaiians (139).



mainstream service system (44). The use of alternative health systems among Mexican-American adolescents is apparently limited; only 2 percent of Mexican-American adolescents surveyed in the Hispanic HANES reported using a folk healer in the past year (138).

Services and interventions that address linguistic, geographic, economic, and cultural barriers (44,98,167) to the utilization of services are likely to improve racial and ethnic minority adolescents' access. It is likely that it is quite important for services to be in the neighborhoods where minorities reside, be provided in the language spoken by the adolescent and his or her family, be financially affordable, and be responsive to the cultural background of the adolescent (44).

### Services and Interventions To Increase Access to Health Services Among Racial and Ethnic Minority Adolescents

As noted earlier, a disproportionate number of racial and ethnic minority adolescents are poor or near-poor, and they confront many the same financial and other barriers to access other poor adolescents do. For these adolescents, the expansion of health insurance coverage or the establishment of school-linked or community-based health centers may effectively improve access to services.<sup>62</sup> A question that arises, however, is whether racial and ethnic minority adolescents have special needs for services that cannot be effectively met in the "mainstream" system. More research on this topic would be useful. There is an increasing consensus, however, that services for racial and ethnic minority individuals, including children and adolescents, would be improved if they were "culturally competent."

Culturally competent services for adolescents may be difficult to design, because there is little systematic information about how racial and ethnic minority adolescents experience adolescence. There is beginning to be some systematic analysis of what a culturally competent system of care is, but the knowledge base has not yet been applied systematically to the design of training programs for health care and other service providers. Overall, there is little systematic description of how services have been developed or adapted to meet the specific needs of racial and ethnic minority adolescents, and even



Photo credit: Office of Technology Assessment

Services that address linguistic, geographic, economic, and cultural barriers to utilization are likely to improve racial and ethnic minority adolescents' access to needed services. The Latin American Youth Center provides a broad range of services, as well as a place to "hang out," for young people in a Washington, DC, neighborhood populated by large numbers of immigrants from Central America.

less scientific evaluation of the effectiveness of available services. Currently, however, minority providers and providers trained to be sensitive to the sociocultural aspects of providing health care are few (6,17,44).

Developing Culturally Competent Systems of Care—The concept of a "culturally competent system of care" has been suggested as a model for working effectively in cross-cultural situations (44, 202). Several characteristics are said to be necessary for a system to be considered culturally competent

<sup>62</sup>For a discussion of school-linked health centers and other innovation in the delivery of health and related services to adolescents, see Ch. 15, "Major Issues Pertaining to the Delivery of Primary and Comprehensive Services to Adolescents," in this volume.

(44). The system must value diversity at all levels, have a sense of its own culture, be aware of the dynamics involved when cultures interact, have institutionalized cultural knowledge, and have developed adaptations to diversity. A culturally competent system of care recognizes and values cultural diversity, and works effectively with the natural support and helping networks within minority communities. Effective providers must be sensitive to cultural differences within as well as across racial and ethnic groups.

There is some evidence that, when given the choice, black adults prefer to be seen by a black provider (6). Black or other racial and ethnic minority adolescents may similarly prefer to have access to minority providers, although information on this topic is scarce. Currently, there are few minority providers in the health professions. Between 1980 and 1987, only 11 percent of doctoral degrees in health education earned were awarded to minorities; half of them went to blacks (6). In 1987, blacks made up only 5.2 percent of medical school graduates (181). A recent report by a DHHS task force recommended the recruitment and training of more minority doctors (227) and a new law passed in the 101st Congress (Public Law 101-527) will provide additional scholarships and loans to minority students.

According to some observers, however, not all minority providers can be assured to be culturally competent. Some racial and ethnic minority doctors trained in major medical schools have the same attitudes and values as their white peers (71), and changes in the health care field have made individual practice in low-income areas, less attractive. Further, while members of broad racial and ethnic minority groups (e.g., Asians, Hispanics) may have some things in common with other members of that group, the cultural differences of subgroups may prove more important. An Asian health care provider of Japanese heritage, for example, will not necessarily be competent to deal with a Hmong adolescent from Southeast Asia. Perhaps the most well-recognized need is for the cross-cultural training among white health professionals, who are often ignorant of the dynamics and interpretations of the behavior of racial and ethnic minority adolescents (8,123).

Considerations in Developing Services for Racial and Ethnic Minority Adolescents-Many studies have found that blacks, Asian Americans,

Hispanics, American Indians, and Native Hawaiians strongly value the family (23,63,72,80,92,113,118,135,169,186,265,270). Thus, services that include the family may very well be most effective. For Asian-American adolescents, services that gain family involvement, use supportive family networks, and promote family decisionmaking are believed likely to be more effective, although there have been no tests of this model (118,277). Attempts to involve parents may pose practical difficulties for single-parent households, however, and some adolescents report that they prefer that parental involvement be an option rather than a requirement (47,201). For black adolescents, particularly those in single-parent households, family involvement may include using a total kinship network composed of persons related by blood, marriage, friendship, neighboring residence, or work association (96). When providing services to Hispanic adolescents and their families, it may be important to respect the traditional family age and sex hierarchies of power (169), although this too may pose problems for the adolescent clients. Although churches have been identified as important community resources, especially for black adolescents, some observers believe that churches may not be appropriate or willing sources of health information, particularly regarding issues related to sexuality or drug use (47). When willing, they may not have the necessary staff, funds, or technical expertise (161).

Level of acculturation is another important variable to consider when developing interventions and services for adolescents (e.g., 88,169). Normal conflict between adolescents and older generations in the family may be exacerbated by culture conflicts, when more "acculturated" adolescents do not wish to follow traditional practices (118,189). For example, there can be conflict between an Hispanic-American adolescent girl and her traditional grandmother when the adolescent wishes to experience the same freedom to go on unchaperoned dates as her peers. Three primary sources of intergenerational conflict for Southeast Asian refugee adolescents have been identified: conflicts concerning pressure for the adolescents to date and marry within their ethnic group; conflicts concerning career choices, with adolescents experiencing pressure to pursue professional careers; and conflicts caused by role reversal, for example when an adolescent assumes greater familial responsibilities because he or she

has the language proficiency to interact more effectively in the outside world (1 18).

