Sexual and Reproductive Transitions of Adolescents in Developing Countries

This Policy and Research Paper presents findings and recommendations from the seminar on Sexual and Reproductive Transitions of Adolescents in Developing Countries organized by the IUSSP Scientific Panel on Adolescent Life Course in Developing Countries and the Center for Demographic, Urban and Environmental Studies (CEDUA), El Colegio de Mexico, which was held in Cholula, Puebla, Mexico, 6-9 November 2006. Additional support was received from UNFPA and the Guttmacher Institute.

About the Author

Canadian-born Ruth Dixon-Mueller, formerly Professor of Sociology at the University of California at Davis, is currently an independent consultant. She has published a number of articles on marriage and divorce, family planning, women's employment, and sexual and reproductive health and rights and is the author of Rural Women at Work: Strategies for Development in South Asia, Women's Work in Third World Agriculture: Concepts and Indicators, Population Policy and Women's Rights: Transforming Reproductive Choice, and Abortion and Common Sense. Dr. Dixon-Mueller lives in Costa Rica.
The International Union for the Scientific Study of Population (IUSSP) is an international professional association that brings together over 2,000 population specialists from all over the world to address key population issues. It is composed of demographers, economists, sociologists, statisticians, physicians, public health officers, family planners, administrators and policy makers from 140 countries. Founded in 1928, the IUSSP is internationally recognized for its role in identifying emerging and critical population and development issues, encouraging scientific research on these topics, and sponsoring international seminars, workshops, conferences, training sessions, and Internet forums at which critical issues can be discussed and debated.

One of the main functions of the IUSSP is to stimulate interest in population matters among governments, national and international organizations, the scientific community and the general public. In order to bring the results of policy-relevant IUSSP scientific activities to the attention of governments and civil society organizations concerned with population issues, the IUSSP began the Policy and Research Papers series.

The outcomes of IUSSP meetings are also disseminated through a wide range of publications: the IUSSP website, edited volumes and articles in leading peer-reviewed journals. The results of its work are also communicated to international governing and policy-making institutions with which IUSSP has special consultative status, such as the Economic and Social Council of the United Nations.

The IUSSP is funded through membership dues and grants from governments, international donors and private foundations. It has recently received funding from the governments of France, Belgium, and the Netherlands, UNFPA, the William and Flora Hewlett Foundation, the World Bank, the Wellcome Trust, and the Bill and Melinda Gates Foundation.

IUSSP
3-5 rue Nicolas, 75980 Paris cedex 20, France

© Copyright 2007

List of previous issues of the Policy & Research Papers series

19 Population Ageing in Industrialized Countries: Challenges and Issues. Gustavo De Santis, 2001
17 Men, Family Formation and Reproduction. Silvia Necchi, 1999
14 Data and Decision-making - Demography’s Contribution to Understanding AIDS in Africa. Elizabeth Pisani, 1998
10 Population and Environment in Arid Regions. Allan Findlay, 1996
9 Women, Poverty and Demographic Change. Julieta Quilodran, 1996
8 Population and Environment in Industrialised Regions. Catherine Marquette, 1996
5 Women’s Roles and Demographic Change in Sub-Saharan Africa. C. Oppong & R. Wéy, 1994
4 Toward a More Effective Policy Response to AIDS. David Anderson, 1994
3 Health and Mortality Trends among Elderly Populations: Determinants and Implications. Walter Mertens, 1994
2 Population and Deforestation in Humid Tropics. Walter Mertens, 1994
1 Contributions of the IUSSP to the International Conference on Population and Development. Walter Mertens, 1994

All issues of the Policy & Research Papers series can be downloaded for free on the IUSSP website (www.iussp.org).
Sexual and Reproductive Transitions of Adolescents in Developing Countries

Ruth Dixon-Mueller
This Policy and Research Paper presents findings and recommendations from the seminar on Sexual and Reproductive Transitions of Adolescents in Developing Countries organized by the IUSSP Scientific Panel on Adolescent Life Course in Developing Countries and the Center for Demographic, Urban and Environmental Studies (CEDUA), El Colegio de México, which was held in Cholula, Puebla, Mexico, 6-9 November 2006.

Editorial committee for this issue:
Chair: Fatima Juarez (El Colegio de Mexico, Mexico)
Cynthia B. Lloyd (Population Council, USA)
Tom LeGrand (Université de Montréal, Canada)
Susheela Singh (Guttmacher Institute, USA)

Current editor of the IUSSP Policy and Research Papers series:
Nico van Nimwegen (Netherlands Interdisciplinary Demographic Institute)
INTRODUCTION

The seminar on Sexual and Reproductive Transitions of Adolescents in Developing Countries was intended to build on the report by the U.S. National Academy of Sciences (NAS) on young people’s transitions to adulthood (Lloyd 2005) by considering new research—conceptual, methodological and substantive—on adolescents’ sexual, marital and reproductive behaviors and how they relate to one another and to other aspects of adolescents’ lives. Recognizing that adolescence is a time of rapid physical, social and emotional development, learning, and skills building as well as of experimentation, risk taking and vulnerability, the goal of the seminar was to provide evidence relevant to policies and practices for improving the sexual and reproductive health and rights of adolescents throughout the developing world.

