An Approach to the Problem of Teenage Pregnancy

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Synopsis

Sex education continues to gain prominence as a critical factor in current challenges to the nation's public health. Adolescent pregnancy, with its frequently adverse consequences for the health and well-being of both mother and child, has reached unprecedented levels in the United States, and AIDS now threatens society in its entirety. Despite awareness that effective sex education is essential to combatting these problems, current debates, focused on the content and timing of sex education provided in the schools, are shortsighted. As currently practiced in this country, sex education curriculums convey the wrong message and are targeted to the wrong audience. In emphasizing the provision of data to youth, we ignore the fact that parental guidance and direction are more often helpful than data and options. Yet we fail to provide parents and others who comprise the traditional systems of child care and nurturance with the information they require to assume responsibility for the safe and healthy development of children and youth.

Understanding the reasons for the failure of conventional sex education provides a foundation for developing a more effective approach to preventing adolescent pregnancy. Defining an effective message and targeting information to the appropriate audience are necessary to effect a significant reduction in premature sexual behavior among adolescents.

MORE THAN 1 MILLION American teenagers become pregnant each year. About half will deliver infants who are at greatly increased risk of mortality. A large percentage of the infants who survive will live with increased risk related to parental inadequacy. For the pregnant teenager herself, life will never again be the same.

The problem of teenage pregnancy has been addressed in a number of ways. Some of these have been ineffective; others have worsened the problem. In either case, our attempts frequently have reflected ignorance or misunderstanding of the forces which are associated with and contribute to teenage sexual activity. Consequently, we often have used the wrong message in education and prevention efforts and aimed it at the wrong target audience.

Proposed in this paper are two prevention models, the "Just Say Later" model and the "Support" model. Although neither are new, I believe that both offer a more reasoned approach to the problem of teenage pregnancy than do most of the models currently in vogue.

The "Just Say Later" message is suggested as a model in programs designed to reduce or prevent teenage pregnancies. Its principal theme is abstinence from sexual activity during adolescence. It is presented as a practical and logical alternative to the "Safe Sex" model advocated by those who base prevention strategies on the assumption that most teenagers are going to be sexually active (*1*).

The "Support" model is offered as a preferred alternative to the commonly—and shortsightedly—practiced "Education" model of adolescent pregnancy prevention. The latter, which is based on the assumption that teenagers armed with adequate factual information can and will act sexually responsibly, seems to ignore the fact that knowledge is not attitude, nor is attitude behavior. Teenagers are not adults. Education is important, but it cannot supplant the support, guidance, and protection that we owe teenagers as they are presented with myriad unhealthy choices during their developmental years.

Factors Influencing Adolescent Pregnancy

Dramatic increases in adolescent pregnancy rates have occurred and have been influenced by changes in the social climate to which teenagers

have been exposed. While efforts to reduce and prevent teenage pregnancies cannot be expected to reverse all of the contributing social forces, those forces must be understood if we are to avoid the obvious pitfalls, draw successfully on our traditional social and cultural strengths, and design effective models of prevention.

The threatened demise of the American family. The family, traditionally the child's principal support, has been transformed radically in recent decades. Many changes have contributed to a vacuum of child care which may, at least partly, account for many of the problems of today's teenagers. The deleterious impact of change may be seen in numerous trends:

- Rates of divorce and rates of teenage pregnancy have increased concurrently.
- With the increase in numbers of working mothers and in single parent homes, more and more children have no after-school supervision and attention.
- Government sponsored programs such as Aid to Families with Dependent Children often seem to encourage that which they were set up to prevent. Poverty has been blamed for increased problems of alcohol, drugs, and teenage pregnancy at a time when the poverty status of our country is no worse, and perhaps better, than it ever has been.
- Our society has changed from rural, to urban, to highly mobile urban, trends that undermine the traditional support offered to children by extended families and stable communities.
- Most of today's parents are in their 20s and 30s, and they grew up in a climate of changing sexual attitudes and practices.
- "Anti-squeal" rules and other regulations about confidentiality were instituted to protect children from their parents. Implicit in these was a false assumption that teenagers identified as having problems could best manage their lives without parental involvement or that occasional visits by social agency staff could replace daily family contact. The pendulum between overprotection and underprotection of our children has swung dangerously far toward the side of neglect.
- Perhaps most significantly, the role of parenting and the competence of parents have been downplayed. Societal changes in recent decades led to ambivalence and confusion about the role of parents in helping their children reach safe and healthy maturity. "Rights" of children have been so heavily stressed that parental ability to provide support and assume responsibility has been seriously undermined.

