

Adolescent Reproductive Health in Asia

It is evident that the sexual and reproductive health of adolescents has emerged as an issue of great concern in Asia. This is based on two demographic trends that exist in the region: the widening gap between sexual maturity and age at marriage, and the continuing prevalence of adolescent marriage and low contraceptive use during adolescence.

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The reproductive health of adolescents is of growing concern today. The Programme of Action adopted at the International Conference on Population and Development, held at Cairo in 1994, stresses the importance of addressing adolescent sexual and reproductive health issues and promoting responsible sexual and reproductive behaviour (United Nations, 1994). The reproductive health needs of adolescents have been largely ignored by the existing health services. Therefore, there is a need to provide such services and to undertake research in understanding adolescent sexual behaviour and reproductive health.

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It is important to recognize the growing incidence of premarital sexual activity among adolescents, owing to the widening gap between age at menarche and age at marriage. As most acts of premarital sexual intercourse are unprotected, sexually active adolescents are increasingly at risk of contracting and transmitting sexually transmitted diseases (STDs), including HIV/AIDS. In addition, young women are particularly vulnerable to coerced sexual intercourse as a result of gender power imbalances. Sexually experienced adolescents are typically unaware of the consequences of unprotected sexual intercourse and are poorly informed of their sexuality and means of protecting themselves, often leading to unwanted pregnancy and abortion.

In some Asian countries, there is a high proportion of marriage during adolescence, resulting in a high rate of adolescent childbearing. Motherhood at a very young age entails a risk of maternal mortality that far exceeds the average, and the children of young mothers tend to have higher levels of morbidity and mortality. Early childbearing continues to be an impediment to improvements in the educational, economic and social status of women. It is also known that contraceptive use among married adolescents is noticeably lower than among older women. Thus, it is important that information and services on reproductive health be made available to both married and unmarried adolescents.

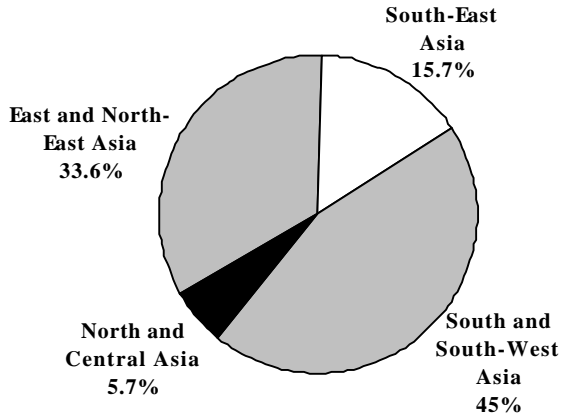
This paper first highlights the demographic dimensions of the sexual and reproductive health of adolescents in Asia. It discusses adolescent sexuality and the factors that influence their sexual behaviour. It also discusses adolescent childbearing and contraceptive use. Finally, it examines the consequences of adolescent sexuality and childbearing and concludes with a discussion outlining the scope for further research.

Demographic dimensions of adolescent sexual and reproductive health

Adolescents in Asia

Adolescence is defined as the stage of life during which individuals reach sexual maturity; it is the period of transition from puberty to maturity (United Nations, 1997). The 10-19 age group identifies the period of adolescence. However, for the purpose of this paper, the word “adolescents” refers to the 15-19 age group, as data on reproductive health are most commonly available for this particular age group. Furthermore, the reproductive health problems and needs of adolescents tend to be more distinct than those of youth aged 20 to 24 years old.

Figure 1. Percentage distribution of population aged 15 to 19: Asia, 2000

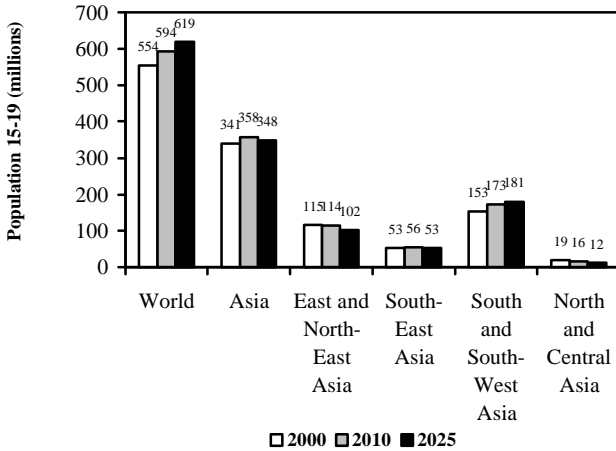


Source: United Nations (2001a). *World Population Prospects, The 2000 Revision*, vol. 1, *Comprehensive Tables* (United Nations Publication, Sales No. E.01 XIII.8).

Of the world's 6.1 billion population in 2000, over one billion people (19.1 per cent) belonged to the 10-19 age group. The Asian region comprises 712 million people in this age group. According to United Nations medium-variant projections, the number of persons in the 10-19 age group will continue to grow worldwide, reaching 1,253 million by the year 2025, while in Asia this number will decline to 698 million by the year 2025 (United Nations, 2001a).

The population in the 15-19 age group, hereafter referred to "as adolescents", will also experience a remarkable change during the period 2000-2025. In 2000, there were 554 million adolescents living in the world, of whom 48.5 per cent were females. Over three fifths (62 per cent) of these adolescents belong to Asia. In this region, 9 per cent of the total population in 2000 were adolescents. Figure 1 shows that the largest number of adolescents reside in South and South-West Asia (45 per cent) followed by East and North-East Asia (33.6 per cent). According to United Nations medium variant projections, the world adolescent population will increase by 40 million to 594 million by 2010, while in Asia it will increase by 17 million to 358 million by 2010. While the world's adolescent population will continue to grow to 619 million

Figure 2. Trends in population aged 15 to 19: world and Asia, 2000, 2010 and 2025



Source: United Nations (2001a). *World Population Prospects, The 2000 Revision*, vol. 1, *Comprehensive Tables* (United Nations Publication, Sales No. E.01 XIII.8).

by 2025, Asia will witness a fall in its adolescent population to 348 million by 2025, dropping to 7 per cent of the total population (figure 2).