The rights of adolescents with respect to schooling, preparation for employment, freedom from sexual exploitation, protection from early or forced marriage, and access to sexual and reproductive health information, education and services (among other topics) have been set forth in many international agreements and supporting documents. Yet, policy making and implementation of programs in sexual and reproductive health and rights remain highly contested. Should adolescents be allowed to choose their own partners or to say yes or no to sex, to marriage, to childbearing, and with what qualifications? What should they know about sex, who should tell them, and when? Are educational systems obliged to teach young people about how to protect themselves from pregnancies and sexually transmitted infections (STIs) and HIV? Are health systems obliged to provide sexual and reproductive services to teenagers regardless of their age or marital status? Which programmatic approaches and interventions have been found to be effective and which not?
Research reported at the seminar identified a number of ongoing needs and emerging problems associated with early, unsafe, or involuntary sexual, marital and reproductive transitions in a variety of settings. The observations and conclusions of the seminar build on two important recent reports in this area in a variety of ways. With a more in-depth focus on sexuality and sexual transitions, various papers at the seminar provided more insights into the complexities of individual country and cultural contexts, advancing knowledge in several areas including romance and courtship, risk taking and individual agency, the sequence and timing of sexual transitions in relationship to other adolescent transitions, program evaluation and the quality of data. In this way, the papers add to existing knowledge of what is needed for more effective policy making and programming to support safe, healthy and productive transitions for boys and girls.

GENERAL CONCLUSIONS: COMPELLING NEEDS AND ONGOING CHALLENGES

The major conclusions emerging from the research findings and from ideas expressed in the group discussions are highlighted here.

Sexual transitions frequently occur early – even before age 15 – but commonly by age 18.

In many developing (and developed) countries the majority of adolescents have already made their “sexual debut” before age 18—that is, while they are still “children” as defined by the Convention on the Rights of the Child. More than half of young women interviewed in Demographic and Health Surveys (DHS) in a number of sub-Saharan African, South Asian and Latin American and Caribbean countries had become sexually active at age 17 or younger (as well as in France, Sweden, Great Britain, Canada and the United States), and up to one-third had done so before age 15 in some countries. Equally high proportions of boys initiate sex early in an overlapping but not identical set of countries.

• The very early sexual initiation of girls (before age 15) in most developing countries occurs primarily within the context of early marriages2 whereas for boys this is almost never the case.

• The application of various criteria of “readiness” to adolescents of different ages suggests that boys and girls under age 15 are almost invariably “too

2 Marriage is defined to include both legal marriage and consensual unions or living together.
young” to have sexual intercourse, get married or have children because of the risks and vulnerabilities involved with respect to their health and rights.

• Even at age 18 and older, prohibitions on the provision of information and services to unmarried adolescents in some countries as well as other policies and practices such as forced marriages (or parental refusal to permit a marriage) undermine the capacities of young men and women to make safe, voluntary and informed decisions about their sexual and reproductive lives.

Sexual, marital and reproductive transitions during adolescence are often positive events of high social and personal value.

• Sexual transitions, partnership formation, marriage (legal or informal) and childbearing are natural elements of becoming an adult and have many positive features. Mid to late adolescence may be an opportune time for girls in some settings to begin childbearing, especially if there are few opportunity costs for doing so, if the girl is in good physical health, and if she wants to have a child.

• Adolescence is not all about risk taking, nor should adolescent sexual, marital or reproductive transitions necessarily be a cause for alarm. It is not “teenage sex,” “early marriage” or “adolescent childbearing” per se that is problematic, but the extent to which such events contribute to or reflect a lack of opportunities; occur with inadequate protection due to lack of choice, knowledge, skills or relevant services; or constitute a violation of young people’s health and human rights.

• Policies and programs should build on the positive elements of adolescents’ lives to ensure that their sexual, marital and reproductive transitions are fully informed, voluntary, and safe both for themselves and their partners.
Adolescents of all ages have a need and right to know about their bodies, their sexual and reproductive health, and their rights and responsibilities.

- Policies and programs should be pragmatic with respect to what is needed, realistic with respect to what is achievable, and nonjudgmental with respect to adolescents’ perceptions of their capacities and limitations.
- Providing information without services—or services without adequate information about their availability—is not helpful. Knowing that condoms protect against HIV or that the Pill protects against pregnancy is useless if a boy or girl has no idea where to get supplies or is prohibited from buying them.
- Packages of information, services and legal and social supports for adolescents’ decision making should encompass the full range of sexual and reproductive issues, including counseling about sexual practices, identities and preferences; protection against STIs/HIV and unwanted pregnancies; high quality antenatal and delivery care and safe abortion services for adolescent girls; and diagnosis, counseling and treatment for STIs/HIV and for sexual violence, incest and abuse.

Within the overall parameters of what is generally known, policies and programs need to be adapted to the diverse conditions of adolescents’ lives.

