

TN: 2396673
Pages: 121-135 QCL
SHARES Overseas

UBY/UTBG ILL - Lending

Call #: RJ 111 .A38x

luck up

Location: AUXSTORSER BA01RA06SE02

Journal Title: Advances in adolescent mental health.

Volume: 4 Issue:

Month/Year: 1990 Pages: 121-135

Article Author: Dryfoos, J. G

Article Title: A review of interventions to prevent pregnancy

ILL Number: 202919956



Lending String: *UBY

Borrower: QCL

Document Delivery Service

Main Library

Glasgow G12 8QE

United Kingdom

Fax:

Odyssey:

Email: dds@lib.gla.ac.uk

5/1/2020 1:50 PM

BYU

BRIGHAM YOUNG
UNIVERSITY

Harold B. Lee Library

Interlibrary Loan
Copy Center

For Odyssey Receipt Problems:

Phone: 801-422-2953

Fax: 801-422-0471

Email: ill_copy@byu.edu

Odyssey Problem Report

If you have experienced a problem in the delivery of the requested item, please contact us within **Five Business Days** with the following information:

ILL#: _____

Your OCLC Symbol: _____

Date of Receipt: _____

Please specify if:

- Pages were missing pp. ____ to ____
- Edges were cut off pp. ____ to ____
- Illegible copy, resend entire item
- Wrong article sent
- Other (explain): _____

NOTICE:

This material may be
protected by copyright
law **Title 17 U.S. Code**

A REVIEW OF INTERVENTIONS TO PREVENT PREGNANCY

Joy G. Dryfoos

TEENAGE PREGNANCY: WHAT IS THE PROBLEM?

The incontrovertible fact is that more than one in ten teenage girls in the United States have become pregnant every year for the past decade and more than 150,000 are becoming mothers before they reach their eighteenth birthday. The consequences of these events have been well documented. They give shape to a broad consensus that it is not healthy for the individuals nor good for society to encourage the continuation of these events. There is little consensus, however, about the domains of the problem of teenage pregnancy or about possible solutions. A wide array of positions have been taken on this issue (Dryfoos, 1985a):

- The problem is too-early intercourse. Young people should not engage in premarital sexual relations. Promiscuous behavior reflects the lack of morality in the society at large and the decline of the American family as the guiding force in moral development.

Advances in Adolescent Mental Health,

Volume 4, pages 121-135.

Copyright © 1990 by Jessica Kingsley Publishers Ltd.

All rights of reproduction in any form reserved

ISBN 1 85302 088 5

- The problem is lack of knowledge. Young people do not know about their bodies, reproduction, or how to prevent pregnancy. They are ignorant of the risk of pregnancy and the consequences of early parenthood.
- The problem is lack of skills in decision-making. Teenagers do not know how to resist the pressures that arise in peer situations.
- The problem is lack of access to contraception. While family planning clinic services exist, teenagers do not know how to access and utilize them; some are afraid of real or imagined parental notification or prohibitive costs. Misinformation about the potential side effects and dangers of the pill is widespread.
- The problem is lack of access to abortion services because of price, parental consent policies, lack of pregnancy counseling, or other barriers.
- The problem is lack of opportunity. With few perceived options in society, disadvantaged teens are not motivated to delay parenthood. While pregnancies are largely unintentional, poor youngsters feel that childbearing will not change their future status, and so they enter parenthood.
- The problem is welfare. The system rewards young women for becoming mothers and enables them to leave home and set up households.

These disparate problem definitions have produced equally disparate solutions. Thus, interventions to prevent adolescent pregnancy range from "saying no" programs that promote abstention to "workfare" programs that mandate job placement for teen welfare mothers in the hope of staving off repeat pregnancies. In this brief review, we touch on the major prevention efforts that appear to have the highest probability for reducing pregnancy rates and, especially, rates of early childbearing among unmarried teens.

METHODOLOGICAL CONSIDERATIONS

A panel of the National Research Council, appointed by the National Academy of Sciences, recently studied the issue of adolescent pregnancy in the United States. Their report emphasizes the significant gap between what people believe to be the solutions to the problem of adolescent pregnancy and the "state-of-the-art" of evaluation of the effectiveness of these interventions (Hayes, 1987). Nevertheless, they concluded that adequate knowledge exists on which to base recommendations for program and policy development, and for a research agenda.