Within Asia, the number of adolescents will continue to grow in South and South-West Asia, from 153 million in 2000 to 181 million in 2025, while other subregions will exhibit a decline in the number of adolescents in 2025.

Age at marriage

There are two distinct issues concerning the trends in age at marriage in Asia that have implications for the sexual and reproductive health of adolescents. The first concerns the trend towards an increase in the age at marriage in many countries in the region. This trend has resulted in an extended period of adolescence before marriage in these countries. At the same time, a number of studies have documented the trend of a fall in age at menarche, which implies an earlier onset of adolescence, sexual maturity and the ability to reproduce. This trend is commonly attributed to a variety of environmental, genetic and socio-economic factors, including improved

Table 1. Percentage of women aged 20 to 24 and 40 to 44 who married by ages 15, 18 and 20, by country and year of survey

Country	Year of survey	20 to 24			40 to 44		
		Percentage married by age			Percentage married by age		
		15	18	20	15	18	20
Bangladesh	1996/1997	46.8	68.5	77.1	73.5	93.6	96.7
India	1992/1993	26.1	54.2	71.4	40.8	72.4	85.3
Indonesia	1997	5.8	29.6	47.0	18.2	49.1	67.2
Kazakhstan	1999	0.3	14.7	54.6	0.1	7.8	37.1
Kyrgyzstan	1997	0.1	21.2	58.4	0.0	15.7	46.7
Lao People's Democratic Republic	2000	7.3	26.0*	49.5**	6.0	23.3*	48.8**
Mongolia	1998	0.2	10.4	36.7	0.4	17.7	44.8
Nepal	1996	19.1	60.3	75.7	36.5	75.0	87.1
Pakistan	1990/1991	11.4	31.6	48.9	18.0	44.8	60.9
Philippines	1998	2.0	14.6	27.5	3.3	20.2	36.8
Sri Lanka	1993	1.1	13.7	27.8	8.0	26.3	40.5
Thailand	1987	2.4	20.5	37.0	3.1	24.4	47.4
Turkey	1998	4.2	23.0	42.8	10.8	43.0	66.2
Uzbekistan	1996	0.4	15.3	55.7	0.2	18.0	56.2
Viet Nam	1997	0.9	12.4	35.9	1.3	13.2	34.6

Sources: Various demographic and health surveys.

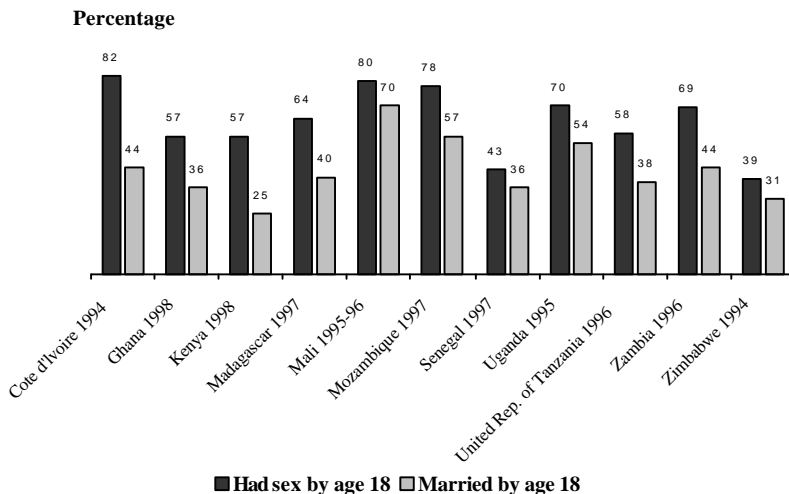
* By age 17.

** By age 19.

nutrition and exposure to modern social life. As a result, young girls are biologically mature enough to engage in sex and become pregnant at an earlier age, although they may not be emotionally and psychologically mature enough to understand the implications. The widening gap between age at menarche and age at marriage increases the possibility that young people will engage in premarital sexual activity. Moreover, because of the sexual inequality that prevails in many Asian societies, adolescent girls are particularly vulnerable to the risks associated with misinformed and unprotected sexual relationships, as well as the adverse consequences of adolescent pregnancy.

The second issue relates to the high incidence of marriage during adolescence in some countries in the region, resulting in higher rates of childbearing. Table 1 shows the trend in the proportions married by ages 15, 18 and 20 between women aged 40 to 44 and women aged 20 to 24 at the time of the survey. This table reveals that in several countries in Asia, there is a clear

Figure 3. Women aged 20 to 24 who had sexual intercourse and/or who married by age 18, sub-Saharan Africa

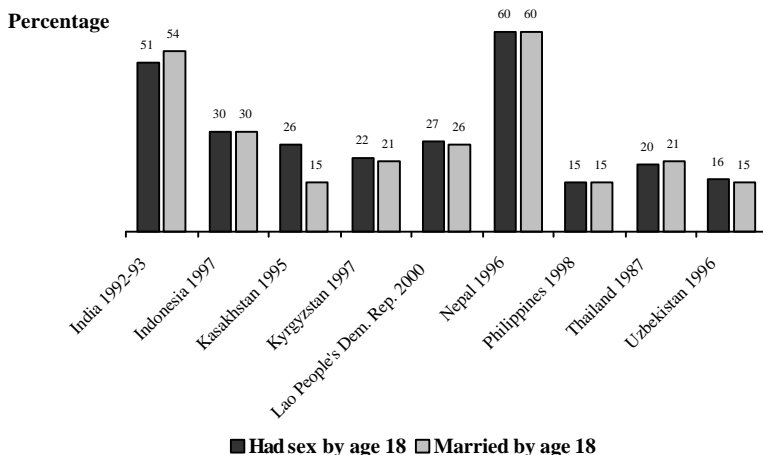


Source: Population Reference Bureau (2001). *Youth in sub-Saharan Africa: A Chartbook on Sexual Experience and Reproductive Health* (Washington, DC, Population Reference Bureau, MEASURE Communication), figure 7, p. 13.

tendency towards a decline in the proportions married by ages 15, 18 and 20 between the older cohort of women aged 40 to 44 and the younger cohort of women aged 20 to 24. It is only in Kazakhstan and Kyrgyzstan that there has been a notable increase in the proportions married by ages 15, 18 and 20 between the older and younger cohort of women. In the Lao People's Democratic Republic, Uzbekistan and Viet Nam, the proportions married have remained almost unchanged.

