

Coming of Age in the Era of AIDS: Puberty, Sexuality, and Contraception

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ALL SOCIETIES ATTEMPT TO MANAGE THE SEXUAL behavior of youth who are entering their childbearing years. Today's concern over teenage sexual behavior and childbearing is often couched in terms of the societal and individual cost of teenage parenthood (Furstenberg and Brooks-Gunn 1986; Furstenberg, Brooks-Gunn, and Chase-Lansdale 1989; Brooks-Gunn and Furstenberg 1989), but ignores the teenager's experience, perceptions, and social setting. Little is known about teenagers' constructions of sexuality: how they experience the emergence of sexual desire and their strategies for managing it; how they receive and process information about sexuality; how they negotiate sexual relationships in the face of potential sexual arousal; and how their sexual experiences relate to and affect other features of their development, such as establishing satisfying relationships with peers of the same and opposite sex. Societal concerns have so singularly focused on the reproductive consequences of sexual intercourse that the risks of sexually transmitted diseases have barely received attention and the meaning of intercourse in a repertoire of sexual experimentation and expression has been avoided altogether. Teenagers' intrapersonal experience of sexuality has also gone virtually unstudied.

The haunting specter of AIDS has added a new and frightening dimension to sexuality. Neither quantitative nor qualitative studies to date take an in-depth look at the effect of AIDS on social perceptions.

But enough information is available to explore how the threat of AIDS is changing adolescent constructions of sexuality and their actual sexual behavior.

In our exploration of the social and cultural response of adolescents to AIDS, a dominant theme emerges. Adolescents view AIDS through a curious lens of American sexual culture. We cannot hope to understand how teenagers respond to the threat of AIDS without appreciating how teenagers come to acquire and organize their sexual identity. This sexual identity is influenced by the prevailing belief that sexual behavior is fraught with danger and morally wrong but is uncontrollable and irresistible at the same time. Our article explores these themes as they pervade the sexual imagery and practices of young people. But our discussion must be placed against a backdrop of certain facts about the actual occurrence of AIDS in the adolescent populations. Adolescents interpret and respond to these "facts" in ways that are consistent with both public and private perceptions of sexuality in American culture.

Prevalence of Adolescent AIDS

What is known about adolescent AIDS? The number of reported cases of AIDS in adolescents is still low (about 1 percent of all cases, or 1,429 youth aged 13 to 21 years of age as of March 1, 1990), but has been increasing each year. In addition, many individuals aged in their 20s who are diagnosed with AIDS (about one-fifth of all cases) were probably infected during their adolescent years, given the long incubation period of the virus (Stall, Coates, and Hoff 1988; Curran et al. 1988). Adolescent cases are more likely than adult cases to be females (14 percent versus 7 percent as reported in a Centers for Disease Control [1988] [CDC] report; Gayle, Rogers, and Manoff 1988), and more likely to be heterosexually acquired (9 percent versus 4 percent). In an analysis of cases in New York City (which accounted for about one-third of all reported AIDS cases and one-fifth of adolescent cases [ages 13 to 21] in the United States in 1987), the ratio of male to female cases was 2.9:1 for adolescents and 7:1 for adults (Hein 1989; Vermund et al. 1989). Heterosexual transmission was more common among New York City adolescents (15 percent) than New York City adults (8 per-

cent). When separating cases by gender, heterosexual behavior was implicated in about one-half of adolescent female cases in both New York City and nationwide.

The proportional increase in cases of HIV infection via intravenous drug use and possibly via heterosexual encounters with drug users, and the corresponding decrease in blood transfusion and homosexual transmission, is resulting in a disproportionate number of cases in urban—primarily black and poor—groups. This is truer for teenagers than for adults. In the 1988 CDC report, greater proportions of the adolescent cases were minority group members than nonminority group members (53 percent versus 38 percent; Gayle, Rogers, and Manoff 1988).

These statistics do not tell the whole story of teenage AIDS, for not only is the incubation time lengthy, but the number of HIV-infected adolescents (and adults) is also unknown. Thus, it is not possible to tell if the proportion of those who will contract AIDS as adolescents will change substantially in the next decade (Brooks-Gunn, Boyer, and Hein 1988; Hein 1989).

Adolescent Sexuality

Cultural constructions of sexuality provide the backdrop for the adolescent sexual experience. The social meanings of puberty, sexual desire, and sexual behavior all are constructed against a sometimes contradictory *mélange* of messages from parents, from schools, and from the media. The interface between the adolescent experience and these messages affects the response to AIDS.

The Meaning of Sexuality

What are pubertal and sexual experiences like for teenagers today, and how do they lay the groundwork for later sexual activity and, in particular, their response to AIDS? Do these experiences in some way herald an intensification of gender roles, specifically a more patterned or stereotypic way of interacting with the opposite sex? Do such patterns limit the ways in which sex may be negotiated between male and female?

