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# Sexual relations among young people in developing countries: evidence from WHO case studies

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# EXECUTIVE SUMMARY

Since the late 1980s, the UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction ("the Programme") has supported a number of social science research initiatives on under-investigated areas of sexual and reproductive health care. Four of these initiatives—on the dynamics of contraceptive use, the determinants and consequences of induced abortion, sexual behaviour, and the role of men—also covered the needs and perceptions of young people.

These four initiatives comprised 146 research projects and, of these, 34 studies in 20 countries in Africa, Asia, and Latin America addressed young people, including adolescents (aged 10–19 years) and youth (aged 15–24 years). Fieldwork for these case studies was conducted chiefly between 1992 and 1996. A summary review of the studies is now available from the Programme.

The studies cover a variety of sociocultural settings. In some, premarital sexual activity is taboo, using contraception is forbidden among unmarried youth, and abortion is viewed as the only solution to premarital pregnancy among adolescents. In others, premarital pregnancy may be condoned and childbearing among unmarried women is not unknown.

Most studies focus on unmarried youth. However, some focus on special groups such as pregnant young women or those who have terminated a pregnancy, young reproductive health seekers in general, or young clients of services for sexually transmitted infections (STIs).

Many common themes emerge from these studies. In every setting, sexual activity begins during adolescence among many young people. Much of this activity is risky—contraceptive use is often erratic, and unwanted pregnancy and unsafe abortions are observed in many settings. Sexual relations may be forced. There are wide gender-based differences in sexual conduct, and in the ability to negotiate sexual activity and contraceptive use. Despite this, relatively few young people think they are at risk of disease or unwanted pregnancy. Awareness of safe sex practices seems to be superficial, and misinformation regarding the risks and consequences of unsafe sex is widespread.

This paper reviews these and other findings, discusses their implications for policies and programmes, and highlights research gaps. For the sake of consistency, the term "youth" is used to refer to young people of all ages between 10 and 24.

A number of recommendations are offered on the basis of the summary review of these case studies. These include programmatic recommendations to build negotiation skills, dispel misconceptions, counter sexual violence, involve young people in programme design, tailor fertility regulation services to meet young people's needs, and communicate the message that every unprotected sexual act risks disease and unwanted pregnancy.

The review suggests a need for more in-depth behavioural research on the perspectives and experiences of youth in different settings. It points to the need to study positive outcomes, in addition to

risk assessment, and stresses that research should explore the ways in which gender roles and power imbalances affect life skills among youth and how social constraints make young women particularly vulnerable and unlikely to exercise choices relating to their sexual and reproductive lives. Research is also needed to document how young women can exercise greater autonomy.

# INTRODUCTION

Since the late 1980s, the UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction ("the Programme") has launched a number of social science research initiatives to improve knowledge of under-investigated but crucial areas of sexual and reproductive health. Adolescents and youth have not always been the primary focus of these initiatives, nor have data always been gathered with the intention of analysing the perspectives and behaviours of young people. Nevertheless, several Programme-supported case studies under research initiatives relating to the dynamics of contraceptive use (1988), the determinants and consequences of induced abortion (1989–90), sexual behaviour (1991–92), and the role of men in reproductive health (1995–96) extended their investigations to explore the needs and perspectives of young people. Despite the diversity of study designs and varying degrees of emphasis on young people, many themes emerge from this body of research which shed light on young people's extent of involvement in, and patterns of, sexual and reproductive behaviour. The objective of this paper is to review and document the findings emerging from these studies, and, thereby, to highlight the sexual and reproductive health situation of young people.

**Background**

Under the above-mentioned four initiatives, 146 research projects were supported in 21 developing countries. Of these, 34 studies in 20 developing countries in Africa, Asia, and Latin America addressed young people, including adolescents (aged 10–19) and youth (aged 15–24). Fieldwork relating to these case studies was largely conducted between 1992 and 1996. Several case studies focused specifically on adolescents or youth. Others covered subjects of a wider age range, but were designed to present findings independently on the sexual and reproductive behaviour of youth. All these studies were conceived and implemented by scientists from developing countries applying research questions and protocols appropriate to their own context. As a result, studies include a broad range of designs and methodologies.

It is important to note that the studies included in this paper were not nationally representative. Almost all were case studies and their findings were not intended to be generalised to the country or region in which they were conducted. Also, the distribution of included countries is not representative of developing countries more generally. To a considerable extent, the distribution of countries represented here reflects the fact that studies dealing with highly sensitive issues are more culturally acceptable in some settings than in others. Finally, it must be noted that the Programme was able to support only a small proportion of the large number of proposals submitted under the above initiatives.

Annex 1 lists all the case studies included in this paper, providing information on: study site and populations; composition of the sample in terms of age, sex, and marital status; and sample size and design.

The studies included here cover a large number of sociocultural settings, with wide disparities in the context of the sexual and reproductive behaviour of young people. In some settings, for example, premarital sexual activity is considered taboo, using contraception is forbidden among unmarried youth, and abortion is viewed as the only solution to premarital pregnancy among adolescents (as evident from, for example, case studies in Hanoi and Ho Chi Minh City, Viet Nam, and sites in Seoul, Kyongbuk, and Kyongnam in the Republic of Korea). In others, premarital pregnancy is more likely to be condoned, and childbearing among unmarried women not unknown (as evident from case studies in Cuba, for example).

The samples of subjects in the studies varied. The majority of studies address the perspectives and behaviours of females and males, and most focused on the subpopulation of unmarried youth. However, some case studies focused on special groups, such as pregnant young women or those who had terminated a pregnancy, young reproductive health seekers in general, or young clients of services dealing with sexually transmitted infections (STIs). The age ranges also varied. The majority of studies encompassed the 15–24 year-old population—i.e. youth—but some include younger adolescents (typically aged 13 onwards). Other studies include subjects of a wider age range, but contained separate analyses of the youth populations which are presented in this paper. For convenience, the authors used the term youth to refer to samples that spanned adolescence (10–19 years of age) and youth (15–24 years of age). For the most part, as described in Annex 1, samples were drawn from among educational institutions, health facilities, workplaces, and, occasionally from meeting places. A few studies drew their samples from household surveys.

Methodologies employed in the studies also varied. While the majority of case studies reported on the findings of a survey, several of them combined qualitative methods (focus group discussions or in-depth interviews) with a quantitative survey, and a few were exclusively qualitative. Studies employing a survey were about equally divided between those that opted for face-to-face interviews and those that employed self-administered questionnaires (one study contained both).

Many common themes emerge from these studies, in spite of their substantive or methodological differences. In every setting, sexual activity appears to begin during adolescence among a substantial proportion of youth. Much of this activity is risky; the practice of contraception and condom use is often erratic, and unwanted pregnancy and unsafe abortions are observed in many settings. Sexual relations are not always consensual: force and coercion are far from unknown. While young people tend to be generally well informed, they have only patchy in-depth knowledge of issues related to sexuality. Moreover, expressed norms often conflict with behaviour. Lastly, there are wide gender-based differences in sexual conduct, and in the ability to negotiate sexual activity and contraceptive use.