It is, however, to be noted that despite the decline in the proportions married by ages 15, 18 and 20 over time, some countries currently exhibit a high incidence of marriage during adolescence. In Bangladesh, for instance, 47 per cent of women aged 20 to 24 were married by age 15, and 69 per cent and 77 per cent of these women were married by ages 18 and 20, respectively. A similar high rate of adolescent marriage is observed in India and Nepal. Among women aged 20 to 24, over 70 per cent of women in these countries were married by age 20, and over half the women were married by age 18. Similarly,

Figure 4. Women aged 20 to 24 who had sexual intercourse and/or who married by age 18, by country and year of survey



Sources: Various demographic and health surveys.

26 per cent of women in India and 19 per cent of women in Nepal in the age group 20 to 24 were already married by age 15.

Age at first sexual intercourse

In sub-Saharan Africa, the incidence of premarital sex is clearly evident from figure 3, which shows that sexual experience precedes marriage in nearly every country surveyed. In those countries, the proportion of young women who first had sexual intercourse by age 18 is much higher than those women who were married by this age (Population Reference Bureau, 2001). By contrast, available data suggest that premarital sex is less common in Asia. According to the demographic and health surveys carried out in Asia, in six out of nine countries the proportion of women aged 20 to 24 who had sex by age 18 is either lower or equal to the proportion of women who were married by this age (figure 4). In Kyrgyzstan and the Lao People's Democratic Republic, the proportion of women aged 20 to 24 who had sex by age 18 is marginally higher than those women who were married by this age, while in Kazakhstan the proportion of women aged 20 to 24 who had sex by age 18 is substantially higher than those women who were married by this age (25.5 per cent versus 14.7 per cent).

Adolescent sexuality

Sexual behaviour

Although national-level surveys tend to suggest that premarital sex is less common in Asia, more focused in-depth studies on adolescent sexual and reproductive health undertaken in some countries of Asia have revealed that it is clearly on the rise. Survey results on the sexual behaviour of adolescents in Asia suggest that a noticeable percentage of adolescents are sexually experienced. In the Republic of Korea, for example, 24 per cent of male and 11 per cent of female secondary school students were reported to have had premarital sexual intercourse. Among sexually experienced adolescents, the majority of women had their first sexual intercourse with a steady boyfriend with marriage in mind, while a significant proportion of men had their first experience with a commercial sex worker or a casual friend. In Nepal, the Republic of Korea, Thailand and Viet Nam, over half of the adolescent men had sexual intercourse with sex workers. A large number of sexually experienced young men also reported having multiple sexual partners; close to 70 per cent of male students in the Republic of Korea and about 30 per cent of young men in Thailand had more than two partners (Brown and others, 2001).

In India, although traditional norms oppose premarital sex, some studies indicate a growing trend towards premarital sexual activities among adolescents (Sharma, 2000). Data from Bangladesh revealed a very high incidence of premarital sex: 61 per cent of males as compared with 24 per cent of females had had premarital sexual activity among adolescents, and this percentage was much higher in urban than in rural areas (Uddin, 1999). Results from a 1991 study conducted in nine districts of Nepal also found that 20 per cent of young people were engaged in premarital sex (Rai, 2001).

In the case of Myanmar, it has been traditionally believed that unmarried people are not sexually active; however, many people acknowledged that unmarried people are engaged in premarital sex (Htay and others, 2000). In the Lao People's Democratic Republic, a study among community members revealed that sex and pregnancy before marriage were common and more or less accepted because of the common belief that pregnancy outside marriage leads to marriage (Sananikhom and others, 2000). Similar findings were revealed by the series of country case studies on sexual and reproductive health carried out by the UNESCO Regional Clearing House on Population Education and Communication, Bangkok (see box 1).

However, the motivations for premarital sexual intercourse are likely to be different for adolescent men and women. Young men tend to have the

Box 1. Premarital sexual behaviour among adolescents

Cambodia: A study of garment workers revealed that only 2 per cent of unmarried female garment workers had had any form of sexual experience and that these sexual encounters had been with their boyfriends. These young women were on the average 18 years of age at the time of their first sexual experience. However, male garment workers were less likely to have had their first sexual experience with their marriage partners. Some 40 per cent had had their first sexual experience with their girlfriends and another 40 per cent with commercial sex workers (Ampornsuwanna and others, 2000: 6).

Malaysia: A study on the reproductive health of adolescents (aged 13 to 19) revealed that 40 per cent of respondents had begun dating from age 13. By the age of 18, 84 per cent had started holding hands, 85 per cent kissing and necking and 83 per cent petting. In the household survey, 1 per cent admitted to having had sexual experience, while 24 per cent confirmed that in the media survey. Of these, 18.4 per cent had had their first sexual intercourse between 15 and 18 years. Yet another study showed that 45 per cent of respondents aged 15 to 21 had dated and 9 per cent reported having had premarital sexual intercourse. As in most studies, more boys than girls reported having had sexual intercourse, confirming the belief that there is less pressure for boys to remain virgins or that they are more aggressive when it comes to having sex (Lee, 1999:4-5).

Philippines: The 1994 young adult fertility and sexuality study showed that some 18 per cent of youth were engaged in premarital sex, with a higher level of premarital sex, at 26 per cent among males as compared with 10 per cent among females. This study also revealed that there had been very little change in the level of premarital sex among females over the previous 12 years, declining slightly from 11.5 per cent in 1982 to 10.2 per cent in 1994. The average age at sexual debut is 18 years for girls and 18.3 years for boys (Berja, 2000:5).