Puberty. Puberty elicits a wide array of emotions. Children feel alternately excited and scared, pleased and dismayed. All probably experience bewilderments, given the rapidity with which changes occur. Until recently, popular and scholarly writing about puberty has had a negative cast (cf. Brooks-Gunn 1984, 1989 and Deutsch 1944 for other perspectives). But as we learn more about puberty, it is not as upsetting as earlier professional opinion suggested. Girls who mature early and who receive little or no information from their mothers report the most negative experiences (Brooks-Gunn 1988; Brooks-Gunn and Ruble 1982). Females obtain information about menarche primarily through discussions with the mother and close girlfriends, almost never with boys or fathers (Brooks-Gunn 1987). Other pubertal events are less readily discussed (Brooks-Gunn and Warren 1988); masturbation and feelings of sexual desire are virtually taboo subjects. This is somewhat surprising in that the call for abstinence from sexual intercourse in the teenage years presumes that desire exists; otherwise, there would be little necessity to control it. Indeed, some writers characterized adult responses to pubertal change and desire as "pubertal amnesia," as though they had never had these experiences themselves (Brooks-Gunn 1988).

Little is known about the meaning of pubertal changes to boys, but the occurrence of ejaculation may be as significant for boys as menarche is for girls. A small study of pubertal boys who had had an ejaculation found them extremely reluctant to discuss the experience with parents (Gaddis and Brooks-Gunn 1985). None had talked to peers about their experiences, although all joked about it in the "locker room" genre. Boys learn not to discuss pubertal changes with most people in their lives and certainly not in mixed company. They have no adults to whom they turn for even rudimentary knowledge and really no peers with whom they can discuss what these changes mean or how to cope with them (Gaddis and Brooks-Gunn 1985).

Girls begin sexual encounters with a different, but also problematic, view of sexuality. They learn that the adult world is ambivalent about their body transformations. While discussions with mothers and close girlfriends are sanctioned, clear limits are placed on the range of acceptable topics. Their emerging feelings of sexual desire are treated as if they did not exist, or worse, as if they were not normal. In such an atmosphere, it is not surprising that relatively few teenage girls talk about masturbation, even though it is estimated that about one-third

of girls have masturbated by the middle adolescent years (Chilman 1983; Coles and Stokes 1985; Sorensen 1973).

Pubertal youth also learn that a more mature body alters their relationships with peers and parents (Brooks-Gunn and Reiter 1990; Brooks-Gunn and Zahaykevich 1989). An early maturing girl, for example, often elicits provocative responses from older teenage boys. She is likely to demand more freedom to spend time with more mature friends. Conflicts with parents are inevitable (Magnusson, Strattin, and Allen 1985; Simmons and Blyth 1987).

Early Sexual Desire. Pubertal changes set the stage for an increase in sexual feelings. For boys, increases in testosterone are associated with sexual behavior and feelings of arousal (Udry et al. 1985; Udry 1988a). Males rate their sex drive as being at its peak in the adolescent years. Teenage boys have the highest levels of ejaculation over the life span with proportionately more being due to masturbation during adolescence than later in life (Chilman 1983; Kinsey, Pomeroy, and Martin 1948).

Social factors more likely mediate, or perhaps dampen, sexual desire among girls (Brooks-Gunn and Furstenberg 1989). Testosterone levels are associated with sexual arousal, but less strongly than they are for boys (Udry 1988b; Udry and Billy 1987). And sexual behavior and hormonal levels are not linked (Udry, Talbert, and Morris 1986). Fewer girls masturbate across the adolescent years, and they masturbate less frequently than do boys (Chilman 1983; Katchadourian 1989).

While many people assume that girls respond to erotic or provocative stimuli less readily than boys, gender differences are smaller than imagined, especially among sexually experienced adolescents and youth (Chilman 1983; Katchadourian 1989). Thus, the titillating aspects of the youth culture, as exemplified in advertisements, music, rock videos, movies, and fashion may stimulate sexual arousal in both boys and girls. Still, more girls respond to erotic symbols in the context of a relationship than boys. For girls, "the investment of erotic meaning in both explicitly sexual and nonsexual symbols appears to be contingent on the emotional context. The two genders evaluate the meaning of potentially erotic symbols using distinctive sets of criteria. For males, the explicitly sexual is endowed with erotic meaning regardless of the emotional context. For females, the emotional context is endowed with erotic meaning without regard for the presence or absence of explicitly sexual symbols" (Miller and Simon 1980, 403).