This paper reviews these and other findings, discusses their implications for policies and programmes, and highlight research gaps. Subsequent sections are organised as follows. Section 2 describes the context of relationships among youth, notably the formation of partnerships, the magnitude of sexual activity, and the extent to which sexual activity is safe and consensual. Section 3 discusses the adverse health consequences of risky sexual behaviours, including STIs, unwanted pregnancy, and abortion. Section 4 focuses on the extent to which youth are fully informed of

healthy sexual practices, and the sources of their information. Section 5 highlights the enormous gender imbalances that persist in sexual attitudes and decision-making among youth. Section 6 summarises the main findings and recommendations that emerge for programmes and research.

# THE CONTEXT OF SEXUAL RELATIONSHIPS AMONG YOUNG PEOPLE

The case studies suggest that a considerable proportion of adolescents and youth engage in premarital sexual activities that tend to be unsafe. These include: having multiple partners, contact with sex workers, and erratic use of contraceptives. Furthermore, for a considerable minority of young people sexual debut and sexual activity are not consensual.

Each study took care to ensure the privacy and anonymity of its respondents. In many studies, for example, questionnaires, or at least the most sensitive questions, were self-administered; in all, study participants were reassured by the research team of the confidentiality of their responses. Despite these efforts, comparisons between females and males, and across regions are difficult to draw because of prevailing cultural norms and gender-related double standards. Many authors have commented, for example, on the tendency for young males to over-report, and young females to under-report, their sexual experiences. Likewise, there may also be a greater tendency to withhold information on sexual activity among youth in highly conservative settings in which taboos prohibiting premarital sexual activity are strictly observed—e.g. parts of Asia—than in others where premarital sexual activity is more likely to be condoned or accepted. Hence, while gender- and culture-specific disparities observed in this section are clear, the *magnitude* of these disparities is uncertain.

Studies shed light on a host of issues relating to young people's sexual relationships, from their dating behaviours to sexual activity status to coerced sexual experiences and consistent use of contraception. These aspects of the sexual behaviours of youth are reported in this section.

**• "Dating" connotes many activities for young people.**

**Sexual debut**

As age at marriage rises, opportunities increase for premarital friendships, dating, and more serious partnerships between young males and females. A few case studies have explored the dating patterns of youth, and findings suggest considerable cultural variation. Among college students in Dumaguete City, Philippines (Cadelina, 1998), for example, dating is practised by large proportions of youth, although not on a regular basis. Popular locations for meeting dates, as reported by about half of all respondents, include movie houses, discotheques, pubs or karaoke bars. Dating does not involve sexual intercourse for the majority of youth: 22% of those who date in Dumaguete City (9% and 41% of females and males, respectively) report that dating usually includes sexual intercourse, although 24% of both females and males report heavy petting.

Among young college students in Hanoi and Ho Chi Minh City, Viet Nam, too, the practice of dating and having a close relationship (*nguo yeu*, literally "being a lover", usually without sexual relations) is common: 47% of young males and 39% of young females in this study report such a relationship

(Vu Quy Nhan, 1996). Typically, however, dating comprises chatting (88% females, 73% males); and for smaller numbers of others, it reportedly includes hand-holding (8% and 17%, respectively), kissing (3% and 5%) and petting (1% and 5%), but rarely intercourse (0.1% and 1%).

A few case studies explored how aspects of the home environment relate to dating and sexual behaviour. A case study of adolescents in secondary school and those out of school in three Peruvian cities, Lima, Cusco, and Iquitos (Alarcon and Gonzales, 1996) found that parental permission is usually sought before young people date: for example, of the 28–36% of males and 20–32% of females who report frequent socialising, up to half of all males and a quarter of all females report that they go out even without permission.

**• Young males are considerably more likely to be sexually experienced than are young females.**

Table 1 shows the percentage of youth reporting sexual intercourse and age at debut (where available) as found in the case studies focusing on a cross-section of currently unmarried youth, as well as among special populations (youth who are about to be married, seeking health care services, and so on). Although the case studies were not designed to be similar, questions relating to sexual activity and age at debut were largely similar across the studies. Results are presented by region. Several interesting findings emerge which contradict the impression that prevails in many settings that few unmarried young people are sexually active.

For females, premarital sexual activity varies widely across regions; within each region, however, rates reported in various case studies are remarkably similar. For example: rates of sexual activity are concentrated in the 2%–11% range in various settings in Asia; 12%–25% in various settings in Latin America; and 45%–52% in settings in Sub-Saharan Africa. Of interest is the exceptionally high rate reported among a sample of about-to-be-married Chinese women in Shanghai who received their "obligatory" health examination prior to marriage (Gao, 1998). When marriage is imminent, premarital sex seems to occur among the majority of women, even in conservative settings.

The case studies suggest that among males, typically, between one-third and half are sexually experienced. However, there is considerably more variation than is observed among young females, both across and within regions. For example, on the low side, 15% of college students in Hanoi and Ho Chi Minh City (Viet Nam) and 24% of schoolgoing males in Kwangju metropolitan area (Republic of Korea)—both in Asia—report premarital sexual activity. At the other end of the spectrum, there is less regional variation, with highs in the range of 66%–75% reported in all three regions.

Premarital sexual activity is more prevalent among males than among females, although some of this difference may be attributable to over-reporting among males, and under-reporting among females**.** Gender disparities—perhaps somewhat overestimated as a result of cultural norms—are widest in Asia, where reported rates are at least five times as high among males as among females. In the Latin American case studies, too, rates are up to twice as high among males as among females. In the single African case study where sex-specific data are available, the disparity is much narrower.

Table 1. Premarital sexual activity among youth, 1990s.