Thailand: Sexual activity is found to be much more common among male than female adolescents. In a study conducted in 21 private and government secondary schools, it was found that nearly one third of male students in grade 12 were sexually active. In another study from schools, community centres and organizations in provincial cities, two thirds of single males aged 15 to 24 reported having had sexual intercourse. Surveys have also indicated that between 36 and 45 per cent of males had their first sexual experience with a commercial sex worker. In comparison with males, fewer female adolescents were engaged in premarital sex, ranging from only 1 per cent of single females in the school-based study to about 10 per cent of young females drawn from the broad catchment area (Soonthornhdaha, 1996:1-2). Yet, another study conducted among final-year secondary school students in Suphanburi province found that 40.6 per cent of male and 6.6 per cent of female respondents had experienced sexual intercourse (Gray and Sartsara, 1999:7). The above studies also found that the average age at first sexual intercourse was around 16 years for boys and 18 years for girls.

Source: UNESCO Regional Clearing House on Population, Education and Communication, Bangkok.

sexual debut out of curiosity or for the sake of sexual pleasure, but young women are more likely to have premarital sexual intercourse for love, and associate it with marriage or a longterm relationship (Isarabhakdi, 2000; Soonthornhadha, 1996).

Because of the differences in the nature of premarital sexual intercourse between men and women, the adolescent women often experience negative consequences of premarital sexual relations. A study from Free Trade Zone communities in Sri Lanka reported cases of single young women who became pregnant after having unprotected premarital sexual intercourse. These women started their sexual relations with their partners who promised to marry them in exchange for sexual intercourse. However, after discovering the partner's pregnancy, the man either disappeared or left for another woman. As a result, these young abandoned women suffered the consequences of unwanted pregnancy, including unsafe abortions and the stigmatism of being a single mother (Hettiarachchy and Schensul, 2001).

The low level of contraceptive use among "sexually active unmarried adolescents" has also been reported in numerous surveys. For instance, among Vietnamese college students, only 32 per cent of females and 28 per cent of males used a contraceptive method at first sexual intercourse (Brown and others, 2001). In the Lao People's Democratic Republic, out of sexually experienced adolescents aged 15 to 25, as many as 79 per cent did not use any contraceptive methods at first sexual intercourse (Sisouphanthong and others, 2000). Similarly, a study in Nepalese border towns found that less than 65 per cent of unmarried men aged 18 to 24 ever used a condom during sexual intercourse with non-regular sex partners, including commercial sex workers. They claimed to be free from STDs because they thought they were careful to choose disease-free women as partners. However, many men did become infected with STDs, which made them realize the danger of unprotected sexual intercourse (Tamang and others, 2001).

Adolescents, particularly women, are also more susceptible to coercive sexual relationships. There are reports of "sugar daddy" phenomena, which refer to sexual relations between young women and older and wealthier men; young women have sexual intercourse with the older men in exchange for economic gains. In addition to coercion based on the economic power of men, young women have been forced to have sexual intercourse by a person with authority over them. In the Republic of Korea, 9 per cent of female factory workers surveyed had been forced to have their first sexual intercourse with factory supervisors or colleagues (Brown and others, 2001). Moreover, even in

the context of dating, young women tend to be coerced to have sexual intercourse with their boyfriends. One fourth of young Thai women had their first sexual intercourse because they could not resist pressure from their boyfriends. These women accepted sexual demands of their boyfriends to please them and to sustain the relationship. Young women in Bangkok also admitted the weak bargaining power of women over the issue of sexual intercourse (Isarabhakdi, 2000; Soonthorndhada, 1996).

These risky sexual behaviours of adolescents seem to be compounded by a widespread sexual double standard in many Asian societies. Such a double standard accepts or even encourages promiscuity among men, but strictly restricts women's sexual behaviour. Peer pressure among adolescent men to have sexual experiences is one example of the double standard. For example, approximately 40 per cent of young men in rural Thailand said they had their first sexual intercourse because they wanted to be as experienced as their friends (Isarabhakdi, 2000). On the other hand, young women in Bangkok expressed concern about being labelled as loose and complained about the social norm of favouring virgins as marriage partners, but at the same time encouraging men to be sexually experienced (Soonthorndhada, 1996). These young women therefore fall between the sexual demands of their boyfriends and social pressure to be good women.

Factors that lead to risky behaviour among adolescents

The previous section identified the sexual and reproductive health issues affecting both unmarried and married adolescents. The factors and "barriers" that can lead to risky reproductive health-related behaviour among adolescents in general, particularly among unmarried adolescents, fall into four main categories, which are identified below.

Limited access to information

First, adolescents often lack access to sufficient and correct information. Cognitive distortions and a sense of non-susceptibility lead to uninformed decisions, which may result in unwanted pregnancy and STDs. The notions that they are "too young to be pregnant" and "unprotected intercourse just once could not lead to conception or STD transmission" are prevalent among teenagers. There is a great need for reproductive health information and services targeted at adolescents. Information on the risks and prevention of pregnancy, STDs and HIV/AIDS, as well as on the consequences of unplanned pregnancy and abortion, is particularly needed.

Peer pressure

A second factor in risky reproductive health-related behaviour concerns the increasing significance of peer pressure. Growing social acceptance of premarital sex plays a major role in reproductive health-related decision-making among adolescents and other young people. As adolescence is a developmental period of physical transition and identity formation, the struggle for individual autonomy and the social construct of masculinity or femininity render teenagers susceptible to peer pressure. The influence of that pressure is increasing in the context of the erosion of traditional parental control over premarital sexual behaviour and the declining role of family members, especially grandmothers, in providing adolescent girls with premarital instruction and advice on appropriate sexual and marital behaviour (Gage, 1998). A study on the sexual experience of rural Thai youth found that peer influence was one of the main motivations for engaging in first premarital intercourse (Isarabhakdi, 2000).

While parents are perceived to be the logical source of information, they often do not discuss sexual issues with their children because they are embarrassed by the subject. As a result, the family is no longer the prime reference group in reproductive health-related decisions, since teenagers tend to value the opinions of their friends more highly.

Inadequate access to youth-friendly health services

Third, inadequate access to youth-friendly health services is a major barrier for young people and adolescents often “falling through the cracks”. Since they no longer qualify for paediatric services and their health problems are not like those of adults, they require specially trained health personnel. Health systems in most countries, particularly in Asia, generally do not specifically address adolescent needs and adolescents often do not feel comfortable visiting clinics designed for adults.