- The nature, timing and sequencing of male and female adolescents’ sexual, marital and reproductive transitions differ in dramatic ways across and within countries and social groups. Trends observed in some countries (for example, toward earlier sexual initiation) are absent or reversed in others. Similarly, associations between events such as first intercourse or first birth and school leaving, employment or getting married take different forms in different settings.
- Boys’ transitional experiences differ from girls’ in every social group with respect not only to their timing and “density” (the number of key transitions that
occur as they pass through their adolescence from age 10 through 19) but also in their personal and social significance. For example, girls' sexual initiation is far more likely than boys' to be coerced or unwanted; girls are more vulnerable than boys are to acquiring an STI/HIV from an infected partner; and girls invariably bear the major social, economic, cultural and health consequences of early pregnancy.

- The effects of globalization on young people's attitudes, behaviors and opportunities are uneven and interact with the underlying political, socioeconomic and cultural environments in which they live. Adolescents are often caught between competing norms and values that stress adherence to conservative religious or cultural traditions and parental authority, on the one hand, and liberal, secular ideas of independence, individualism and personal freedom on the other.
MAIN ISSUES AND RESEARCH FINDINGS

Drawing clear and consistent scientific conclusions from the analyses of adolescents’ sexual, marital and reproductive transitions in developing countries and their trends, variations, causes, correlates and consequences is difficult. Nowhere are these complexities more relevant than in the initiation of sexual activity, which in the demographic literature is typically defined as the occurrence of “first heterosexual, vaginal intercourse,” whether marital or nonmarital, voluntary or coerced.

Some important reasons for these difficulties are:

- Results are often specific to particular social and cultural contexts: associations observed in one setting are not necessarily found in another.
- Multiple factors influence adolescent attitudes and behaviors, not only individual, family and community attributes but also changing social norms and values.
- Meanings and perceptions of various events and conditions differ widely among individuals and social groups and between male and female adolescents.
- Disentangling the interrelation between sexual experiences, school progress or exit, relationships with parents and peers, leaving home, entering the labor force and marriage is not a simple task.
- Information does not necessarily translate into behavioral change in a linear fashion but is filtered through young people’s personal experiences and their interpersonal relationships, anxieties, fears, hopes and desires.
This policy paper nevertheless seeks to identify broad conclusions that rise above these variations and complex patterns to find those generalizations that can contribute to policy and programs.

**Do adolescents tell the truth about sex?**

Not always. Research suggests that girls tend to underreport and boys to exaggerate their sexual experiences, depending in part on the sex-gender norms of the cultures in which they live. Experiments comparing different ways of asking questions have produced quite inconsistent results. In Malawi and Kenya, unmarried women aged 15-21 were more likely to admit in a face-to-face interview that they had had intercourse with a boyfriend than in a self-administered questionnaire but less likely to admit to having had sex with other partners such as friends or acquaintances (Mensch et al). Eight percent of self-proclaimed virgins were found to have at least one of four STIs. In Nyanza, Kenya, girls aged 12-18 were far more likely to tell interviewers that their best friends had had intercourse than admit to it themselves (Magadi and Agwanda).

**First intercourse may be preceded by other sexual activities, some of them risky.**

First intercourse is a poor marker of sexual experience in many settings. It is often preceded by a progression and variety of sexual activities with persons of the same or opposite sex, not involving vaginal-penile intercourse, but perhaps including oral or anal sex. Moreover, first intercourse occurring outside of marriage may be followed by long periods of sexual inactivity, including nonsexual dating relationships, or by sporadic activity with a variety of partners. Research on the timing, nature and sequencing of sexual acts among male and female adolescents in particular environments can provide crucial information for the design of information, education and service programs for young people. Investigations into the gendered motives for engaging in precocious sexual activity of particular types or for delaying sex, the nature and meaning of adolescent partnerships, perceptions of pleasure and risks, the capacity to nego-
tiate safe sex and avoid unwanted sex, and attitudes of male entitlement and female compliance are also relevant for program design and evaluation.

Adolescents living in conservative environments are often ill prepared to deal in an informed way with their emerging sexuality and with new sexual choices.

- Despite religious, moral, and parental disapproval, boys in the Philippines are increasingly likely to have sex before marriage and, to a lesser extent, girls (Hindin). A longitudinal survey of adolescents in Cebu province found that virtually no one had intercourse before age 15. Boys said that the “right age” for boys to have sex was about 22 and for girls 21, while girls said 24 and 23. By average age 18, however, 30% of boys and 20% of girls had had sex and by age 21, two-thirds and one-half had done so. Girls reported their first sexual experience as not planned or not wanted in more than half the cases. Over one-third of girls at age 21 had become pregnant and almost one-quarter of boys had impregnated a girlfriend. A government plan to institute school-based sex education was blocked by the Roman Catholic Church.

- In Iran, premarital sex is illegal as well as religiously and culturally taboo. In Teheran, however, 18% of a population-based sample of unmarried 15-16-year-old boys and 37% of 17-18-year-old boys admitted that they had had “sexual contact” with girls or women, among whom 67% and 75% reported more than one sexual partner (Mohammad et al). Of those who were sexually experienced, more than one-quarter said they had begun by age 12. Boys were more likely to be sexually experienced if they had any of the following characteristics: not currently attending school, working, having access to satellite TV or the internet, smoking, using alcohol and defining themselves as “moderately religious” rather than “religious”. Younger adolescents were significantly less likely to have ever used condoms during sex than were older adolescents.