| Site/country | Sample | Age Range | % sexually experienced | | Age at sexual debut (mean or median) | | Source |
|---|---|---|---|---|---|---|---|
| | | | Female | Male | Female | Male | |
| **Botswana** Phikwe, Mahalapye, Kang | In- and out-of-school females | 13–19 | 45 | Ns[1] | Na[2] | Na | Kgosidintsi, 1997 |
| **Nigeria** Ilorin | University students | 15–24 | 52 | 73 | 19[3] | 17[3] | Araoye, 1995 |
| Uganda Kampala | Secondary school students[4] | 14–17 | 45[5] (both sexes) | | 15[5] (both sexes) | | Mathias, 1993 |
| **China** Shanghai | About-to-be married females visiting clinics for required physical examination | 18–29 | 69 | Ns | 21–23[3] | Ns | Gao, 1998 |
| **Korea, Republic of** Export Promotion Zones | Females working in free trade zone, unmarried, residing in dormitories, attending public information programmes | 19–29 | 30 | Ns | 18–20[5] | Ns | Kwon Tai-Hwan *et al.*, 1994 |
| **Korea, Republic of** Kwangju | Secondary school students | 16–21 | 11 | 24 | 18[3] | 18[3] | Gayun, 1996 |
| **Korea, Republic of** Seoul | Unmarried university students; Industrial workers | 15–29 | Ns | 36<br>78 | Ns | 20[5]<br>20–21[5] | Jong Kwon Lim *et al*., 1995 |
| **Nepal** Border towns | Male residents<br>Non-residents | 18–24 | Ns | 54<br>40 | Ns | 18[5]<br>17[5] | Tamang, 1999 |
| **Philippines** Dumaguete City | College students | 18–24 | 10 | 50 | 18[3] | 17[3] | Cadelina, 1998 |
| **Thailand** North and North-east | Rural household survey | 15–24 | 2 | 51 | 18[5] | 16[5] | Isarabhakdi, 1995 |
| **Thailand** Bangkok | Females, school-going and factory workers | 15–19 | 3 | Ns | 18[5] | Ns | Soonthorndhada A, 1994 |
| **Thailand** Chiang Mai | Factory workers, married and unmarried | 13-25 (unmarried) | 6 | 75 | 18[3] | 16[3] | Rugpao, 1997 |
| **Viet Nam** Hanoi, Ho Chi Minh City | College students | 17–24 | 2 | 15 | 20[3] | 20[3] | Vu Quy Nhan, 1996 |
| **Argentina** Federal Capital, Chubut | Adolescents at public hospitals for reproductive health services | 13–19 | 44 | 52 | 31% at <16 | 35% at < 16 | Pantelides, 1991 |
| **Argentina** Buenos Aires | Students in final three years of secondary school | 13–19 | 25 | 55 | 20% by age 16[5] | 47% by age 16[5] | Mendez Ribas *et al*, 1995 |
| **Argentina** Buenos Aires | Secondary school students | 13–19 | 23[6] | 46[4] | 25% at <15 | 57% at <15 | Kornblit, 1993 |
| **Peru** Lima | Youth attending night school (2% males/females married) | 10–24 | 25 | 66 | 22% at <15 | 30% at <15 | Villanueva, 1992 |

| Site/country | Sample | Age Range | % sexually experienced | | Age at sexual debut (mean or median) | | Source |
|---|---|---|---|---|---|---|---|
| | | | Female | Male | Female | Male | |
| **Peru** Lima, Cusco, Iquitos | Secondary school students and out-of-school adolescents | 13–19 | 12–23[7] | 42–55[8] | 15–16[5] | 14–15[5] | Alarcon and Gonzales, 1996 |
| **Peru** San Martin de Porres | Females attending one night school | 10–19 | 20 | Ns | 20% at <15 | Ns | Rodriguez-Lay, 1997 |
| **Peru** Lambayeque | Household survey in 14 districts | 12–19 | 13 | 36 | Na | Na | Caceres, 1995 |

[1] Not studied.
[2] Not available.
[3] Mean value.
[4] Females and males combined.
[5] Median value.
[6] Estimated from report that percentage for overall sample was 34% but male rates were twice those of females.
[7] Lima: 23%; Cusco: 12%; Iquitos: 21%.
[8] Lima: 43%; Cusco: 42%; Iquitos: 55%.

**• Age at sexual debut is lower among males than among females.**

Given its association with risk behaviours, age at sexual debut is presented. The case studies reveal varying ages: however, it is in Latin America that age at debut appears notably earlier than in the other two regions. The case studies report that between 20% and 25% of females attending night schools in Lima, Peru (Villanueva, 1992) and San Martin de Porres, Peru (Rodriguez-Lay, 1997), and secondary school in Buenos Aires, Argentina (Kornblit, 1993) reported sexual debut by age 15, as did 30% of males in high schools in Lima, and 57% of males in secondary schools in Buenos Aires. In the case studies in Africa and Asia, typically median ages at debut are 18–20 years among females, and Table 1 gives means15–20 years among males.

**• Sexual debut most frequently occurs in the home.**

The case studies suggest that where sexual activity occurs, it occurs, especially at initiation, within the home of one of the partners. The home was the location of sexual debut among students in Dumaguete City, Philippines (Cadelina, 1998), as well as for the overwhelming majority (92%) of young, about-to-be-married women in Shanghai, China (Gao, 1998). So too in the case study in Lambayeque, Peru (Caceres, 1995), almost half (48%) of sexually active youth reported that sexual initiation had occurred in the home of one of the partners. Other studies point out, however, that this practice is far more common among sexually active females than males. For example, among secondary school students in Buenos Aires, Argentina (Mendez Ribas *et al*., 1995), females are far more likely to report sexual relations in the home (76%) than are males (42%). Among college students in Hanoi and Ho Chi Minh City, Viet Nam, too, sexual activity typically occurs in the home of a partner among two-thirds of females (63%) and about two-fifths of males (38%) (Vu Quy Nhan, 1996).

**Nature of sexual partnerships**

**• Young males are more likely than females to report multiple sexual partners.**

Multiple partner relationships were explored in a number of case studies, but findings may not be comparable because of variation in reference periods, from twelve months preceding the survey in a few studies, to lifetime measures in the majority. Nevertheless, findings summarised in Table 2 suggest that large percentages of sexually active youth have engaged in sexual relations with more than one partner. There is, however, considerable inter-study and gender disparity: proportions who have ever experienced sexual activity with more than one partner ranged from about one in five among sexually active male college students in Dumaguete City in the Philippines to about three-quarters of young sexually active males attending health services in Buenos Aires, Argentina (Pantelides, 1991). Of the four case studies reporting multiple partners among sexually active youth in the recent past (last six or twelve months), rates range from 25% to 27% in the last 12 months among young men in the border towns of Nepal (Tamang, 1999) to 69% in the same reference period among younger university students in Ilorin, Nigeria; number of partners reported by these young men ranged from two to 20 (Araoye, 1996).

Table 2. Multiple partners reported by sexually active youth: percentage reporting two or more partners.

| Country | Sample | Reference Period | Age range | % reporting 2 or more partners | | Source |
|---|---|---|---|---|---|---|
| | | | | Female | Male | |
| **Nigeria**<br>Ilorin | University students | 12 months | 15–24 | 15.9[1] | 69.8[2] | Araoye, 1995 |
| **Uganda**<br>Kampala | Secondary school students[3] | 12 months<br>Lifetime | 14–17 | 9.9<br>14 | | Mathias, 1993 |
| **Korea, Republic of**<br>Kwangju | Students in Classes 9-12 | Lifetime | 16–21 | 33 | 68 | Gayun ,1996 |
| **Nepal**<br>Border towns | Border town residents<br>Non-residents | 12 months<br>12 months | 18–24 | Ns[4] | 27<br>25 | Tamang, 1999 |
| **Philippines**<br>Dumaguete City | College students | Lifetime | 18–24 | 19 | 19 | Cadelina, 1998 |
| **Thailand**<br>Rural North/Northeast[5] | Rural household survey | 12 months | 15–24 | 0[6] | 31[7] | Isarabhakdi, 1995 |
| **Argentina**<br>Federal Capital,Chubut | Adolescents at public hospitals for reproductive health services | Lifetime | 13–19 | 31 | 76 | Pantelides, 1991 |
| **Argentina**<br>Buenos Aires | Students in final 3 years of secondary school | Lifetime | 13–19 | 36 | 72 | Mendez Ribas *et al.*, 1995 |
| **Argentina**<br>Buenos Aires | Secondary school students | 6 months | 13–19 | 15 | 43 | Kornblit, 1993 |
| **Peru**<br>Lima | Students in night school (2% males and females married) | Lifetime | 10–24 | 8 | 42 | Villanueva, 1992 |
| **Peru**<br>Lima, Cusco, Iquitos | Secondary schools students and out of school adolescents | Lifetime | 12–19 | 20–36[8] | 44–65[9] | Alarcon and Gonzales, 1996 |

