

Intervention Strategies that Work for Youth

Summary of FOCUS on Young Adults
End of Program Report





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Youth Issues Paper 1

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Introduction

What kinds of programs work in their attempts to promote youth reproductive health and HIV prevention? What factors make some programs successful and others less so? Answers to these questions are critical, particularly in light of data that show that most young people start having sex before age 20, that relatively few young people use reliable contraception, and that up to half of all new HIV/AIDS infections occur in people under age 25 in many parts of the world.

Intervention Strategies that Work for Youth reports on programs that have helped young people in developing countries practice healthier behaviors, including delaying sexual debut, reducing the number of sexual partners, and increasing the use of methods for preventing pregnancy and sexually transmitted infections (STIs), including HIV/AIDS. It is addressed to program planners, administrators, policy-makers, and donors interested in developing evidence-based strategies and programs to promote better health for youth.

Chapter 1 provides some context about the lives of young people around the world and how profoundly gender and cultural norms affect their health. Chapter 2 summarizes the research process used in the FOCUS report. Chapters 3, 4, and 5 report the key research findings and programmatic efforts in three types of interventions: creating a supportive environment for young people; improving reproductive health knowledge, attitudes, and behaviors; and increasing young people's use of reproductive health services. Chapter 6 presents recommendations based on this research.

This paper highlights results from 39 evaluations of program interventions for youth in developing countries. The FOCUS on Young Adults program identified these as having sound methodology and important results. These might be considered the first generation of such studies in the developing world. The next generation of programs and studies will put relatively more emphasis on promoting abstinence and delayed sex, reducing the number of partners, reaching younger youth, and involving parents. FOCUS also summarized other studies and project experiences that offered supportive but less rigorous research findings and described key operational issues, emphasizing capacity building, scaling-up and sustainability, and youth involvement.

This is the first in a new series of Youth Issues Working Papers to be produced by YouthNet on various topics. Part of YouthNet's mandate is to make the FOCUS materials as widely available as possible, including publication in multiple languages, and we are pleased to further disseminate work from the FOCUS program in this first working paper. We hope it will be useful to your work and help improve reproductive health and prevent HIV/AIDS among young people.

— Dr. Nancy E. Williamson, YouthNet Program Director

Chapter 1. Context of Young People's Lives

More than a quarter of the world's population — 1.7 billion people — is between the ages of 10 and 24, and the numbers are growing. Adolescence is a period of dynamic change representing the transition from childhood to adulthood and is marked by emotional, physical, and sexual maturation. Habits that are formed during adolescence have major repercussions in adulthood.

Globally, puberty is occurring earlier for both boys and girls, and the age at which people marry is rising. This leaves a widening gap of time during which young adults can potentially engage in premarital sexual activity. Most young people throughout the world will engage in sexual intercourse by age 20, whether unmarried or married.

Although rates of adolescent childbearing are declining in most countries, more than 13 million adolescent girls give birth each year in the developing world, and many of these births are unplanned. Societies that place an emphasis on fertility encourage women to bear children at a young age. Most sexually active young people do not use contraception, and even those who do, experience higher contraceptive failure and are more likely to discontinue use than older people. While condoms are a key contraceptive method for youth, many young people view condoms unfavorably because they are often seen as a symbol of distrust and are thought to reduce intimacy and sexual pleasure.

Young women as well as their children face serious health risks from early pregnancy and childbearing. Young, unmarried women are more likely than older women to have clandestine or illegal abortions for legal, social, and financial reasons. Early motherhood can cut short a girl's education and increase poverty.

Gender norms profoundly affect adolescence. For a substantial minority of young women — and some young men — early sexual activity is unwanted or coerced. Some poor, young women exchange sex for money or other gifts from older men, especially in sub-Saharan Africa. Young women are often expected to be virgins until they are married — and to marry early — whereas, in many places, young men are encouraged to be sexually active and to gain sexual experience before marriage. This behavior puts adolescent boys at significant risk for problems related to healthy development. Societal norms that expect men to be dominant and aggressive can be unhealthy, for both men and women.

Education, family, and culture also influence young people's reproductive health and risk for HIV/AIDS. On average, girls who are better educated are less likely to be infected with HIV, more likely to postpone childbearing, and more likely to have smaller, healthier families. Urbanization and modernization have had a mixed effect on the health of young people. Youth in urban areas are more influenced by factors outside the family and community, which may contribute to more unsafe sexual



practices. However, some of these influences have also fostered better use of protective reproductive health care and less risky behavior. While some traditional practices can be positive, such as older relatives providing young people with sexuality education, others can have a negative impact, such as female genital cutting, which jeopardizes girls' health. Some adolescents have lost connection with their families and live on the margins of society, often on the

Girls in school are significantly less likely to have experienced sexual intercourse than girls who are not attending school.

street, making them especially vulnerable to sexual exploitation.

The factors discussed here contribute to making young people especially vulner-

able to unintended pregnancies and STIs, including HIV/AIDS. In many areas, up to half of all new infections of HIV occur among those under age 25, with girls at particular risk of infection.

Risks and Protective Factors

Emerging evidence from the United States and developing countries indicates that a number of factors influence adolescent sexual and risk-taking behaviors. These factors can increase risk, offer more protection for youth, or sometimes function in both ways. The factors fall into the following categories:

- Individual characteristics of young people, including knowledge, attitudes, beliefs, values, motivations, and experiences
- Peers and sexual partners with whom they interact
- Families and adults in the community
- Institutions such as schools, workplaces, and religious organizations that support youth
- Communities through which social expectations about gender norms, sexual behavior, marriage, and childbearing are transmitted

To broaden knowledge of the influence of these risk and protective factors, FOCUS carried out survey research in 10 countries: Brazil, Chile, Ghana, Jamaica, Paraguay, Peru, South Africa, Togo, Zambia, and Zimbabwe. From this research, FOCUS identified key influences that

affect sexual debut and condom use, and suggested programmatic responses.

Impact on Sexual Debut

Seven conclusions about factors affecting sexual debut emerged:

- In most countries, adolescent boys start having sex earlier than girls. Programs should address sexual norms and behaviors of boys at an earlier age and through social norms.
- Girls in school are significantly less likely to have experienced sexual intercourse than girls who are not attending school. While many factors affect girls' sexual behavior, national policies and community norms that encourage education for girls may contribute to the factors that delay sexual debut.
- Higher levels of knowledge about reproductive health were not associated with higher levels of sexual activity in the two country surveys that looked at this issue. Four of the studies discussed in Chapter 4 found that school-based reproductive health or HIV/AIDS education resulted in delayed sexual debut. These findings indicate that education programs on reproductive health should be strengthened and they do not increase sexual activity.
- Young people's reported experiences with other risk behaviors such as smoking, drinking, or using illegal drugs are highly correlated with having had sexual intercourse, even when controlling for age. Reproductive health programs might be more effective if linked with programs that encourage other healthy behaviors among youth.
- The perception that friends are sexually active and experienced appears to influence young people's behavior. As discussed in Chapter 4, peer promoters may be more successful if they have a profile similar in sexual experience to the target audience.
- Family poverty level is strongly associated with earlier sexual debut for girls, but is less strongly associated for boys. Health educators should collaborate with programs directed at

The terms *young people*, *young adults*, *youth*, and *adolescents* are used interchangeably in this paper. All these terms refer to people 10 to 24 years of age, unless otherwise specified.

poverty reduction by adding components on youth reproductive health.