As parental rights, responsibility, and guidance have waned, teenagers, as a group, have fared poorly. A sense of hopelessness, frustration, lack of control, and inevitability was felt by many parents of the 70s as they watched their children engage in a variety of destructive behaviors. In addition to rising rates of adolescent sexual activity, there were disturbing increases in the rates of alcohol and drug use, teenage suicide, and highway mortality. The average of Scholastic Aptitude Test (SAT) scores fell every year from 1967 to 1980.

In "The Coming Parent Revolution," Westin points out that, too often, professionals have implied that parents not only are incapable of caring for their children but frequently do them great harm (*2*). At times, this belief has prompted professionals to exclude parents from their children's activities; for example, in the 1960s many educators stopped giving grades to children, fearing that parents might use a concern about grades to put undue pressure on their children. During this period, school counselors assumed heightened importance. Although many parents felt relieved that professionally trained guidance counselors were tending to their children's needs, schools preempted an important parental responsibility. Apart from the fact that guidance counselors lack much of what parents have to offer, there were more children with problems than the counselors could possibly handle in the time available.

Many well-meaning health professionals joined with educators in usurping parents' rights and responsibilities. Physicians tended to interact with parents as though they were not capable of understanding the details of their child's illness. Psychologists told parents to "communicate" with their kids—to not get so "uptight" about their drug use or sexual activity.

A revolution began in the late 1970s when parents began to realize their kids were not doing well. Not only were the professionals not helping, but they were compounding many problems. Parents began to educate themselves, to speak out, and to provide their children with the protection and guidance they instinctively wanted to give. They realized that what professionals called "communication" frequently was acceptance of harmful behavior and too often served as a "cop-out." The positive effects of strong parental involvement

were seen first in the area of adolescent drug use. The First Lady, Mrs. Nancy Reagan, became an articulate and visible leader of a parents' movement that continues to grow. Positive changes in sexual attitudes and behavior occurred in these same families. The family was rediscovered as the best and most logical focus for the difficult task of parenting.

Although some children are so seemingly invulnerable that they can survive the worst of conditions, dysfunctional families, particularly those in which child abuse and neglect occur, can do real harm. Despite this, we must recognize that problems in a child's development can be expected when families are left out of parenting or if there is no family, foster family, or similar model of support. If a family is abusive or there is no real family, the best approach is to work to repair what is damaged or find a replacement.

For both the best of families and the worst of families, it is clear that banding together can help. Parents can be stronger if neighborhood or community standards or rules are established. Where PTAs or other community groups set agreed-upon standards of conduct, parents are less likely to be pressured by children who say things such as "all the other kids get to stay out past midnight."

The drug use epidemic. The rise in teenage alcohol and drug use is in no small way related to the increase in teenage pregnancy. Sex and psychoactive chemicals go together for a variety of reasons. Boys, particularly, may use them to overcome the anxiety, shyness, or discomfort that often surrounds social situations with the opposite sex. The chemicals also contribute to a loss of inhibitions. Most children enter adolescence believing that premarital sex is inappropriate and that they will not be active. Alcohol can disinhibit behavior, but it does not erase as easily the guilt that follows action. Much adolescent sex, especially a first experience, occurs with one or both partners intoxicated. The sexually experienced teenager may use drugs in the belief that drugs make sex better, unaware that repeated use may impair sexual capacities.