[1] Up to 3 partners; 12% females report engaging in casual sex.
[2] Up to 20 partners; 49% males report engaging in casual sex.
[3] Female and male responses combined.
[4] Not studied.
[5] Refers to percentages reporting sexual relations with casual partners: male: 71%; females: 0%.
[6] No females reported engaging in casual sex.
[7] 71% males reported engaging in casual sex.
[8] Lima: 24%; Cusco: 20%; Iquitos: 36%.
[9] Lima: 53%; Cusco: 44%; Iquitos: 65%.

Corresponding rates among females are uniformly lower. Lifetime rates range from 8% among students in night schools in Lima, Peru (Villanueva, 1992) to 36% of secondary school students in Buenos Aires, Argentina (Mendez-Ribas *et al*., 1995). For females, only three case studies measured the number of partners in the recent past: not a single rural female in the North and North-east of Thailand reported multiple partners in the previous 12 months (Isarabhakdi, 1995). In contrast, 15% of university students in Ilorin, Nigeria reported 2–3 partners in the preceding 12 months (Araoye, 1996). Likewise, 15% of secondary students in Buenos Aires, Argentina reported two or more partners in the six months preceding the survey (Kornblit, 1993). Clearly, gender disparities are wide, with one notable exception. About as many female as male college students in Dumaguete City, Philippines, have engaged in sexual relations with multiple partners (Cadelina, 1998).

The nature of partnerships at sexual debut and at the time of each study differed markedly between females and males (Table 3). Over 80% of females in six of the eight studies with data available, tended to have experienced sexual intercourse with a steady boyfriend, with marriage in mind. In contrast, far fewer sexually experienced males initiated sexual activity with a steady girlfriend, and over one-third in most studies reported debut with a sex worker. Alarmingly, as many as 82% of young men visiting border towns of Nepal report recent relations with a sex worker (Tamang, 1999).

**• Young females are more likely than males to report sexual intercourse with a steady partner.**

Among young males, where multiple partners are cited, a combination of girlfriend/regular partner and a casual partner (usually a sex worker) is not unusual. A study among rural adolescents in North and North-east Thailand observed that among sexually active men, 16% reported engaging in sexual activity with their regular partner as well as with a sex worker, "friend" and/or "loose girl" in the twelve months preceding the survey (Isarabhakdi, 1995).

**• Homosexual experiences are not unknown.**

Few studies explicitly inquired about homosexual experience. Those that did are highly selective of region (Latin America), sex (males), and special populations (STI clinic attendees). No attempt was made, in any of the studies, to probe for homosexual behaviour, and results, in some cases, may well be underestimates. Results from three case studies in Peru reported rates ranging from 2%—among school-aged adolescents in Lima, Cusco, and Iquitos (Alarcon and Gonzales, 1996, ages 13–19) and a sample of youth outpatients at general medicine services in urban Chile (Kleincsek, 1994)—through 10% among males in night schools in metropolitan Lima (Villanueva, 1992, ages 10–24) to 13% among literate males in Lambayeque (Caceres, 1995, ages 12–19). In Asian case studies, a homosexual experience was reported by 6% of university males in Dumaguete City, Philippines (Cadelina, 1998), and 10% of STI clinic attendees in New Delhi, India (Grover, 1995).

Two of the case studies inquired about homosexual relations among females: among urban school-aged adolescents aged 13–19 years in Lima, Cusco and Iquitos, Peru, only 1% reported a homo-

Table 3. Sexual partner, at debut or currently.

| Country | Sample | Age Range | Female | | Male | | | Source |
|---|---|---|---|---|---|---|---|---|
| | | | Friend or casual contact at sexual debut or currently % | Fiancé/ boyfriend contact at sexual debut or currently % | Sex worker/ partner at sexual debut or currently % | Friend, or casual contact at sexual debut or currently % | Fiancé/ girlfriend contact at sexual debut or currently % | |
| **Nigeria** Ilorin | University students | 15–24 | 12 | 85 | 23 | 49 | 31 | Araoye, 1995 |
| **Korea, Republic of** Export Promotion Zones | Females in manufacturing sector, residing in dormitories | 19–29 | 27 | 73 | Ns[1] | Ns | Ns | Kwon Tai-Hwan *et al.*, 1994 |
| **Korea, Republic of** Seoul | Unmarried university students | 15–29 | Ns | Ns | 43 | 11 | 46 | Jong Kwon Lim *et al.*, 1995 |
| **Nepal** | Male residents | <25 | Ns | Ns | 33 | 62 | | Tamang, 1999 |
| Border towns | Male non-residents[2] | <25 | Ns | Ns | 82 | 18 | [3] | |
| **Philippines** Dumaguete City | College students | 18–24 | 17 | 65 | 17 | 19 | 58 | Cadelina, 1998 |
| **Thailand** North/North-east | Rural household survey | 15–24 | 0 | 100 | 46 | 24 | 30 | Isarabhakdi, 1995 |
| **Thailand** Chiang Mai | Factory workers, married and unmarried | 13–25 | 6 | 94 | 50 | 37 | 13 | Rugpao, 1997 |
| **Viet Nam** Hanoi and Ho Chi Minh City | College students | 17–24 | 0 | 100 | 34 | 3 | 63 | Vu Quy Nhan, 1996 |
| **Argentina** Buenos Aires | Students in final 3 years of secondary school | 13–19 | 2 | 97 | 42 | 11 | 47 | Mendez Ribas *et al.*, 1995 |
| **Peru** Lima, Cusco, Iquitos | Secondary school students and out-of-school adolescents | 13.19 | Na[4] | Na | 19-55 | Na | Na[5] | Alarcon and Gonzales, 1996 |
| **Peru** San Martin de Porres | Females attending one night school | 10–19 | Na | 87 | Ns | Ns | Ns | Rodriguez-Lay, 1997 |

[1] Not studied.
[2] Casual relations.
[3] Included with casual contact.
[4] Not available
[5] 8–12% engaged in sex with sex worker and partner at the same time.

sexual experience (Alarcon and Gonzales, 1996); however among a sample of college students in Dumaguete City, Philippines, 14% reported that their first sexual experience had been with a partner of the same sex (Cadelina, 1998).

