



Adolescent Health Research Updates

Supplement to the Adolescent Health Plan

No 4 — May 1997

Research Updates are periodically distributed from the Alaska Adolescent Health Advisory Committee (AHAC). AHAC believes that effective planning for the health of Alaska's adolescents should have a strong scientific basis. *Alaska's Adolescents: A Plan for the Future*, the 1995 publication by AHAC, was the product of the committee's review of research related to adolescent health at that time. In order to stay current with new information, AHAC continually reviews research dealing with a broad range of adolescent health topics. Summary reports are prepared by AHAC members for distribution to people interested in teen health, especially those who use *Alaska's Adolescents* as a guide for their efforts in the field. Feedback about the usefulness of these updates is welcomed.

Sexuality Education Program Effectiveness

Sexual activity among adolescents has been identified as a significant public health problem in this country for the past thirty years. In the 1970's, we were most concerned with the high incidence of teenage pregnancy and "VD" (venereal disease.) The 1980's brought awareness of HIV/AIDS infection. Today the problems and lifelong consequences of too-early sexual activity in teens (unintended pregnancies, abortions, unprepared parenthood, HIV and other sexually transmitted diseases, financial dependence and emotional problems) affect and deeply concern us all, individually and as members of communities.

The "Youth Risk Behavior Survey: Alaska Report 1995"¹ provides valuable data related to sexual behavior among Alaskan teens:

- Nearly half (47%) of high school students reported that they have had sexual intercourse at least once.
- Nearly one-quarter (23%) of Alaska middle school students have been sexually active.
- Almost one in ten (9%) of all middle school students have had sexual intercourse before they reached 12 years of age.

Alaska's teens are at risk, and because the consequences reach well beyond youth and their own families, we are all at risk for the negative effects of their sexual behavior. What can we do to help young people make better, less risky, choices regarding their sexual behaviors? What activities might we invest in that would help our teens delay sexual involvement until they have the maturity to form healthy, sustaining relationships of adulthood?

Although sexuality—what it means to be male or female— is a complex and broad subject indeed, and "sexuality education" in some cases covers a very broad range of topics, almost all sexuality education programs, past and present, have addressed teen sexual behaviors and attempted to delay sexual involvement among teens. This *Research Update* focuses on programs with this aim, and will use the term "sexuality education", recognizing that sexuality education includes many more topics than sexual behavior alone.

History

Formal sexuality education programs have been a part of our education system in the United States for several decades.² There have been four "generations" of change in sexuality education approaches over the past thirty years.³ An understanding of these four generations are helpful in order to consider where we are today, and where should we go next.

The first generation of sexuality education programs occurred in the 1970's in response to the high rates of teenage pregnancy. These programs were "fact based" and rooted in the premise that if teens had a greater knowledge about reproductive anatomy, sexual intercourse, pregnancy, the likelihood of pregnancy, the consequences of child bearing, and methods of contraception, they would choose to avoid unprotected intercourse.

The second generation evolved from the first, largely in response to HIV/AIDS. These programs included substantial information and devoted more attention to values clarification, general decision making, and communication skills.

Evaluations of curricula based on these first two approaches have documented that while they did increase knowledge, they did not seem to produce much of a reduction in the risk-taking behaviors of teens.³

The third generation of programs did not evolve from the earlier programs, but developed in reaction and opposition to them. Called "abstinence-only" approaches, they are supported by a morality based belief that teens should not engage in sexual activity until marriage.

Today's sexuality education curricula represent a mixture of the lessons learned in the first three. The main difference between these programs and those that preceded them is that they are based on theoretical approaches demonstrated to be effective in other health areas, such as tobacco and substance abuse. These "abstinence-plus" curricula emphasize: 1) the positive aspects of abstinence and delayed sexual activity for teens—it is good to be abstinent as teens, and 2) the notion that all teens must practice effective contraception if they become sexually active.

There has not been a distinct transition from one generation of sexuality education to the next. In fact, both the third and fourth type of approaches are employed today. Therefore, it is important to clarify the differences between them.