Effectiveness of Programs Targeting Racial and Ethnic Minority Adolescents-Information on programs geared to the delivery of health and related services to racial and ethnic minority adolescents is severely limited. Several models of programs designed to serve racial and ethnic minority adolescents have emerged, but few of these have been evaluated. Thus, it is difficult to draw conclusions about which are the best models for delivering services to ethnic and racial minority adolescents. Much of the information about the effectiveness of such models is anecdotal information based on the experiences of providers rather than scientific evidence.

Some programs aim to increase the self-esteem of minority adolescents by providing ethnic role models or mentors. One such program is Project IMAGE, a church-based program in Chicago that pairs young black males ages 8 to 18 with volunteer black men in an effort to provide a positive force for the youth and to link them with special services and programs (168). Another program, the Las Madrinas (Godmothers) program administered by Hacer, Inc., in New York City, pairs low-income Hispanic girls at risk of dropping out of school with young Hispanic professional women who act as volunteer mentors (83). The goal of this program is to promote leadership among the girls and encourage them to stay in school. Activities include workshops, referrals to services, and field trips to cultural, educational, and recreational sites.

One program that has been evaluated used short stories about well-known Puerto Rican men and women who had overcome adversity (heroes) to emphasize the importance of cultural identity and foster the development of self-esteem and coping skills among Puerto Rican adolescents having trouble in school (42,43). An evaluation of this program indicated that Puerto Rican adolescents who participated in the program experienced increased ethnic identity and reduced anxiety compared with similar adolescents randomly assigned to a control group. Interestingly, the intervention had somewhat negative effects on ethnic identity and self-esteem for adolescents in families headed by two biological parents, as opposed to mother-headed single-parent households (43).

Another approach to the promotion of health and well-being among racial and ethnic minority adolescents is to instill a sense of cultural awareness by involving adolescents in culturally traditional ceremonies. The use of interventions incorporating Afrocentric rites of passage for adolescents is an example of this approach (44). Programs incorporating Afrocentric rites of passage are intended to support the transition of black adolescents into responsible adult roles (50). Many traditional American Indian health practices are gradually being incorporated by tribes and "Western" mental health providers into contemporary approaches to mental health treatment for Indian adolescents. These include the "four circles," sweat lodge, and "talking circle," which are treatment strategies based on traditional healing practices (112,202).

Information about the effectiveness of mentoring and modeling programs for racial and ethnic minority adolescents is generally lacking. However, Project EPIC (Education and Prevention in Communities) at Wayne State University in Michigan is developing an evaluation to assess the effectiveness of rites of passage programs in reducing substance abuse among adolescents (264).

Hawaii currently offers a wide range of services for adolescents (194,262). Although culturally appropriate services targeted specifically to Native Hawaiian adolescents are few and have not been evaluated for effectiveness, the number of services for Native Hawaiian adolescents is increasing (139). The Native Hawaiian Health Care Act of 1988 (Public Law 100-579) will lead to the eventual establishment of Native Hawaiian health systems throughout the State that will provide health promotion, disease prevention, and primary care services (139). The implementation of this act provides a critical opportunity to target services for Native Hawaiian adolescents.

### ***Major Federal Programs Pertaining to Racial and Ethnic Minority Adolescents***

The Federal programs to help low-income persons discussed earlier in this chapter tend to serve many minority persons because of the disproportionate number of minorities who live in poverty. The discussion here focuses on Federal programs that are concerned specifically with serving racial and ethnic minority populations.

Many of the programs are within DHHS, but the U.S. Department of Education, the U.S. Department of Agriculture, and the U.S. Department of Justice also have some programs. In addition to the programs discussed here, there are isolated examples of federally funded grants that focus on meeting the health needs of minority adolescents. There are also programs that focus on other needs of minority adolescents, such as education or job training.

### **U.S. Department of Health and Human Services**

Three of the four major components of DHHS mentioned earlier—the Family Support Administration, and the Office of Human Development Services, and the Public Health Service—have programs that focus specifically on racial and ethnic minority populations. The Health Care Financing Administration does not focus specifically on these populations.

Family Support Administration (FSA)—FSA's Office of *Refugee Resettlement* provides Federal funds to States for refugee and entrant assistance programs (213). Refugee and entrant assistance programs were established in 1980 in order to assist refugees and Cuban and Haitian entrants in becoming employed, self-sufficient, and assimilated into U.S. society as soon as possible after their arrival (213). Federal funds are provided to help offset necessary costs, although most funds are used to provide grants to States for refugee assistance and services by way of cash assistance, medical assistance, State administrative costs, social services, and targeted assistance. The amount of assistance provided specifically to adolescent refugees or their families is not available.

One program of the Office of Refugee Resettlement that has a substantial impact on adolescents is in the Unaccompanied Minor Refugee Program which provides support for unaccompanied refugee minors (216). The U.S. Catholic Conference and Lutheran Immigration and Refugee Service help the Office of Refugee Resettlement place unaccompanied refugee minors in licensed child welfare programs (e.g., foster care, group care, independent living, residential care), and costs incurred on their behalf are reimbursed by the Office of Refugee Resettlement until a month after the minor's 18th birthday.<sup>63</sup> Since 1979, more than 8,500 unaccompanied minor refugees have entered this program.

Nearly half of these minors who enter the program continue to be under its jurisdiction through their adolescence. There are now about 3,000 unaccompanied refugee minors in care.

Another program of the Office of Refugee Resettlement is the Transition Program for Refugee Children. This program provides funds for the special educational needs of refugee children and adolescents, including bilingual education, remedial programs, school counseling and guidance services, and instruction to improve English language skills. Support is also provided for training for parents, and in-service training to educational personnel (216).

Under the Immigration Reform and Control Act of 1986 (Public Law 99-603), the Office of Refugee Resettlement provides Federal grants to States for the purpose of helping State and local governments defray expenses incurred in providing public assistance, public health assistance, and educational assistance to eligible legalized aliens. These grants are called "legalization assistance impact grants." States may use the grants for educational services for legalized alien children and adolescents who have been in the United States for less than 3 years and who reside in school districts with large concentrations of eligible legalized aliens (217). Although \$898.5 million was available to States under this grant program in fiscal year 1989, and adolescents were eligible for services, the amount of such assistance specific to adolescent immigrants is not available from the Federal Government.

Office of Human Development Services (OHDS)—OHDS oversees a number of programs related to racial and ethnic minority populations.

OHDS' *Administration for Children, Youth, and Families* makes funds available through its Family and Youth Services Bureau for programs to prevent substance abuse among runaway and homeless Native American adolescents. Projects are expected to incorporate Indian tribal values and languages, and develop a positive cultural and family identity (54 FR 15092-15106).