Several of the case studies—largely those in Asia—document associations between the consumption of alcohol and risky sexual behaviour among young men (casual and sex worker contacts). These studies suggest that young people recognise that alcohol reduces social and sexual inhibitions, and reduces concern about disease prevention and safe sexual behaviour. For example, large percentages of female and male university students in Hanoi and Ho Chi Minh City were of the opinion that alcohol "facilitates" casual sex (62% and 70%, respectively). In the case study of the risk behaviour of young men in border towns in Nepal, researchers found that resident young men who reported alcohol consumption had almost four times higher odds of having casual sex than young men who did not consume alcohol. Similar associations were observed in case studies in Thailand among rural males in the North and North-east (Isarabhakdi, 1995), and urban factory workers in Chiang Mai (Rugpao, 1997), as well as university students in and around Seoul, Republic of Korea (Jong Kwon Lim *et al*., 1995). Among the latter (Republic of Korea), the frequency of alcohol consumption was positively associated with the number of sexual partners a respondent reported. Among rural men in North and North-east Thailand, similarly, 59% reported that alcohol consumption typically preceded sexual relations with sex workers (Isarabhakdi, 1995); among male Korean university students, the corresponding figure was 80% (Jong Kwon Lim *et al.*, 1995); furthermore, in this study, 79% of college students who had experienced an STI indicated that they had probably obtained the infection when engaging in sexual relations after having consumed alcohol.

**• Alcohol consumption is linked to unprotected sex.**

Case studies report that, between 30% and 90% of males and between 12% and 90% of females practised some form of contraception during their first sexual experience (Table 4). Although the in-school and university students were more likely than others to have practised contraception at debut, the practice is not universal, even among them.

**• The use of contraceptives at sexual debut is infrequent, with females consistently less likely to report practice than males.**

Gaps remain between ever-use and consistent use of contraceptives (Table 5): for example, while 69% of both female and male college students in the case study in Dumaguete City, Philippines, had ever used contraceptives, only 53% of males and 56% of females claimed to practise contraception regularly. In Lambayeque, Peru, contraceptive use by youth was similarly inconsistent—while 45% of all males and 32% of all females had ever used a method, only 13% and 10%, respectively, professed regular use, and only 11% and 4%, respectively, had used a condom in their last three sexual contacts. The leading reason for inconsistency of

**• Contraceptive use is typically irregular, and very few youth report consistent and correct use of contraceptives.**

Table 4. Contraceptive practice at sexual debut, and methods used by adolescents practising contraception

| Country | Sample | Ages | Contraceptive use | | Methods used: condom | | Method used: natural methods[1] | | Sources |
|---|---|---|---|---|---|---|---|---|---|
| | | | Female | Male | Female | Male | Female | Male | |
| **China** Shanghai | About-to-be married females visiting clinics for required physical examination | 15–29 | 22 | Ns[2] | 43 | Ns | 40 | Ns | Gao, 1998 |
| **Korea, Republic of** Export promotion zones | Females in manufacturing sector, residing in dormitories | 19–29 | 8 | Ns | Na | Ns[3] | Na | Ns | Kwon Tai-Hwan *et al.*, 1994 |
| **Korea, Republic of** Seoul | Unmarried male university students | 15–29 | Ns | 31[4] | Ns | 71 | Ns | Na | Jong Kwon Lim *et al.*, 1995 |
| **Philippines** Dumaguete City | University students | 18–24 | 59 | 51 | 25[5] | 29[6] | 75 | 71 | Cadelina, 1998 |
| **Thailand** Chiang Mai | Factory workers, married and unmarried | 13–25 | Na | 38[7] | Ns | Na | Ns | Na | Rugpao, 1997 |
| **Thailand** North/North-east | Rural household survey | 15–24 | 2 of 11 | 70[8] | 1 of 2 | 77 | 1 of 2 | 4 | Isarabhakdi, 1995 |
| **Viet Nam** Hanoi, Ho Chi Minh City | College students | 17–24 | 32 | 28 | 14 | 52 | 86 | 48 | Vu Quy Nhan, 1996 |
| **Argentina** Buenos Aires | Students in final 3 years of secondary school | 13–19 | 90[9] | 89[10] | 73 | 89 | 39 | 16 | Mendez Ribas *et al.*, 1995 |
| **Cuba** Havana, Matanzas, Pinar del Rio | Females attending 4 hospitals for pregnancy termination or delivery | 12–19 | 20 | Ns | Na | Ns | Na | Ns | Lopez *et al.*, 1997 |
| **Mexico** Mexico City | Low-income adolescents at Obstetric and Gynaecology Clinic of a public hospital, ever pregnant, ever terminated a pregnancy | <20 | 2 | Na | Na | Ns | Ns | Ns | Ehrenfeld, 1994 |
| **Peru** Lima, Cusco, Iquitos | Secondary school students and out-of-school adolescents | 13–19 | 17–45[11] | Na | Na | Na | 32–44[12] | Na | Alarcon and Gonzales, 1996 |

[1] Includes withdrawal and rhythm.
[2] Not studied.
[3] Not available
[4] 31% with girlfriend ; 33% with casual friend; 37% (35% condom) with sex worker.
[5] Includes 10% reporting use of condoms and natural methods simultaneously.
[6] Includes 8% reporting use of condoms and natural methods simultaneously.
[7] % practising contraception at debut was 54% if partner was sex worker and 20% otherwise.
[8] % practising contraception at debut was 76% if partner was sex worker; 38% if casual sex partner; 34% if partner was girlfriend.

use was a dislike of the method: 49% males and 37% of females attributed non-use to dislike; and 18 of males and 14% females attributed non-use to their partner's dislike (Caceres, 1995). A case study from Mexico of ever-pregnant adolescent females reported that sexual activity was largely spontaneous and without contraception: *"When you're in that boat, you don't think... We'll worry later",* was a typical response (Ehrenfeld, 1994; 1999).

Condom use is particularly erratic. Even though it seems to be a widely-held belief that condoms were not to be used in regular partnerships or marriage (for example the case studies of: youth in a *barrio* in Buenos Aires, Argentina, by Gogna, *et al*., 1996; university students in Seoul, Republic of Korea, Jong Kwon Lim *et al*., 1995; and adolescent factory workers in Chiang Mai, Thailand, Rugpao, 1997), there is little indication that condoms are regularly used even in contacts with casual partners or sex workers. In the case study in Lambayeque, Peru, for example, in their relations with sex workers, only 21% of all males report consistent condom use, while 41% have never used a condom (Caceres, 1995). Among young factory workers in Chiang Mai, Thailand (Rugpao, 1997), 23% and 16% of males report no or inconsistent condom use in their relations with sex workers who they visited "regularly" and those who were more "temporary", respectively; 57% reported non-use or inconsistent use when the partners were "promiscuous girls".

A few studies point to inconsistent condom use despite relatively high levels of condom awareness. Among college students in Ilorin, Nigeria, for example, although over 90% were aware of condoms, only 19% and 43% of sexually active females and males, respectively, made use of them. Among females attending night schools in San Martin de Porres, Peru (Rodriguez-Lay, 1997), while 23% were aware of condoms, under 1% had used them. Evidence from the case study among schoolgoing adolescent females in Selibe Phikwe, Mahalapye and Kang in Botswana suggests that, although out-of-school adolescent females were more likely ever to have practised contraception than in-school females, those still in school were more regular users (Kgosidintsi, 1997).