- Youth who have a positive, sustained relationship with an adult such as a teacher may be less likely to have experienced sexual intercourse. The research is sparse on this issue but does suggest that adult mentoring programs may be useful. However, the type of adult mentor — teacher, scout leader, religious leader, etc. — may affect the results. Programs should be monitored carefully to assess the effects of mentoring.

Impact on Condom Use

Three conclusions about factors affecting condom use emerged:

- Boys are almost universally more likely to report using condoms during their most recent sexual experience than are girls. Programs should encourage boys to use condoms consistently and help girls gain negotiation skills to use condoms.
- A potentially strong influence on young people appears to be positive attitudes toward condom use, although these attitudes were measured in only two countries in the case of boys, and one in the case of girls. Programs should work among sexually active youth to improve attitudes toward condom use, perception of risk, and knowledge of correct use.
- Communication with peers and sexual partners about sexuality appears to be an important positive influence on condom use, particularly for boys. While the causal effect is not clear — that is, whether the decision to use condoms results in better communication or vice versa — greater communication with sexual partners and peers appears to have a positive association with condom use.



Chapter 2. Summary of the Research Process

The FOCUS assessment of the effectiveness of youth reproductive health and HIV/AIDS prevention programs identified 39 studies with relatively strong research designs that involved an intervention and control group. The criterion for inclusion in the group of studies was the design of the evaluation, not the strength of the overall intervention itself or the quality of the program implementation. While the number of such evaluations has increased in recent years, the evidence base in this field is still small.

Programs appear to be more effective in influencing knowledge and attitudes than in changing behaviors.

The assessment also included supportive and anecdotal evidence. Supportive studies provided statistical evidence for changes in reproductive health outcomes in particular programs but lacked a control group. These studies do not account for the possibility that something other than the program itself could cause the change in outcome indicators. Anecdotal evidence from observations, focus groups, or case studies can provide valuable insight into youth behavior and program operations but, taken alone, cannot lead to valid conclusions about program impact. All study designs have some limitations: those with intervention and control groups, quantitative studies without a control group, and anecdotal or qualitative evidence. All three types, however, are useful in evaluating programs and policies.

The conclusions in the FOCUS report (see Chapter 6) give the most weight to the 39 studies with relatively strong evidence. Table 1 summarizes the findings of these studies according to type of program and significant impact in knowledge, attitudes, and key behaviors. The review of these studies led to three broad findings:



Table 1. Studies with Strong Research Design (1989–2001): Impact on Knowledge, Attitudes, and Behaviors

Type of Program	Number of Studies	Improved Knowledge and Attitudes †	Improved At Least One Behavior Among Some Participants †
All Programs	39	32/35	22/29
School	21	17/19	9/14
HIV/AIDS education	13	11/12	6/7
General RH* education	8	6/7	3/7
Mass Media	6	5/6	5/5
Media only	1	1/1	1/1
Media with social marketing	5	4/5	4/4
Community	4	4/4	4/4
Youth development	1	1/1	1/1
Peer education	3	3/3	3/3
Workplace	4	4/4	2/2
Health Facility	4	2/2	2/4
Youth-friendly services	3	1/1	2/3
Youth center	1	1/1	0/1

* RH is reproductive health.

† Number showing significant impact/total number.

- Programs appear to be more effective in influencing knowledge and attitudes than in changing behaviors. This result likely reflects the difficulty of changing behaviors that are influenced by a large number of factors, many of which go beyond knowledge and attitudes related to reproductive health.
- There are not enough rigorous evaluations to draw firm conclusions about program strategies. Some promising approaches have not yet been rigorously evaluated in developing countries. Of the stronger studies, most have focused on school interventions; only a few have assessed the use of health services; and none has examined the impact on behaviors of creating a supportive environment. Little evidence is available on long-term effects on behaviors, or on scaling-up and evaluating long-term programs.
- Because of the small number of rigorous evaluations conducted, variations in the period of observation and behaviors studied, and lack of study replication in multiple settings, it is not possible to be certain that particular program models are more effective than others.

The criterion for inclusion in the group [of studies] was the design of the evaluation, not the strength of the overall intervention itself or the quality of the program implementation.

Chapter 3. Creating a Supportive Environment

Policies, social norms, and cultural practices shape the risk and protective factors that affect young adults' reproductive health.

Policies

Policies include formal directives such as constitutional provisions, laws, or regulations, as well as standards of practice and formal guidelines. Policies can overcome barriers to serving the reproductive health needs of youth by authorizing delivery of needed services and by improving young peoples' access to quality information and services.



About 100 countries have broad national youth policies and youth coordination mechanisms. A few of these address reproductive health issues for youth, including incorporating sexuality education into the schools. International conventions and statements sponsored by the United Nations have supported such policies, but a lack of political will and difficulties in coordinating policies across governmental sectors have often slowed the process of development and implementation.

More information is needed on how policies are actually implemented and whether they have a positive impact on young adult reproductive health. Programs that seek to improve policies have not been rigorously evaluated. However, findings from surveys and program experiences regarding policies have led to several important lessons learned.

- In developing and implementing policies, countries have coordinated youth activities across sectors, including sports and recreation, labor, justice, health, and education. Experiences indicate that national and local multi-sectoral groups can successfully coordinate efforts if one sector has clear credibility and authority to lead. Technical assistance and funding can provide the impetus to support national policy implementation in stages. In Bolivia, for example, technical assistance provided to the Ministry of Health helped develop and implement stronger national service delivery policies for youth.
- Local leaders and advocacy groups draw on the cultural strengths of a particular country. Influential leaders and youth-focused advocacy coalitions can help persuade high-level decision-makers to support positive youth policies and help address controversy. Youth networks in Kenya, South Africa, Bolivia, and the Dominican Republic have helped call attention to youth and HIV/AIDS by working through national commissions, ministries, and legislative lobbying coalitions.
- Involving youth directly in planning and implementing policies is important, since young people are among the most effective advocates for change. Through media appearances, meetings with government officials, and other strategies, youth in Mali, Brazil, and other countries have demonstrated the value in having young people speak out on HIV/AIDS and reproductive health issues.

- Providing demographic projections of alternative policy scenarios, data on costs and benefits of youth programs, and information on the threat that HIV/AIDS poses to youth can have an impact on leaders.
- Leveraging the resources of international donors can help focus public and private attention on the need to invest in adolescent reproductive health programs.

Social Norms and Cultural Practices

Norms are appropriate, expected rules of behavior, and the positive or negative sanctions, costs, and benefits associated with following or violating those rules. The social context in which young people grow up and become adults influences their choices and their reproductive health behaviors.

Norms that may lead to negative reproductive health outcomes are gender discrimination, a low value placed on education, restrictions on girls' mobility, promotion of early sexual activity, stigma regarding the use of condoms, and cultural expectations about age of marriage and having children. Parents' relationships with their children can influence the impact of social norms.

Programs have used several strategies to try to change social norms and cultural practices. The primary approaches involve mass media, person-to-person communication, influence of traditional and religious leaders, and participatory learning and action — a needs assessment technique that allows the targeted audience to help shape action plans, thus tapping the creativity of youth in the process.