First Sexual Experiences. There are few studies of first sexual intercourse. We know about the age of first intercourse, the relationship with the first partner, and the use of contraceptives (see Brooks-Gunn and Furstenberg 1989; Hayes 1987; Hofferth and Hayes 1987, for reviews of this literature; see also appendix note 1). We do not know how youth feel about their first experiences, with whom they share and withhold information, or how they decide to have sex the first time. Typically, teenagers say that they did not plan to have sex the first time that it occurred. In a health survey of Philadelphia adolescents conducted in 1988–1989, almost two-thirds of the girls said that their first intercourse “just happened,” one-fifth said that sex was “unplanned but not entirely unexpected,” and only 15 percent indicated that they had planned to have sex.

We have little information on the conversations between boys and girls that lead to intercourse or the negotiations around the use of contraception. For white youth, however, first sexual experiences leading to intercourse tend to progress from kissing to petting to intercourse. Black youth are less likely to follow this progression, moving more rapidly to intercourse (Udry 1988b; Westney, Jenkins, and Benjamin 1983). Decisions about contraception may be very different in sexual situations that develop quickly from those that unfold more slowly (see Brooks-Gunn and Furstenberg 1989, and Paikoff and Brooks-Gunn 1990, for a discussion of cognitive and social cognitive aspects of decision making with regard to intercourse and contraceptive use). They also may differ if girls want to preserve their virginity and engage in other sexual behaviors such as oral or anal sex to do so, perhaps not recognizing that in so doing they may increase their risk of contracting some sexually transmittable disease.

First Contraceptive Use. Until recently, about one-half of all teenagers did not use contraceptives the first time they had sexual relations (Zelnik and Shah 1983). In 1988, about one-third of all boys reported not having used contraception at first intercourse (Sonnenstein, Pleck, and Ku 1989). Younger adolescents are less likely to have used birth control than are older teenagers, and blacks and Hispanics are less likely to have done so than whites (Sonnenstein, Pleck, and Ku 1989; Zelnik, Kantner, and Ford 1981). Both males and females, black and white, indicated that condoms are the overwhelming method of choice for those who use birth control during first intercourse.

Why do so many teenagers engage in unprotected intercourse? The two most frequently cited reasons are that teenagers did not think that they would conceive and that they were not anticipating having intercourse (Paikoff and Brooks-Gunn 1990). Generally, all individuals tend to underestimate personal risk and to believe they are at less risk than are their peers (Weinstein 1987). Adolescents, however, are more likely than are adults to engage in behaviors associated with health risk (Irwin and Millstein 1986). Their cognitive difficulties in assessing personal risk, lack of experience with the consequences of risk, ignorance, and denial all contribute to irregular contraceptive use. In turn, all these factors are relevant in shaping adolescents' responses to AIDS.

Mixed Messages about Sexuality

The pubertal, sexual, and contraceptive experiences of teenagers occur in a cultural context that provides mixed messages about the acceptability of such experiences. Fine (1988) has suggested that four themes dominate the public and private discourse about sexuality: questions of morality and individual responsibility; desire; danger; and victimization.

Discourse of Morality. Arguments against sex education in the schools and exhortations for the teaching of "good values" in the classroom take "judgmental and moralistic" forms (Fine 1988, 32). Conservatives fear that sex education will result in earlier intercourse, although this proves to be largely unfounded (Kirby, Ziegler, and Rivelis 1988; Paikoff and Brooks-Gunn 1990; but see Moore, Furstenberg, and Peterson 1986; and Marsiglio and Mott 1986). In addition, the majority of parents (i.e., over 80 percent) wish to have some sex education in the school (Gallup and Elam 1988).

The morality discourse has been contentious. Disagreements about the content of such programs often split school districts. The parents want schools to represent their personal views on sexuality, and the difference of opinion has resulted in most programs across the country being short, fragmented, and generally inadequate (Kirby 1984).

Framing adolescent sexuality as a moral issue may unintentionally reduce the likelihood of contraceptive use; if intercourse is morally reprehensible, then it is wrong to plan for it. Indeed, contraceptive use is lower in youth who have negative attitudes about having sex than in

those who have positive attitudes (Fisher, Byrne, and White 1983). And the rates of teenage sexuality are not significantly higher in the United States than in most Western European countries which are more successful in curbing teenage pregnancy rates (Jones et al. 1985; 1988). We might also note that the rates of all sexually transmitted diseases are also higher than in the United States.

Discourse of Desire. The discourse of desire is important for many teenagers and increasingly for girls as well as boys. Fine (1988) has identified several distinct cultural themes that dominate the discussion of adolescent sexuality in the United States. In the section that follows, we draw from her insightful analyses of what she refers to as "the discourse of adolescent sexuality." For example, the percentage of adolescent girls, especially older ones, who report that they have masturbated has risen dramatically in the last 20 years (Chilman 1983; Hunt 1974; Kinsey, Pomeroy, and Martin 1948). This is true even though masturbation is a taboo topic for girls, and pubertal education ignores female sexual desire.