- In five states of Mexico, 13-14-year-old students were far more likely than 15-16 and 17-19-year-olds to believe that a woman should be a virgin when
she marries and to hold conservative views about marriage and other sexual behaviors (Menkes). Girls were more conventional than boys on most measures, and students of lower socioeconomic standing were more conventional than those who were better off. Although more traditional attitudes were associated with later sexual initiation, they were also associated with lower use of condoms among those who did become sexually active, regardless of age.

_____  
**Young people in many countries are forming romantic attachments where these were not previously permitted, although such relationships are not always sexual.**

The changing nature of relationship formation and the flourishing of romantic ideas and courtship behaviors have been documented in a variety of sexually conservative societies, although norms (and double standards) of honor and virginity sometimes prevail.

- The growing popularity of dating in urban areas of Vietnam has not resulted in a significant increase in sexual intercourse among teenagers nationwide, which remains among the lowest in the world (Teerawichitchainan). Almost no one reported having sexual intercourse before age 18 in Vietnam. Couples who do become sexually active say that using condoms implies that sex was “planned” or “expected” rather than spontaneous, and that a person who is prepared has a “calculating mind.” Almost all first partners for young men and women are romantic partners or a future spouse, although 11% of young men aged 15-25 in one survey said their first partner was a stranger or sex worker. The sale of condoms to unmarried persons, which the government defines as “promoting a social evil,” is against the law.

- In Indonesia, adolescents grow up amidst competing ideologies of modernism, traditionalism, secularism and religious fundamentalism (both Islamic and Christian) (Utomo and McDonald). A government school-based program on HIV/AIDS adopted in 1997 has not been formally incorporated into the curriculum. Yet young people have easy access to sexually explicit magazines,
videos, and Internet sites. Survey-based results show that premarital sex among adolescent girls is very rare, although probably increasing, and is also rare among boys, among whom it is associated with drug use and other risky behaviors. Young men in dating relationships sometimes visit prostitutes to protect the virginity of their girlfriends. It is illegal for family planning providers to serve unmarried clients.

The timing of male and female sexual initiation during adolescence is not easy to explain or predict with the “usual variables,” with a few exceptions.

A number of studies analyzed the correlates of early sexual initiation among adolescent boys and/or girls and of non-use of condoms. Age and gender are always significant factors (although gender sometimes works in opposite ways), as is the number of years of education and/or current school attendance for girls. Beyond these associations, the effects of factors such as poverty, exposure to mass media, urban residence, family living situations and even religion are often either insignificant or inconsistent across samples.

- In Kenya, Mali and Zambia, a comparison of premarital sexual activity among 15-19-year-old married and unmarried women found that 14, 21 and 23%, respectively, had had intercourse by age 15 and half to two-thirds had done so by age 19 (Djamba). Married women were more likely to report having had premarital sex than unmarried women at each age; beyond this, age was positively associated with having premarital sex and female education was negatively associated. Consistent differences were not observed across countries based on religion, rural-urban residence, economic assets or media exposure, however.

- Among girls aged 12-19 in South Nyanza, Kenya, about half had initiated sex before age 16, the legal age for sexual consent (Magadi and Agwanda). Five percent mentioned that they had sex before age 12 and 80% by 18 (the legal age of adulthood), at which time almost half had already had their first child. Girls’ (and their mothers’) education and higher economic status were associated with
later sexual initiation, marriage and childbearing, but there were no consistent differences between Protestants and Catholics or by place of residence (rural-urban, district), and other socioeconomic, cultural and personal factors.

• In Mali, age at first sex is rising for females as marriages are increasingly delayed, especially in urban areas (Sauvain-Dugerdil et al). Still, sexual initiation occurs very early: 53% of young rural women and 38% of men had intercourse before age 15, and 34% and 21%, respectively, in the city of Bamako. Young women from better-off households with more schooling initiated sex later while schooling was associated with earlier sexual initiation among boys. By age 20, 83% of young rural women and 62% of those living in Bamako were already mothers but only 12% and 8% of young men, respectively, had become fathers.

Interventions to promote later sexual initiation and/or safer sex are often too brief and are more likely to change knowledge than behaviors and have short-term rather than long-term effects.

• In China, premarital sexual activity is increasingly common among young couples but is initiated late and is still low by international standards. A community-based program to promote contraceptive use among unmarried young people aged 15-24 in Shanghai resulted in a short-term increase within 20 months of the launch of the intervention but no long-term effects as measured 28 months after the end of the intervention (Xiaowen Tu et al). However a major factor in the lack of a long-term effect is the weakening in the implementation of the intervention over time, combined with positive changes in the control areas that were outside the control of the study. Most couples initiate sex without the use of condoms or other contraceptive methods. It is difficult for unmarried persons in China to obtain contraceptives, however, and providers are reluctant to serve such clients. These factors help to explain why the intervention did not necessarily translate into higher levels of contraceptive use in the long-term.
In a community-based male-to-male peer outreach program aimed at boys 13-19 living in the slums of Recife, Brazil, only 32% of boys had used a condom at first sex and even fewer of those who first had sex at age 14 or younger (Juarez et al). Sexual and reproductive knowledge at the outset was very low: 20% of boys could not name any contraceptive method and most were confused about STI/HIV symptoms and prevention. Researchers worked within the community to learn how male adolescents think and to gain the support of gang leaders and adults. Though significant gains were obtained in boys’ knowledge, attitudes and behaviors, it was clear that the intervention would have to continue over a long period of time to have sustained effects. In this case it did, because after completion of the project intervention, peer leaders and the community continued with the intervention, which was self-sustainable.