OHDS' *Administration for Native Americans* provides training and technical assistance to assist public and private Native American organizations in developing, conducting, and administering projects to carry out locally determined social and economic

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<sup>63</sup>States may permit support to extend for longer periods (216).

development strategies (223). In recent years, the Administration for Native Americans has targeted the problem of drug and alcohol abuse prevention. In fiscal year 1989, OHDS used its coordinated Discretionary Funds program to allocate about \$250,000 to a total of five projects in this area. Not all of the projects were adolescent-specific.

OHDS used its Coordinated Discretionary Funds Program for fiscal year 1989 to make funds available for prevention and treatment of alcohol abuse among minority youth using culturally sensitive interventions; for the prevention and treatment of alcohol abuse among Native American adolescents using runaway and homeless youth centers; and for innovative community approaches to entrepreneurial activity with Native American adolescents (53 FR 33686-33722).

Through interagency agreements with the Indian Health Service and the Bureau of Indian Affairs, the Administration for Native Americans has also funded health promotion activities, including alcohol and drug abuse prevention education. In 1989, the Administration for Native Americans transferred \$70,000 to the Bureau of Indian Affairs for a health education program expected to involve 27,000 students attending Bureau of Indian Affairs schools (223). In the past, OHDS has used its discretionary funds to fund projects to increase minority access to runaway and homeless youth center services; prevent child abuse among minorities; reunite American Indian families with children separated because of parental substance abuse; and prevent substance abuse among Native American adolescents. OHDS has also funded programs to increase the participation of historically black colleges and universities and Native American organizations in OHDS funding opportunities (221).

OHDS also provides funds to increase the number of minorities entering the field of social work to do work in the area of child welfare. Funds are provided for traineeships and in-service training to historically black colleges and universities and to colleges controlled by Indian tribes or serving Indian reservations.

Public Health Service (PHS)—PHS has a number of agencies with programs that address the health needs of racial and ethnic minority adolescents:

- . the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA);
- . the Health Resources and Services Administration (HRSA);
- . the Indian Health Service (IHS); and
- the Office of Minority Health.

*Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA)*--ADAMHA consists of three agencies concerned with mental health and with substance abuse:

- . the National Institute on Drug Abuse,
- . the National Institute of Mental Health, and
- the Office of Substance Abuse Prevention.<sup>64</sup>

ADAMHA's *National Institute on Drug Abuse* has several initiatives related to substance abuse among minority adolescents. Most of the projects focus on epidemiology and risk factors; fewer focus on prevention or specific treatment approaches.<sup>65</sup> Projects include several studies examining the effects of drug use on school dropout rates in minority communities, a study examining the etiology of substance abuse among high-risk black adolescents, and a study of cultural factors affecting vulnerabilities to substance abuse among Hispanic adolescents (229,230).

The National Institute on Drug Abuse also conducts the National Household Survey on Drug Abuse, a periodic national prevalence survey of drug use. The survey oversamples person ages 12 to 34, blacks, and Hispanics, but still has a very small sample of nonwhite adolescents.

The National Institute on Drug Abuse has Special Populations Research and Training Programs that work to enhance research and training opportunities for minority researchers. Technical assistance is provided to potential researchers to develop their grant writing and research skills (230).

ADAMHA's *National Institute of Mental Health* administers the Child and Adolescent Service Sys-

<sup>64</sup>Basic activities of ADAMHA agencies focusing on alcohol and drug abuse are described in ch. 12, "Alcohol, Tobacco, and Drug Abuse: Prevention and Services," in Vol. II. Activities of the National Institute of Mental Health, the ADAMHA agency focusing on mental health are described in ch. 11, "Mental Health Problems: Prevention and Services," in Vol. II. Basic ADAMHA activities in the context of the entire Federal role in adolescent health are described in ch. 19, "The Role of Federal Agencies in Adolescent Health," in this volume.

<sup>65</sup>Most Federal drug abuse prevention activities relevant to minority adolescents take place in the Office of Substance Abuse Prevention (see below).

tern Program (CASSP), a small grant program established in 1984 to develop new initiatives to improve the delivery of mental health services to severely emotionally disturbed children and adolescents (231). CASSP is aimed at improving coordination among the child welfare, juvenile justice, mental health, and special education systems (71). It provides technical assistance and acts as a clearinghouse for research information to CASSP grantees, and provides funding for grants to States.<sup>66</sup> As of June 1989, CASSP had been funded in 42 States (231). Fiscal year 1989 funding for CASSP was \$9.8 million.

A major goal of CASSP is to ensure that services to severely emotionally disturbed children and adolescents from racial and ethnic minorities are sensitive to cultural differences. In 1986, CASSP sponsored a workshop on the development of mental health programs for minority children and adolescents and their families. Following that workshop, CASSP project directors were instructed to develop at least one major goal related to improving services for cultural and ethnic minority children and adolescents in their States; each State receiving a CASSP grant is required to develop a minority objective. State efforts include such activities as developing training programs in cultural issues for service providers, establishing task forces to explore the difficulties that minority children and adolescents have in gaining access to existing mental health services and to advise in the implementation of minority objectives, and making outreach efforts to involve minorities in CASSP activities (231). Technical assistance is available through CASSP to help develop and implement minority objectives (e.g., 44).

The National Institute of Mental Health funds six centers that do research and provide treatment targeted to the needs of particular ethnic groups (84a). It recently awarded \$1.4 million for a new Research Center on the Psychobiology of Ethnicity that will investigate, among other things, ethnic differences in how people respond to drugs for mental disorders, ‘‘culture-bound syndromes,’’ and how different groups conceptualize psychiatric disorders (84a). How much of a focus will be on adolescents is unknown.

ADAMHA’s Office of Substance Abuse Prevention was created in 1986 to provide national

leadership for alcohol and drug abuse prevention (234). The Office of Substance Abuse Prevention has a demonstration grant program with a strong focus on minority and multicultural adolescents. Of the 130 demonstration grants awarded in 1987 (most of which target adolescents), 56 percent are targeted at minority groups. Of these, 24 programs focus on blacks, 15 on Hispanics, 12 on American Indians and Alaska Natives, 6 on Asian Americans and Pacific Islanders, and 16 on multiethnic minority groups. Most of the remaining grants are for multiethnic projects that include whites. Many of the projects incorporate strategies to enhance their cultural competence, such as involving respected community members in the program, recruiting minority staff at all levels, encouraging the use of traditional cultural activities (e.g., celebrating cultural festivals or teaching traditional languages), and using culturally appropriate media and messages in drug and alcohol education efforts.