**• Sexually active youth express a preference for traditional methods, such as withdrawal and rhythm.**

Choice of method reflects a general and heavy reliance on natural methods. Withdrawal and rhythm are frequently reported: for example, in the case study of university students in Dumaguete City, Philippines, cited above, about half the users practised natural methods; among female industrial zone workers in Seoul, Kyongbuk, and Kyongnam, Republic of Korea, over half; and among university students in Ilorin, Nigeria, 44% and 27% of females and males, respectively.

**Sexual coercion**

Given the sensitive nature of the topic, non-consensual sexual activity is difficult to research. The topic is especially sensitive among youth, the age group in which coercion is perhaps most likely to occur. Although force and sexual coercion were not the sole topics of any of the studies reviewed in this article, a few studies exploring

**• Coercive sexual relations are not uncommon, especially among young females.**

sexual behaviour or the context of abortion were able to raise the issues, at least indirectly. Studies have employed different ways of assessing coercion—in some, force was defined as any sexual activity that was not consensual; in certain others, a considerable age difference between partners was regarded as an indirect indicator of coercion, and in yet others it was defined more directly and narrowly as rape or sex with "sugar daddies" (males, usually substantially older than their partner, who exchange money and/or gifts for sex).

Thirteen studies included in this review documented the extent to which sexual debut—or more recent sexual activity—was forced. Nine studies drew their samples from among students and out-of-school youth, factory workers, health centre clients, and, in one case, households. In the remaining four, the samples consisted of pregnant adolescents, adolescents who had undergone an induced abortion, or recent mothers (Mpangile *et al*., 1992; 1999; Bautista, 1989; Ehrenfeld, 1994; Austin, 1996). Their findings, presented in Table 6, clearly dispel the notion that sexual activity among youth, especially young females, is entirely consensual.

Although there is considerable variation, in the majority of case studies, between 5% and 15% of young females report a forced or coerced sexual experience. In several case studies, the figure is higher: 21% among in- and out-of-school adolescents in Selibe Phikwe, Mahalapye and Kang, Botswana (Kgosidintsi, 1997), 20% among secondary school students in Lima, Cusco and Iquitos, Peru (Alarcon and Gonzales, 1996), and 41% among young females attending urban night study centres in Lima, Peru (Villanueva, 1992). Among females working in an export zone in Republic of Korea, 9% reported that sexual debut had been forced by factory supervisors or colleagues (Kwon Tai-Hwan *et al.*, 1994). In a case study in Manila, Philippines, 6% of unwed mothers report that pregnancy resulted from rape, and another 7% that it resulted from sex in exchange for money to support a drug habit (Bautista, 1989). Among rural adolescent females in North and North-east Thailand, three of 11 sexually active females report that their sexual debut was a result of force or pressure from their partner (Isarabhakdi, 1995).

The "sugar daddy" phenomenon is cited in a number of studies as a reason for having sex against one's will. About one in five school-going and out-of-school adolescent females in Selibe Phikwe, Mahalapye, and Kang, Botswana, for example, report that it is difficult to refuse sex when money and gifts are offered. In this sample, girls as young as 13 reported having engaged in sex with "sugar daddies" (Kgosidintsi, 1997). Another case study in a hospital setting in Dar-es-Salaam, United Republic of Tanzania, reports that 28% of young women suffering post-abortion complications were made pregnant by men who were about 25 years older than them, evidence that the authors link to a coercive relationship (Mpangile *et al*., 1992; 1999). Studies report that perpetrators were often authority figures—work place supervisors (Republic of Korea), "sugar daddies," and older male teachers, policemen, priests, and relatives (Botswana, United Republic of Tanzania).

Sexual coercion is also experienced by males. Fewer case studies have explored coercive relationships among males than among females (five compared to 13); these studies suggest that under 7% of young males have experienced non-consensual sexual debut. In Dumaguete City, Philippines, a few (under 1%) report the phenomenon of "sugar mommies" (Cadelina, 1998).

Table 5. Current contraceptive practice.

| Country | Sample | Age range | % practising any contraception | | % practising contraception by method[1] | | | | % practising contraception regularly | | Source |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Female | Male | Female: Condom | Female: Natural method | Male: Condom | Male: Natural method | Female | Male | |
| **Botswana** Selibe Phikwe, Mahalapye, Kang | In- and out-of-school females | 13–19 | Na[2] | Ns[2] | 33[3] | Na | Ns | Na | 66 | Ns | Kgosidintsi, 1997 |
| **Kenya** | Secondary school students | 12-21 | | | | | | | | | Nyamongo, 1995 |
| Nairobi | | Urban | Na | Na | 16 | Ns | 35 | Ns | 10 | 20 | |
| Homa Bay | | Rural | | | 57 | | 73 | | 39 | 57 | |
| **Nigeria** Ilorin | University students | 15–24 | 81[4] | 72[5] | 19 | 44 | 43 | 27 | 31 | 76 | Araoye, 1996 |
| **Uganda** Kampala | Secondary school students[6] | 14–17 | 52 | | Ns | Ns | Ns | Ns | Ns | Ns | Mathias, 1993 |
| **China** Shanghai and two rural counties | Pregnant women attending facility for pre-marital examination or for abortion | 18–24 | 27[7] | Ns | 13 | Na | Ns | Ns | 6 | Ns | Wang, 1997 |
| **Korea, Republic of** Export Promotion Zone | Females in manufacturing sector, residing in dormitories | 18–29 | 21[8] | Ns | 25 | 12 | Ns | Ns | Na | Ns | Kwon Tai-Hwan *et al.*, 1994 |
| **Korea, Republic of** Seoul | Male university students | 15–29 | Ns | Na | Ns | Ns | 35[9] | Na | Ns | Na | Jong Kwon Lim *et al.*, 1995 |
| **Nepal** | Residents | <25 | Ns | Na | Na | Ns | 60 | Ns | Ns | 41 | Tamang, 1999 |
| Border towns | Non-residents[10] | | | | | | 76 | | | 43 | |
| **Philippines** Dumaguete City | College students | 18–24 | 69 | 69 | 32[11] | 37 | 34[12] | 35 | 56 | 53 | Cadelina, 1998 |
| **Viet Nam** Hanoi, Ho Chi Minh City | College students | 17–24 | 1 | 9 | Na | Na | Na | Na | Na | Na | Vu Quy Nhan, 1996 |
| **Argentina** Buenos Aires | Students in final 3 years of secondary school | 13–19 | 97 | 96 | 90 | 58 | 93 | 42 | 62 | 79 | Mendez *et al.*, 1995 |
| **Chile** | Urban, four regions | <20[13] | Na | Na | 23 | Na | 23 | 2-6 | 12 | | Kleincsek, 1994 |
| **Peru** Lima, Cusco, | Secondary school students and out-of- | 13–19 | 22–53 | 30–41 | 14–40 | 4–11 | 23 | 2-6 | Na | Na | Alarcon and Gonzales, 1996 |

| Country | Sample | Age range | % practising any contraception | | % practising contraception by method[1] | | | | % practising contraception regularly | | Source |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Female | Male | Female: Condom | Female: Natural method | Male: Condom | Male: Natural method | Female | Male | |
| Iquitos **Peru** | school adolescents Youths attending night school | 10–24 | 8[14] | 37 | 0 | 4 | 30 | 6 | Na | Na | Villanueva, 1992 |
| San Martin de Porres **Peru** Lambayeque | Household survey in 14 districts | 12–19 | 32 | 45 | 4[15] | Na | 11[1] | Na | 10 | 13 | Caceres, 1995 |