In studies involving middle school children, researchers have found that the predictors of sexual promiscuity and drug and alcohol use are often the same (*3*). Positive self-image, good problem solving skills, healthy family relationships, and an ability to communicate well are all characteristic of children who are least susceptible to either problem. Research has shown, also, that educational aspirations, belief in God, and church attendance all correlate positively with virginity in adolescence.

The loss of hope. There are indications that the tripling of the adolescent suicide rate over the last 20 years may be related to a lack of hope in young people. This lack of hope may be inferred from frequent allusions to death in rock music performed by groups with names such as the "Grateful Dead" and from the frequent use of death imagery—for example, skulls and the color black—in the culture of adolescents who are most susceptible to problems. Absence of hope also has been attributed to the "nuclear bomb" hypothesis which holds that kids live in fear of instant death and act as if there is no tomorrow. Those who believe there is no tomorrow can easily rationalize the use of drugs and the instant pleasures found in sex and vandalism. Deferment of gratification for later eventual gain is a difficult concept to teach children who see no future. Youngsters who seek instant gratification are often trapped in lives which fall well short of their potential—a loss to them, their families, and our society.

Hope begins with belief in the future, and it is linked to self-esteem. A prerequisite of self-esteem too frequently lacking in our young people is possession of goals for the future and a value system.

Models for Adolescent Pregnancy Prevention

Because efforts to prevent adolescent pregnancy often must be mounted in the context of the social issues discussed previously, it is important to understand them. Yet, as is seen with increasing clarity with respect to the prevention of drug abuse, the larger, often destructive social context need not be allowed to dictate or limit either the philosophies or strategies we design to address the problem of teenage pregnancy.

Defining the message: the "Just Say Later" model. The behavior of adolescents is very much influenced by the messages conveyed in the attitudes and practices of those around them, most especially their parents, peers, teachers, and the media that they hear and see. With regard to teenage sexual activity, abstinence is what we want from our children. Yet we often give ambivalent and confusing messages, as does a father who, while insisting that his daughter not engage in sex, urges her to use precautions if she must be active.

Table 1. Rates of sexual activity of girls ages 15–19 years (percentages)

Status	1971	1982
Active	27	43
Inactive	72	58
Swing group	16	

SOURCES: for 1971—Zelnick, M., and Kantner, J. F.: "Sexual and Contraceptive Experiences of Young Unmarried Women in the U.S., 1976 and 1971." Family Planning Perspectives 9:55–71 (1977) table 1; for 1982—Pratt, W. F., et al.: "Understanding U.S. Fertility: Findings from the NSFG Cycle III." Population Bulletin 39, December 1984, table 2.

Table 2. Percent of never married women who have ever had sexual intercourse

Age	1971	1976	1979	1982
15–19 years	26.8	34.9	39.4	42.8
15 years	13.8	18.0	22.0	18.4
16 years	21.2	25.4	26.6	28.5
17 years	26.6	40.9	42.2	40.1
18 years	36.8	45.2	53.9	53.8
19 years	46.8	55.2	57.7	65.6

SOURCES:
For 1971, 1976—Zelnick, M., and Kantner, J. F.: "Sexual and Contraceptive Experiences of Young Unmarried Women in the U.S., 1976 and 1971." Family Planning Perspectives 9:55–71 (1977) table 1.
For 1979—unpublished tabulations from the 1982 National Survey of Family Growth.
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Compiled by the National Institute of Child Health and Human Development.

Do we expect them to be abstinent, or don't we? When we seem willing to settle for less, we often get less.

The ambivalence reflects, in part, the belief of those advocating the message of sexual abstinence that it will not be heard or heeded by some teenagers. As inevitable as sexual activity is for some young people, failure to believe that abstinence is a realistic prevention objective for many others leads to mixed messages.

Uncertainty as to whether the message ought to be targeted to those adolescents who are likely to be abstinent or those who are not may result, in effect, in abandoning these youngsters who waver between choosing abstinence and sexual activity. In defining and promoting prevention models, we must take into account the great variations among children in age, gender, personality, potential for educational achievement, values, goals, environment, and other factors. No single message is likely to be effective for all.