*Health Resources and Services Administration (HRSA)*—As noted earlier, HRSA’s *Bureau of Maternal and Child Health* (formerly the Office of Maternal and Child Health) administers the maternal and child health block grant programs authorized by Title V of the Social Security Act. In administering this program, the Bureau seeks to remove cultural, communication, and systems barriers to health services for medically underserved women, infants, and children, many of whom belong to minority groups (91). The Bureau has established a Workgroup on Culturally Distinct Populations to provide advice on the best use of grant money to improve health care for minorities.

As noted earlier, the Bureau of Maternal and Child Health sets aside 15 percent of Federal maternal and child health block grant funds to support special projects of regional and national significance (SPRANS) which contribute to the health of mothers and children with special needs. A number of the projects that have been funded focus on improving the provision of health services to minority and poor adolescents (91). Examples include a project to reduce teenage pregnancy among black adolescent girls, a project to prevent injuries among American Indian adolescents, and a project to promote the health of American Samoan adolescents (91,15 1,244).

<sup>66</sup>See ch. 11, ‘‘Mental Health Problems: Prevention and Services,’’ in Vol. II for further discussion of CASSP.

HRSA's *Bureau of Health Professions and Bureau of Health Care Delivery and Assistance* support a variety of personnel training programs. The Division of Disadvantaged Assistance in the Bureau of Health Professions administers a Health Careers Opportunity Program, which provides assistance to health profession training programs that serve minorities and other disadvantaged persons to facilitate the recruitment and retention of minorities in health professions; about 13,000 students take part in programs of the Health Careers Opportunity Program annually (240a). The program also provides direct financial assistance to disadvantaged students.

In fiscal year 1988, HRSA began providing awards through its "Excellence in Minority Health Education Program" to historically black colleges and universities to strengthen their capacity to train minority students in health professions (240a). Personnel from the National Health Service Corps, who staff community and regional health centers, receive orientation about linguistic and cultural aspects of health care (240a).

*Indian Health Service (IHS)*---The IHS provides health services to American Indians and Alaska Natives (199,202). IHS clinical facilities have generally been placed on or near reservations (199). About half of American Indian adolescents reside on reservations and are eligible for health care services through the IHS (202).

The IHS finds three regional adolescent treatment centers for substance abuse rehabilitation through its Alcohol and Substance Abuse Programs Branch (249). The IHS also provides partial funding for teen centers in or near four Albuquerque area schools, and health services at Bureau of Indian Affairs boarding schools (22). In addition, the IHS has made youth a priority for its prevention programs, planning to specifically emphasize teen pregnancy, alcohol and drug abuse, mental health, violence, and suicide.

Unfortunately, however, numerous factors make the provision of health services to Indian adolescents inadequate, even for reservation-based Indian adolescents. In recent years, overall IHS funding has just kept pace with inflation with no real increases (48). Most IHS funds are used to provide acute care to Indians of all ages; except for some funding for

substance abuse services, teen pregnancy services and participation in several multifunded adolescent health centers in Albuquerque, New Mexico (45), there is no targeted treatment funding for adolescents. Little money is available for prevention services (48). Although the IHS has a Maternal and Child Health Program, it is merely advisory and has no budget of its own to implement programs. Similarly, although the IHS policy recognizes that adolescents have special needs in health care, and youth are a priority, adolescent clinics have not been established as part of the usual IHS health care delivery system, and there are no adolescent medicine specialists in the IHS (22).

Confidentiality is often important to adolescents considering the use of health care services<sup>67</sup> (201). Various aspects of IHS delivery may result in a lack of privacy for American Indian and Alaska Native adolescents, and the lack of privacy may reduce such adolescents' willingness to seek appropriate health care (22). For example, especially in small communities, the IHS is a major employer of members of local tribes. Research on this or other nonfinancial factors affecting access to care for American Indian adolescents is nearly nonexistent.

*Office of Minority Health*---The *Office of Minority Health* was created within the DHHS Office of the Assistant Secretary of Health in 1985 to address the problems and implement the recommendations of the Secretary's Task Force on Black and Minority Health (164). These recommendations included stimulating the development of innovative programs to improve the health status of minority populations and advocating a national strategy to address the health needs of minorities (164,227).

The Office of Minority Health has developed a research center to investigate minority health problems (164). The Office of Minority Health has also provided funding for a number of demonstration grants for the development of community health coalitions to reduce risk factors among minority populations (252). Funded projects include programs designed to reduce teenage pregnancy; reduce the risk of alcohol and other drug problems among high-risk, urban Latino youth; and provide AIDS education to American Indian high school students and adults using Native healing principles and

67 See ch.17, "Consent and Confidentiality in Adolescent Health Care Decisionmaking," in this volume.

techniques. Additional HIV education and prevention programs directed at black and Hispanic adolescents and adults have also been funded (25,252) as has a special initiative on minority males (54 FR 22312).

Although the overall goal of the Office of Minority Health is to improve the health status of blacks, Hispanics, Asian-Americans, Pacific Islanders, and Native Americans, the U.S. General Accounting Office recently reported that the office “does not have specific goals or objectives for each of these groups, nor does it have short- and long-term strategic plans for its objectives” (194a). Later in 1990, the potential role of the Office of Minority Health was expanded when the U.S. Congress statutorily established such an Office, to be headed by a Deputy Assistant Secretary for Minority Health (Public Law 101-527, the “Disadvantaged Minority Health Improvement Act of 1990,” Section 2). Public Law 101-527 also authorized an increase in funding for the Office of Minority Health, to \$25 million per year for fiscal years 1991 through 1993. The potential role of the Office in improving the health of minority adolescents is as yet unknown.

### U.S. Department of Agriculture

The U.S. Department of Agriculture’s Food and Nutrition Services administers a food distribution program for low-income Indians living on or near reservations (206). Participating agencies receive monthly distributions of food from local warehouses. How many Indian adolescents benefit from this program is not known.

### U.S. Department of Education

Funding by the U.S. Department of Education of programs focusing on minority adolescent health is limited, but examples of such programs do exist. One is a Drug-Free Schools and Communities Program for Hawaiian Natives to develop a culturally appropriate curriculum for 3,000 Native Hawaiian students. Another is a Drug-Free Schools and Communities Program for alcohol and drug education and prevention among Indian children who live on reservations and attend schools operated or funded by the Bureau of Indian Affairs.