In order to produce scientific evidence about the effectiveness of interventions in this field, it is necessary to measure changes in adolescent pregnancy rates and to attribute those changes to a particular program, curriculum, or counseling service offered by a specific agency. While information about births is relatively easy to collect in a given population, abortion rates are elusive because of underreporting. Few of the available studies have included comparable experimental and control groups; in some instances, the results were contaminated because control group members gained access to services during the study period (Quint & Riccio, 1985). In light of these methodological shortcomings, our understanding of "what works" to prevent pregnancy must be informed by

"surrogate" measures of effectiveness, such as delay in the initiation of sexual activity and the use of contraception at initial intercourse and thereafter (Dryfoos, 1986).

Until recently, those concerned about adolescent pregnancy focussed their attention on issues surrounding sex education and access to contraception (Alan Guttmacher Institute, 1981). Such interventions give youngsters the *capacity* to control their fertility. A more contemporary approach centers on *life options*, that is, ensuring that young people have the necessary education and job opportunities that can provide an alternative to early parenthood (Dryfoos, 1985b; Edelman, 1987). The current approach builds on the findings from research that young girls and boys who have low academic achievement, and live in poor families, are much more likely to become parents than young people with higher achievement and more advantaged families (Pittman, 1986; Abrahamse, 1987). Based on Andrew Sum's analyses of the National Longitudinal Survey of Youth, Pittman (1986) showed that about 22% of young women (aged 16 to 19) with below average basic skills, and from poverty families, had borne children. This contrasted with 4% of young women with average or above average basic skills, and from nonpoverty families. This finding did not differ for white, black or hispanic women.

The complexity of evaluation is even further compounded by the demands associated with testing the effects of various life options interventions. To date, no one has demonstrated the impact of educational remediation on pregnancy rates, yet this approach has intuitive validity in light of the strong evidence that educationally disadvantaged children are so prone to early childbearing.

The following discussion is an overview of the "what works" literature, agency reports, and program observations. We begin with programs aimed at improving the *capacity* to control fertility. Sex education and skills enhancement programs provide basic information about reproduction and appropriate tools for making responsible decisions about the initiation of sexual relationships. We then discuss programs that try to help sexually active youngsters to be better contraceptors. Finally, we explore several *life options* approaches to pregnancy prevention.

SEX EDUCATION AND SKILLS ENHANCEMENT

Sex education is widely available in the United States, but the quality of programs is very uneven. About three-fourths of all school districts claim that they provide some form of sex education (Sonnestein & Pittman, 1982). However, in a recent Harris Poll (1986), only 59% of teens reported ever taking any course in sex education, and less than two-thirds of those had taken courses with significant content (such as facts about birth control or abortion). About 92% of teens who had taken a comprehensive sex education course had a high or medium

level of knowledge about pregnancy issues, compared to 70% of those with a noncomprehensive course, and 66% of those with no sex education. However, only 40% of all respondents knew that pregnancy was most likely to occur about two weeks after the last menstrual period, ranging from 49% of those with comprehensive sex education to 34% of those with no sex education.

It is well-documented that sex education courses improve knowledge, but, there is little conclusive proof that behavior is influenced by taking courses. The rate of sexual activity does not appear to change nor does the efficacy of contraceptive use. There is no evidence that pregnancies have been prevented as an outcome of any specific sex education curriculum (Kirby, 1984). Sex educators have responded to these disappointing research results by developing and incorporating new approaches into their courses such as decision-making skills and life planning (Pittman & Govan, 1986).

Schinke & Gilchrist (1984) have used a Life Skills Counseling methodology to teach problem-solving and assertiveness skills related to sexual behavior. For a very small sample, they were able to show improved knowledge, attitudes and better use of contraception. Health educators are increasingly aware of the interrelationships between problem behaviors such as substance abuse and early sexual behavior. Increasingly, courses are being designed with the life skills approach and addressed toward broader issues of high risk behavior, rather than specific behaviors (Scales, 1987).

The life planning approach combines materials on vocational guidance with exercises that are designed to lead to less risk-taking and more rational decisions about school, social, and family behavior. Extensive worksheets produce personalized planning guides for careers, based on course materials, research, interviews, and individual preferences. Several curricula are available to schools and community groups including Life Planning Education (Hunter-Geboy, Peterson, Casey, et al., 1985) and Choices (Quinn, 1985). A high degree of student and teacher satisfaction has been reported by users of these materials; research on the impact on their behavioral outcomes is underway but not yet completed.

One concern about most sex education and life options curricula is their middle-class orientation. Public/Private Ventures (1986) has adapted the life planning approach for use with a low-income minority population. Preliminary evaluations from the use of the P/PV curriculum in the Summer Training and Education Program (STEP) report gains in knowledge of contraception. Participants were 53% more likely to use contraceptives if they were sexually active than if they were in the control group (Public/Private Ventures, 1987). However, the life planning workshop is only one component of the comprehensive STEP program; at this stage, it is inaccurate to attribute changes to the curriculum alone.