One study in Paraguay involving the media increased the proportion of youth who believe that girls act responsibly when they ask their sexual partners to use condoms (see Magnani, Table 5). Person-to-person communication through community mobilization campaigns has been effective, according to experiences from a Bangladesh program that used a series of community meetings to discuss youth reproductive health concerns. Efforts to eliminate genital cutting of young girls in Africa have been successful when they have engaged the keepers of those traditions as active partners. Projects in Zambia and Cambodia suggest that a participatory learning and action approach to a needs appraisal helped adult health workers overcome stereotypes of youth and allowed a broader array of program responses.

Media interventions and community mobilization activities have the potential to influence social norms and change some individual beliefs related to young adult reproductive health. However, more attention should be paid to making macro-level changes in norms through national-level information, education, and communication campaigns.

Involving youth directly in planning and implementing policies is important, since young people are among the most effective advocates for change.

Chapter 4. Improving Knowledge, Attitudes, and Behaviors

In making the transition from childhood to adulthood, adolescents need to acquire the knowledge and develop the attitudes and skills to help them participate as members of a household, neighborhood, and larger community. They must gain experience in making decisions based on reason, in assessing risks and consequences of decisions and actions, and in interacting and communicating with peers, sexual partners, and adults.



In recognition of the wide range of risk and protective factors that influence young people's reproductive health, programs for adolescents can focus directly on sexuality and sexual behaviors as well as on nonsexual contextual factors. The following discussion of programs that may work to improve youth knowledge, attitudes, skills, and behaviors is organized according to four program settings: schools (including those linked to clinics), mass media, communities, and the workplace.

School Programs

School programs can potentially reach a large number of adolescents in countries where school enrollment rates are high. (School attendance is generally rising around the world.) The structured school environment is conducive to sending educational messages to youth, offering a potential captive audience for sexuality and reproductive health programs.

Twenty-one school programs in developing countries have undergone relatively strong evaluations, including 13 focused on HIV/AIDS/STIs and eight focused on general reproductive health. Nearly all of the school programs studied had a positive influence on reproductive health knowledge and attitudes. Of the 14 studies that evaluated changes in behaviors, nine found improvements in at least one behavior (see Table 1). However, changes were generally short-term, and the long-term effects on behavior are less certain.

Many issues relating to sexuality education still need to be resolved. Programs vary widely in what is taught, at

Terminology Used in Tables 2 through 8

Design. Experimental designs are those in which study subjects are assigned to intervention and control groups at random. Quasi-experimental designs are those in which a control group is chosen through non-random methods. In quasi-experimental studies, the control groups are chosen to be as similar as possible to the intervention groups, often by matching characteristics considered to be the important antecedents of the outcomes sought by the program.

Findings. The findings shown are statistically significant and desirable differences found when comparing baseline data with post-intervention data.

AIDS. The phrase "AIDS" is used when referring to HIV/AIDS.

Table 2. Schools: HIV/AIDS Sexuality Education Programs that Measured Behavior

Year Lead Author Country	Sample Size Population	Design (% lost to follow-up, if available)	Intervention (Length and intensity, if available)	Findings
2000 Harvey South Africa	N=1,080 M/F, 13-29 yr	Experimental, longitudinal, 14 schools, pre/posttest (35%)	Three-phase drama-in-education for teachers, nurses, students	Increased condom use; improved attitudes toward people with AIDS
1999 Fawole Nigeria	N=433 M/F, mean ages: intervention 17.6 yr, control 17.8 yr	Experimental, longitudinal, 4 schools, random student selection, pre/posttest (4%)	Lecture, film, role-play, songs, debate, stories, essays (6 weekly sessions, 2-6 hr each)	Reduced number of sexual partners and proportion sexually active; increased knowledge of AIDS; improved attitudes toward people with AIDS
1999/1998 Fitzgerald/Stanton Namibia	N=515 M/F, 15-18 yr	Experimental, longitudinal, 10 schools, random student selection, pre/3 posttests (30%)	Adapted from U.S. program, Focus on Kids (40-hr facilitator training; 14 student sessions, 2 hr/7 wk)	Increased delay of sexual initiation, males' condom use, females' intention of using condoms, belief in ability to put on condom
1997 Antunes Brazil	N=394 M/F, 18-25 yr (Work full time and attend school)	Experimental, longitudinal, 4 schools, pre/2 posttests (50%)	Content based on AIDS risk-reduction model of behavioral change (four 3-hr sessions)	Reduced females' risky behaviors and improved communication with partners
1994 Thongkrajai Thailand	N=2,909 M/F, age not reported	Quasi-experimental, longitudinal, 3 schools, pre/posttest (19%)	Trained peer IEC* counselors to make clinic referrals and provide learning environment	No changes found
1991 Wilson Zimbabwe	N=84 M/F, mean age 23.1 yr (teachers and students)	Experimental, longitudinal, pre/posttest (0%)	Condom demonstration, video, role-play, and psychodrama (one 90-min session in school)	Reduced number of partners, unprotected sex acts in last month; increased self-efficacy, knowledge, and correct use of condoms
(Unpublished) Coplan Nigeria	Not reported	Quasi-experimental, 12 schools, pre/posttest	Clinic providers linked to peer educators, STI identification, disclosure, and prevention content	Increased condom use, knowledge and treatment of STIs, self-reported STI symptoms, visits to providers

*IEC is information, education, and communication.

what age, in what setting, by whom, and in what manner. Often, funding is minimal, teacher training is lacking, involvement of parents and youth is low, and programs are offered only in high school after many youth are already sexually active. Despite these problems, school-based programs offer a chance to reach large numbers of young people and their teachers, as well as an opportunity to institutionalize sexuality education and broaden its impact when ministries of education make it official policy.

HIV/STI programs appeared overall to have more impact on behavior than did general reproductive health programs. Table 2 summarizes the seven HIV/STI programs that measured behavioral change. Older youth were the focus of most of these programs, including an evening school in Brazil for those working during the day and a school for student teachers in Zimbabwe. However, a drama-based program in South Africa reached those as young as 13 years of age. A program in Namibia adapted a U.S. curriculum called Focus on Kids. The behavior

changes noted in these studies included fewer episodes of unprotected sex among females, delay in first sex for girls, increased condom use, and reduced number of sexual partners.

Table 3 describes the six HIV/STI programs that did not measure behavioral change. Many of these found changes in knowledge and attitudes. Most identified ways programs needed to be improved, such as more teacher training and attention to gender issues.