“Marriage” encompasses many different types of unions—arranged or freely chosen, legal or consensual—and many different types of living arrangements that have implications for adolescents’ sexual and reproductive health and rights.

Shifts away from early marriages arranged by parents to later marriages in which young people have more opportunities to choose or refuse have been documented in a number of countries. In addition to choosing their own marriage partners, some couples may establish consensual unions as a way of avoiding parental control or the costs of a marriage, or when there is a pregnancy. The proportions of married 15-19-year-old girls who are in informal rather than legal unions ranges within sub-Saharan Africa from 3% in Eritrea and 6% in Benin to 51% in Ghana and 71% in Rwanda. They are especially high in Latin America and the Caribbean: over 50% almost everywhere, and 84% in Peru and El Salvador, 89% in Colombia and 93% in the Dominican Republic.

In eastern Guatemala, girls with more schooling entered their first union later, but education was only one of many factors determining the timing of the union (Behrman et al). In the four villages sampled, 28% of girls and 6%
of boys were already in a union before age 18 and 22% and 4%, respectively, had a child. The mean gap between first union and first parenthood was only 0.6 years, suggesting that cohabitation or marriage often followed rather than preceded a pregnancy.

- In a slum area of Dhaka, Bangladesh, half of a sample of married girls aged 15-19 had chosen their own husbands, whom they had typically met at work or in the community (Rashid). Their average age at first union was 13.5 years. Girls felt pressures to have a child early, despite the economic difficulties it would cause. Ill health during pregnancy was viewed as normal, and most girls delivered their babies with the assistance of traditional birth attendants or female relatives. Although clinics and hospitals were available nearby, women feared ill treatment by providers and said they were often expected to pay for “free” services.

What is “agency” among young people, and how can it be measured?

Questions of adolescents’ “readiness” or “preparedness” for responsible sex, marriage and parenthood at different ages and in different settings were extensively discussed, particularly in relation to chronological age. The concept of agency—that is, the ability to make strategic life choices—is composed of attributes such as freedom of movement; knowledge of one’s environment; participation in decision making; an adolescent’s sense of self-worth; belief that girls should have the same rights as boys; and—for the purposes of this research—basic sexual and reproductive health information.

Among unmarried young people ages 15-24 in Maharashtra, India, urban and rural males had significantly more freedom of movement than females and took part in more decisions about their lives (Jejeebhoy et al). Females had somewhat more egalitarian gender role attitudes and a slightly higher sense of self-worth, while boys knew far more than girls about condoms. Few knew whether a girl can get pregnant at first intercourse, whether bleeding is inevitable then, or about the fertile time of the cycle. Young persons with more education, who were earning wages, and with close ties to peers measured higher on agency. Researchers concluded that adolescents’ decision-making capacities would be strengthened by encouraging completion of secondary school; investing in livelihood skills; overcoming girls’ social isolation; challenging traditional norms of masculinity; and overcoming misconceptions about sex and reproduction.
Motherhood and fatherhood in adolescence have very different meanings and program requirements, depending on the circumstances of the pregnancy.

- In Argentina, older adolescent girls (aged 18-19) giving birth in public maternity wards and hospitals were far more likely to have wanted their pregnancy than were younger adolescents (Gogna et al). Their pregnancies more often occurred in a romantic relationship and 71% had started living with their partners when the baby’s birth was registered. Only 42% of girls under age 15 lived with their partners and most of their pregnancies were unwanted. The majority of mothers under 15 were victims of incest or sexual abuse, and 80% of the fathers were at least 10 years older. Across all ages, four-fifths of the girls had not been using any contraceptive method when they became pregnant; half because they wanted a baby and the others because they lacked adequate information and access.

- In Colombia, age at sexual initiation and first pregnancy for girls has been declining over the past decade or so, with rural, poorer and less educated girls undergoing the earliest transitions (Flórez and Soto). Pregnancy-induced union formation and single motherhood appear to be increasing, with many pregnancies being defined as unwanted, especially among younger girls. A Sexual Education Law approved in 1994 making it mandatory to include sexual education in the curriculum of public and private schools has had very little impact due to lack of consistent implementation. Health centers offer services, but for various reasons many adolescent girls don’t know about them or are not using them.

School attendance during early or mid-adolescence does not necessarily “cause” girls or boys to delay sex, marriage or childbearing.

Decisions about attending or staying in school are not necessarily made by adolescents themselves, but reflect the preferences, resources and investment
decisions of their families and communities. Moreover, research shows that early sexual initiation, union formation and/or pregnancy often follow rather than precede school leaving and are associated with slow progress, grade repetitions, poor scholastic performance, poor quality teaching, unsafe school environments, and other factors.