[1] Natural methods include withdrawal and rhythm.
[2] Na = not available. Ns = Not studied.
[3] Higher among out-of-school 53% compared to 25% among in-school adolescents; but more regular use (76%) among in-school users as compared to 58% among out-of-school users.
[4] Females: Other methods: OC 11%; other 3%; % users among those ever engaged in sex work: 39%; those ever engaged in casual sex: 30%; and with regular partner 37%.
[5] Males: other methods: OC 17%; other 12%; used with sex worker 86%; casual partner 81%.
[6] Females and males combined.
[7] Includes use of oral contraceptives, 8%; IUD, 1%; other methods, 5%.
[8] Includes use of oral contraceptives, 13%; other methods, 1%.
[9] With sex workers 48%; with girlfriend 26%; with casual partner 23%.
[10] Casual sexual relations only.
[11] Includes 15% females who report condom use combined with natural methods.
[12] Includes 19% males who report condom use combined with natural methods.
[13] The study referred to the population 15–40 but results presented here refer to youth only; figures for females and males combined.
[14] All used oral pills or IUDs.
[15] Used condom at least once during the last three sexual encounters.

Table 6. Experience of sexual coercion

| Country | Sample | Ages | Question posed | % coerced | | Source |
|---|---|---|---|---|---|---|
| | | | | Females | Males | |
| **Botswana** Selibe Phikwe, Mahalapye, Kang | In- and-out-of-school females | 13–19 | Ever forced to have sex | 21<br>in school: 20<br>out-of-school: 26 | Ns[1] | Kgosidintsi, 1997 |
| **Tanzania, United Republic of** Dar Es-Salaam | Women admitted to hospitals for post-abortion complications | 14–19 | Partner at time respondent became pregnant aged 45 or older | 28 | Ns | *Mpangile et al., 1992, 1999* |
| **Korea, Republic of** Export promotion zones | Females in manufacturing sector, residing in dormitories | 19–29 | Partner at sexual debut[2] | Colleague: 9<br>Other: 3 | Ns | Kwon Tai-Hwan *et al.,* 1994 |
| **Philippines** Manila | First-time mothers, married and unmarried | 15–24 | Reason for pregnancy | Rape: 6<br>“Seduced” while on drugs: 7 | Ns | Bautista, 1989 |
| **Philippines** Dumaguete City | College students | 15–24 | First sexual partner | Rape: 2<br>Sugar daddy: 3<br>For cash or other gain: 10 | "Sugar mommy": <1 | Cadelina, 1998 |
| **Thailand** North/North-east | Rural household survey | 15–24 | Reason respondent engaged in sex first time: forced/ pressured including by partner | (27)[3] | Forced/ pressured by partner: 10 | Isarabhakdi, 1995 |
| **Argentina** Federal Capital and Chubut | Adolescents at public hospitals for reproductive health services | 13–19 | Reason respondent engaged in sex first time: “violation” | 5 | 0 | Pantelides, 1991 |
| **Argentina** Buenos Aires | Students in final 3 years of secondary school | 14–20 | Reason respondent engaged in sex first time: “violation” | Rape: 2<br>Insistence of partner: 3 | Rape: 0<br>Insistence of partner: 3 | Mendez Ribas *et al.*, 1995 |
| **Mexico** Mexico City | Low-income adolescents at Ob/Gyn clinic of public hospital, ever pregnant, ever terminated a pregnancy | <20 | FGD[4] | Experience of rape discussed by at least one participant | Ns | Ehrenfeld, 1994 |
| **Panama** Metropolitan and San Miguelito health region | Females, first time pregnant, attending antenatal care services | <20 | Pregnancy resulted from rape | 1<br>Aged under 17: 3 | Ns | Austin, 1996 |
| **Peru** Lima, Cusco, Iquitos | Secondary school students and out-of-school adolescents | 13–19 | Sexual debut was forced | 2–20 | 3–7 | Alarcon and Gonzales, 1996 |
| **Peru** San Martin de Porres | Females attending night schools | 10–19 | Sexual debut was forced | 18 | Ns | Rodriguez-Lay, 1997 |
| **Peru** Lima | Youth attending night schools | 10–24 | Sexual debut was forced | 41 | 2 | Villanueva, 1992 |

[1] Not studied.
[2] Many women reported that their sexual debut had been forced by supervisors or colleagues in the factory.
[3] Small sample: N=3 of 11 sexually experienced females.
[4] Focus group discussion

# CONSEQUENCES OF UNSAFE SEXUAL ACTIVITY

## Sexually transmitted infections

**• Substantial minorities of youth have experienced symptoms of sexually transmitted infection.**

Few studies have explored sexually transmitted infections (STIs) among youth. What is of interest among the eight case studies that did so is that their samples are drawn from the population at large—educational institutions, factories, and communities—rather than from among high-risk populations per se. Results presented in Table 7 confirm that typically, somewhat larger proportions of young men than young women have experienced symptoms of a sexually transmitted infection. Only one study (university students in Ilorin, Nigeria), however, explored treatment-seeking behaviours. In this study, 10% of female university students had experienced abnormal vaginal discharge, and 4% sores: of these, although the large majority (89%) did indeed obtain treatment, about one-third of these students reported self-medication. In contrast, all males who experienced symptoms sought care, and relatively few (17%) attempted self-medication (Araoye, 1996).

## Unwanted pregnancy

**• Considerable percentages of young females (10%–40%) report unwanted pregnancy.**

A substantial minority of sexually active unmarried young women experience pregnancy, which is typically both unplanned and unwanted. In the community-based studies that explored unwanted pregnancy, between 10% and 40% of young unmarried females reported having experienced an unwanted pregnancy (Table 8). On the high side, among females about to be married in Shanghai, for example, 40% admitted experiencing an unwanted pregnancy (Gao, 1998); in export zones in the Republic of Korea, unmarried factory workers report similar rates (37%, Kwon Tai-Hwan *et al.*, 1994); in sites in Botswana, 42% of out-of-school adolescent females had experienced a pregnancy (Kgosidintsi, 1997); and in Buenos Aires, Argentina, 27% of adolescent women seeking health care had experienced an unwanted pregnancy (Pantelides, 1991).

In general, it appears that youth attending school or university are less likely to experience an unwanted pregnancy than are those drawn from the general population—usually under 10% in studies in every region (see for example, case studies in Argentina, Botswana, Nigeria, Peru, Philippines, Uganda and Viet Nam). For example, among students in the final three years of secondary school in Buenos Aires, Argentina, 3% of all females report a pregnancy, while 2% of males report making a partner pregnant. This finding is consistent with other findings from the same study, suggesting more consistently safe sexual behaviour, including higher rates of contraception and a higher incidence of planned as opposed to spontaneous sexual activity (Mendez Ribas *et al*., 1995).