A controversial issue in the on-going dialogue about pregnancy prevention is the viability of what are commonly called "Saying No" programs. One strongly held view is that the only prevention strategy should be to make it clear to young

people that premarital sex is unacceptable behavior. Mosbacher (1986), in a report for the Family Research Council of America, calls for molding children to "reflect virtue, self-control, and self sacrifice in services to others." Another view is that intervention should assist young people to delay the initiation of sex until they are "ready" (Hofferth, 1987). A broad consensus exists among family planning clinicians and counselors that the content of counseling should begin with an exploration of sexual decision-making and then, if the client decides to initiate sex or is already engaged in sexual behavior, to encourage the use of contraception.

Interventions that promote abstention until marriage are located primarily in church groups and Moral Majority organizations. Repeated studies have shown that "religiosity" (frequent church attendance) is strongly associated with low rates of sexual activity (Hayes, 1987). Since religiosity is significantly related to family influence, parental control is the variable that creates the effect rather than any specific replicable curriculum. Programs to improve communication between parents and teens have not met with significant success, probably because of the difficulty of enlisting the parents of high risk children.

The prototypical "Saying No" program, developed by Marion Howard, was designed to provide eighth grade youth with information and decision-making skills to help them resist peer pressure (Pittman & Govan, 1986). In the ten-session Postponing Sexual Involvement curriculum, human sexuality issues are covered by nurses and counselors, while the skill building component is presented by older teen leaders. Preliminary evaluation found that only 5% of low-income eighth grade girls had initiated sex by the end of the school year, compared to 15% who did not take the course (NOAPP, 1987). No long-term effects have been reported as yet.

One important consideration in the design of interventions aimed at delaying initiation of sex is the high rate of involuntary first-time intercourse as a result of rape, incest, or being forced to submit to sexual advances. Erickson & Moore (1986), in a small sample study, found that more than 10% of sexually active teens reported having sex in a forced situation. In a study of teen mothers in Illinois, one third reported ever having been forced to have sexual intercourse, and 61% had ever been asked or forced to have a sexual experience that they did not want (Ounce of Prevention, 1987).

In summary, the "state of the art" in sex and family life education and decision-making skills programs is rapidly expanding. New curricula are being aggressively marketed to school systems. In response to developing social issues, content areas are broadening to include sexual abuse, AIDS, parenting, homosexuality, career awareness, communication, and family formation. School systems, confronted with the threat of a proposed mandate to provide AIDS education to third graders, are more willing than in the past to provide general sex education. However, there is still resistance to providing such information in the elementary grades (U.S. Conference of Mayors, 1987).

ACCESS TO CONTRACEPTION

Family Planning Clinics

After spending two years reviewing the subject of adolescent pregnancy, the Panel on Adolescent Pregnancy of the National Research Council concluded:

Because there is so little evidence of the effectiveness of the other strategies for prevention, the major strategy . . . must be the encouragement of diligent contraceptive use by all sexually active teenagers (Hayes, 1987).

This recommendation, while not surprising to people who work in the field, warranted headlines across the country and produced a large number of positive and negative reactions in the media. The Panel offered several approaches to achieve the goal:

- (1) Aggressive public health education to dispel myths about health risks of pill use.
- (2) Exploration of nonmedical models for distribution of the pill.
- (3) Continued public funding support for family planning clinics.
- (4) Inclusion in sex education of information on how to use and where to obtain birth control.
- (5) Enhanced contraceptive services including better counseling, outreach and follow-up at low or no cost.
- (6) Further development of comprehensive school-based clinics.
- (7) Implementation of condom distribution programs.
- (8) Evaluation of contraceptive advertising.

The Panel was impressed by the research base that established the connection between the use of contraception and the nonoccurrence of unintended childbearing. Data from the 1979 Johns Hopkins Survey of Young Women provide the most compelling evidence of this link. Zelnik & Kantner (1980) showed that only 7% of sexually active teens who always used a medical method had experienced a premarital pregnancy, compared to 62% of those who had never used a method.

For more than a decade, family planning clinics have been the primary sites used by teenagers to obtain medically prescribed contraception. In 1983, about 1.6 million teens visited family planning clinics (Torres & Forrest, 1985). This figure includes about one-third of the 4.5 million estimated to be sexually active and at risk of unintended pregnancy (Pratt, Mosher, Bachrach et al., 1984). About the same number made a family planning visit to a private physician (Pratt & Hendershoot, 1984), leaving more than 1.5 million sexually active teenagers unserved. There are approximately 5,000 family planning clinics in the U.S. where teenagers receive confidential services including counseling, group education, physical exams (including pelvics and Pap smears), prescriptions, and supplies. These clinics are operated by health departments, hospitals, Planned

Parenthood Affiliates, and other agencies, and are within reach of most teenagers in urban areas.