Moreover, health-care providers in those clinics seem unprepared to discuss sexual issues with adolescents and many fear that the provision of contraceptives will condone premarital sexual activity. Especially in countries with conservative values and traditions, many parents and policy makers have held strong views that providing contraceptive information and services will promote promiscuity among unmarried adolescents. However, reviews of sex education programmes in several countries conclude that sex education does not encourage early sexual activity, but can delay first sexual intercourse and lead to more responsive behaviour (UNAIDS, 1997).

Hence, the lack of knowledge of contraceptives on the one hand and access to contraceptive services and supplies on the other may prevent adolescents from using contraceptives even when they want to protect themselves from pregnancy.

Economic constraints

Finally, economic constraints can influence the behaviour of young people in some cases. Resource constraints affect the ability to buy contraceptives or seek medical services. Another economic dimension is manifested through youth involvement in sexual relations for economic gain. Economic exchanges are made with persons who are perceived to be in a position to provide economic remuneration for sexual favours. Adolescents are more likely than adults to engage in such sexual behaviour as offering sex for money or having coercive sex. Adolescent girls are more vulnerable than adult women to being involved in such exploitative sexual practices because of compelling reasons to earn money for their own needs or for their families (Podhisita and others, 1994).

Adolescent childbearing and contraceptive use

Childbearing

This section examines the level and trends in adolescent childbearing in Asia. According to the United Nations (2001a), 132 million babies are born worldwide each year. Close to 90 per cent of these births (119 million) occur in the developing world, and slightly over three fifths (76 million) in Asia. Of the total annual births in the world, about 14 million babies (10.6 per cent) are born to adolescent mothers. In Asia, 6 million babies (8 per cent) are born to adolescent mothers.

Several countries in Asia have witnessed a substantial decline in the total fertility rate over the past few decades and a subsequent fall in adolescent fertility. However, there are still a number of countries in the region with fairly high adolescent fertility rates. According to the *2001 ESCAP Population Data Sheet*, the adolescent fertility rate in Asia is 36 births per 1,000 females aged 15 to 19 (United Nations, 2001b). This regional average, however, masks the considerable rate differences within the subregions of Asia. Adolescent fertility rates are highest in South and South-West Asia (57 births per 1,000) followed by 45 births per 1,000 in South-East Asia, and 37 births per 1,000 in North and Central Asia. The adolescent fertility rate is lowest in East and North-East Asia (4 births per 1,000).

Table 2. Percentage of women aged 20 to 24 who had had a child before ages 15, 18 and 20, by country and year of survey

Country	Year of survey	Percentage of 20 to 24-year-olds who had had a child by age		
		15	18	20
Bangladesh	1996/1997	14.7	46.5	63.3
India	1992/1993	5.1	28.3	48.6
Indonesia	1997	1.7	14.0	31.4
Kazakhstan	1999	0.2	6.0	22.1
Kyrgyzstan	1997	0.0	4.2	36.6
Lao People's Democratic Republic	2000	1.7	17.5	36.7
Mongolia	1998	0.1	5.4	24.7
Myanmar	1997	1.4	14.5	40.9
Nepal	1996	1.9	26.2	51.6
Pakistan	1990/1991	3.3	17.2	30.5
Philippines	1998	0.5	7.1	20.5
Sri Lanka	1993	0.4	5.4	16.6
Thailand	1987	0.8	9.3	23.9
Turkey	1998	0.9	10.9	26.2
Uzbekistan	1996	0.0	2.6	25.3
Viet Nam	1997	0.3	4.1	18.9

Sources: Various demographic and health surveys.

The high rates of adolescent childbearing found in South and South-West Asia are obviously related to early age at marriage. It is evident from table 2 that Bangladesh has one of the highest levels of adolescent childbearing, followed by Nepal and India; all these countries are characterized by early age at marriage for females. It is interesting to note that in Bangladesh about 15 per cent of women aged 20 to 24 had had a child before they reached 15. By the time they were 18 years of age, about 47 per cent had had a child and over three fifths (63.3 per cent) had had a child before age 20. Similarly, over half the women aged 20 to 24 in Nepal and almost half the women in this age group in India had had a child before reaching age 20.

Contraceptive use

The study of the use of contraceptives among adolescents reveals an issue of key importance to this particular group, namely, that adolescent girls may know about contraceptives but do not necessarily use them. The data presented in table 3 show that knowledge levels concerning contraceptives exceed 90 per cent among adolescent married girls surveyed in all of the countries except the Lao People's Democratic Republic, Myanmar and Uzbekistan. However,

Table 3. Percentage of currently married women of reproductive age with knowledge and current use of any contraceptive by age, by country and year of survey

Country	Year of survey	Knowledge of contraception			Use of contraceptives		
		15-19	20-24	15-49	15-19	20-24	15-49
Bangladesh	1996/1997	99.9	100.0	100.0	32.9	43.1	49.2
India	1992/1993	90.4	95.1	95.8	7.1	21.0	40.6
Indonesia	1997	94.0	97.3	97.2	44.5	60.7	57.4
Kazakhstan	1999	—	—	99.6	39.2	53.0	66.1
Kyrgyzstan	1997	99.1	100.0	99.8	29.3	48.7	59.5
Lao People's Democratic Republic	2000	66.9	77.7	79.4	6.7	20.2	32.2
Mongolia	1998	97.6	99.5	99.3	23.5	48.1	59.9
Myanmar	1997	87.1	92.2	92.9	21.3	30.4	32.7
Nepal	1996	96.9	98.7	98.4	6.5	15.8	28.5
Pakistan	1996/1997	—	—	94.3	6.2	9.9	23.9
Philippines	1998	96.5	98.7	98.8	21.8	39.8	47.8
Sri Lanka	1993	96.3	98.9	99.1	30.3	53.6	66.1
Thailand	1987	99.5	99.4	99.6	—	—	67.5
Turkey	1998	98.5	99.1	98.9	33.6	52.9	63.9
Uzbekistan	1996	85.7	93.8	95.7	15.8	35.5	55.6
Viet Nam	1997	97.0	97.6	98.9	18.1	55.1	75.3

Sources: Various demographic and health surveys.

adolescents' knowledge of contraception is relatively lower as compared with women aged 20 to 24 and women aged 15 to 49. It is also evident that in countries where the knowledge level is very high, there is only a small difference in contraceptive knowledge between females in the age groups 15 to 19 and 20 to 24.