In either case, the ambivalence which we convey may serve to encourage the very activity that we are trying to prevent.

In developing a strategy for the prevention of teenage pregnancy, therefore, a first question is "What message is most likely to do the most good with the least risk?" Second, we must ask, "What message will be heard and heeded by those young people for whom the primary message does not work?"

For purposes of answering these questions, we might view teenagers as belonging to one of three groups. One consists of young people who are likely to remain sexually abstinent.

A second group is made up of those who are most likely to be sexually active. A third group is composed of teenagers for whom education, prevailing social attitudes, peer pressures, and other factors will strongly influence whether they are sexually active or inactive.

Large-scale population analyses of sexual activity patterns among adolescent girls support this categorization. While it is true that rates of teenage sexual activity have changed dramatically in recent decades (table 1), the three groups just discussed remain readily discernible. In a 1971 survey of girls between the ages of 15 and 19, 27 percent were found to be "sexually active," defined as having had sexual intercourse one time. In a 1982 survey of girls in the same age group, 43 percent reported themselves as being "sexually active" and 58 percent reported no sexual activity, that is, they were "sexually abstinent." That proportion of the adolescent female population who were sexually abstinent in 1971 but active in 1982—that is, 16 percent, the difference between 27 and 43 percent—makes up the third group referred to above. I call these girls the "swing group."

In planning an adolescent pregnancy prevention strategy, should the principal target be the original core group of 27 percent who are most likely to continue their sexual activity, or should our efforts focus on that 16 percent in the swing group whose pattern of sexual activity may be most susceptible to change? We have several options.

First, we can tell all children that they ought to remain abstinent, but if they must have sex, that they ought to be careful. As previously noted, this message is ambivalent and, thus, inherently weak.

A second option is to accept the fact that a large number of teenagers are or soon will be sexually active and concentrate on messages of "safe" sex. To accept the premises of this option, however, is to fall prey to two incorrect assumptions. One is the assumption that sexual activity has become the norm and that there is no turning back, or, stated differently, that the battle for

abstinence has been lost, and there is no way of rolling back the rates. Second is the unproven assumption that sex education offered in accordance with a "safe sex" philosophy will be effective in reducing rates of teenage pregnancy.

With respect to the first of these, even in 1982, the year in which surveys recorded the highest rates of adolescent sexual activity, the assumption that most teenage girls were sexually active was true only for those 18 and 19 years old (table 2). More than 50 percent of girls between the ages of 15 and 17 remained abstinent. Limited available data regarding sexual activity rates in boys indicate comparable patterns. Although more active than girls, only slightly more than one-half (56 percent) of adolescent boys were sexually active in 1977 (*4*).

With respect to the second assumption—that we have lost the battle for sexual abstinence among adolescents—it should be noted that since the late 1970s, adolescent sexual activity rates appear to have leveled. Among black girls, rates leveled off in the period from 1976 to 1979 and have declined significantly since then. Among white girls, evidence of some leveling in sexual activity rates did not become apparent until the 1980s (fig. 1).

The third, and in my opinion, preferred, course of action is to adhere to the belief that the abstinence message is both reasonable and likely to benefit a significant number of young people.

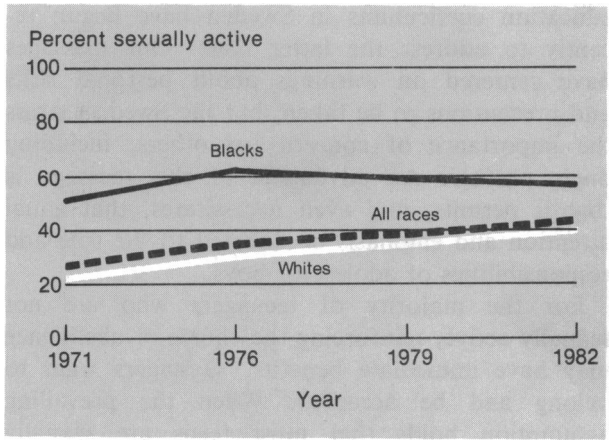
"Just Say Later," the abstinence model, would build on gains seen in the recent leveling off of rates of sexual activity among adolescent girls. And of the three groups of teenagers described previously, it is likely that the one most readily amenable to efforts intended to encourage behavior change will be the swing group. This is not surprising.