Institutional responses to desire are mixed. Teenagers, particularly girls, are not encouraged, and probably even discouraged, from talking about their longings and arousal (Petchesky 1984; Thompson 1983). Teenagers may be learning that their feelings are not valued. This is especially true in school (Fine 1988). There is little effort to teach teenagers about the disinhibitory effects of alcohol or drug use, even though sex is most apt to occur in such situations (Zabin et al. 1988).

In striking contrast to the school response are media images of youth. Music, movies, and television shows relentlessly portray sexual desire. In 1985 the average teenage viewer saw almost two-thousand sexual references on television (Greenberg et al. 1987; cited in Brown, Childers, and Waszak 1990). Depictions of sexuality frequently involve unmarried heterosexual characters, with desire often the main focus (Greenberg et al. 1980; Brown, Childers, and Waszak 1990). The discourse of morality gets almost no play. Nor does engaging in protected sex: teenagers are exposed to one or two sexual references per programming hour, but to none about birth control (Louis Harris and Associates, Inc., 1987).

Discourse of Danger. Both parents and the media characterize sex as dangerous, particularly for girls who have to "face the consequences," both practically and morally. At the same time, unpro-

tected—that is, dangerous—sex, especially in the service of passion, is portrayed as exciting.

Discourse of Victimization. The media regularly show girls as the victims in sexual encounters. And parents often restrict their pubertal daughters' activity to protect them from male advances (Hill and Lynch 1983). While boys are more powerful and may coerce girls, the theme of victimization reinforces girls' perceptions of their limited power in sexual negotiations.

Girls may thus find themselves in a double bind: while "victims," they are expected to control boys' sexual desires by not engaging in intercourse. Males and females become antagonists. Both danger and desire coexist for girls (Fine 1988, 36); how they manage the two without sacrificing male relationships is critical for understanding the meaning of adolescent sexuality in the era of AIDS. At the very least, "consequences" for young men as well as for young women will change the sexual discourse.

Adolescent Sexuality in the Era of AIDS

Perhaps for the first time since the advent of antibiotics and modern maternity care, the cost of sexuality may be death. The timing is ironic: the HIV epidemic occurred just after premarital sex had become less socially regulated in the late 1960s through the early 1980s. In this more tolerant climate, adolescents have greater responsibility for sexual decision making and, in particular, for guarding against undesirable consequences. Do teenagers today take the possibility of contracting AIDS into account as they become sexually active individuals? We have reason to suspect that a significant majority of youth are not considering this new and frightening aspect of sexuality.

Assessing the impact of AIDS on teenage sexuality is by necessity speculative, given the short time frame of the HIV epidemic, the lack of information about behavior change among adolescents, and the confusion in implementing HIV education in the public schools. In this spirit of speculation, we consider a variety of responses by school personnel, parents, and teenagers to the possibility of acquiring HIV infection via sexual intercourse.

Knowledge, Perceived Risk, and Behavioral Change

What do teenagers know about the transmission of AIDS and methods for preventing it and assessing their own personal risk? Do youths differ from adults, as is commonly assumed, when studying sexual behavior? To answer these questions, we shall rely on several surveys of youth, conducted from 1985 to 1987 in San Francisco, New York City, and the Commonwealth of Massachusetts (Strunin and Hingson 1987; Reuben, Hein, and Drucker 1988; DiClemente, Zorn, and Temoshok 1986; DiClemente, Boyer, and Morales 1988). We also shall present results from the 1988-1989 Philadelphia Youth Survey (see Appendix note 2) and a national survey of 15- to 19-year-old, never-married, noninstitutionalized males conducted in 1988 (Sonnenstein, Pleck, and Ku 1989). The National Health Interview Survey, which has included questions on AIDS since 1986, contains comparable information on adults (Dawson and Hardy 1989; Hardy and Dawson 1989).

Knowledge about AIDS. Most teenagers and adults across age and race (well over 90 percent by 1988) know that sexual contact and intravenous drug use are ways in which HIV infection spreads. All the youth surveys conducted from 1985 to 1987, however, indicate that teenagers were generally less informed about how HIV is transmitted than were adults in the National Health Interview Survey. Black teenagers are more likely to have misconceptions than are whites (DiClemente, Boyer, and Morales 1988). In the Philadelphia sample, for example, 26 percent of the black females and 18 percent of the white females believed that the virus could be transmitted by giving blood.