A higher level of knowledge about contraception, however, does not always translate into a higher level of contraceptive use. For example, in India and Nepal, knowledge of contraception among adolescents was more than 90 per cent. Despite this high percentage, less than 10 per cent of adolescent girls were found to be using any form of contraceptive in these two countries. There is a considerable difference in the use of contraceptives among adolescents across countries. Less than 10 per cent of adolescents were found to be using any form of contraceptive in India, the Lao People's Democratic Republic, Nepal and Pakistan, while contraceptive use among adolescents was fairly high (at least 30 per cent) in such countries as Bangladesh, Indonesia, Kazakhstan, Sri Lanka, Thailand and Turkey. It should also be noted that the use of

contraceptives among adolescents is remarkably lower than among women aged 20 to 24 and among women aged 15 to 49 in general. The difference is especially striking in Mongolia, the Philippines, Sri Lanka, Turkey, Uzbekistan and Viet Nam.

These data show that even when adolescent girls know about contraceptives, they are much less likely to be using them than older women, indicating a large unmet need for contraceptives among adolescents. The above findings coincide with the results of a study carried out by the United States of America Bureau of the Census, which found that contraceptive use among adolescent girls in developing countries was much lower than that among older women (McDevitt and others, 1996). The study further revealed that there were approximately 13 million teenage girls living in developing countries with an unmet need for family planning. The study also indicated that, in many Asian countries, 30 per cent or more of married adolescent girls wanted to delay or limit childbearing but were not currently using contraceptives. The overall unmet need among adolescents might therefore be much higher if sexually active, unmarried teenagers who were not currently using any contraceptives were included.

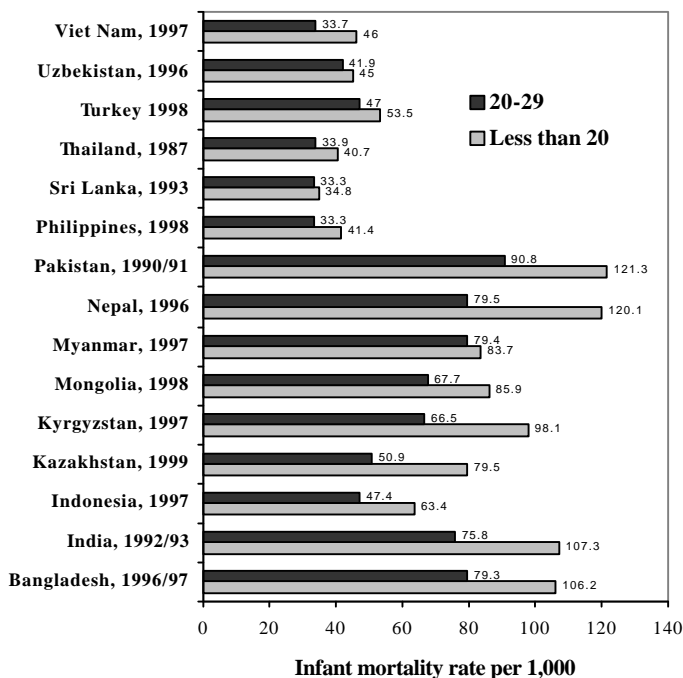
Consequences of adolescent sexuality and childbearing

Maternal and child health

Adolescent pregnancy and childbearing have significant effects on maternal and child health. Children born to adolescent mothers are highly likely to have a low birth weight and to be premature, injured at birth or stillborn, and are associated with delivery complications resulting in higher mortality. The increased risk of infant death to adolescent mothers is also associated with immaturity of early childbearing and inexperience in child-rearing. Studies have invariably shown that infant mortality rates are generally higher for babies born to adolescent mothers than for those born to women in their 20s or 30s (United Nations, 1989; McDevitt and others, 1996).

Because adolescents are physiologically and socially immature, health risks associated with their pregnancies and childbearing are more pronounced than are those among older women (United Nations, 1989; Royston and Armstrong, 1989). Studies reviewed by the Population Reference Bureau found that adolescent women were especially vulnerable to reproductive health problem, and were more likely than older women to die from problems related to pregnancy and childbirth. Most importantly, adolescent women faced

Figure 5. Infant mortality rate per 1,000 live births by women's age at childbirth, by country and year of survey



Sources: Various demographic and health surveys.

increased risks during pregnancy and childbirth because they had less information and access to prenatal, delivery and postpartum care as compared with older women (Ashford, 2001). Studies reviewed by UNESCO suggest that in Bangladesh the high incidence of teenage pregnancies has contributed to high maternal mortality: among adolescent girls under 18, the maternal mortality rate is three to four times higher than among older women (Uddin, 1999).

An elevated risk of dying among births occurring to adolescent women can be observed from data tabulated from the demographic and health surveys carried out in Asia. It is evident from figure 5 that in Bangladesh, India, Nepal and Pakistan, over 1 in 10 babies born to adolescent women die before

reaching their first birthday. In all the countries surveyed, infant mortality rates are higher among children born to adolescent women as compared with women aged 20 to 29. The risk of dying during infancy is at least 1.3 times higher among births occurring to adolescent women as compared with women aged 20 to 29 in such high-mortality countries as Bangladesh, India, Nepal and Pakistan. Although the infant mortality rate is much lower in Viet Nam (34.8 per 1,000 live births) and is only moderately high in Kazakhstan (50.3 per 1,000 live births) and Kyrgyzstan (66.2 per 1,000 live births), the risk of dying during infancy is between 1.4 and 1.6 times higher among births to adolescent women as compared with women aged 20 to 29. These data reaffirm the fact that in virtually all societies adolescent childbearing is detrimental to both the mothers and their offspring.