In politics, advertising, and much of marketing, messages are most productive when aimed at the moderate or the undecided. The conservative Republican, for example, tends to count on the conservative vote and assume the liberal vote is not attainable. The vote that decides the election will come from the middle. To be successful, the candidate must tailor a campaign message that is credible and attractive to these swing voters.

Similarly, sex education will most easily change the behavior of those whose choice of whether to be sexually active or inactive is most open to suggestion—that is, the young girls who comprise the swing group.

The public health payoff of a "Just Say Later" prevention program which successfully encourages abstinence could be substantial. If the outcome

Figure 1. Rates of sexual activity among black and white girls, ages 15-19, 1971-82



SOURCES: For 1971, 1976—Zelnick, M., and Kantner, J. F.: "Sexual and Contraceptive Experiences of Young Unmarried Women in the U.S., 1976 and 1971." Family Planning Perspectives 9:55-71 (1977) table 1.
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were no more than a return to 1971 levels of sexual abstinence among teenagers, adolescent sexual activity rates would be reduced by slightly more than one-third (from 43 percent to 27 percent). In this context, it is noteworthy that pregnancy rates per 1,000 sexually active women have remained relatively constant from 1974 to 1982. Because the single most telling predictor of teenage pregnancy is sexual activity, we might anticipate a 33 percent reduction in teenage pregnancy rates. Significant reductions in infant mortality rates might follow.

There is no shortage of good reasons for abstinence from sexual activity during adolescence. In fact, in crafting a message, a challenge often is to identify and emphasize the considerations most relevant in a given context. Some may emphasize the moral and ethical reasons, and the guilt which often is associated with teenage sexual activity. Others will point out that the educational and financial risks of pregnancy can be considerable. Another message may emphasize health risks—AIDS is currently the most visible, although by no means the only risk; another about which adolescents should be aware is the significantly increased morbidity and mortality of infants born to underage mothers.

Yet another message can note, from a psychological perspective, that sex with mutual consent, shared experience, and love does not routinely occur until around the age of 20. Prior to that age, sex is most often for self-centered gain; one's

experiences and perception of sex can be harmfully shaped by such an early self-centered reward. Sex education curriculums in Sweden have begun recently to address the latter issue. Our messages have centered on warnings about personal risks and precautions to be taken, but the Swedish stress the importance of concern for others, including one's partner. An advantage of this message is that it permits, and even necessitates, that equal attention and emphasis be directed to the role and responsibilities of adolescent boys.

For the majority of teenagers who are not sexually active, reinforcing the choice of abstinence may have immediate benefits. Teenagers want to belong and be accepted. When the prevailing assumption holds that most teens are sexually active, the abstainer may feel socially deviant. He or she may avoid activities in which a decision to remain abstinent labels one as "different." The abstinence model gives permission to say "no" and feel comfortable with that decision.

A societally sanctioned "rule of abstinence" also gives abstaining teens permission to encourage and shield others. Approaches that strengthen the peer community and give teen leaders support in their message of abstinence could bring tremendous results. We know that the single best indicator of virginal status in girls is peer experience. As a rule, teenagers are wonderful people with high ideals and a desire to help others. The abstinence model can build on the strength of the 58 percent who have been largely ignored in the past. When mobilized, they can become powerful advocates of the model, able to exert significant peer influence and support.

Because sex, unlike drug use, is something we hope will be a part of healthy adult life, it is important to stress that an abstinence message is not an anti-sex message. Rather, it suggests deferment of sexual activity until one is developmentally, emotionally, physically, educationally, and financially more mature. The message, "Just Say Later," urges the teenager to wait, to postpone.