- In Argentina, most girls giving birth in public maternity wards who were not in school at the time they became pregnant had either completed their schooling or said they hadn’t wanted to study any more (Gogna et al). Girls who had already left school often viewed their pregnancies as conferring special status. Those who quit school when they became pregnant had typically thought about leaving previously, even though the schools had flexible policies to encourage pregnant adolescents and even young nursing mothers to continue their education.

- In South Africa, the association between school leaving and sex and childbearing is very different for males and females and for black African, colored and white adolescents (Marteleto et al). Black male and female adolescents have the highest rates of sexual initiation at each age and whites have the lowest. Virtually none of the adolescents in any of the groups was married or in an informal union before age 20 and virtually none of the boys or white girls had become parents by age 20. School enrollment among all groups in early adolescence is almost universal, but educational performance differs dramatically across racial groups and by gender. Although girls do better in school on average than boys do, their progress is slowed by the birth of a child, particularly among black Africans.

- In national surveys of older students who were in school at age 12 in Burkina Faso, Ghana, Malawi and Uganda, early puberty and female premarital sex hastened subsequent school exit in three of the four countries; school enrollment delayed female premarital sex in two of the four countries; and male premarital sex and school enrollment were not linked (Biddlecom et al). Poor
school environments hastened school exit for everyone, and starting school late, repeating grades and dropping out were common. Researchers concluded that there was “no dominant trajectory of school and reproductive transitions in adolescence.”
POLICY ISSUES AND IMPLICATIONS

Given the commonalities and diversities observed across settings in adolescents’ sexual, marital and reproductive transitions and their implications for human rights, it is clear that significant policy and programmatic work needs to be done in the following areas.

The protection of adolescents’ sexual and reproductive health and rights depends on parallel efforts to ensure certain enabling conditions.

Making significant progress toward the achievement of the Millennium Development Goals (MDGs) is essential if adolescents’ health and rights are to be assured. These include poverty alleviation, universal primary schooling, the promotion of gender equality and girls’ and women’s empowerment, improvements in reproductive health and child survival, prevention of HIV/AIDS, malaria and other diseases, and employment. Enabling conditions extend also to the elimination of discrimination based on sexual identity or orientation, race, religion, ethnicity, nationality, and other group identities as well as reductions in all forms of conflict and violence.

A package of special initiatives is required to meet adolescents’ particular sexual and reproductive health needs and to advance and protect their rights.

- Comprehensive, age-appropriate and cumulative sexuality education should be adopted in and out of the schools, beginning at young ages, that stresses human rights, gender equality, and sexual rights and responsibilities, together with national and community-based information, education and communica-
tion (IEC) campaigns promoting safe sex, prevention and care for all, including adolescents.

- Universally accessible and comprehensive sexual and reproductive health services in primary care health centers, family planning clinics, and other venues should be designed to reach adolescents of both sexes with the information, counseling, testing, services and supplies (e.g., condoms, birth control pills, HIV tests) that they need.

- Legislation and other measures are needed to enable adolescents to exercise their rights to be free from sexual harassment, violence and coercion; from marriages entered without their full consent; and from harmful practices such as female genital mutilation (FGM); as well as their right to prevent unwanted conceptions regardless of age or marital status; to terminate an unwanted pregnancy safely, to carry a wanted pregnancy safely through delivery; and to stay in school.

Obstacles to the adoption and implementation of adolescent sexual and reproductive health policies and programs need to be identified and overcome.

Governments are often reluctant to challenge traditional practices or beliefs that violate human rights if it is not in their political self-interest to do so. The government of Indonesia, for example, has adopted a forward-looking policy on family planning and safe pregnancy for married couples as well as on women’s empowerment and domestic violence (Utomo and McDonald). But unmarried persons are excluded from sexual and reproductive health services (especially family planning) for moral and religious reasons and the issue has become highly politicized. Buffeted by competing demands and criticisms from separatist movements, religious fundamentalists, and other groups, the government of Indonesia has “retreated to the safer ground of inactivity” with respect to adopting an enlightened adolescent sexual and reproductive health and rights policy.
Sexuality, union formation and childbearing as well as the authority of parents over their sons and daughters are controversial issues almost everywhere. Answers are needed to questions such as the following: What would motivate a government or political party to take on an unpopular issue that many people find threatening? What evidence and arguments are needed to convince policy makers faced with political, cultural or religious opposition that it is in their political interest to “do the right thing” with respect to guaranteeing the health and well being of young people?

Research evidence should be presented in a manner that policy makers find accessible, useful and convincing.

Policy makers and planners “on the ground” must make decisions based on imperfect information, but they need to show results. They want to know what is required and for whom, why, where, when and how—and how much will it cost? In contrast, academic researchers often hedge their bets with qualifications and hold to standards of evidence that are difficult to meet. In a constantly changing world, classic experiments are designed to test the effectiveness of informational, educational or service interventions—often narrowly defined with respect to costs and benefits—as though the world were standing still, when other approaches such as “natural experiments” might be sufficient. How much evidence, and of what kinds, is “enough”? When is it necessary to gather even more, and when and how can existing research, statistical and narrative reports be better formulated as tools for action, even if they may be imperfect?