In one San Francisco study, about two-thirds knew that condom use will lessen the probability of contracting AIDS, even though well over 90 percent knew that HIV could be transmitted sexually (DiClemente, Zorn, and Temoshok 1986). Whites were more likely than were blacks to know about the efficacy of condoms (72 percent versus 60 percent) (DiClemente, Boyer, and Morales 1988). In the Philadelphia survey, when asked about the *best* birth control method for avoiding sexually transmitted diseases, including AIDS, 94 percent of the males and 90 percent of the females listed condoms. Analysis yielded no racial differences. Girls who were sexually active were slightly more likely to list

condoms than were virgins. Age differences were negligible although 14-year-old girls were somewhat less likely to list condoms (78 percent of the 14-year-olds versus over 90 percent of girls 15 years of age or older).

Perceived Risk. Many youth believe that they are not immune from risk. Percentages vary across surveys, however, possibly because of differences in the questions asked. In the Philadelphia survey, only 10 percent of the females and 12 percent of the males answered affirmatively to the statement: "Teens like me don't get AIDS." Sexually experienced females were less likely to respond affirmatively than were virgins (5 percent versus 14 percent). In the San Francisco survey, one-fifth indicated that they were the kind of person to get AIDS, and two-thirds said that they were not the kind of person to get AIDS (DiClemente, Boyer, and Morales 1988).

In the 1988 National Survey of Adolescent Males, 5 percent thought that they had a strong chance of getting AIDS in the next five years (Sonnenstein, Pleck, and Ku 1989). About twice as many black and Hispanic youth answered affirmatively as did white males. The actual percentages of teenagers who would be defined as high risk in this national sample includes 3 percent who had engaged in homosexual activity, 3 percent who had had a sexually transmitted disease, 1 percent who had had sex with a prostitute, and 2 percent who had used intravenous drugs or who had had a sexual partner who had done so.

Another indicator of risk may be knowing someone personally who is infected. In the Philadelphia sample, about 10 percent knew someone who had AIDS. Black teenagers were twice as likely to know a person infected with AIDS than were white teenagers (14 percent versus 7 percent). No gender differences were found. The 1988 adult data look very similar, with 14 percent of blacks and 10 percent of whites knowing someone personally with AIDS. This proportion was higher for better-educated adults.

Behavior Change. It is difficult to assess behavior change as a result of the threat of AIDS. Few studies have base-line information prior to the epidemic, or even short-term longitudinal evaluations of prevention programs during the epidemic.

Studies have begun on characteristics of adults who do alter behavior. High levels of knowledge, low sensation seeking, high personal efficacy, not using drugs or alcohol during sex, social support, and norm

changes within one's community have been shown to be predictive of engaging in safer sex in groups of primarily white, educated, homosexual men in urban areas (see Joseph et al. 1987; Stall, Coates, and Hoff 1988). There are no comparable works on teenagers. Youth engaging in high-risk behavior, however, perceive themselves to be at lower risk than, in fact, they are (Reuben, Hein, and Drucker 1988). Indeed, teenagers as a group tend to seek sensations and have a higher sense of invulnerability (Irwin and Milstein 1986). They also may have a lower sense of personal efficacy and be more influenced by situational factors, such as having sex while drinking, than adults. All of these conditions reduce their chances of engaging in safe sex.

In the 1988 National Survey of Adolescent Males, 57 percent of sexually active boys reported using a condom alone or with other methods, 29 percent using a female method without a condom, and 23 percent using an ineffective or no contraceptive method at least in intercourse. Black adolescents were more likely to report condom use than were white or Hispanic teenagers (66 percent, 54 percent, and 53 percent, respectively). And white adolescents were more likely to report that a female method of contraception with condoms was used than were blacks or Hispanics (22 percent, 15 percent, and 16 percent, respectively). Hispanics were most likely not to have used any method at last intercourse.

Sonnenstein, Pleck, and Ku (1989, 155) tested whether changes in condom use at first intercourse occurred as information about the AIDS epidemic became more widely available, by looking at use by year and controlling for age and race. Use of condoms for first intercourse occurring in 1983–1984 or in 1985–1986 was not different from the base-line period of 1975–1982. The odds were increased 110 percent for first intercourse occurring in 1987–1988, however, compared with the 1975–1982 base-line period (Zelnik and Kantner 1980).

One longitudinal study has reported on condom use in 1984–1985 and again in 1985–1986 in an adolescent health clinic in San Francisco (Kegeles, Adler, and Irwin 1988). Investigators found no changes in girls' intentions over the study period, and boys actually were less likely to say that they intended to use condoms over the year period. This is particularly discouraging given that boys and, to a somewhat lesser extent, girls, recognized that condoms were effective in preventing sexually transmitted diseases.