Repeated studies of family planning services for teenagers have concluded that convenience, confidentiality, and lack of "hassle" are important predictors of utilization; special teen sessions and "rap groups" are appealing only to very young clients. Measures of the effectiveness of clinic services, however, involve more than the gross number of patients; an important factor is the continuity of usage. In many clinics, half of the teen patients fail to make a return visit. Continuation on a method (typically the pill) is often related to satisfaction with the method (Shea, Herceg-Baron, & Furstenberg, 1984). Nathanson & Becker (1985) have shown that contraceptive continuation rates were significantly greater in clinics where teenage patients expect that the nurses will provide "authoritative guidance" about contraceptive methods, and where nurses expect to give that kind of service. The authors cite this style of staff-patient interaction as evidence that young women who initiate sexual activity may want and need more direct personal guidance about contraception than they currently receive.

Recent work by Kalmuss, Lawton, & Namerow (in press) on adolescents' decision-making about birth control suggests that family planning counseling should include greater emphasis on the costs and benefits of pregnancy, as well as the costs and benefits of contraception. More directive counseling with adolescent clients appears to be needed to deal with the low compliance rates for adolescent pill users and the complexity of decision-making. One approach currently being tested is "contract counseling." Counselors work with youngsters to develop a contractual arrangement for the receipt of contraception. A few programs offer incentives such as records and movie passes for return visits. Family planning providers acknowledge the need for more intensive personalized counseling and more energetic follow-up. However, budget cuts since 1981 have severely limited the clinics' capacities for expansion and for the initiation of innovative approaches, particularly along educational and outreach lines (Program in Reproductive Health Policy, 1983). There is growing recognition that different kinds of programs are needed to deliver family planning services to unserved sexually active teenagers.

School-Based Clinics

Few recent social interventions have generated as much positive and negative response as comprehensive multi-service school-based clinics. The rapidity of diffusion of this model, from 10 identified sites in 1983 to some 120 current or potential sites only four years later, lends testimony to its attractiveness. School-based clinics, located on-site in junior and senior high schools, provide a range of medical, psychological, and social services to students who enroll (Kirby, 1986). School systems do not run these programs. They are organized and operated primarily by hospitals, medical schools, local public health depart-

ments, or youth serving agencies. Financial support derives largely from state funds (e.g., Maternal and Child Health Block Grants, special adolescent health initiatives, Medicaid) or foundation grants (Terskiewicz & Brindis, 1986).

The lengthy process that leads to the establishment of a clinic involves collaboration among the initiating agency, school, parents, students, and community leaders. Prior to opening the clinic, parental consent must be obtained from as many parents as possible. Complex arrangements within the school system have to be worked out. These include the role of the school nurse, if available; relationships with guidance counselors and other programs; and the renovation and maintenance of clinic space.

Most of the adverse publicity received by school-based clinics has centered on the issue of birth control services. Media have repeatedly employed the term "sex clinics," a phrase picked up by detractors and used to try to influence school boards and the public (Dryfoos & Klerman, 1987). In reality, only 10 to 20% of all visits to school-based clinics are for family planning services. Physical examinations and emergency care for minor illnesses and injuries are the major visit categories. However, each clinic is different, depending on the needs of the children and the particular specialties of the operating agencies. Thus, the Kansas City program places a heavy emphasis on mental health counseling, the Dallas clinic includes complete dental care, and the Junior High School program in Washington Heights, New York, does a complete social needs assessment on each new enrollee. Many clinics report that their personal counseling has revealed an unexpectedly high prevalence of sexual abuse; one nurse-practitioner recounted six cases within a 10-day period. Substance abuse among parents is another problem that is frequently disclosed in the confidential relationship between the clinic staff and students.

Lovick & Wesson (1986) report that 28% of school-based clinics distribute birth control pills and condoms on-site after counseling and appropriate medical procedures, including pelvic examinations and Pap smears; 52% give gynecological exams and prescriptions, and then refer students to collaborating agencies for contraceptive supplies; 20% only do sexuality counseling and then refer the client elsewhere for exams and supplies. The emphasis in counseling is on personal responsibility and delaying the initiation of sexual intercourse until the appropriate time for the individual. Clinics have procedures for insuring compliance with medical protocols. Students who are using birth control are followed routinely, including telephone calls at home. In many schools, the clinic counseling is reinforced by health education courses. These are often taught in the classroom by clinic personnel.