### U.S. Department of Justice

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) in the U.S. Department of Justice focuses on problems related to delinquency among adolescents in general rather than among any particular group of minority adolescents.<sup>68</sup> Nevertheless, OJJDP does on occasion make efforts to address special issues related to adolescents from minority groups.

For example, OJJDP is funding several research projects on Minorities in the Juvenile Justice System in an effort to determine the extent to which processing decisions are influenced by the racial or ethnic background of the adolescent offender (257).

OJJDP has also provided funding for Proyecto Esperanza. The goal of this project, implemented by the National Coalition of Hispanic Health and Human Services Organizations,<sup>69</sup> is to assess family strengthening and crisis intervention programs and to design model programs to prevent child abuse and reduce the incidence of running away within Hispanic families (1 10,257). OJJDP has also asked the National Coalition of Hispanic Health and Human Services Organizations to provide technical support to the National Court Appointed Special Advocates Association and the National Council of Juvenile and Family Court Judges to improve the quality of their services to Hispanic children and adolescents at risk of out-of-home placement.

### Rural Adolescents: Issues in the Delivery of Health and Related Services

Data from an analysis by McManus indicate that about one-third of all U.S. adolescents ages 10 to 18 live in rural (nonmetropolitan) communities (132). About half of these adolescents live in the South; another one-quarter live in the Midwest (132).

#### *Special Health Issues for Rural Adolescents*

#### Limitations of Data and Research on the Health of Rural Adolescents

It is difficult to determine the health status of rural adolescents for several reasons, only some of them specific to rural areas. First, as discussed throughout

<sup>68</sup>See ch. 13, “Delinquency: Prevention and Services,” in Vol. II and ch. 19, “The Role of Federal Agencies in Adolescent Health,” in this volume for further discussion.

<sup>69</sup>The National Coalition of Hispanic Health and Human Services Organizations is a nonprofit national Hispanic organization focused on improving the health and psychosocial well-being of the Hispanic population (153).



this report, there have been few large-scale epidemiologic studies of adolescents. Second, limitations in access to the health care services system for adolescents in general, and for rural adolescents in particular (see below), make clinical samples less than valid as indicators of health status. For example, families of adolescents with complex health problems sometimes may move to metropolitan areas solely because of a lack of specialized services in rural areas. Similarly, when adolescents are treated in metropolitan medical centers, they may not be reflected in clinical prevalence studies as “rural” cases, even though they continue to reside in rural communities. Finally, synthesis of the literature on rural-urban differences is hampered by diverse definitions of rural and by failure to account for confounding variables and the heterogeneity of rural communities.

Sufficient data do exist, however, to leave two broad impressions. First, the idyllic image of rural life that may still persist is quite discrepant from reality. Second, although it is a mistake to ignore or underestimate the health risks experienced by rural adolescents, it also seems true that rural adolescents generally are similar to their urban peers in the health problems they experience. Given the extent of health problems among adolescents on average, these impressions are not contradictory. Additional descriptive research designed to separate rural, regional, social class, and ethnic factors and analyses to determine the effects of particular dimensions of rural life on adolescent health would be useful in assessing the true level of health problems among rural adolescents. It would also be useful to have more information on the extent to which rural health facilities meet the needs of rural adolescents.

### Health Problems Experienced by Rural Adolescents

As noted earlier, the most comprehensive national health data collected on a continuing basis are National Health Interview Survey data by the National Center for Health Statistics.<sup>70</sup> According to National Health Interview Survey data, the inci-

dence of both acute and chronic conditions in children and adolescents is generally similar in metropolitan and nonmetropolitan areas (132,133). About 75 percent of both metropolitan and nonmetropolitan adolescents report (or, more likely, have reported for them) that their health is excellent or very good (132).

In terms of the prevalence of problems, the most sizable urban-rural differences that show up in available data from a variety of sources reviewed for OTA by Melton and Oberlander are differences in rates of accidental injuries and delinquency (137). Rural adolescents have higher rates of accidental injuries and lower rates of delinquency (137). The prevalence of other problems may not be different for rural and urban adolescents, but the risk factors for the problems may be different.

The American Academy of Pediatrics has identified rural injuries as a major public health problem with unregulated use of farm machinery by adolescents being a prime culprit (10). Using national databases of the National Center for Health Statistics and the Consumer Product Safety Commission, Rivara reported substantial risks for adolescent males in farm families, with farm injuries taking 22.4 per 100,000 lives among 10- to 14-year-old males, 30.9 per 100,000 lives among 15- to 19-year-old males, and accounting for 4,397 emergency room visits among 10- to 19-year-old males in a single year (174). Fatalities resulted most commonly from machinery-related injuries (especially involving tractors), drownings, and firearm accidents (144,174). In addition to severe trauma, farm adolescents are vulnerable to more subtle injuries related to the use of farm machinery, such as noise-induced hearing loss (28). It should also be noted that rural adolescents have been found to engage in behaviors that put them at high risk for automobile and other types of accidents (263).<sup>71</sup>

Data from the National Crime Survey, conducted periodically by the U.S. Department of Justice, shows less victimization by adolescents (and other

<sup>70</sup>As discussed above, National Health Interview Survey have several limitations with respect to evaluating the health status of adolescents. One issue is that parents, rather than the adolescents themselves, typically report on their children’s health status and health care utilization.

<sup>71</sup>The University of Minnesota survey of 7<sup>th</sup> through 12<sup>th</sup> graders in Minnesota found, for example: that only 35 percent of rural adolescents surveyed use their seat belt all or most of the time; that 64 percent of rural adolescent males never used a seat belt; that nearly one out of four rural adolescents surveyed (and three times more males than females) never wear a helmet when riding a motorcycle; that fewer than half the rural adolescents surveyed say they would *not* drink and drive; that only 43 percent said they would not ride with a driver who used alcohol or drugs; that about 20 percent sometimes ride with a driver who’s been using alcohol or drugs; that rural adolescents start drinking earlier and drink more often and drink in greater quantity than urban adolescents (263).

age groups) in rural than in urban areas.<sup>72</sup> For the most part, however, rural crime and delinquency do not appear to differ in their origins or quality from offending in urban communities (1 15).