Several other surveys questioned teenagers about behavior change

more specifically. In the Massachusetts survey, 15 percent of the sexually active teenagers indicated that they had altered their sexual behavior because of worries about AIDS. Of this group, 10 percent avoided sex, 35 percent were more selective, and 25 percent were more "careful." Only 10 percent reported using condoms as a method of changing sexual behavior. Philadelphia teenagers were asked if they had, because of AIDS, stopped having sexual intercourse, talked with their partners about AIDS before having intercourse, started using condoms, or been more careful about choosing partners. Almost all teenagers (95 percent) reported that they were more selective in their choice of partners, and relatively few (12 percent) had stopped having intercourse in response to AIDS. About two-thirds reported using condoms, similar to the National Survey of Adolescent Male findings. Females were less likely to report having started using condoms than were males (64 percent versus 71 percent), and white females were less likely to report this change than were black females (51 percent versus 74 percent). Many teenagers had talked to their sexual partner about AIDS, with more girls than boys (67 percent versus 52 percent) and more black females than white females (70 percent versus 61 percent) reporting such discussion.

These self-reports about risk-reducing behaviors, nevertheless, must be viewed with caution. When we examined actual patterns of contraceptive use, discrepancies appeared. Although Philadelphia teenagers who reported modifying their behavior were generally more likely to have used condoms at last intercourse, 47 percent of those who reported increased use of condoms had not used a condom the last time they had had sex (35 percent males and 52 percent females). Using condoms the last time was strongly associated with knowing someone personally who had AIDS.

AIDS and the Discourse about Sexuality

How do these results inform the discourse about sexuality? The AIDS epidemic has had an impact on all four of the themes presented by Fine (1988)—the discourses of morality, desire, danger, and victimization.

Discourse of Morality. In the era of AIDS, morality has continued to guide the discourse about sexuality. An AIDS education guide that the federal government puts out for parents and teachers states: "The

surest way to prevent the spread of AIDS in the teenage and young adult population is for schools and parents to convey the reasons why adolescents should be taught restraint in sexual activity" (U.S. Department of Education 1987, 9). Messages are to urge "responsibility and restraint." In addition, the pamphlet mailed to each household in 1988 sends a similar message, even though the document provides explicit information on condom use as well: "Children must also be taught values and responsibility, as well as skills to help them resist peer pressure that might lead to risky behavior. These skills can be reinforced by religious and community groups. However, final responsibility rests with the parents" (Koop 1988).

How has this emphasis on abstinence influenced teenagers? In the Philadelphia sample, about one in ten teenagers says he or she has stopped having sexual intercourse because of AIDS. At the same time, national survey data suggest that the proportion of teenagers who are sexually active has increased over the last ten years. The percentage of sexually active, never-married, metropolitan 17- to 19-year-old males was 66 percent in 1979 and 76 percent in 1988, with the greatest increases occurring in the youngest age group (Sonnenstein, Pleck, and Ku 1989). While the percentage of sexually active girls seemed to have leveled off between 1979 and 1982, increases have been reported between 1982 and 1988 using the National Survey of Family Growth, particularly for white girls (London et al. 1989; Hofferth, Kahn, and Baldwin 1987). Evidently, the discourse of morality, as projected by conservative debates of the last decade, has not decreased sexual activity among adolescents since the advent of AIDS.

Discourse of Desire. The discourse of desire appears mainly in the media where no appreciable changes are evident. Sensuality is still a major means of selling products, and music, movies, and television shows still allude to desire and glorify physical attractiveness. The mass media pay little attention to birth control, with the exception of public health announcements, often relegated to inconspicuous late-night spots. All media forms have steadfastly resisted condom advertising despite strong professional and public support for making condoms more visible. Thus, the irrational fear that contraceptive advertising will promote sexual activity persists (Turner, Miller, and Moses 1989).

Discourse of Danger. Most of the public health discourse on AIDS has focused on danger. As former Surgeon General Koop has said with

regard to sex education: "We have to be as explicit as necessary. . . you can't talk of the dangers of snake poisoning and not mention snakes" (quoted in Leo 1986, 54; and Fine 1988, 30).

Teenagers have picked up this message. Like their elders, they know that sex confers some risk. Only one in ten teenagers in the Philadelphia survey agreed that teens like themselves do not get AIDS. And over 80 percent of the boys in the 1988 national survey disagreed a lot with the statement that "AIDS is so uncommon that it is not a big worry." At the same time, most teenagers are assessing their risk quite accurately. Only 5 percent of the respondents in the National Survey of Adolescent Males say that there is a strong chance that they could get AIDS. The percentages are higher for blacks and Hispanics than they are for whites (11 percent, 7 percent, and 3 percent, respectively), and higher for those who have had sexual intercourse than for those who have not. Younger and older teenagers were equally likely to believe that they had a strong chance of contracting the AIDS virus. Teenagers are not reacting to the danger with high levels of fear, however. The percentage of teenagers having intercourse has not dropped. In the national survey, only 15 percent of the boys indicated that they worried about AIDS all the time. Arousing fear without providing reasonable alternative behaviors does not constitute a very effective agent of behavior change (Job 1988).