• Basic demographic and health data for adolescents must be disaggregated by gender and more precise age groups such as 10-11, 12-14, 15-17, and 18-19, as far as possible. Summary measures of “adolescent fertility rates” ages 15-19 or of HIV/AIDS among “young people” aged 15-24 are not helpful for assessing particular needs.
• Evaluations of programs such as school- or community-based initiatives for preventing STIs/HIV and unwanted teenage pregnancy and for changing gender attitudes that set extremely high experimental design criteria must recognize the costs of inaction as well as action and take a realistic view of what is possible.

• Applied research useful for adolescent programming includes operational research on the adaptation of inputs for delivery to particular groups; approaches to teacher or provider training; assessments of advocacy efforts to win the support of community and national leaders; and strategies for overcoming the resistance of planners or donors who argue that particular initiatives “are not possible here,” “don’t work,” or are “not cost-effective.”

Research must not only influence but respond to the priorities set by policy makers and programmers who, in turn, need to be involved in setting the research agendas for the issues that concern them most. All parties to the research endeavor should begin with the basic question, what do we need to know, and why do we need to know it? Further, once research results are available, interactive presentations and discussions with policy makers, program planners and community groups are needed to determine their significance for guiding new and existing sexual and reproductive health policies and programs for adolescents.
LIST OF PRESENTED PAPERS

List of papers presented at the Seminar on Sexual and Reproductive Transitions of Adolescents in Developing Countries organized by the IUSSP Scientific Panel on Adolescent Life Course in Developing Countries and the Center for Demographic, Urban and Environmental Studies (CEDUA), El Colegio de México, held in Cholula, Puebla, Mexico, 6-9 November 2006.

Session 1: Rethinking concepts and methods

• “How young is ‘too young’? Comparative perspectives on adolescent sexual and reproductive transitions” by Ruth Dixon-Mueller

• “Agency among unmarried young people in India: Levels, patterns and gender differences” by Shireen Jejeebhoy, Rajib Acharya, Mallika Alexander, Laila Garda, Savita Kanade and Bela Ganatra

• “Gender inequality, sexual morality and sexual practices of the adolescents” [Mexico] by Catherine Menkes

Session 2: Schooling and adolescent transitions

• “Premarital sex and schooling transitions in four sub-Saharan Africa countries” by Anne Biddlecom, Richard Gregory, Barbara Mensch and Cynthia Lloyd

• “What is the real impact of schooling on age of first union and age of first parenting? New evidence from Guatemala” by Jere R. Behrman, Alexis Murphy, Agnes Quisumbing, Usha Ramakrishna and Kathryn Yount
“Does women’s education influence the timing of marriage and childbearing in the next generation? Evidence from rural Bangladesh” by Lisa M. Bates, Joanna Maselko and Sidney Ruth Schuler

Session 3: Interrelationships between transitions

“Sexual behavior, childbearing, union formation and schooling in South Africa: Evidence from panel data” by Leticia Marteleto, David Lam and Vimal Ranchhod

“The process of marital couples’ formation in Mexico” by Marta Mier y Terán

Sessions 4-5: Sexual behavior: transitions

“Sexual and reproductive transitions of young Indonesians in a context of contested values and policy inactivity” by Iwu Dwisetyani Utomo and Peter McDonald

“Premarital sexual activity among young men in Vietnam” by Bussarawan Teerawichitchainan

“Sexual risk-taking behaviors among boys aged 15-18 in Tehran” by Kazem Mohammad, Farideh Khalaj Abadi Farahani, Mohammad-Reza Mohammadi, Simak Alikhani, Mohammad Zare, Fahimeh Ramezani Tehrani and Ali Ramezankhani

“Intergenerational and longitudinal predictors of sexual debut in the Philippines” by Michelle J. Hindin

“Does female circumcision influence sexual behaviour of adolescent women? Evidence from Burkina Faso” by Banza Baya and Idrissa Ouili

“The start of the ‘sexual transition’ in Mali: Risks and opportunities” by Claudine Sauvain-Dugerdl, Bassoutoura Gakou, Fatou Berthé, Abdoul Wahab Dieng and Samba Diop
• “Differential influences of poverty on the transition to premarital sexual activity in three African countries” by Yanyi K. Djamba

• “The determinants of timing of first sexual intercourse, first marriage and first birth among female adolescents: Evidence from South Nyanza, Kenya” by Monica A. Magadi and Alfred O. Agwanda

---

**Session 6: Adolescent reproductive health programs**

• “Improving reproductive health and transitions to adulthood: A successful service strategy” [Recife, Brazil] by Fatima Juarez, Vera Man, Tais de Freitas, John Cleland and John Simons

• “Long-term effects of sex education and reproductive health service program on contraceptive use among unmarried youth in Shanghai, China: A community-based study” by Xiaowen Tu, Chaohua Lou, Ersheng Gao and Iqbal H. Shah

• “Promoting youth-to-youth sexual and reproductive health education with an integrated livelihood programme in Kassena-Nankana District of northern Ghana” by Atinbire A. Solomon and Cornelius Debpuur