Of the eight general reproductive health programs evaluated rigorously, four demonstrated positive behavioral impacts (see Table 4). A carefully monitored program among boys and girls ages 11 to 14 in Jamaica, for example, found among sexually active youth an increase in condom use in the short term but not in the long term. Programs in Chile, Mexico, and Uganda also included younger teenagers and found a decrease in sexual activity and increased use of contraceptives among those sexually active. The other four programs used various

Table 3. Schools: HIV/AIDS Sexuality Education Programs that Did Not Measure Behavior

Year Lead Author Country	Sample Size Population	Design (% lost to follow-up, if available)	Intervention (Length and intensity)	Findings
1997/1994 Klepp/Klepp Tanzania	N=1,063 M/F, mean age 13.5 yr	Experimental, longitudinal, randomized, community trial, pre/posttest (23%)	Theory-based <i>ngao</i> (shield) education (20 hr over 2-3 mo)	Increased knowledge and communication about AIDS; improved attitudes toward people with AIDS; reduced intention to have sex
1995 Abolfotouch Saudi Arabia	N=838 M only, 14-19 yr	Quasi-experimental, 3 intervention/3 control schools randomly chosen, posttest only	One lecture about AIDS given on World AIDS Day 1992	Increased fear of getting AIDS
1995 Aplasca Philippines	N=845 M/F, mean age 14 yr	Quasi-experimental, longitudinal, cluster- randomized, 1 class per grade, pre/2 posttests (5%)	Cognitive learning theory-based (2-day teacher training; 12 bi- weekly student classes, each 40 min)	Increased knowledge of AIDS; agreement that sex should be delayed; improved HIV-related attitudes
1995 Munodawafa Zimbabwe	N=285 M/F, grades 9-10	Quasi-experimental, 3 intervention/2 nonequivalent control schools, linked pre/posttest (0%)	Student nurses trained as instructors (5 hr/wk for 6 wk nurse training; student sessions 80 min/wk for 7 wk)	Increased knowledge of 14 out of 24 items relating to STIs, AIDS, drugs, and alcohol
1994 Caceres Peru	N=1,213 M/F, 11-12 yr (primarily Catholic)	Quasi-experimental, longitudinal, randomized youth in 14 schools, pre/ posttest (33%)	Theory-based curriculum (15-hr teacher training; student sessions 2 hr/wk for 7 wk)	Increased attitudes (condoms, sexuality, contraception), knowledge of AIDS and sex, females' self-efficacy; reduced discrimination, males' <i>machismo</i>
1994 Kuhn South Africa	N=567 (low SES*) M/F, 12-30 yr	Quasi-experimental, 2 cross- sectional samples, pre/posttest (15%)	Participatory methods to design and implement program (2 wk of intense focus on AIDS)	Increased communication and knowledge about AIDS, improved attitudes toward people with AIDS

*SES is socio-economic status.

approaches, such as a formal curriculum in Nigeria and links between schools and clinics in Brazil. Findings included increases in knowledge but only limited use of clinic services among younger youth.

Mass Media/Social Marketing

Mass media are increasingly important in most young people's lives. These influential channels

can inform youth and the community at large about sexuality and reproductive health and can shape their attitudes, beliefs, and behaviors.

A review of six rigorously designed studies and other supportive studies concluded that mass media are most effective when combined with other, complementary activities such as educational materials, entertainment, and reproduc-

Table 4. Schools: Reproductive Health Education Programs

Year Lead Author Country	Sample Size Population	Design (% lost to follow-up)	Intervention (Length and intensity, if available)	Findings
2000/1998 Eggleston/Jackson Jamaica	N=945 M/F, 11-14 yr	Quasi-experimental, longitudinal, 10 schools, pre/2 posttests (24%)	Family life education curriculum (one session/wk for 1 yr)	Increased condom use; improved attitudes about sex, parenthood, and pregnancy prevention (9 mo only)
2000 Gaffikin Brazil	N=4,777 M/F (ages not reported)	Pre/posttest matched control group, 12 schools (72%)	Clinic-linked sex/RH education program and provision of youth-appropriate health services at public facilities	Increased number of youth receiving RH information from school or health professionals
2000 Murray Chile	N=4,238 M/F, grades 7-12	Quasi-experimental, 5 schools, pre/3 posttests (3%)	School and health clinic-linked education curriculum (implemented over 2 yr)	Increased knowledge of reproduction and STIs, use of contraception by females
1999 Shuey Uganda	N=400 M/F, 13-14 yr	Quasi-experimental, 38 random schools each w/10 students, pre/posttest (0%)	Healthy decision-making and communication curriculum with community participation	Reduced sexual activity; increased communication about sex; agreement that abstinence is good
1997/1997 Mbizvo/Rusakaniko Zimbabwe	N=1,689 M/F, mean age 14.5 yr	Experimental, randomized, 8 schools, pre/2 posttests (6%)	Health education consisting of distributing IEC* materials and giving lectures	Increased knowledge of wet dreams, menstruation, pregnancy, and family planning
1995 Seidman Chile	N=532 M/F, mean ages: Control 15.6 yr Intervent. 16.1 yr	Quasi-experimental, longitudinal, pre/posttest (0%)	Teen Star curriculum, values-based fertility awareness/sexuality education (18 classes, first 8 divided by sex)	Increased fertility awareness; reduced initiation of sexual activity
1993 CEDPA, JHU/PCS Nigeria	N=3,194 M/F, mean ages: 14.3 yr (jr. school), 17.2 yr (sr. school)	Quasi-experimental, longitudinal, 18 schools, pre/posttest (31%)	Population/family life education curriculum (462 teachers trained in participatory methods)	Improved attitudes toward monogamy, and males' attitudes toward family size
1989 Pick de Weiss Mexico	N=491 M/F average range 13.4-14.9 yr	Quasi-experimental, longitudinal, 3 schools, pre/2 posttests (15%)	Planning Your Life curriculum (2-day teacher training; 12 student sessions, 2/wk for 6 wk)	Increased general knowledge, self-efficacy, perception of and access to condoms

* IEC is information, education, and communication.

tive health services. Mass media interventions clearly influence adolescent knowledge and attitudes, but there is less evidence that these programs consistently and directly influence sexual and contraceptive behaviors.

Table 5 summarizes the rigorous studies available on mass media. Four of them involved a project called Social Marketing for Adolescent Sexual Health (SMASH) in Botswana, Cameroon, Guinea, and South Africa. Generally, these

Table 5. Media Programs

Year Lead Author Country	Sample Size Population	Design (% lost to follow-up, if available)	Intervention (Length, if available)	Findings
2001/1998 Kim/Kim Zimbabwe	N=1,426 M/F, 10-24 yr	Quasi-experimental, 2 cross-sectional samples, 7 sites, pre/posttest (2%)	Radio, drama, hotline, providers and peer educators trained (6 mo)	Increased use of RH facilities, contraception and condoms, refusal of sex, knowledge and discussion of RH topics; limited sex to one partner
2000 Magnani Paraguay	N=947 baseline N=1,575 follow-up M/F, 15-19 yrs	Quasi-experimental, 2 cross-sectional samples, pre/posttest	Mass media campaign, including peer educators	Increased condom use at first sex, knowledge and attitudes about RH issues
Social Marketing for Adolescent Sexual Health (SMASH), Four Countries				
1999 Van Rossem Cameroon	N= 1,606 baseline N=1,633 follow-up M/F, 12-22 yr	Quasi-experimental, 2 cross-sectional samples, pre/posttest	Peer education, youth clubs in schools, mass media, and social marketing of condoms (13 mo)	Reduced number of partners, sexual initiation, early sexual debut; increased females' ever use of condoms, knowledge of preventive behaviors, discussion of RH, males' perception of risk
1999 Van Rossem Guinea	N=2,016 baseline N=2,005 follow-up M/F, 12-19 yr	Quasi-experimental, 2 cross-sectional samples, pre/posttest	Peer education, media, targeted social marketing, recreational events, trained providers (8 mo)	Increased condom use among sexually active males and at last sex (no changes for females)
1998 Meekers South Africa	N=430 F, 17-20 yr (stratified sample, only F reported)	Quasi-experimental, 2 cross-sectional samples, pre/posttest (10%)	Participatory media devel- opment, mass media, 70 peer educators trained and sponsored 300 targeted condom distribution outlets (34 mo)	Increased awareness about risks of becoming pregnant, belief in condoms as best way to protect against AIDS, ever use of condoms; improved perceptions of barriers
1997 Meekers Botswana	N=1,002 baseline N=2,396 follow-up M/F, 13-18 yr	Quasi-experimental, pre/posttest	Youth-friendly RH outlets, radio, print, education sessions, social marketing, community outreach, and sales by peers (8 mo)	Increased males' self-efficacy, females' belief that condoms reduce risk of AIDS, AIDS is not curable, sex leads to marriage, and abstinence is protective

studies found changes in knowledge but less in behavior (Agha 2002). The Arte y Parte program (Paraguay) and the Promotion of Youth Responsibility project (Zimbabwe) reached similar conclusions. Despite these ambiguous findings, social marketing programs have the potential to reach large numbers of people. (For more on social marketing, see page 20.)