Most adolescents are not acting as though the situation is out of control. Almost four out of five boys in the 1988 national survey disagreed with the statement that "using condoms to prevent AIDS is more trouble than it's worth" (Sonnenstein, Pleck, and Ku 1989). The incidence of condom use in boys increased in 1987-1988. Almost all of the Philadelphia teenagers report being more selective about their partners, and about two-thirds report having started using condoms. These changes are probably very recent; in the national survey, analysts found no increases in condom use for the four years preceding 1987, and the San Francisco study, conducted before 1987, yielded no increases in condom use. These changes do not mean that teenagers are using condoms consistently. In the Philadelphia survey, of those teenagers who were using condoms as a response to AIDS, only about one-half used condoms the last time they had sexual intercourse. Increases in condom use also are not seen uniformly across risk groups. Only about 20 percent of high-risk adolescents who had used intravenous drugs, had sex

with someone who had used intravenous drugs, or had sex with a prostitute had used a condom at last intercourse in the 1988 national survey. In contrast, over 60 percent of high-risk adolescents who had ever had a homosexual experience or who reported a sexually transmitted disease had done so. This is the same percentage of adolescents in the low-risk group who had used condoms during last intercourse (Sonnenstein, Pleck, and Ku 1989). Clearly, certain teenagers engaging in risky behaviors have not responded to the threat of AIDS at all.

Teenagers are learning about the AIDS danger from their parents and the schools. In the Philadelphia sample, 53 percent of the boys and 56 percent of the girls reported discussing how to avoid getting a sexually transmitted disease, including AIDS, with their parents. These percentages are similar across age groups, suggesting that discussions begin in early adolescence, if at all. Sexually active girls were not more likely than virgins to report having talked about sexually transmitted disease prevention with their parents. Black girls were slightly more likely to have had discussions with their parents than were white girls (63 percent versus 50 percent). How much information is provided, however, is anyone's guess. Parents sometimes elliptically limit themselves to comments such as "protect yourself," with no guidance as to how to do so (Furstenberg, Brooks-Gunn, and Morgan 1987).

The families in the Philadelphia sample were asked if they had received the AIDS pamphlet that was mailed to every United States household by the Public Health Service in the spring of 1988. About 60 percent of the parents surveyed acknowledge receipt of the pamphlet. In these households, 36 percent of the boys and 46 percent of the girls reported discussing the material with their parents.

Schools also are providing information on danger in terms of transmission, and methods to reduce danger. Virtually all (94 percent) parents want AIDS education in the school (Louis Harris and Associates, 1988). And parents and teenagers are reporting that such instruction is taking place. In the 1988 National Health Interview Survey, of those adults with children between the ages of 10 and 17, 57 percent of white and 62 percent of black parents indicated that their children had had some AIDS education in school. In contrast, one-third of the adolescents in the San Francisco survey, taken a few years earlier, reported having had AIDS education (DiClemente et al. 1989). In the Philadelphia survey, 82 percent of all teenagers say they have had

school-based instruction in sexually transmitted diseases. While educational materials are being developed at a rapid rate, no national data exist on the type and effectiveness of information (Brooks-Gunn, Boyer, and Hein 1988; Hein 1989). In one study of the efficacy of AIDS education in San Francisco middle and high schools, participation in a short AIDS program decreased misconceptions about transmission routes and increased knowledge about the efficacy of condoms (DiClemente et al. 1989).

Discourse of Victimization. Practicing safer sex in the era of AIDS is largely dependent on male actions. Girls, who have been characterized as victims of male desire and power (Fine 1988), are in an awkward position. Their option to take care of birth control themselves in order to protect against pregnancy is not available as a protection against AIDS. Questions of how boys and girls make decisions as to when to have sex and what precautions to use are more salient than ever before. Girls seem to have different perceptions of boys' intentions to use condoms than do the boys themselves. In the San Francisco study, girls believed that their boyfriends were not very likely to want to use condoms, while boys tended to believe that girls wanted them to use condoms (Kegeles, Adler, and Irwin 1988). At the same time, boys were more likely to report their intention to use condoms than were girls. Indeed, most boys may be willing to use condoms: four-fifths of the boys in the 1988 national survey did not think that using condoms was too much trouble in the face of AIDS (Sonnenstein, Pleck, and Ku 1989).