It should be expected that pregnancy rates would be reduced in view of the amount of personal staff attention directed to sexual needs as well as other psychosocial needs, the ease with which compliance can be monitored, and the close links between clinic and classroom. The striking results reported by the St. Paul, Minnesota, school-based program first drew attention to the potential of

this model for preventing pregnancy (Edwards, Steinman, Arnold et al., 1980). In the most recent report, Hayes (1987) shows a decrease from 79 births per 1,000 in 1973 to 26 births per 1,000 in 1983-1984. This result has not been replicated by any other on-site clinic, nor have the St. Paul data been compared with a control group.

One program that demonstrated reductions in pregnancy combined sex education and counseling in schools with family planning services in a nearby clinic site (Zabin, Hirsch, Smith et al., 1986). The staff, a social worker and a nurse practitioner, worked in both places. At the end of the three-year demonstration period, pregnancies among students in the experimental schools decreased 26% compared to a substantial increase in the control schools (from 32% to 51%). The evaluation also showed a significant postponement of first intercourse (by an average of seven months) and very high utilization of the clinic and of contraceptives, especially among junior high school students. Zabin (Zabin et al., 1986) attributes the success of the program to the amount of attention that the students received from the staff.

Other school-based clinics have reported improvements in contraceptive use. In Kansas City, higher rates of contraceptive use were reported among clinic users than nonusers, with a striking increase in condom use among males (Kitzi, 1986). In St. Paul, female contraceptive users had a high rate of continuation; 91% were still using their method (primarily the pill) after a year, and 78% after two years of use (Edwards & Arnold-Sheeran, 1985). However, at most sites a very low proportion of the school population uses the school-based clinics for family planning; therefore, it is not certain that high contraceptive compliance rates will result in lower school-wide pregnancy rates.

Condom Distribution and Other Male-Oriented Programs

School-based clinics have the capability of assisting boys to become more responsible for their sexual behavior; about half of all visits are made by boys. However, very few of these clinics distribute condoms. Young boys are often aware of the importance of contraception, but hesitant to purchase condoms in drug stores. In recent years, there has been an upsurge in interest in programs for males, but most of the results have been too insignificant to evaluate (Dryfoos, 1985c). Despite innovative outreach efforts, young males are reluctant to use family planning clinics because they perceive them to be "woman-oriented" programs. One of the more successful attempts uses video-tapes of neighborhood sport events as a lure to an all-male clinic that employs medical students as mentors (Armstrong, 1986). Programs designed to reach young males typically conduct outreach on the "street" by utilizing older males as role models or peer outreach workers (Hayes, 1987).

One of the few large-scale programs that distributes condoms has been initiated by the Maryland State Health Department. In an attempt to decrease the

barriers to condom use, free condoms and instructions are made available for anonymous pick-up (Maryland, 1987). In addition to local health department sites, the "Three-For-Free" programs have expanded to drug and alcohol counseling centers, community mental health centers, a gas station, and other social agencies. Local health departments advertise with flyers and public-service announcements.

Risk factors for early parenthood are the same for boys and girls: low achievement, low-income families, peer pressure, and lack of parental guidance. Many practitioners who work with high-risk boys have concluded that changes in the opportunity structure are necessary concomitants of an effective pregnancy prevention strategy among disadvantaged males (Pitt, 1985). Thus, the "life options" hypothesis applies equally to both genders.

LIFE OPTIONS INTERVENTIONS

Programs that include educational enhancement, job preparation, and family planning are being initiated in response to the more general objective of helping high-risk youth. These approaches view early childbearing as only one symptom of disadvantage and assume that more comprehensive treatments are necessary to help children achieve their educational, career, and family goals.

A program that encompasses these principles has recently been initiated in New York City using collaborative partners from a number of agencies and the Children's Aid Society as the lead agency (Carrera, 1987). There are seven "Primary Prevention Programmatic Dimensions":

- (1) On-site medical and health services: complete physical exams, contraceptive counseling and prescription; weekly follow-up counseling of contraceptive patients.
- (2) Self-esteem enhancement through the performing arts: weekly workshops with parents and teens led by professionals from the National Black Theatre. Issues include conflict resolution, school experiences, job problems, family roles, gender roles, and racism.
- (3) Skills training in individual sports: squash, tennis, golf, and swimming, skills that emphasize self-discipline, self control, and a precise mastery.
- (4) Academic assessment and homework help program: complete educational needs assessment and prescription for individual and group tutorials, given by volunteers and educational experts.
- (5) College admission program: every participant receives a certificate at the beginning of the program guaranteeing a place as a Freshman at Hunter College with all costs subsidized, following completion of teen pregnancy prevention program and graduation from high school.
- (6) Family life and sex education unit: 15 week, separate programs for parents and teens, including a holistic view of sexuality, using readings, films, role playing and lectures.
- (7) Job club and career awareness program: weekly session conducted by employment specialists to explore career possibilities, secure a social security card, complete working papers, and apply for jobs. Each teen secures a job or takes part in an Entrepreneurial Apprenticeship Program. Each participant opens a bank account and contributes to it weekly.