Community and Peer Programs

Community programs range from small-scale awareness-raising activities to much broader community mobilization efforts where large segments of the community, including young people, are involved in identifying needs and designing programs to meet them. Community programs address many of the factors that influence young people's sexual and reproductive

behavior because they encourage the participation of youth, parents, community leaders, and others. The two main types of community interventions reviewed are youth development programs and peer programs. These vary widely in their design and goals.

Youth development programs focus on life options and skills, educational aspirations, vocational opportunities, and psychosocial development needs. The programs may or may not address reproductive health specifically, but the multiple program components may act together to promote a healthy lifestyle. One such program, the Better Life Options project in India (see Levitt-Dayal, Table 6), supports literacy, vocational training, and other activities for several years and appears to have a substantial

Table 6. Community Programs

Year Lead Author Country	Sample Size Population	Design	Intervention (Length, if available)	Findings
2001 Speizer Cameroon	N=818 M/F, 10-25 yr	Quasi-experimental, pre/posttest, 1 member per eligible household	Trained peer educators, held discussion groups, referred youth to services, distributed promotional materials (18 mo)	Increased use of modern methods, condom use at last sex, sponta- neous knowledge of contraception and STI symptoms
2001/2000 Brieger/Speizer Nigeria	N=1,714 baseline N=1,801 follow-up M/F, 12-24 yr	Quasi-experimental, longitudinal, pre/posttest, random samples of 100 at 20 sites	Developed activities with youth-serving organizations including in-school and out-of-school peer education (8 mo)	Increased use of protective methods against STIs (in-school only), RH knowledge and self- efficacy (in-school males), willingness to purchase condoms
2000 Levitt-Dayal India	N=1,693 F, 15-26 yr	Quasi-experimental, posttest only, 1 intervention/ 1 control site	Better Life Options program: empowerment income generation, family life education (3 yr)	Increased use of contraception, age at marriage, completion of secondary school, use of hospital for childbirth, ability to make independent decisions
2000 Magnani Peru	N=6,962 M/F, 14-15 yr	Pretest/posttest panel group design	School and pilot project, peer leader training	Reduced males' sexual initiation; increased males' contraceptive use at last sex, knowledge of ovulation and pregnancy

impact on multiple reproductive health outcomes. However, the study had the potential for self-selection bias in comparing youth who chose to participate with those who chose not to participate; thus, positive outcomes could be attributed either to the program or to selection bias. Furthermore, more research is needed to identify which components of such programs might affect reproductive health and HIV/STI outcomes.

Peer programs recruit and train a core group of youth to serve as role models and to provide information, referrals to services, and contraceptives to their peers. Peer programs typically include several elements important to health promotion and development: strong identification with the social and cultural environment of the target group, promotion of social norms and values supportive of positive attitudes and health behavior, and involvement of young people in programs that are designed for them. These programs take advantage of the fact that many young people prefer to interact with others sim-

ilar to themselves and commonly identify peers as one of their primary sources for reproductive health information.

Three peer programs had strong research designs (see Table 6). In Peru, a peer program resulted in improved knowledge and attitudes, reductions in the proportion of sexually active males, and increased contraceptive use at most recent intercourse. The West African Youth Initiative in Nigeria and Ghana resulted in reduced risky sexual behaviors in the intervention area, with its greatest impact on students in school rather than out of school. The Entre Nous Jeunes Program in Cameroon resulted in increased condom use. Overall, the studies found impact primarily among youth attending schools, with weaker findings for out-of-school youth.

While these programs did show positive results, the broader review of evidence indicated that peer programs have not been shown to be sustainable, cost-effective, or able to overcome

Table 7. Workplace Programs

Year Lead Author Country	Sample Size Population	Design (% lost to follow-up, if available)	Intervention (Length, if available)	Findings
2000 FOCUS, CARE Cambodia	N=1,072 F, mean age 20 yr (urban factory workers)	Quasi-experimental, matched-control group panel design, pre/posttest	RH education using participa- tory learning and action approach	Increased discussion of condoms with friends, knowledge of contraception, risks of pregnancy
1998 Celentano Thailand	N=2,417 (1991) N=1,669 (1993) M, 19-23 yr (Thai army conscripts)	Prospective cohorts: 1991, 1993	100% condom promotion: distribution program in brothels, interviews, serologic testing every 6 mo (2 yr)	Increased consistent condom use; reduced risk behaviors (1993), STI and HIV incidence, number of brothel visits
1995 Bhave India	N=514 F, 15-25 yrs (sex workers)	Quasi-experimental, longitudinal, pre/posttest (0%)	Brothel owners and sex workers educated with videos, discussions, and visual aids (6 mo)	Increased knowledge of HIV/AIDS, likelihood of insisting on condom use
1995 Cash Thailand	N=252 F, 15-24 yr (unmarried factory workers)	Quasi-experimental, longitudinal, 4 sites, pre/posttest (18%)	AIDS prevention materials; education by health promoters; education by peer educators	All interventions increased attitudes, knowledge, and intention of adopting protective behaviors

selection bias. The primary impact of peer education programs may be on the peer educators themselves, not on their peer contacts. Also, peers may tend to contact mainly youth like themselves, which means that various types of youth need to be recruited to reach a wide range of groups.

Workplace Programs

Workplace programs provide youth with information and services at or through their places of employment, often using a peer-education approach. Programs have been implemented in factories, the military, hotels, plantations, merchant ships, and brothels. As conditions caused by poverty and AIDS force more youth to work and as employers become more concerned about the health of their employees and customers, workplace programs are increasingly important. Workplace programs can reach out-of-school youth, who have less education and are more likely to practice risky sexual behaviors than in-school youth. Some youth workers are considered at high risk for HIV transmission because they are in jobs that require them to travel away from home or because they engage in risky behaviors as part of their job.

Four programs indicate varying levels of impact on knowledge, attitudes, and behavior (see

Table 7). A program with female garment workers in Cambodia, for example, resulted in improved knowledge of reproductive health issues. Because of high levels of survey non-responses, the study could not assess impact on behaviors. In Thailand, as part of a national “100 percent condom” program involving brothels, a project with young Thai soldiers resulted in substantial behavioral changes and a tenfold decline in STIs. An STI prevention campaign among young sex workers in India succeeded in slowing HIV infection rates. Except for Thailand, the evidence among these studies was insufficient to draw major conclusions. In all the studies, including Thailand, determining the impact of the workplace intervention in relation to other concurrent factors was not possible.