Conclusion

Extrapolating from data in three major metropolitan areas and in one northeastern state, the vast majority of today's youth have heard about AIDS and know that sexual intercourse is one of the major transmission routes. At the same time, misinformation about transmission still abounds and is more prevalent among adolescents than adults. Such misinformation seems to be easily discredited by short AIDS information courses (DiClemente et al. 1989). Even the mailing of pamphlets may be an effective device for enhancing knowledge, as demonstrated by the fact that a significant proportion of Philadelphia teenagers dis-

cussed the 1988 United States Public Health Service pamphlet with their parents and that a condom education program conducted via mailing was efficacious (Kirby, Ziegler, and Rivelis 1988).

Knowledge, however, is clearly not sufficient to alter behavior. Across surveys, a subset of youth report behavior change, but obviously many youth have not altered their sexual behavior. Why is this so? We suspect that it has to do with (a) their constructions of sexuality, (b) the decision-making and, ultimately, negotiation process of entering into and continuing a sexual relationship, and (c) the perceived costs of sex without condoms.

First, sexuality emerges in a cultural context; its meaning is constructed by youth in the face of conflicting messages. In addition, sexual preoccupation and sexual experience may not have as large a place in the lives of teenagers as people commonly believe. Adolescents face myriad challenges, sexuality being only one of them. And, also in contrast to prevailing opinion, many teenagers do not have sex very often (Furstenberg, Levine, and Brooks-Gunn, 1990). Consequently, an infrequent event which is but one with which youth struggle may render foresight and planning less relevant than for adults.

Second, reasoned decision making also may be a problem, given how youth negotiate sexual encounters. The little that we know about this process suggests that it is fraught with difficulty. Parents do not tell their children about their own experiences or prepare them to make difficult decisions. Decision-making curricula in schools take highly rationalistic approaches, which may be totally irrelevant to the actual situations in which teenagers find themselves. Additionally, gender-linked discourses of victimization, danger, and desire make it more difficult to carry on negotiations in anything but a highly sex-stereotypic fashion (i.e., boys wanting sex and girls saying no). Adults contribute to gender-specific difficulties by portraying girls as victims and denying their sexual desires and highlighting male desire, sensation-seeking, and danger.

Third, teenagers may perceive the costs of unprotected sex in different terms than their elders. Surely, AIDS will alter perceptions. Indeed, striking behavior change has been documented among adults, including homosexuals and drug users, engaging in high-risk activities. Teenagers may not differ in their response to AIDS from adults who perceive themselves to be at relatively low risk.

What constitutes appropriate behavior change to these youth? Adolescents report “being more selective” in their choice of partners, reducing the number of casual partners, and/or using condoms more frequently. We know almost nothing about what it means to be “more selective.” Are adolescents practicing serial exclusivity, having sex with fewer partners, avoiding having sex with strangers, or asking potential partners or their friends about earlier sexual and drug experiences? In any case, selectivity is no guarantee of protection. Do teenagers realize this?

As for condom use, a significant subset of adolescents report such behavior more frequently as a response to the threat of AIDS. Indeed, the National Survey of Adolescent Males provides striking evidence of change after virtually all teenagers recognized the risk posed by AIDS. Reports, however, sometimes may be exaggerated. In the Philadelphia study, a high proportion of those who said that they were using condoms did not use them at the last sexual intercourse or during the last month. And condom use was not sustained in many cases in the San Francisco short-term longitudinal study reported earlier. Condom use may have increased, but half-way measures may be all that some teenagers—and adults—are able to manage (Becker and Joseph 1988).

Adolescents face a set of particular challenges that make contraceptive use difficult; they may have vastly different constructions of sexuality than do adults and different male/female sexual negotiation patterns. Some of the characteristics (e.g., low personal efficacy, high sensation seeking, susceptibility to peer pressure, low knowledge, and sense of invulnerability) shown to make the practice of safer sex more difficult among adults engaging in high-risk behaviors are more typical—perhaps normative—among adolescents. Unless more intensive efforts are made to broaden society’s understanding of teenage sexuality—and teenagers’ understanding of their own sexual behavior—there will be little progress; AIDS, as “a disease of society,” demands a response beyond that limited to individuals.

Appendix Notes

1. The number of boys engaging in homosexual acts and in both heterosexual and homosexual acts is understudied, although such varia-

tions are critical to an understanding of HIV transmission in adolescents (Boxer and Cohler 1989; Ramefedi 1987; Savin-Williams 1988).

2. A three-year project to expand family planning services in a number of different communities in the Philadelphia Metropolitan Area is currently being conducted. A base-line survey designed to measure sexual knowledge, attitudes, and behavior among a large sample of teenagers was conducted by telephone in 1988–1989 using a random sample of households with youth between the ages of 14 and 18 in five diverse neighborhoods served by different family planning clinics, as well as a small representative sample of families with adolescents in the community at large. Females were selected at four times the rate of males. A total of 1,256 teenagers were interviewed (82 percent were female). The ethnic composition was 42 percent black, 50 percent white, 4 percent Hispanic, and 4 percent other.

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