Data on mental health problems among rural adolescents are scarce (155). The few epidemiologic studies of adolescents that have included rural-urban comparisons have shown somewhat more risk in urban communities (e.g., 179). However, the surveys and studies tend to vary on so many dimensions (e.g., ethnicity, social class other than size of community) that the research gives little understanding as to any protective factors that may be associated with rural communities per se. There are, however, characteristics of rural life, both longstanding and contemporary, that may affect the mental health and coping ability of rural adolescents differently from adolescents living in metropolitan areas. On the negative side, there is substantial evidence that farm youth have been at greater risk of stress in recent years, in part as a result of the farm crisis of the early 1980s (see 57). Researchers have documented a substantial increase in guilt, alienation, aggressiveness, depression, helplessness, and poor school performance in rural adolescents (18, 70, 155, 261). One study of 4,300 15- to 19-year-olds in three communities in rural Minnesota, conducted in the early 1980s at the peak of the farm crisis, found that 3 percent reported having attempted suicide in the past month (70). The University of Minnesota Adolescent Health Survey found that about 10 percent of rural females and 7 percent of rural males reported having attempted suicide at one point, and about 3 percent of students had both attempted suicide and were seriously considering taking their own lives at the time of the survey (263). Rural adolescents who live on farms worried about killing themselves at two times the rate of other adolescents (263). Thirty percent of Minnesota respondents had experienced the suicide of a fellow student or adult in the school, and 14 percent had

experienced the loss in the previous school year (263).

In addition to change related to the recent farm crisis, perennial instability in many rural communities has resulted from constant migration away from such communities and, during the 1970s, reverse migration, as the dominant rural industries in particular regions have “boomed” and “busted” (29, 162). More generally, simply because the range of institutions and social situations is relatively narrow in small communities, change within rural communities is likely to have a greater impact than comparable change in larger communities (271).

Conversely, the relatively low complexity of life and slow diffusion of innovations in rural communities may also contribute to a lack of excitement about the future (137). As evidence, those who stay behind are more likely to be high school dropouts (19.5 v. 16.0 percent<sup>73</sup>), twice as likely to be married during adolescence (3.4 percent among nonmetropolitan adolescents), and less likely to have at least some college education (35.0 v. 44.5 percent<sup>74</sup>) (132).

However, there are many positive aspects to life in rural communities. In general, rural communities are viewed as desirable places to live, in large part because of the greater sense of neighborliness that can arise from “undermanning” (14),<sup>75</sup> and a lower rate of crime than in more densely populated communities (104, 27 1). Many of the pressures experienced by adolescents in rural communities are similar to those experienced by adolescents in urban and suburban communities (e.g., 178).<sup>76</sup>

### Access to Health Services by Rural Adolescents

Adolescents in rural areas face special barriers to access to health services, in terms of availability, affordability, and approachability. Perhaps reflecting this differential accessibility and affordability, rural adolescents, especially those who are from poor families, do use health services somewhat less

<sup>72</sup>See ch. 13, “Delinquency: Prevention and Services,” in Vol. II for a discussion of delinquency.

<sup>73</sup>These @Q refer to heads of household.

<sup>74</sup>These data refer to heads of household.

<sup>75</sup>“Undermanning” results when there are more socially necessary roles to be filled than there are people to fill them (14). This phenomenon can have positive health consequences, because it is positively associated with a greater press for personal involvement, and thus more personal control, which in turn have been shown to be related to positive physical and mental status (165). Such general features of rural life as “undermanning” do not always apply to rural adolescents, however. For example, as small rural schools are consolidated into larger institutions, students may become alienated and show behavior problems and psychosomatic disorders (15, 69).

<sup>76</sup>In their review for OTA, which was limited by scant information, Melton and Oberlander found no clear urban-rural differences in substance use\* or in sexual behavior or attitudes (137). There were, however, more studies, and more variations in results, on the topic of substance use. Studies of maltreatment were not able to be analyzed in terms of rural-urban differences.

frequently than their urban peers. Nonmetropolitan adolescents have been found to report 2.7 physician visits per year, compared with 3.2 visits annually among metropolitan adolescents (132). On the other hand, the proportion of nonmetropolitan adolescents who report having been hospitalized in the previous year is somewhat higher than among metropolitan adolescents (5.4 percent v. 3.9 percent) (132). It is unclear whether this discrepancy results from differences in accessibility of outpatient care, severity of health needs, or some other factor.

The availability of professionally staffed mental and physical health services is often limited in rural communities (137,204). Surveys of rural mental health professionals have shown that professionals who choose to work in rural areas tend to be people who received their graduate training in a rural locale. There is a need, then, for more clinical training programs in rural areas. Only 20 percent of physicians, few of them specialists, practice in rural areas; similarly, mental health professionals are concentrated in urban areas. One consequence of the lack of providers is that adolescents in rural areas are especially likely to receive their health care from hospital clinics, and are relatively unlikely to have any consistent source of care. Furthermore, even when services are available, transportation problems may make them inaccessible and, therefore, functionally unavailable to adolescents in rural areas.

Adolescents in rural areas also face economic barriers to care, as Medicaid benefits tend to be more limited in rural States, and many rural families are poor (204). In 1984, 19.3 percent of adolescents in nonmetropolitan areas lived in poverty, compared with 15.5 percent in metropolitan areas (132), but the difference in median family income between metropolitan and nonmetropolitan areas is more striking (\$30,045 v. \$21,956 in 1985 [158]). In addition, disadvantaged rural families are less likely to be eligible for public assistance programs, as poor parents in rural communities are commonly employed for at least part of the year.

Even when help is available, it may not be sought due to the strong sense of individual responsibility characteristic of many rural people. A study of

welfare programs (including AFDC, food stamps, and Medicaid) throughout Wisconsin showed perceptions of stigma to be much greater in rural communities (170).<sup>77</sup> Perhaps as a result, welfare exits in rural communities were substantially more frequent and faster—an outcome that is positive in most respects, but that may signal a willingness to give up needed health services when they are perceived as a sign of personal weakness. In a survey that was conducted among adolescents, the University of Minnesota found that, overall, 25 percent of rural adolescents tried to solve their problems on their own rather than seek help from parents, doctors, friends, clergy, or school people; adolescents living on farms were less likely than other rural adolescents to seek help for problems, even though, as noted above, they were more likely to be troubled (263).<sup>78</sup> However, the survey was not able to determine whether the adolescents who did not seek help were extremely self-reliant, undesirous of help, or unable to go and get help (263).