The risk of early childbearing to the health of mother and child is focused mainly on married adolescents, as in many Asian countries sexual activity and childbearing begin within marriage and data on childbearing are typically gathered from married women. However, in several countries of Asia there is evidence of premarital sexual relationships leading to premarital births, although such births vary greatly across societies. Young unmarried women who have children are socially as well as economically disadvantaged. This is partly because of the traditional values that strongly oppose sexual relationships, pregnancy and childbearing among the unmarried. Most importantly, births to unmarried adolescents are likely to be unplanned or unwanted and, above all, single mothers may be living in poverty. In 22 out of 27 countries for which data were available, the proportion of last births that were unwanted or mistimed was remarkably higher among unmarried adolescent mothers than among married adolescent mothers. These circumstances, therefore, greatly increase the poor outcomes of adolescent childbearing in terms of the health of the mothers and children (Singh, 1998).

Sexually transmitted diseases and HIV/AIDS

It has been estimated that at the end of 2001, approximately 40 million people worldwide were living with HIV/AIDS, of which, a total of 6.4 million people belonged to the Asian region (UNAIDS, 2001). Young people bear a special burden in the HIV/AIDS pandemic. Nearly one third of those currently living with HIV/AIDS are aged 15 to 24. Adolescents are more vulnerable than adults to unplanned pregnancies, STDs and HIV/AIDS. It has been documented that although premarital sex is less common in the Asian region, it is clearly on the rise. It has been observed that when adolescents become sexually active, they tend to have multiple partners and use condoms and other contraceptives inconsistently. Furthermore, younger women are more

Box 2. Vulnerability of young girls in the transmission of HIV infection

It is the interplay of biological, cultural and economic factors that make young girls particularly vulnerable to the sexual transmission of HIV. While both girls and boys engage in consensual sex, girls are more likely than boys to be uninformed about HIV, including their own biological vulnerability to infection if they start having sex very young. Girls are also far more likely than boys to be coerced, raped or enticed into sex by someone older, stronger or richer. Sometimes, the power held over them is mainly that of greater physical strength. Sometimes it is social pressure to acquiesce to elders. Sometimes it is a combination of factors, as may be the case with older “sugar daddies” who offer schoolgirls gifts or money for school fees in return for sex. In the era of AIDS, the consequences for young girls can be disastrous.

Source: UNAIDS (2001). *Report on the Global HIV/AIDS Epidemic, June 2000* (Geneva, Joint United Nations Programme on HIV/AIDS), p. 47.

vulnerable to forced sex and sex in exchange for gifts and money, with increased risks of contracting STDs, including HIV/AIDS (Ashford, 2001).

It has been found that while women, in general, are more likely than men to be infected with HIV during unprotected vaginal intercourse, the prevalence of HIV infection among adolescent girls is strikingly high. Biologically, young girls are vulnerable to the risk of HIV transmission because their genital tracts are not fully mature. In addition to this biological vulnerability, there are other cultural and economic factors that multiply the risk of contracting HIV infection among adolescent girls (see box 2).

Sexually transmitted disease is a major health problem among youth in much of Asia, according to studies commissioned by UNESCO. For example, in Bangladesh two thirds of all reported STDs occur among people under 25 years of age and the incidence is much higher among women aged 15 to 19 than among men of the same age (Uddin, 1999). Half of the HIV/AIDS-infected persons in Viet Nam were adolescents and youth (Nga, 2000). In China, 8.7 per cent of the HIV carrier and AIDS patients belong to the 16-19 age group (Sun, 2000).

While adolescents, in general, are especially vulnerable to HIV/AIDS, certain groups of adolescents are more at risk of HIV infections than others. For example, adolescents in need of special protection, including street children, sexually exploited children, including those engaged in prostitution, and migrant children, face additional risks. A United Nations study suggests that young migrants are susceptible to HIV infection: on the one hand, young

male migrants tend to engage in unsafe sexual practices when they are away from the family, and young women migrants, on the other hand, may be forced to work as sexual workers as a means of survival (United Nations, 2001c).

Conclusions

From the preceding analysis, it is evident that the sexual and reproductive health of adolescents has emerged as an issue of great concern in Asia. This is based on two distinct demographic trends that exist in the region:

(a) The widening gap between sexual maturity and age at marriage, which results in premarital sexual activities among adolescents in many countries and areas in the region;

(b) The continuing prevalence of adolescent marriage and low contraceptive use during adolescence, resulting in a high rate of adolescent fertility.

The adverse health consequences of adolescent fertility for both mothers and children include the high rate of maternal mortality and infant mortality. The vulnerability of adolescent girls to STDs, including HIV/AIDS, and early childbearing also have a negative impact on the educational prospects of girls, including pregnancy-related school dropout, thereby threatening their economic and overall development prospects. When schoolgirls become pregnant, they either resort to illicit abortion, which is often unsafe, or carry the foetus to full term, which hampers their opportunities for socio-economic advancement.

In addition to recent demographic trends, the following factors influence the sexual and reproductive behaviour of adolescents in Asia:

- Inadequate access to correct information
- Availability of, and access to, youth-friendly health services
- Peer pressure and the erosion of the role of the family
- Economic constraints

While many Governments in the region have begun to recognize the importance of sexual and reproductive health issues for adolescents, particularly after the adoption of the Cairo Programme of Action in 1994, the programmes in this field are still at an early stage of development. Important prerequisites for effective reproductive health programmes for adolescents include political commitment, the development of sound policies and strategies and the development of social and community support systems.

In Asia, married adolescents are generally the target group of reproductive health-related research, whereas in Africa and Latin America both married and unmarried adolescents are included. Based on the recognition of early sexual maturity and premarital sexual activities among adolescents, research should, therefore, focus on both married and unmarried adolescents.