More research is needed on workplace interventions to determine the best way to reach working, out-of-school youth. Workplace programs hold promise in regions where significant portions of young workers are in the formal work sector, such as in parts of Latin America and Asia, and among specialized populations, such as military conscripts and sex workers. However, no studies have demonstrated impact among general youth populations.



Chapter 5. Increasing the Use of Reproductive Health Services

In general, getting adolescents to use clinics in developing countries, especially in Africa and Asia, has been difficult. Youth are quite healthy for the most part and have a limited need for clinic services. Also, a wide range of barriers inhibits youth, particularly those who are not married, from attending available clinics. These barriers include concerns about privacy and confidentiality, fear and embarrassment, staff members' attitudes and actions (including scolding and moralizing), cost of services, laws and policies that make serving youth difficult, inconvenient hours of operation, long distances to services, and poor transportation.

Youth do have many reproductive health needs, however, and often turn to alternatives such as pharmacies, home remedies, traditional methods of contraception and abortifacients, friends and family, clandestine abortion, and STI drugs without a doctor's prescription.

Among the primary types of programs that seek to increase young people's use of reproductive health services and products, three involve health facilities: youth-friendly services, youth centers, and linked school and health facility programs. Others involve social marketing and mass media, community outreach, and private sector initiatives.

Youth-Friendly Services

The term "youth-friendly services" generally refers to programs seeking to improve the access to, and quality of, existing reproductive health services, specifically by making them more acceptable to adolescents. By improving services, programs hope to attract youth to their facilities.



Evaluation of the effectiveness of youth-friendly services is limited. Three studies involved rigorous designs with intervention and control clinics (see Table 8). These studies found that efforts to make clinical services youth-friendly have not generally brought about increased use by young people, although satisfied clients appear to return to those clinics for ongoing care. However, anecdotal reports suggest that well-established, large nongovernmental programs can draw youth to clinics through substantial outreach efforts. Also, when programs include community activities directed at changing perceptions of facilities and service providers, clinics appear to have had some success reaching youth.

FOCUS concluded, however, that while it is important to continue improving clinical services to youth,

the most promising youth-friendly services might in fact be through private sector outlets such as pharmacies. The impact of nonclinical services needs further evaluation.

Youth Centers

Youth centers often provide reproductive health care as one of many services. They generally have recreational, educational, and sometimes vocational components as well as reproductive health information, counseling, and services in a youth-friendly setting. Ideally, youth centers provide a supportive, nonthreatening environment where youth have access to counseling, contraceptives, clinical prevention services, and treatment. Furthermore, they can bring youth into contact with influential peers, provide a connection with an institution, and allow for mentoring.

One study with a rigorous research design analyzed the impact of a youth center in Lomé,

Togo (see Table 8). It found that the center had little impact on reproductive health knowledge or practices. Recent findings from situation analyses of youth centers by the Population Council in Ghana, Kenya, and Zimbabwe indicate that the main use is generally by males for recreation, and those males and females using the reproductive health services tend to be older than the target age. One of the studies also found that youth centers appear to be a relatively costly way of providing reproductive health care since they are largely used for recreation. Experience in Mexico also indicated that youth centers are too expensive for reaching large numbers of youth. In some cases, programs have taken actions to address these issues.

Linked School and Health Facilities

Reproductive health services are sometimes linked with schools, either through a referral system from schools to existing health facilities and other service delivery sites or through health

Table 8. Youth-Friendly Services and Youth Centers

Year Lead Author Country	Sample Size Population	Design	Intervention (Length, if available)	Findings
Youth-Friendly Services (YFS)				
2001 Institute for RH Ecuador	Adolescent clients (sample size not reported)	Pre/posttest design in 4 intervention and 4 control clinics	Education, counseling, and clinic services (1 yr)	Increased number of returning clients
2000 Moyo Zimbabwe	N=250 baseline N=606 follow-up M/F, 12-24 yr (unmarried)	Pre/posttest, 2 cross-sectional surveys, other assessments	Community meetings, YFS protocol in clinics, nurse training, peer education, and renovation of a youth center	Increased communication about sex, females' atti- tudes toward condom use; reduced smoking and drug use
2000 Nelson Zambia	N=10 urban and peri-urban public facilities	Time series, 8 intervention/ 2 control clinics	YFS protocol in clinics, services, skills training for providers and peer educators	Increased use of services
Youth Centers				
2001 Kouwonou Togo	N=2,083 M/F, 10-24 yr	Panel with reflexive controls, pre/2 posttests	Youth clinical services, counseling, IEC*, vocational and literacy classes	Increased knowledge of condoms

*IEC is information, education, and communication.

units in schools. The introduction of reproductive health curricula into schools can help overcome some of the psychosocial and administrative barriers associated with clinics. Also, linking schools with clinics means that students could have access to a more complete package of services, including STI diagnosis and treatment, than they would through pharmacists and community-based distributors.

Three linked programs had rigorous research designs (see Coplan, Table 2; Gaffikin, Table 4; Murray, Table 4). These three studies suggest that linked programs can have a positive impact. A project in Nigeria (see Coplan) trained private physicians in the neighborhood near the schools to teach students about STIs and encourage them to seek treatment from physicians. Overall, however, youth did not use the linked clinics in large numbers. Further research is needed about linkages between schools and service delivery systems, including links to clinics, private practitioners and commercial sources; peer distribution of contraceptives; and other types of distribution points within schools.

Social Marketing/Mass Media

Social marketing refers to health promotion interventions that use techniques borrowed from commercial advertising, market research, and

the social sciences. Social marketing techniques are designed to promote and increase the use of socially beneficial health products such as condoms, to increase access to health services, and to bring about changes in health behavior and practices. The mass media, an important channel of communication in most social marketing interventions, have a major influence on youth norms and values. Social marketing campaigns utilizing mass media can promote services and products to youth through pharmacies, clinics, and other community outlets — as well as make those products more available in those outlets. To conduct communication and marketing interventions, social marketing identifies which audience groups to address (by age, gender, etc.) and what types of messages might change their behaviors.

Two studies of social marketing programs had relatively rigorous designs. Conclusions from the SMASH project are based on study findings from Botswana, Cameroon, Guinea, and South Africa (see Table 5). While this project led to changes in some reproductive health outcomes, it only affected condom use among both young men and women in Guinea. Several factors might have contributed to this finding: the evaluation took place after only a short intervention period; some countries provided limited data;



and adolescents were more concerned with preventing pregnancy than preventing STIs.

The other rigorous study (see Kim, Table 5) supports the notion that linking youth-friendly services to mass media and community activities might be a better approach to increasing service use than simply providing youth-friendly services without outreach.

These studies and several others with less rigorous findings offer limited evidence that social marketing programs involving mass media can increase the use of health services by youth.

Community Outreach

Some programs have sought to take reproductive health and HIV-related services to young people in the community rather than making youth come to programs. Outreach can include deploying workers from health facilities, linking with programs in the community that serve youth, and providing services in nonclinical settings. Community outreach is a way to channel information through the myriad influences and stimuli that influence young people. Community outreach programs have the potential to reach young people who are out-of-school, unmarried, marginalized, or hard-to-reach for other reasons. These programs also eliminate distance as a barrier to using services and can better overcome the distrust and alienation felt by many hard-to-reach youth.

The FOCUS review identified only one community outreach study with a good evaluation, the Better Life Options project in India (see Levitt-Dayal, Table 6, and discussion, page 15). Other supportive evidence suggested that outreach to newlyweds and university students may increase the use of services. Community outreach approaches may have potential for increasing the use of health services, but more research is needed.