Parent-supported, teen-directed movements are underway in the prevention of substance abuse. Such programs as the National Federation of Drug Free Youth, "Just Say No" Clubs, and World Youth Against Drugs can serve as models for similar parent-supported, teen-directed movements designed to promote and disseminate the message of sexual abstinence.

I suggest that the "Just Say Later" model, with its emphasis on sexual abstinence, might be most effectively targeted to teens who make up the swing group, but that it also promises immediate and significant benefits for the majority of adolescents who already are sexually abstinent and for those who have not yet become regulars. However, no matter how successful we are, it is unrealistic to expect 100 percent abstinence. Earlier, in grouping adolescents by patterns of sexual activity, we identified a group of adolescent girls who have chosen to be sexually active. Should we give up on these 27 percent in order to focus on a group only half as large—the 16 percent who comprise the swing group? Of course not. For those committed to sexual activity, other messages and alternative approaches must be considered.

Some believe that the answer for the 27 percent of adolescent girls who are sexually active lies exclusively in an emphasis on education and contraception. We believe the complexity of the problem requires much more.

The sexually active group may be further subdivided into three subgroups. One is composed largely of the approximately one in five unmarried pregnant teenagers who say they intended to become pregnant (*5*). A second group is made up of those sexually active girls who are aware of and avail themselves of measures to increase the safety of sex. For neither of these groups is additional sex education likely to produce a reduction in teenage pregnancy.

The third group is another swing group made up of sexually active teenagers who, with education and access to contraceptive materials, might alter their sexual practices from unsafe to safe. While it is clear that sexually active youth *can* benefit from sex education in terms of reductions in health risks and other adverse effects, there is no evidence to suggest that those who obtain information *do* or *will* use it wisely to change behavior. Only about three-quarters of high school sex education courses provide information on contraceptive methods, and fewer than half of eligible students take these courses. This notwithstanding, evidence suggests that adolescents tend often to choose other than the most effective contraceptive methods and to use even these methods poorly. Alcohol and other drug use among teenagers is another important obstacle to safe sex as well as to abstinence. For those adolescents with good intentions and good information, intoxication often transforms sexually "safe" into sexually "unsafe" behavior.

The assumption that sex education will result in responsible sexual behavior in teenagers and reduced pregnancy rates among sexually active teenagers ignores risk factors other than lack of

information. Teenagers at high risk for pregnancy often have a number of problems, of which sexual activity is just one. Poor scholastic achievement is perhaps the biggest indicator of potential trouble (*3*). Some have suggested that better education in reading and writing is more likely than enhanced sex education to decrease teenage pregnancy rates. Scholastic underachievement may be a result of psychological, developmental, intellectual, or environmental deficits; inadequate early education; lack of goals or aspirations (hopelessness); and dysfunctional family systems. Until these problems are addressed, it is unlikely that standard sex education will be well-translated into appropriate behavior change. When and if the underlying problems are corrected, abstinence again becomes an attainable goal.

Targeting the message: the "Support" model. The "Support" model, the second proposed strategy for preventing adolescent pregnancy, requires that we reassess those who ought to be the target audiences for education messages about pregnancy prevention.

During the decade of the 1970s, schools were given vastly increased responsibility for dealing with a variety of problem behaviors, among them teenage pregnancy. Viewed in retrospect, this course of events is not surprising. In the midst of the social tumult of the 1960s and 1970s, we turned in frustration to our schools for help with numerous tough problems. We failed to realize that while schools can help, they can only do so much.

When we turned the problem over to schools, we seemed to assume that they could do it alone. In addressing our messages to teenagers and making schools the messenger, we left out parents. Many parents and communities decreased their own involvement, wrongly believing that schools would and should assume primary responsibility for adolescent behavior.

While asking schools to assume this responsibility, however, we told them they could no longer teach ethics, values, and morality. In essence, schools were expected to teach responsible behavior without being allowed to teach the moral and ethical bases for responsible behavior. Unwilling to lay down rules or even strongly directive guidance, they chose instead to present options. Our teenagers were provided with data and asked to make decisions on their own as to what was appropriate and responsible behavior.