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References

- Ampornsuwanna, Laddaporn, Samapeap Tarr, Tong Si Then and Phay Mov (2000). *Case Study, Cambodia: Communication and Advocacy Strategies, Adolescent Reproductive and Sexual Health* (Bangkok, UNESCO).
- Ashford, Lori S. (2001). "New population policies: advancing women's health and rights", *Population Bulletin*, 56(1):1-44.
- Berja, Clarinda L. (2000). *Case Study, Philippines: Communication and Advocacy Strategies, Adolescent Reproductive and Sexual Health* (Bangkok, UNESCO).
- Brown, Ann Denise, Shireen J. Jejeebhoy, Iqbal Shah and Kathryn M. Yount (2001). *Sexual Relations among Young People in Developing Countries: Evidence from WHO Case Studies* (Geneva, Department of Reproductive Health and Research, World Health Organization).
- Gage, Anastasia J. (1998). "Sexual activity and contraceptive use: the components of the decision-making process", *Studies in Family Planning*, 29(2):154:166.
- Gray, Alan and Srisuman Sartsara (1999). *Case Study, Thailand: Communication and Advocacy Strategies, Adolescent Reproductive and Sexual Health* (Bangkok, UNESCO).
- Hettiarachchy, Tilak and Stephen L. Schensul (2001). "The risks of pregnancy and the consequences among young unmarried women working in a Free Trade Zone in Sri Lanka", *Asia-Pacific Population Journal*, 16(2):125-140.
- Htay, Thein Thein, Katherine Ba Thike, Michelle Gardiner, Christopher Elias and Peter Fajans (2000). "A strategy for advancing reproductive health in Myanmar", *Asia-Pacific Population Journal*, 15(4):39-62.
- Isarabhakdi, Pimonpan (2000). *Sexual Attitudes and Experience of Rural Thai Youth* (Bangkok, Institute for Population and Social Research, Mahidol University).

- Lee, Mary Huang Soo (1999). *Case Study, Malaysia: Communication and Advocacy Strategies, Adolescent Reproductive and Sexual Health* (Bangkok, UNESCO).
- McDevitt, Thomas, Arjun Adlakha, Timothy B. Fowler and Vera Harris-Bourne (1996). *Trends in Adolescent Fertility and Contraceptive Use in the Developing World*, United States Bureau of the Census, Report IPC/95-1 (Washington, DC, United States Government Printing Office).
- Nga, Quan Le (2000). *Case Study, Viet Nam: Communication and Advocacy Strategies, Adolescent Reproductive and Sexual Health* (Bangkok, UNESCO).
- Podhisita, Chai, Anthony Pramualratana, Uraiwan Kanungsukkasem, Maria J. Wawer and Regina McNamara (1994). "Socio-cultural context of commercial sex workers in Thailand: an analysis of their family, employer, and client relations", *Health Transition Review*, 4 (Supplement):297-320.
- Population Reference Bureau (2001). *Youth in Sub-Saharan Africa: A Chartbook on Sexual Experience and Reproductive Health* (Washington, DC, Population Reference Bureau, MEASURE Communication).
- Rai, Hemlata (2001). "Negative attitude towards positive people", *Nepali Times*, Issue No. 52, 20-26 July.
- Royston, Erica and Sue Armstrong (1989). *Preventing Maternal Deaths* (Geneva, World Health Organization).
- Sananikhom, Pany, letje Reerink, Peter Fajans, Christopher Elias and Jay Satia (2000). "Strategic assessment of reproductive health in the Lao People's Democratic Republic", *Asia-Pacific Population Journal*, 15(4):21-38.
- Sharma, R.C. (2000). *Case Study, India: Communication and Advocacy Strategies, Adolescent Reproductive and Sexual Health* (Bangkok, UNESCO).
- Singh, Susheela (1998). "Adolescent childbearing in developing countries: a global review", *Studies in Family Planning*, 29(2):117-136.
- Sisouphanthong, Bounthavy, Somsouk Souksavath, Boonta Louangvixia, Vandy Matmanisone and Khemphone Khamphavong (2000). *Report of the Adolescent Reproductive Health Survey* (Vientiane, Lao People's Revolutionary Youth Union).
- Soonthorndhada, Amara (1996). *Sexual Attitudes and Behaviours and Contraceptive Use of Late Female Adolescents in Bangkok: A Comparative Study of Students and Factory Workers* (Bangkok, Institute for Population and Social Research, Mahidol University).
- Sun, Jiangping (2000). *Case Study, China, People's Republic of: Communication and Advocacy Strategies, Adolescent Reproductive and Sexual Health* (Bangkok, UNESCO).
- Tamang, Anand, Binod Nepal, Mahesh Puri and Devendra Shrestha (2001). "Sexual behaviour and risk perceptions among young men in border towns of Nepal", *Asia-Pacific Population Journal*, 16(2):195-210.
- Uddin, Nassir (1999). *Case Study, Bangladesh: Communication and Advocacy Strategies, Adolescent Reproductive and Sexual Health* (Bangkok, UNESCO).
- United Nations (1989). *Adolescent Reproductive Behaviour*, vol. II, *Evidence from Developing Countries* (United Nations publication, Sales No. E.89.XIII.10).

- _____ (1994). *Programme of Action adopted at the International Conference on Population and Development, Cairo, 5-13 September 1994* (United Nations publication, Sales No. E.95.XIII.7).
- _____ (1997). *World Population Monitoring 1996: Selected Aspects of Reproductive Rights and Reproductive Health* (United Nations publication, Sales No. E.97.XIII.5).
- _____ (2001a). *World Population Prospects: The 2000 Revision, vol. I, Comprehensive Tables* (United Nations publication, Sales No. E.01.XIII.8).
- _____ (2001b). *2001 ESCAP Population Data Sheet* (Bangkok, Economic and Social Commission for Asia and the Pacific).
- _____ (2001c). "Situations of HIV/AIDS among young people in the Asian and Pacific region", paper prepared for the Third Asia-Pacific Intergovernmental Meeting on Human Resources Development for Youth, 4-8 June 2001 (Bangkok, Economic and Social Commission for Asia and the Pacific).
- UNAIDS (1997). *Impact of HIV and Sexual Health Education on the Sexual Behaviour of Young People: A Review Update* (Geneva, Joint United Nations Programme on HIV/AIDS).
- _____ (2001). *Report on the Global HIV/AIDS Epidemic, June 2000* (Geneva, Joint United Nations Programme on HIV/AIDS).