While no formal evaluation has been conducted and the number of participants is relatively small, the potential for pregnancy prevention appears to be great. Since the program began, none of the girls have become pregnant and none of the boys have fathered a child. None of the participants have dropped out of school.

There are a number of other interesting and innovative comprehensive youth-serving programs. Multiservice centers such as the Door, the Hub (both in New York City), and the Bridge (in Boston) provide medical, educational, social and recreational services. The STEP program involves low-income underachieving 14- and 15-year-olds in two summers of educational remediation and paid part time work along with life planning workshops (Public/Private Ventures, 1987). During the intervening school year, mentor/counselors offer guidance and referral.

Recent recognition of the interrelationships among problem behaviors, particularly early unprotected intercourse and school failure, has led many youth organizations to move in new directions. The Girls Club of America has initiated a research project testing the efficacy of four alternative pregnancy prevention programs to identify models to add to their roster of after-school activities (Quinn, 1985). The National Urban League has initiated a program through the black fraternity Kappa Alpha Phi, combining school remediation, recreation, community service activities, and counseling about responsible sexual activity (Hayes, 1987).

Foundations have stimulated collaborative efforts between schools and local youth serving agencies. For example, the Ford Foundation and the Carnegie Corporation cosponsored the Urban Middle Schools Adolescent Pregnancy Prevention Program (UMSAPP), involving eight urban school districts in developing new programs. The Academy for Educational Development (1987) reported on different "life options" models implemented by the school districts in conjunction with local community organizations, e.g., Life Planning, after-school recreation, male mentors, drop-in center for health and social services, and teacher training. The Annie Casey Foundation has recently announced the New Futures program, "A strategy for investing in at-risk youth." Fifty million dollars will be divided among five cities that appear to be ready to launch comprehensive prevention programs dealing directly with the issues of school, jobs, and unintended pregnancies.

WILL TEEN PREGNANCY "GO AWAY"?

We know that other Western countries with cultures similar to our own do not have such high adolescent pregnancy rates (Jones, Forrest, Goldman et al., 1985). Many theories have been formulated from this finding. The rates have been attributed to our undesirable "sexual climate," lack of governmental commitment, poor performance on the part of the health system, local barriers to

quality sex education, and lack of access to contraception. Another view, based on evidence from Sweden and the Netherlands, purports that only small homogeneous "welfare states" can provide the assurance of lifetime social supports. In such countries, young people grow up in an atmosphere of trust and acceptance by their families and their society; in return, most achieve adulthood by acting responsibly (Dryfoos, 1985d).

Whatever the explanation, it is clear that our country is experiencing unique societal problems. There is a growing subpopulation characterized by low skills and poor preparation for entering the labor force. Lack of job opportunities, compounded by minority status, leaves parenthood as the only perceived avenue to becoming an adult. It is unlikely that teen childbearing will "go away" without major structural changes in the society that promote equity in education, housing, and jobs. But the rate of childbearing can be further reduced by certain incremental interventions that will at least alleviate some of the most constricting circumstances that press on the lives of disadvantaged children. Preliminary results from several small-scale comprehensive programs are encouraging; however, scientific evidence about long term effects on birth rates may not be available for some time, if ever. We may have to design interventions on the basis of less than perfect data and good common sense.

The strong correlation between school failure and early childbearing mandates a heavy focus on schools. In what can be described as a "parallel thrust," efforts to improve the quality of education in poor neighborhoods have to be accompanied by a comprehensive set of health, social, and recreational services that will make it possible for children to learn. All of this cannot be accomplished by the schools working alone. Collaboration is the key word. Outside agencies of all kinds can bring their services and their funding into school settings in order to be available to the students "where they are." These support centers, building on practices in school-based clinics and youth serving organizations, can help the schools to perform their role as "surrogate parents" and give support to the increasing numbers of youngsters whose own parents are not available. More comprehensive and directive guidance can be offered in such a setting without the fragmentation that produces sex education on one day, drug abuse prevention on another, suicide prevention if there is a crisis, and no counseling about family and other personal problems.