Although the population of rural America is predominately white, some regions contain substantial numbers of racial and ethnic minorities. For example, the majority of Native Americans live in rural communities, large numbers of blacks live in the rural South, and many Hispanics live in the rural Southwest. Much of the disproportionate poverty of rural America is accounted for by such communities. Consequently, it is important to consider cultural differences when planning and delivering health services to adolescents in rural areas. In addition, it seems important to consider whether rural adolescents live on a farm, because farm youth appear to have different health risks (e.g., serious injury), attitudes toward help seeking, and access to health care, than nonfarm youth.

### Major Federal Programs Pertaining to Rural Adolescents

Despite the number of programs that can indirectly affect rural adolescents, it is striking how few Federal programs directly address the health and related needs of rural adolescents (137). Of most relevance to rural adolescents are the Office of Rural Health Policy in the Health Resources and Services

<sup>77</sup>This study was not adolescent-specific.

<sup>78</sup>As a group, they do not seek contraception information from anyone (25 percent), they are less likely to get health information or care without parental consent (71 percent), and they do not seek out other family members as resources as readily as other young people (22 percent) (263).

Administration (HRSA) of DHHS<sup>79</sup>; the Office of Rural Mental Health Research in the Alcohol, Drug Abuse, and Mental Health Administration of DHHS<sup>80</sup>; and the Extension Service in the U.S. Department of Agriculture, which funds 4-H programs.<sup>81</sup> In addition, the National Center for Nursing Research at the National Institutes of Health is funding a \$500,000 grant to identify psychological and environmental health-compromising behaviors in early adolescents in a rural area (79). The community health center program administered by HRSA's Bureau of Health Care Delivery and Assistance provides grants to about 600 public and nonprofit entities to provide primary health care to medically underserved populations, and about 60 percent of the grantees are located in rural areas of the country (241) (see discussion in section on Federal programs for poor adolescents above; also see 137), and a number of recent congressional initiatives dealing with training of rural health professionals and reduction of rural-urban disparities in health care reimbursement policies (204) also have the potential to positively affect the delivery of health services to adolescents in rural areas, albeit indirectly.

As a general matter, the Secretary of DHHS responded to a recommendation of the National Advisory Committee on Rural Health that a national adolescent health demonstration program be established in five rural community sites, by saying that he had decided to make adolescent health an area of emphasis *throughout* DHHS for budget year 1992 (247).

## Conclusions and Policy Implications

Certain groups of adolescents—adolescents living in poverty, racial and ethnic minority adolescents, and adolescents living in rural areas—experience health problems at disproportionate rates and face barriers to health care because of lack of financial resources, limited local availability of resources, or other factors.

## Poor Adolescents

*In* 1987, nearly one-third of U.S. adolescents lived in families with incomes that did not exceed 150 percent of the Federal poverty level. One of the primary determinants of whether an adolescent was living in poverty was living arrangement. Adolescents who were living with both parents or with their father were far less likely to be living in poor families than were adolescents living with their mother only or adolescents living on their own.

The effects of growing up poor are complex and not well understood (154). It is well known that children growing up in poverty confront more risk factors and benefit from fewer protective and supportive factors than their more advantaged peers. Among the risk factors that many (though not all) poor children confront are a highly stressed and disorganized family environment, dilapidated housing, substandard schools, and often, especially in inner cities, dangerous, blighted neighborhoods where crime and violence seem to have become the norm (71). Access to health care for poor adolescents appears to be limited, based on utilization data and known barriers to access (e.g., low physician participation in Medicaid, problems with transportation, lack of services in poor areas). The rates of many health and related problems (e.g., days of restricted activity due to acute and chronic conditions, overall self-reported fair or poor health, school dropout, adolescent pregnancy, cigarette smoking, involvement in serious forms of delinquency, victimization) are higher among poor than nonpoor adolescents.

Research on the predictors of resiliency among adolescents from disadvantaged backgrounds (e.g., impoverished homes or dysfunctional families) is receiving increasing attention from researchers, although it has received little Federal support. Past research on this topic suggests that having access to supportive individuals and networks, and the ability to draw upon existing networks (e.g., through greater social competence and intelligence), are important factors in helping adolescents overcome

<sup>79</sup>HRSA's Office of Rural Health Policy was established in 1987 and as of August 1989 had seven professionals (246). Its role in rural adolescent health has been limited. The Work Group on Health Services of the National Advisory Committee on Rural Health has targeted teenage health as a focus because of concern about adolescent suicide, pregnancy, and lack of access for health and mental health services.

<sup>80</sup>The Office of Rural Mental Health Research was established in the National Institute of Mental Health in 1990 to coordinate and administer relevant research and demonstration studies (204). This office will administer a newly advertised research effort that will include grants to rural mental health research centers (233).

<sup>81</sup>The U.S. Department of Agriculture's Extension Service is discussed more fully in ch. 19, "The Role of Federal Agencies in Adolescent Health," in this volume.

adverse circumstances. For many adolescents these factors may be amenable to intervention.

### ***Racial and Ethnic Minority Adolescents***

Currently, about half of black, Hispanic, and American Indian adolescents, and one-third of Asian-American adolescents, live in poor or near-poor families. The disproportionate occurrence of health problems that is found among adolescents in these racial, ethnic, and tribal groups is attributable at least in part to their low socioeconomic status and the lack of access to health care that is associated with being poor. A long history of discrimination against people of color may contribute to stress in racial and ethnic minorities (e.g., 100,176).

Among the pressing prevention and service needs for racial and ethnic minority adolescents include preventive mental health and mental health outreach programs for Hispanic, Asian, and American Indian and Alaska Native adolescents; dental care and fluoridation for American Indian and Alaska Native, and Hispanic adolescents; dental care for low-income black adolescents; victimization and violence prevention for black adolescents in poor neighborhoods; pregnancy prevention services for black and Hispanic adolescents; HIV prevention and treatment services for black and Hispanic adolescents. In general, however, these problems are not restricted to these groups, and the sources of the problems are not related to race per se (e.g., genetically based), but to complex interactions among economic, neighborhood, and societal factors.

There is an increasing consensus that services for racial and ethnic minority adolescents would be improved if they were “culturally competent. Culturally competent services for adolescents may be difficult to design, though, because there is little systematic information about how racial and ethnic minority and poor adolescents experience adolescence. There is beginning to be some systematic analysis of what a culturally competent system of care is, but the knowledge base has not yet been applied systematically to the design of training programs for health care and other service providers. Overall, there is little systematic description of how services have been developed or adapted to meet the specific needs of racial and minority adolescents, and less scientific evaluation of the effectiveness of available services. There are, however, very few

health care providers who are racial or ethnic minorities. The number who are racial and ethnic minorities and trained to work specifically with adolescents is not known.