Private Sector

These initiatives involve private physicians, nurses, nurse-midwives, midwives, pharmacists, and others who offer reproductive health information and services to young people. The private sector provides young people the opportunity

to seek information and services in a relatively anonymous way. An analysis of Demographic and Health Survey data by FOCUS confirmed that a high proportion of youth around the world use the private sector for reproductive health services (Murray 2003).

The review found little research on the impact of programs that encourage private providers to offer young people reproductive health and HIV services, and no rigorous evaluations were found. The review found examples of private-sector work, such as a partnership that Procter and Gamble had in Russia where it trained teachers to introduce basic reproductive health information, after which girls were given samples of sanitary napkins and tampons. Other efforts included work with nurses and midwives in Zambia, a clinic network in Madagascar, a voucher project in Kenya, and a midwives program in Ghana.

Social marketing campaigns utilizing mass media can promote services and products to youth through pharmacies, clinics, and other community outlets.

Privacy and confidentiality are two of the things that youth most value and want in reproductive health services. They also want to go where they can easily get supplies, and they indicate they are willing to pay for them. Many youth are already relying on the private sector for health needs. Applying new initiatives in this area is important because they may open the possibility of expanding youth access to reproductive health services in additional sites.



Chapter 6. Recommendations

In an ideal world, countries would have in place strong supportive policies, effective channels of communication to inform and educate youth about reproductive health and HIV/AIDS prevention, and a full range of culturally appropriate reproductive health services. However, in a world of scarce resources, countries must rely on the increasing, although still insufficient, knowledge base of effective policies and programs.

The research review summarized in Chapters 3 through 5 leads to the following six findings about the types of reproductive health programs that are effective and should be pursued, given the limited resources available:

- *Conduct continuous and broad-based advocacy to support youth reproductive health efforts.* More funding and technical assistance are needed to evaluate policy efforts and to disseminate policies to the public. Along with such efforts, advocacy can also assist with multi-sectoral coordination, which is one approach found to be valuable in leading to more supportive policies (see Chapter 3).
- *Conduct well-designed reproductive health education in schools.* While research shows the value of school-based interventions, more work needs to be done to determine the best designs for these efforts (see Chapter 4).
- *Promote condom use through social marketing programs and mass media.* Social marketing programs have a great potential to reach youth, clearly affect their knowledge, and appear to affect behaviors in some cases (see Chapters 4 and 5).
- *Conduct broad-based community initiatives.* Peer promotion, community-based distribution of contraceptives, and other types of community initiatives hold promise in reaching youth, but more research is needed on cost-effectiveness, impact, and program design (see Chapters 4 and 5).
- *Build on the promise of youth-friendly services.* The concept of youth-friendly services needs to be broadened to include private sector services such as pharmacies, where youth seem more comfortable in getting services. Other existing community-based programs need to attract youth to reproductive health services. Research is mixed on the impact of attracting youth to clinics, yet efforts to make clinics

Principles for Research, Interventions, and Policies

- Involve young adults in meaningful ways in youth reproductive health policy dialogue and programming.
- Emphasize abstinence, reduction in number of partners, condom use, and dual protection to prevent HIV/AIDS/STIs and pregnancy.
- Address gender inequality explicitly.
- Identify the policy and program mix best suited to the target population.
- Design comprehensive programs that address multiple youth needs.
- Design projects with expansion in mind.
- Incorporate monitoring and evaluation from the start.

more youth-friendly are useful where well-established programs have good outreach efforts (see Chapter 5).

- *Enhance peer programs.* Peer programs, a popular strategy in many youth projects, may not be cost-effective or sustainable, yet youth rely on their peers. More research is needed to understand how to make peer programs more effective and sustainable (see Chapter 5).

FOCUS also suggested other areas for further research and interventions. In all program areas, more emphasis is needed on cost and sustainability, on moving small-scale projects to the regional and national levels, and on building the capacity of organizations to provide ongoing services. Other recommendations for future projects include: placing more emphasis on links among policies, social norms, contextual factors, youth programming, and youth reproductive health (see Chapter 3); developing connections between youth reproductive health programs and other youth activities (see Chapter 5); and leveraging the private and commercial sectors for greater participation in and contributions to youth reproductive health programming, including workplace programs and private health care delivery (see Chapter 5).



References

Abolfotouh MA. The impact of a lecture on AIDS on knowledge, attitudes, and beliefs of male school-age adolescents in the Asir region of southwestern Saudi Arabia. *J Community Health* 1995;20(3):271-81.

Agha S. A quasi-experimental study to assess the impact of four adolescent sexual health interventions in sub-Saharan Africa. *Int Fam Plann Perspect* 2002;28(2):67-70, 113-18.

Antunes MC, Stall RD, Paiva V, et al. Evaluating an AIDS risk reduction program for young adults in public night schools in Sao Paulo, Brazil. *AIDS* 1997;11(Suppl 1):S121-27.

Aplasca MR, Siegel D, Mandel JS, et al. Results of a model AIDS prevention program for high school students in the Philippines. *AIDS* 1995;9(Suppl 1):S7-13.

Bhave G, Lindan CP, Hudes ES, et al. Impact of an intervention on HIV, sexually transmitted diseases, and condom use among sex workers in Bombay, India. *AIDS* 1995;9(Suppl 1):S21-30.

Brieger WR, Delano GE, Lane CG, et al. West African Youth Initiative: outcome of a reproductive health program. *J Adolesc Health* 2001;29(6):436-46.

Caceres F, Rosasco AM, Mandel JS, et al. Evaluating a school-based intervention for STD/AIDS prevention in Peru. *J Adolesc Health* 1994;15(7):582-91.

Cash K, Anasuchatkul B, Busayawong W. *Experimental Educational Interventions for AIDS Prevention Among Northern Thai Single Migratory Factory Workers. Women and AIDS Research Program Research Report Series No. 9.* Washington, DC: International Center for Research on Women, 1995.

Celentano DD, Nelson KE, Lyles CM, et al. Decreasing incidence of HIV and sexually transmitted diseases in young Thai men: evidence for success of the HIV/AIDS Control and Prevention Program. *AIDS* 1998;12(5):F29-36.

Centre for Developmental and Population Activities, John Hopkins University/Population Communications Services, Nigerian Educational Research and Developmental Council. *Evaluation of Population/Family Life Education Programme in Secondary Schools in Nigeria.* Washington, DC: Centre for Developmental and Population Activities, 1993.

Coplan P, Okonofua EE, Temin, JT. Sexual behavior and health care-seeking behavior for sexually transmitted diseases among Nigerian youth. Unpublished paper.

Eggleston E, Jackson J, Rountree W, et al. Evaluation of a sexuality education program for young adolescents in Jamaica. *Pan Am J Public Health* 2000;7(2):102-12.

Fawole IO, Asuzu MC, Oduntan SO, et al. A school-based AIDS education programme for secondary school students in Nigeria: a review of effectiveness. *Health Educ Res* 1999;14(5):675-83.

Fitzgerald A, Stantan B, Terrieri N, et al. Use of Western-based HIV risk-reduction interventions targeting adolescents in an African setting. *J Adolesc Health* 1999;25(1):52-61.