This school-centered approach to pregnancy prevention embodies a number of important program-planning concepts: early intervention, boys as well as girls, intensive one-on-one attention to individuals, and the integration of components, using available resources. However, not every at-risk youngster needs or wants to get family planning care in schools. School dropouts may require community-based intensive care, such as the programs described above, with particularly strong educational remediation components. Other youngsters already use the family planning delivery system effectively and need only the assurance that the system will continue to function.

During the Reagan administration, the focus of pregnancy prevention interventions at the national level has been strongly directed toward abstention. However, states and cities have moved ahead rapidly in establishing Governor's Commissions and Task Forces that address the problem of teen pregnancy more broadly and seek to propose solutions. Interest is high and many important initiatives are being launched with state dollars in order to expand sex education, increase funding for family planning clinics, start school-based clinics, and develop life options programs. The media have begun to act more responsibly than in the past, airing public service announcements about pregnancy prevention and condom advertisements, and producing shows with content about the risks of early childbearing and the use of contraception. It is not possible to measure how much of the recent response is a reaction to the threat of an AIDS epidemic among adolescents. If pregnancy rates continue to decrease, careful tracking will be required to determine whether to attribute the decline to decreasing sexual activity or better contraceptive use.

The importance of the pregnancy-prevention interventions highlighted in this chapter transcends sexuality issues. Young people who grow up in the richest country in the world have a right to gain the capacity to control their own fertility. Society has an obligation to assure that if this right is used, every young person has equal access to a quality education and career opportunities.

REFERENCES

- Abrahamse A., Morrison P., Waite L. (1987). *Single teenage mothers: spotting susceptible adolescents in advance*. Santa Monica, CA: Population Research Center, The RAND Corporation.
- Academy for Educational Development (1987). Urban middle schools adolescent pregnancy prevention program. Interim report. New York.
- Alan Guttmacher Institute (AGI) (1981). *Teenage pregnancy: the problem that hasn't gone away*. New York.
- Armstrong B. (1986). Involving young men in family planning services. *Planned Parenthood Review*, 6(3), 4-6.
- Carrera M. (1987). Multi-service family life and sex education program. Report from Children's Aid Society. New York.
- Dryfoos J. (1985a). Adapted from *Trends in adolescent pregnancy*. A report to the Mott Foundation, Flint, MI.
- Dryfoos J. (1985b). A time for new thinking about teenage pregnancy. *American Journal of Public Health*, 75, 13-14.
- Dryfoos J. (1985c). Review of programs and services to foster responsible sexual behavior on the part of adolescent boys. Report to the Carnegie Corporation of New York. Summarized by S.R. Edwards (1987). Adolescent boys and sex: Irresponsible or neglected? *Siecus Report*, XV, 1-5.
- Dryfoos J. (1985d). What the U.S. can learn about prevention of teenage pregnancy from other developed countries. *Siecus Report*, XIV(2), 1-7.
- Dryfoos J. (1986). Preventing teen pregnancy: what works. *Planned Parenthood Review*, 6(2), 6-7.
- Dryfoos J., & Klerman, L. (1987). School-based clinics: Their role in helping students meet the 1990 objectives. *Health Education Quarterly* (forthcoming).