As health care providers and policymakers consider the impact of racial or ethnic minority status on individual adolescents and the impact of coming into adolescence on individuals from specific racial or ethnic minority groups, they should take numerous factors into account. Such factors include:

- demographic factors (e.g., the size of the adolescents’ minority group; its relative distribution in the wider society and the adolescent’s immediate community; and its geographic location, whether urban or rural);
- historical factors (e.g., whether the group at large immigrated voluntarily or was forced to relocate to the United States; the history of discrimination against the group); and
- contemporary ‘sociocultural’ factors (e.g., the beliefs, values, social perceptions, and behaviors of the minority group at large; available social institutions, such as the role of a church or religion).

Health care providers and policymakers should also recognize that the adolescent’s basic challenge of forming an identity may be made more difficult for those racial and ethnic minority adolescents who are faced with the challenge of straddling two (or more) cultures.

### ***Rural Adolescents***

With the exception of the higher rate of accidental injuries (due in part to farm injuries) and lower rate of delinquency for adolescents living in rural areas, there are few known sizable rural-urban *differences* in adolescent health. Although research on adolescents living in rural areas is limited, this suggests that rural adolescents are at least as likely to experience many of the same health problems experienced by adolescents in metropolitan areas. However, additional descriptive research designed to separate rural, regional, social class, and ethnic factors is needed, in addition to analyses to determine the possibly differential effects of particular dimensions of rural life (e.g., living on a farm v. in a town) on adolescent health and well-being.

Rural adolescents’ access to health services is limited by shortages of professionally staffed mental

and physical health services, transportation problems, and less access to Medicaid in rural States (204). Thus, adolescents in rural areas are especially likely to receive their health care from hospital clinics, and are relatively unlikely to have any consistent source of care (137). Some research suggests that adolescents who live on farms are particularly unlikely to have access to sources of health care (263). Innovations in efforts to provide more comprehensive and integrated services will have to be adapted to the specific needs of rural adolescents, and specific limitations in health care resources (e.g., the relative scarcity of health care professionals).

### Summary

As is documented throughout this Report, U.S. adolescents face a number of health problems that could very well be ameliorated by access to health and related services.<sup>82</sup> Thus, the conventional wisdom that adolescents as a group are so healthy they do not require health services is not justified. It is disturbing, then, to note that many adolescents face barriers to access to health services. Some of the barriers are common to individuals in other age groups (e.g., lack of health insurance, inadequate coverage), but some of them are unique to, or particularly affect, adolescents (e.g., lack of independent income, requirements for parental consent, lack of information about the need for and availability of health services). This chapter pulls together evidence that some groups of adolescents—adolescents in poor families, racial and ethnic minority adolescents, and rural adolescents—are particularly at risk for selected health problems and for problems in access. Rather than stereotyping adolescents by one factor or another, however, it is important to note that the health issues and barriers to service faced by any adolescent depend on a variety of interrelated factors. Adolescents who are poor, minority, and living in a rural area will face somewhat different issues than those who are poor, minority and living in an impoverished inner-city area. The families of black adolescents may subscribe to health-related beliefs and behaviors that differ from those of poor white rural adolescents, of recently arrived immigrants from Cambodia, or of Native Hawaiians.

Unfortunately, a lack of research attention to issues affecting many of the adolescents discussed in this chapter typically makes it difficult to design a detailed and specific public policy response to these adolescents' health and related needs. Thus, an enhanced commitment to research on the health needs and developmental experiences of poor, racial and ethnic minority adolescents, and adolescents in rural areas, and the relationships among these specific background factors, should be a top priority for appropriate public policy intervention. Unfortunately, the development of an integrated and comprehensive research base may be impeded by the fragmented Federal approach to adolescent health issues.<sup>83</sup>

As an adequate research base is developed, however, much of the information provided in this chapter and elsewhere in this Report can be used to help improve the health of those adolescents particularly at risk. Examples of changes that could be made at the Federal level and elsewhere include the following:

- Expand support for training of racial and ethnic minority, rural, and low-income health care providers with an interest in adolescent health care;
- support training in cultural competence for health care providers who work with racial and ethnic minority adolescents, incorporating evaluations of the effects of such changes;
- Support the expansion of data collection efforts to oversample racial and ethnic minority adolescents and to include information on socioeconomic status;
- Collect data on the availability and accessibility of health services for racial and ethnic minorities, rural, and poor adolescents, with such research to include adolescents' perceptions of accessibility and availability;
- Support efforts to improve environments in poor areas (including hard-hit farm-belt communities, Indian reservations, and inner cities), focusing on family support, improving school environments, improving substandard housing, increasing access to nutritional food, increasing access to recreational and fitness facilities and

<sup>82</sup>For a summary, see Vol. I, "Summary and Policy Options" of this Report.

<sup>83</sup>See ch.19, "The Federal Role in Adolescent Health," in this volume, and Vol. I, "SUIWIUWY and Policy Options."

activities, and, where needed, increasing access to appropriate adult role models.<sup>84</sup>

In addition, the major policy options suggested as a result of OTA's analysis are designed to help improve in particular the lives of those adolescents at greatest risk of health problems.<sup>85</sup> Finally, OTA finds that any policy changes should be undertaken with attention to a guiding principle of providing a prolonged sympathetic and supportive environment for all adolescents, of whatever socioeconomic status, race, ethnicity, or residence. Such a change in policy orientation is essential to help adolescents face a crucial turning point in their lives, and maybe essential to the well-being of the Nation as well.<sup>86</sup>

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<sup>84</sup>Additional examples of specific options related to the delivery of services to poor adolescents, racial and ethnic minority adolescents, and rural adolescents can be found in Vol. I of this Report, "Summary and Policy Options."

<sup>85</sup>Major options, applicable to the needs of many U.S. adolescents, are summarized in the Introduction to this Volume, and discussed in depth in Vol. I of this Report, "Summary and Policy Options." Options related to specific health problems and other crosscutting issues may also have implications for poor, racial and ethnic minority, and rural adolescents; these are listed in Vol. I of this Report, "Summary and Policy Options."

<sup>86</sup>The need for, and implications of, such a guiding principle are discussed further in Vol. I, "SUUMWUY and Policy Options."

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