Abstinence-only: *Programs and curricula that emphasize abstinence as the only solution to teenage pregnancy and the other health risks (STD, etc.) of too-early sexual activity. Other preventive methods such as condoms and contraceptives are not discussed. Most abstinence-only programs stress marriage as the only place in which sexual behavior should be expressed. Popular abstinence-only programs include: "Sex Respect", "Teen Aid" "Project Taking Charge", and "Success Express".*

Abstinence-plus: *Programs that emphasize abstinence as the healthiest choice for adolescent pregnancy and disease prevention, and explore other aspects of pregnancy/disease prevention, including delaying intercourse, strengthening resistance and communication skills, and using contraception. Broadly used abstinence-plus programs include: "Postponing Sexual Involvement", "Reducing the Risk", "School/Community Program for Sexual Risk Reduction in Teens", and "Teen Talk".*

Program Effectiveness

Sexuality education programs vary greatly in format, scope and content. Programs have been implemented in schools, churches, clubs, health clinics, family planning and STD clinics, and in other community agencies. There have been substantial efforts over the past few years to pull together evaluation information on a number of programs and curricula currently being used across the country.^{3,4,5,6,7,8,9,10}

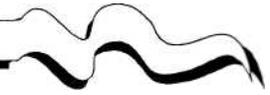
In a research review¹⁰ published in March 1997 by Douglas Kirby, over 4,000 evaluation reports spanning several decades were reviewed to assess the ability of sexuality education programs to alter teen behavior. Kirby offered the following conclusions, which are highly consistent with other evaluation research:

No abstinence-only educational program has been found to delay the onset of intercourse, but very few such programs have been well evaluated, and, thus, there is little evidence to determine whether or not abstinence-only programs can delay intercourse.^{7,8,10,11}

Sexuality and HIV education programs that include discussion of condoms and contraception do not increase sexual intercourse, either by hastening the onset of intercourse, increasing the frequency of intercourse, or increasing the number of sex partners.^{3-4,5,7,8,9,10}

Some programs have not measurably reduced unprotected sexual intercourse, either by delaying the onset of intercourse, reducing the frequency of intercourse, or increasing the use of contraceptives. However, several studies with credible evidence found desirable effects upon delay in the initiation of intercourse, frequency of intercourse, number of sex partners, use of condoms, or use of contraception more generally. However, few studies measured and found long-term effects.^{3,4-5,7,8,9,10}

Effective curricula shared a number of characteristics, which may be linked to their success, while the less successful or ineffective curricula lacked one or more of these characteristics. The Centers for Disease Control and Prevention (CDC) commissioned a research team to review the studies of school-based programs designed to reduce sexual risk-taking behavior and to assess the program's impact on actual behavior. Effective programs were characterized in their findings as those that:^{5,10}



- included a narrow focus on reducing sexual risk-taking behaviors that may lead to HIV/STD infection or unintended pregnancy;
- used social learning theories, social influence theories or theories of reasoned action as a foundation for program development;
- either lasted at least 14 hours or taught students in small groups and used small group exercises to increase the efficiency of the time spent;
- employed a variety of teaching methods designed to involve the participants and have them personalize the information;
- provided basic, accurate information about the risks of unprotected intercourse and methods of avoiding unprotected intercourse;
- included activities that address social pressures on sexual behaviors;
- reinforced clear and appropriate values and messages in order to strengthen individual values and group norms against unprotected sex;
- provided modeling and practice of communication and negotiation skills;
- provided training for individuals implementing the program.

In general, the most successful of the evaluated programs (programs with demonstrated behavior change) incorporate expertise and assistance from multiple community agencies and resources, parents, health care professionals, trained teaching staff, and peer role models. However, even with the more successful programs, the effects have not been measured beyond 18 months and reductions in the birth and pregnancy rates remain largely unknown due to difficulties in measurement.²

Summary

Policy makers, program providers, communities, tax payers and parents are all looking for effective strategies to lower the rates of teen pregnancy and the other negative consequences of early sexual activity among our youth. The fact that a few sexuality education programs have been able to demonstrate some behavior change in adolescent sexual activity is encouraging. Sexuality education curricula based on scientific theory, built on knowledge gained from past models, and combined with rigorous evaluation offer promise.

Before limited resources are committed, Alaskans wanting to implement a sexuality education program would be wise to closely examine any program or curricula proposed to assure that the outcomes claimed have been clearly demonstrated in soundly conducted evaluations. Additionally, programs to alter teen sexual behavior must be seen as only part of the solution, given that the effects are so tenuous. A sound teen pregnancy prevention and/or teen sexual health initiative will have sexuality education programs as part of a much broader campaign that address risk and protective factors of adolescent behavior.

Alaska's adolescents are of great value to us, as our future workers, parents, voters, citizens. They certainly deserve our best investment!

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Adolescent Health Research Updates are a product of the Adolescent Health Advisory Committee and are published by the Alaska Department of Health and Social Services; Division of Public Health; Section of Maternal, Child, and Family Health, 1231 Gambell Street, Anchorage, AK 99501, (907) 269-3425 (fax) 269-3432.