An example of a "responsible" decision message gone awry is a publication called "Helping You Decide." Distributed by the smokeless tobacco industry, this information campaign "just presents the facts" and asks the teenager to decide. The real hope of the publisher is obvious—the industry wants children to use the product. What purports to help teenagers make responsible decisions is aimed at promoting irresponsible decisions. For smokeless tobacco, there is only one responsible decision, not a set of options. A more appropriate message to youth is that of the Surgeon General, who tells youth (and others) not to use smokeless tobacco. Similarly, we do not point out to children such "benefits" of cigarette smoking as temporary stimulation and having a crutch to use in times of uncertainty and ask that they weigh these against the serious health risks. We tell them not to smoke. The same should be true of premature sexual activity. We seem to have forgotten that teenagers are not adults; that guidance and direction are often more helpful than sets of options.

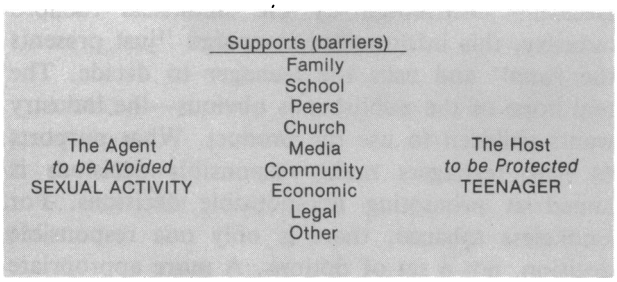
Teenagers should be taught to make choices, but it is irresponsible to assume that they necessarily will choose in their best interests or will be able to withstand pressures to choose wrongly. Sexual desire and drive are normal in adolescence, and well-meaning teens are often overwhelmed by the constant sexual stimulation of media and other sources.

Sex education. The subject of sex education is controversial because it means different things to different people. If we are to resolve those differences, a useful first step is to look at the different components of sex education curriculums.

Many who are most concerned about teenage pregnancy and venereal transmission of disease feel that, when we fail to inform our children of possible protective measures, we are shirking our responsibility. Proponents of this view often reduce sex education to the provision of information about sperm, ova, the avoidance of fertilization, and the reduction of health risks associated with sex—for example, information about how the AIDS virus and other infectious agents may be transmitted sexually and instruction in preventing their transmission.

I prefer to call information about pregnancy, disease, and their prevention, "biology" or "health-related instruction." As important as knowledge of anatomy and physiology may be, there is no conclusive evidence that education which presents such information has any effect in reducing rates of sexual activity and the array of

Figure 2. The support model to reduce teenage pregnancy



related risks.

In my opinion, sex education involves much more than basic biology. Children's sexual practices are directly related to their perception of peer and societal norms, their attitudes and values, their hopes, their ability to defer gratification, and the protection offered them by their parents and others. Unless sex education addresses values, ethics, morality, deferment of gratification, and goals, it is incomplete and potentially dangerous. Without values we cannot teach responsible behavior. It is on this point that sex education in the schools most often fails.

Recognizing that parents have diverse beliefs and tend to resent instruction which does not support those beliefs, schools often attempt to design and present a course which does not present ethical or moral positions which run counter to those of some parents. The choice most often made is to teach a sterile course which makes no judgments. Yet asking schools to teach morally and ethically neutral sex education asks for failure. In their efforts to be impartial when offering options, teachers often imply that all options are equally appropriate; that is, that values are not relevant. At the same time, however, teachers frequently do impart their personal moral and ethical values, if not explicitly, then by their actions as well as by the tone of their instruction. When these values conflict with those of parent and community, problems are inevitable.

A large number of parents believe that schools which cannot present sex in the context of values should stick to biology and stay out of courses aimed at altering behavior.

A logical means of avoiding the dilemma is to direct information regarding sexual activity not primarily toward children but toward parents and others who are more mature and thus better able to deal effectively with difficult decisions. That is, we should place more emphasis on the information needs of the individuals and social institutions that are charged with overseeing the welfare and education of our children—parents, churches, and others in the community.