- Edelman M.W. (1987). *Adolescent pregnancy: an anatomy of a social problem in search of comprehensive solutions*. Washington, DC: Children's Defense Fund.
- Edwards L., & Arnold-Sheeran K. (1985). Unpublished data from St. Paul presented at Annual Meeting of the American Public Health Association, Washington, DC.
- Edwards L., Steinman M., Arnold K., Hakanson E. (1980). Adolescent pregnancy prevention services in high school clinics. *Family Planning Perspectives*, 12, 6-14.
- Erickson P.I., & Moore D.S. (1986). Sexual activity, birth control use and attitudes towards premarital pregnancy among high school students from three minority groups. Paper presented at Annual Meeting of the American Public Health Association, Las Vegas, NV.
- Harris L., & Associates, Inc. (1986). *American teens speak: sex, myths, TV, and birth control*. New York.
- Hayes C.D. (ed.) (1987). *Risking the future: adolescent sexuality, pregnancy, and childbearing*, Vol. I. Washington, DC: National Academy Press.
- Hofferth S.L. (1987). The effects of programs and policies on adolescent pregnancy and childbearing. In S.L. Hofferth & C.D. Hayes (eds.), *Risking the future: adolescent sexuality, pregnancy, and childbearing*, Vol. II. Washington, DC: National Academy Press.
- Hunter-Geboy C., Peterson L., Casey S., Hardy L., & Renner S. (1985). *Life planning education: a youth development program*. Washington, DC: Center for Population Options.
- Jones E., Forrest J., Goldman N., Henshaw S., Lincoln R., Rosoff J., Westoff C., & Wolf D. (1985). Teenage pregnancy in developed countries: Determinants and policy implications. *Family Planning Perspectives*, 17, 53-63.
- Kalmuss D., Lawton A.I., & Namerow P.B. (In Press). Advantages and disadvantages of pregnancy and contraception: teenagers' perceptions. *Population and Environment*, (Forthcoming).
- Kirby D. (1984). *Sexuality education: an evaluation of programs and their effect*. Santa Cruz, CA: Network Publications.
- Kirby D. (1986). Comprehensive school-based clinics: A growing movement to improve adolescent health and reduce teen-age pregnancy. *Journal of School Health*, 56, 189-291.
- Kitzi J. (1986). Personal communication. Adolescent Resources Council. Kansas City, MO.
- Lovick S., & Wesson W. (1986). *School-based clinics: update*. Houston, TX: Support Center for School-Based Clinics. Center for Population Options.
- Maryland, State of (1987). *Promotion of condom use in Maryland: three-for-free*. Department of Health and Mental Hygiene.
- Mosbacher B. (1986). *Teen pregnancy and school-based health clinics*. Washington, DC: Family Research Council of America.
- Nathanson C.A., Becker M.H. (1985). Client-provider relationships and teen contraceptive use. *American Journal of Public Health*, 75, 33-38.
- NOAPP (National Organization on Adolescent Pregnancy and Parenting, Inc.) (1987). *Network*, (Spring), 14.
- Ounce of Prevention (1987). *Child sexual abuse: a hidden factor in adolescent sexual behavior*. Chicago, IL.
- Pitt E., (1985). Personal communication. National Urban League. New York.
- Pittman K. (1986). *Preventing adolescent pregnancy: what schools can do*. Washington DC: Children's Defense Fund.
- Pittman K., & Govan C. (1986). *Model programs: preventing adolescent pregnancy and building youth self-sufficiency*. Washington, DC: Children's Defense Fund.
- Pratt W., & Hendershoot G. (1984). The use of family planning services by sexually active teenage women. Paper presented at the Annual Meeting of the Population Association of America, Minneapolis.
- Pratt W., Mosher W., Bachrach C., & Horn, M. (1984). Understanding U.S. fertility: Findings from the National Survey of Family Growth, Cycle III. *Population Bulletin* (Population Reference Bureau), 39(5), Table 2.

- Program in Reproductive Health Policy (1983). *San Francisco Bay Area family planning provider survey*. San Francisco, CA: Institute for Health Policy Studies, University of California.
- Public/Private Ventures (1987). *Summer training and education program (STEP)*. Report on the 1986 experience. Philadelphia, PA.
- Public/Private Ventures (1986). *Life skills and opportunities curriculum*. Prepared for the Summer Training and Education Program. Philadelphia, PA.
- Quinn J. (1985). *Preventing adolescent pregnancy: a proposed research and service program developed by Girls' Clubs of America, Inc.* New York: Girls' Clubs.
- Quint J., & Riccio, J. (1985). *The challenge of serving pregnant and parenting teens: lessons from Project Redirection*. New York: Manpower Demonstration Research Corporation.
- Scales P. (1987). Forward to the basics: Life skills education for today's youth. *Family Life Educator* 5, 4-9.
- Schinke S., Gilchrist L. (1984). *Life skills counseling with adolescents*. Baltimore, MD: University Park Press.
- Shea J., Herceg-Baron R., & Furstenberg, Jr. F.F. (1984). Factors associated with adolescent use of family planning clinics. *American Journal of Public Health*, 74, 1227-1230.
- Sonnenstein F., & Pittman K. (1982). Sex education in public schools: a look at the big U.S. cities. Paper presented to the annual meeting of the National Council on Family Relations, Washington, DC.
- Tereskiewicz L., Brindis C. (1986). School-based clinics offer health care to teens. *Youth Law News*, VII(5), 1-6.
- Torres A., & Forrest J.D. (1985). Family planning clinic services in the United States, 1983. *Family Planning Perspectives*, 17 30-35.
- U.S. Conference of Mayors (1987). *AIDS Information Exchange*, 4(1). Washington, DC.
- Zabin L., Hirsch E., Smith E., Streett R., & Hardy J. (1986). Evaluation of a pregnancy prevention program for urban teenagers. *Family Planning Perspectives*, 18, 119-126.
- Zelnik M., & Kantner J. (1980). Sexual activity, contraceptive use, and pregnancy among metropolitan-area teenagers. *Family Planning Perspectives*, 12, 230-237.