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References

1. *Youth Risk Behavior Survey: Alaska Report, 1995*. Alaska Department of Health & Social Services, Alaska Department of Education, Alaska Board of Education, February 1996.
2. Mauldon, Jane and Kristin Luker. "The Effects of Contraceptive Education On Method Use at First Intercourse" *Family Planning Perspectives*, Vol 28:19-24 & 41, 1996.
3. Kirby, Douglas, Richard Barth, Nancy Leland and Joyce Fetro. "Reducing the Risk: Impact of a New Curriculum on Sexual Risk-Taking" *Family Planning Perspectives*, Vol 23:6, 1991.
4. Frost, Jennifer J. and Jacqueline Darroch Forrest. "Understanding the Impact of Effective Teenage Pregnancy Prevention Programs" *Family Planning Perspectives*, Vol 27:188-195, 1995.
5. "School-Based Programs to Reduce Sexual Risk Behaviors: A Review of Effectiveness." *Public Health Report*, May-June 1994.
6. *School Health: Findings From Evaluated Programs*. Office of Disease Prevention & Health Promotion, Public Health Service, U.S. Department of Health & Human Services, Washington D.C., 1993.
7. Brown, Sarah S, & Leon Eisenberg, editors. *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families*. National Academy Press, Washington, D.C., 1995.
8. Moore, Kristin A., Barbara W. Sugland, Connie Blumenthal, Dana Gleib and Nancy Snyder. *Adolescent Pregnancy Prevention Programs: Interventions and Evaluations*. Child Trends, Inc., June 1995.
9. Card, Josefina J., Starr Niego, Alisa Mallari and William Farrell. "The Program Archive on Sexuality, Health & Adolescence: Promising Prevention Programs in a Box". *Family Planning Perspectives*, Vol 28:210-220, 1996.
10. Kirby, Douglas, *No Easy Answers: Research Findings on Programs to Reduce Teen Pregnancy*. National Campaign to Prevent Teen Pregnancy, Task Force on Effective Programs and Research. Washington, D.C., March 1997.
11. Brown, Sarah. "Evaluating Sex Education and Abstinence Programs". *American Enterprise Institute Conference*. October, 1996.

Additional Resources

Adolescent Pregnancy Prevention Programs. Department of Adolescent Health Care, The American College of Obstetricians and Gynecologists, 1995.

Blair, Jill F. & Karen Hein, "Public Policy Implications of HIV/AIDS in Adolescents" *The Future of Children: Critical Health Issues for Children and Youth*, Winter 1994, 4:3, 73-93.

References

1. *Youth Risk Behavior Survey: Alaska Report, 1995*. Alaska Department of Health & Social Services, Alaska Department of Education, Alaska Board of Education, February 1996.
2. Mauldon, Jane and Kristin Luker. "The Effects of Contraceptive Education On Method Use at First Intercourse" *Family Planning Perspectives*, Vol 28:19-24 & 41, 1996.
8. Kirby, Douglas, Richard Barth, Nancy Leland and Joyce Fetro. "Reducing the Risk: Impact of a New Curriculum on Sexual Risk-Taking" *Family Planning Perspectives*, Vol 23:6, 1991.
9. Frost, Jennifer J. and Jacqueline Darroch Forrest. "Understanding the Impact of Effective Teenage Pregnancy Prevention Programs" *Family Planning Perspectives*, Vol 27:188-195, 1995.
10. "School-Based Programs to Reduce Sexual Risk Behaviors: A Review of Effectiveness." *Public Health Report*, May-June 1994.
11. *School Health: Findings From Evaluated Programs*. Office of Disease Prevention & Health Promotion, Public Health Service, U.S. Department of Health & Human Services, Washington D.C., 1993.
12. Brown, Sarah S, & Leon Eisenberg, editors. *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families*. National Academy Press, Washington, D.C., 1995.
12. Moore, Kristin A., Barbara W. Sugland, Connie Blumenthal, Dana Gleib and Nancy Snyder. *Adolescent Pregnancy Prevention Programs: Interventions and Evaluations*. Child Trends, Inc., June 1995.
13. Card, Josefina J., Starr Niego, Alisa Mallari and William Farrell. "The Program Archive on Sexuality, Health & Adolescence: Promising Prevention Programs in a Box". *Family Planning Perspectives*, Vol 28:210-220, 1996.
14. Kirby, Douglas, *No Easy Answers: Research Findings on Programs to Reduce Teen Pregnancy*. National Campaign to Prevent Teen Pregnancy, Task Force on Effective Programs and Research. Washington, D.C., March 1997.
15. Brown, Sarah. "Evaluating Sex Education and Abstinence Programs". *American Enterprise Institute Conference*. October, 1996.

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