Teenage pregnancy is a multifaceted and dangerous problem. The best way to protect a child is to place a barrier between the child and an activity that is dangerous. To make abstinence possible, adequate protection, support, and guidance are needed. These supports must be available to our youth until they are mature enough to make responsible decisions. Although important, education should by no means be seen as the most important or only line of defense.

As depicted in figure 2, the more comprehensive and effective are the barriers we erect, the more likely will abstinence result. Teenage rebellion against the barriers need not become a major problem if issues are handled consistently, fairly, and caringly. Overprotection of children is a potential problem, but underprotection is a known and evident risk. We must provide reasonable protection until children are old enough to protect themselves.

Implementing the Models

Many programs or projects can be built on the models of abstinence and family support. While much can be done, the most important immediate task is to effect a change in attitudes. Parents, educators, adolescents themselves, and others must be convinced that the battle is not lost, that abstinence from sexual activity is a realistic goal for adolescents. Further, adults must be convinced that teenagers require guidance, protection, and support while growing up; that education by itself will not succeed.

How can this be achieved? One prerequisite is awareness of the prevalence, causes, and consequences of adolescent pregnancy and, in that context, of the importance and feasibility of the abstinence message. It is also necessary to encourage attitudes which reflect an understanding that sexual activity is not the norm among all, or even the majority, of teenagers; that values are important; and that protective, preventive barriers exist in the form of peers, parents, and society. Together, these provide a sound basis for an action plan for the many parts of the community and society working together.

In contrast to adolescent pregnancy prevention models which entail extensive and time-consuming design of campaign strategies, massive resource outlays for the development and staffing of ex-

panded school-based health facilities, or the abrogation of parental roles and responsibilities by various social institutions, the prevention models proposed in this paper can be implemented now, at minimal cost, by those who are immediately and ultimately accountable for instructing, guiding, and protecting our children. With the impetus of awareness and appropriate attitudes, productive action will require broad involvement.

Parents must acknowledge that teaching their children the importance of goals and ideals is no less critical then providing food, shelter, and educational opportunities. Parents must be helped to attain an understanding that where there is strong family bonding, children are less likely to be involved in self-destructive behavior. While parents are primary role models, they must realize that others exist, many of whom may promote dangerous behaviors, including premature sexual activity and illegal use of alcohol and other drugs. Parents should learn how to respond effectively to objectionable media messages.

Schools and educators must be encouraged, and directed when necessary, to work with rather than in place of parents. It is the responsibility of educational systems to encourage programs that (*a*) alert youth to the pressures from peers, the media, and other sources to be sexually active; (*b*) train youth in specific skills for resisting these pressures; (*c*) correct false normative expectations such as those which hold that "everyone" is sexually active; and (*d*) provide information about the immediate negative consequences of sexual activity. School nurses constitute one suitable source of this health information. Also, schools as well as other social institutions should recognize the benefits of minimizing the time spent by adolescents in unsupervised peer activities.

Media must be encouraged to support abstinence, editorially and programmatically, and the important role which families and communities play in support of teenagers. Articles and programming which depict positive role models and describe accurately the costs and risks of adolescent pregnancy are essential. Too often, programs inappropriately glamorize and romanticize adolescent sexual activities and suggest unlikely happy endings to fictional accounts of teenage pregnancy.

Health care providers must be taught to recognize that while society has changed and parents need help, more importantly they need information which they can use in speaking to their children about sexual attitudes and behaviors. Health care personnel also must recognize their responsibility to teach patients, as well as the larger community through educational forums, the relationship of alcohol and other drugs to premature sex and pregnancy.

Community and public agencies should target educational efforts to parents, teachers, clergy, and other community agencies, not just toward adolescents. Acting on a consensus supported by parents, agencies must be encouraged to disown programs or projects which undercut parental strength. Any rule or regulation that weakens parents' control over their children should be reviewed with great care.

In summary, much can be done. With a minimum of effort we can have a major influence on changing attitudes and practices which have contributed to our problems with teenage pregnancy. The time to act is now.

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