FOCUS on Young Adults, CARE International-Cambodia. *Impact of an Adolescent Reproductive Health Education Intervention Undertaken in Garment Factories in Phnom Penh, Cambodia.* Washington, DC: FOCUS on Young Adults, 2000.

Gaffikin L, Magnani R, Aquino EML, et al. *Evaluation of an Integrated Adolescent Sexuality Education/Health Service Provider Training Pilot Project in Salvador, Bahia, Brazil.* Washington, DC: FOCUS on Young Adults, 2000.

Harvey B, Stuart J, Swan T. Evaluation of a drama-in-education programme to increase AIDS awareness in South African high schools: a randomized community intervention trial. *Int J STD AIDS* 2000;11(8):105-11.

Institute for Reproductive Health. *Reaching Adolescents at Family Planning Clinics: Applying the Reproductive Health Awareness Model. The Awareness Project Research Update.* Washington, DC: Institute for Reproductive Health, Georgetown University Medical Center, 2001.

Jackson J, Leitch J, Lee A, et al. *The Jamaica Adolescent Study: Final Report.* Kingston, Jamaica and Research Triangle Park, NC: University of West Indies and Family Health International, 1998.

Kim YM, Kols A, Nyakauru R, et al. Promoting sexual responsibility among young people in Zimbabwe. *Int Fam Plann Perspect* 2001;27(1):11-19.

Kim YM, Marangwanda C, Nyakauru R, et al. *Impact of the Promotion of Youth Responsibility Project Campaign on Reproductive Health in Zimbabwe.* Baltimore, MD: Johns Hopkins University/Center for Communication Programs, 1998.

Klepp K-I, Ndeki SS, Leshabari MT, et al. AIDS education in Tanzania: promoting risk education among primary school children. *Am J Public Health* 1997;87(12):1931-36.

- Klepp K-I, Ndeki SS, Seha AM, et al. AIDS education for primary school children in Tanzania: an evaluation study. *AIDS* 1994;8(8):1157-62.
- Kouwonou K, Amegee K. *Evaluation de la Connaissance de l'Attitude et de la Pratique Sexuelle des Jeunes de Lomé: Enquête Evaluation de Centre des Jeunes de l'ATBEF à Lomé, EVACJEUNE2*. New Orleans, LA: FOCUS on Young Adults/Tulane University School of Public Health, 2001.
- Kuhn L, Steinberg M, Mathews C. Participation of the school community in AIDS education: an evaluation of a high school programme in South Africa. *AIDS Care* 1994;6(2):161-71.
- Levitt-Dayal M, Motihar R. *Adolescent Girls in India Choose a Better Future: An Impact Assessment*. Washington, DC: Centre for Developmental and Population Activities, 2000.
- Magnani R, Gaffikin L, Espinoza V, et al. *Evaluation of 'Juventud Es Salud': An Adolescent and Sexual Health Peer Education Program Implemented in Six Departments in Peru*. Washington, DC: FOCUS on Young Adults, 2000.
- Magnani R, Robinson A, Seiber E, et al. *Evaluation of 'Arte y Parte': An Adolescent Reproductive Health Communications Project Implemented in Asunción, San Lorenzo and Fernando de la Mora, Paraguay*. Washington, DC: FOCUS on Young Adults, 2000.
- Mbizvo MT, Kasule J, Gupta V, et al. Effects of a randomized health education intervention on aspects of reproductive health knowledge and reported behaviour among adolescents in Zimbabwe. *Social Sci Med* 1997;44(5):573-77.
- Meekers D. *The Effectiveness of Targeted Social Marketing to Promote Adolescent Reproductive Health: The Case of Soweto, South Africa. Working Paper No. 16*. Washington, DC: Population Services International, 1998.
- Meekers D, Stallworthy G, Harris J. *Changing Adolescents' Beliefs About Protective Sexual Behavior: The Botswana Tsa Banana Program. Working Paper No. 3*. Washington, DC: Population Services International, 1997.
- Moyo I, Bond K, Williams T, et al. *Reproductive Health Antecedents, Attitudes, and Practices among Youth in Gweru, Zimbabwe*. Washington, DC: FOCUS on Young Adults, 2000.
- Munodawafa D, Marty PJ, Gwede C. Effectiveness of health instruction provided by student nurses in rural secondary schools of Zimbabwe: a feasibility study. *Int J Nursing Stud* 1995;32(1):27-38.
- Murray N, Toledo V, Luengo X, et al. *An Evaluation of an Integrated Adolescent Development Program for Urban Teenagers in Santiago, Chile*. Washington, DC: FOCUS on Young Adults, 2000.
- Murray NJ, Chatterji M, Dougherty L, et al. *Are Adolescents and Young Adults More Likely than Older Women to Choose Commercial and Private Sector Providers of Modern Contraception?* Washington, DC: Futures Group International/Policy Project, 2003.
- Nelson K, Magnani R. *The Effects of Youth Friendly Service Projects on Service Utilization among Youth in Lusaka, Zambia*. Washington, DC: FOCUS on Young Adults, 2000.
- Pick de Weiss S, Palos PA. Development and longitudinal evaluation of comparative sex education courses. Unpublished paper. U.S. Agency for International Development and Instituto Mexicano de Investigación de Familia y Población, 1989.
- Rusakaniko S, Mbizvo MT, Kasule J, et al. Trends in reproductive health knowledge following a health education intervention among adolescents in Zimbabwe. *Central African J Med* 1997;43(1):1-6.
- Seidman M, Vigil P, Klaus H, et al. Fertility awareness education in the schools: a pilot program in Santiago, Chile. *American Public Health Association Annual Meeting*, San Diego, CA, October 31, 1995.
- Shuey DA, Babishangire BB, Omiat S, et al. Increased sexual abstinence among in-school adolescents as a result of school health education in Soroti District, Uganda. *Health Educ Res* 1999;14(3):411-19.
- Speizer I, Heller G, Brieger W. *Survey Findings from the West African Youth Initiative Project: Final Evaluation of Peer Educator Intervention*. New York, NY: Rockefeller Foundation, 2000.
- Speizer I, Tambahse B, Tegang P. *Evaluation of the 'Entre Nous Jeunes' Peer Education Program for Adolescents in Cameroon*. Family Health and AIDS in West and Central African Project, 2001.
- Stanton B, Li X, Kahihuata J, et al. Increased protected sex and abstinence among Namibian youth following a HIV risk-reduction intervention: a randomized, longitudinal study. *AIDS* 1998;12(18):2473-80.
- Thongkrajai E, Stoeckel J, Kievying M, et al. *AIDS Prevention among Adolescents: An Intervention Study in Northeast Thailand. Women and AIDS Research Program Report Series No 1*. Washington, DC: International Center for Research on Women, 1994.
- Van Rossem R, Meekers D. *An Evaluation of the Effectiveness of Targeted Social Marketing to Promote Adolescent and Young Adult Reproductive Health in Cameroon. Working Paper No. 19*. Washington, DC: Population Services International, 1999.
- Van Rossem R, Meekers D. *An Evaluation of the Effectiveness of Targeted Social Marketing to Promote Adolescent and Young Adult Reproductive Health in Guinea. Working Paper No. 23*. Washington, DC: Population Services International, 1999.
- Wilson D, Mparadzi A, Lavelle S. An experimental comparison of two AIDS prevention interventions among young Zimbabweans. *J Soc Psychol* 1991;132(3):415-17.

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