• “Usage of sexual and reproductive health services by adolescents: its implicit necessities” [Morelos, Mexico] by Xóchitl Romero, Bernardo Hernández, Joaquina Ervit, Blanca Pelcastre, Jorge Salmerón, Jyoti Mudgal and Nadine Gasman

---

**Session 7: Marriage and childbearing transitions**

• “Consensual unions in Burkina Faso: Levels, trends and determinants” by Zourkaleini Younoussi and Thomas K. LeGrand

• “Reproductive tensions and dilemmas: Urbanization and poverty and its impact on the lives of married adolescent women in slums in Dhaka, Bangladesh” by Sabina Faiz Rashid
• “Adolescent pregnancy and motherhood in Argentina: A ‘happy marriage’ between evidence and rights-based policies?” by Mónica Gogna, Georgina Binstock, Silvia Fernández, Nina Zamberlin and Inés Ibarlucía

• “Adolescent fertility in Colombia: What do we know?” by Carmen Elisa Flórez and Victoria Eugenia Soto

Session 8: New approaches to data collection

• “Sexual behavior and STI/HIV status among adolescents in rural Malawi: An evaluation of the effect of interview mode on reporting” by Barbara S. Mensch, Paul C. Hewett, Richard Gregory and Stephane Helleringer

• “Sexuality and HIV/AIDS among young people in vulnerable populations in three cities of Mexico” by Cecilia Gayet and Carlos Magis-Rodríguez
ADDITIONAL READINGS


The International Union for the Scientific Study of Population (IUSSP) is an international professional association that brings together over 2,000 population specialists from all over the world to address key population issues. It is composed of demographers, economists, sociologists, statisticians, physicians, public health officers, family planners, administrators and policy makers from 140 countries. Founded in 1928, the IUSSP is internationally recognized for its role in identifying emerging and critical population and development issues, encouraging scientific research on these topics, and sponsoring international seminars, workshops, conferences, training sessions, and Internet forums at which critical issues can be discussed and debated.

One of the main functions of the IUSSP is to stimulate interest in population matters among governments, national and international organizations, the scientific community and the general public. In order to bring the results of policy-relevant IUSSP scientific activities to the attention of governments and civil society organizations concerned with population issues, the IUSSP began the Policy and Research Papers series.

The outcomes of IUSSP meetings are also disseminated through a wide range of publications: the IUSSP website, edited volumes and articles in leading peer-reviewed journals. The results of its work are also communicated to international governing and policy-making institutions with which IUSSP has special consultative status, such as the Economic and Social Council of the United Nations.

The IUSSP is funded through membership dues and grants from governments, international donors and private foundations. It has recently received funding from the governments of France, Belgium, and the Netherlands, UNFPA, the William and Flora Hewlett Foundation, the World Bank, the Wellcome Trust, and the Bill and Melinda Gates Foundation.

IUSSP
3-5 rue Nicolas, 75980 Paris cedex 20, France

© Copyright 2007

List of previous issues of the Policy & Research Papers series

19 Population Ageing in Industrialized Countries: Challenges and Issues. Gustavo De Santis, 2001
17 Men, Family Formation and Reproduction. Silvia Necchi, 1999
14 Data and Decision-making - Demography’s Contribution to Understanding AIDS in Africa. Elizabeth Pisani, 1998
10 Population and Environment in Arid Regions. Allan Findlay, 1996
9 Women, Poverty and Demographic Change. Julieta Quilodran, 1996
8 Population and Environment in Industrialised Regions. Catherine Marquette, 1996
5 Women’s Roles and Demographic Change in Sub-Saharan Africa. C. Oppong & R. Wéy, 1994
4 Toward a More Effective Policy Response to AIDS. David Anderson, 1994
3 Health and Mortality Trends among Elderly Populations: Determinants and Implications. Walter Mertens, 1994
2 Population and Deforestation in Humid Tropics. Walter Mertens, 1994
1 Contributions of the IUSSP to the International Conference on Population and Development. Walter Mertens, 1994

All issues of the Policy & Research Papers series can be downloaded for free on the IUSSP website (www.iussp.org).
Sexual and Reproductive Transitions of Adolescents in Developing Countries

This Policy and Research Paper presents findings and recommendations from the seminar on Sexual and Reproductive Transitions of Adolescents in Developing Countries organized by the IUSSP Scientific Panel on Adolescent Life Course in Developing Countries and the Center for Demographic, Urban and Environmental Studies (CEDUA), El Colegio de Mexico, which was held in Cholula, Puebla, Mexico, 6-9 November 2006. Additional support was received from UNFPA and the Guttmacher Institute.

About the Author

Canadian-born Ruth Dixon-Mueller, formerly Professor of Sociology at the University of California at Davis, is currently an independent consultant. She has published a number of articles on marriage and divorce, family planning, women’s employment, and sexual and reproductive health and rights and is the author of Rural Women at Work: Strategies for Development in South Asia, Women’s Work in Third World Agriculture: Concepts and Indicators, Population Policy and Women’s Rights: Transforming Reproductive Choice, and Abortion and Common Sense. Dr. Dixon-Mueller lives in Costa Rica.