Delays in recognising or admitting the pregnancy are observed among ever-pregnant adolescents at a public hospital in Mexico City (Ehrenfeld, 1994; 1999), for example, the first skipped period was

Table 7. Experience of sexually transmitted infections.

| Site/ country | Sample | Age range | % ever experienced a symptom of a sexually transmitted infection | | Source |
|---|---|---|---|---|---|
| | | | Female | Male | |
| **Botswana** Selibe Phikwe, Mahalapye, Kang | In- and out-of-school youth | 13–19 | 6[1] | Ns[2] | Kgosidintsi, 1997 |
| **Nigeria** Ilorin | University students | 15–24 | Discharge: 10<br>Sores: 4[3] | Gonorrhoea: 9<br>Syphilis: 5<br>Chancroid: 2 | Araoye, 1996 |
| **Korea, Republic of** Export Promotion Zones | Females in manufacturing sector, residing in dormitories | 19–29 | 7 | Ns | Kwon Tai-Hwan *et al*, 1994 |
| **Korea, Republic of** Seoul | Unmarried male university students | 15–29 | Ns | 8[4] | Jong Kwon Lim *et al.*, 1995 |
| **Philippines** Dumaguete City | College students | 18–24 | 3[5] | 10[6] | Cadelina, 1998 |
| **Thailand** North and North-east | Rural household survey | 15–24 | 3 | 12 | Isarabhakdi, 1995 |
| **Thailand** Chiang Mai | Factory workers, married and unmarried | 13–25 (unmarried) | 1[7] | 3[8] | Rugpao, 1997 |
| **Argentina** Buenos Aires | Students in final 3 years of secondary school | 13–19 | 7[9] | Na[10] | Mendez Ribas *et al.*, 1995 |
| **Peru** Lima, Cusco, Iquitos | Secondary school students and out-of-school adolescents | 12–19 | 5–14[11] | 3–8[12] | Alarcon and Gonzales, 1996 |

[1] Were treated for an STI symptom.
[2] Ns = Not studied.
[3] 89% report receiving treatment; 30% report self-medication.
[4] Including 3% who had experienced gonorrhoea.
[5] Of those who responded; Including those who did not respond, 2%.
[6] Of those who responded; Including those who did not respond, 6%.
[7] % reporting symptoms of: Dysuria: 28; Itching: 35; Ulcer: 1.
[8] % reporting symptoms of: Dysuria:19; Itching: 15; Ulcer: 11; Gonorrhoea: 6; Pus from urethra: 6.
[9] Asked only of adolescent females who ever visited gynaecologist, 7% of sexually initiated report visiting gynaecologist for STI symptom; actual number with symptoms may be higher.
[10] Not available.
[11] Lima: 14; Cusco:8; Iquitos: 5.
[12] Lima: 8; Cusco: 5; Iquitos: 3.

typically considered a delay; the second an irregularity; and it was often only in the third month of pregnancy that adolescents acknowledged the fact that they were pregnant. Many attempted abortions notwithstanding; of these, most did so unsuccessfully.

Young females may be reluctant to disclose the experience of an unwanted pregnancy, and hence the rates reported in Table 8 might well be underestimates of the actual numbers. A case study in Selibe Phikwe, Mahalapye and Kang, in Botswana, underscores this possibility. This study inquired about the experience of pregnancy among both respondents themselves and their peers, and results suggest that while 18% reported the experience of at least one pregnancy, almost three in four report pregnancy among a peer (Kgosidintsi, 1997).

Only one study addresses the consequences of unwed motherhood on young women's lives. This study, conducted in Manila, Philippines (Bautista, 1989) reports generally negative consequences: social ostracism, threat of poverty and economic dependence, and fear of remaining single. Motherhood involved considerable personal cost to young women in this study: it disrupted work (27%), schooling (13%), and parental financial support (9%).

**Abortion**

**• Induced abortion is widely used by pregnant young women, even in settings where it is restricted.**

Data on levels of induced abortion in developing countries are notoriously difficult to gather, either because abortion is restricted or because the issue is too sensitive. Even so, among young females reporting a pregnancy, the overwhelming majority—in almost every case study in every region—opted for abortion. In case studies conducted in settings where abortion is not restricted, such as China, Republic of Korea, and Viet Nam, for instance, well over 85% of ever-pregnant respondents had opted for abortion.

Even where the practise of abortion is restricted, however, large percentages of pregnant young females opted for abortion: college students in Ilorin, Nigeria (76%), and school-going and out-of-school adolescents in Lima, Cusco, and Iquitos, Peru (49%–86%, Alarcon and Gonzales, 1996), for example. The two case studies in Argentina suggest somewhat different conclusions. In one, the majority of ever-pregnant young females seeking health care in hospitals in the Federal Capital and Chubut districts chose to carry the pregnancy to term (62%), and another 14% were pregnant at the time of interview (Pantelides, 1991). In a second, all four of the ever-pregnant secondary school students in Buenos Aires opted for abortion (Mendez Ribas *et al*., 1995), suggesting perhaps that this better-educated group (or their families) had greater access to private abortion services than the general population.

Where abortion is legally restricted, this fact is not universally known by youth. For example, case studies in Lima, Cusco and Iquitos, Peru (Alarcon and Gonzales, 1996) report that 25%–35% of males and 26%–36% of females were unaware of the restrictions on abortion. A qualitative case study of pregnant adolescents in Mexico City (Ehrenfeld, 1994; 1999), some of whom underwent abortion, revealed a similar lack of awareness of the legal situation.

Table 8. Consequences of unsafe sex: unplanned pregnancy.

| Country | Sample | Ages | Question posed | ever-pregnant among sexually experienced % | delivering of ever-pregnant % | experiencing 1 or more abortions among ever-pregnant % | males reporting an unplanned pregnancy % | Source |
|---|---|---|---|---|---|---|---|---|
| **Botswana** Selibe Phikwe, Mahalapye, Kang | In- and-out of-school females | 13–19 | Ever been pregnant[1]<br>In-school<br>Out-of-school | 18<br>8<br>42 | Na[2] | Na | Ns[3] | Kgosidintsi, 1997 |
| **Nigeria** Ilorin | University students | 15–24 | Ever been pregnant; any partner ever been pregnant | 9 | 16 | 76[4] | 13[5] | Araoye, 1995 |
| **Uganda** Kampala | Secondary school students | 14–17 | Ever been pregnant | 2[6] | (25)[7] | (75)[8] | Na | Mathias, 1993 |
| **China** Shanghai | About-to-be-married females visiting clinics for required physical examination | <21 to >26 | Ever been pregnant | 40 | Na | 90 | Ns | Gao, 1998 |
| **Korea, Republic of** Export Promotion Zone | Females in manufacturing sector, residing in dormitories | <19–29 | Ever been pregnant | 37 | 12[9] | 88[10] | Ns | Kwon Tai-Hwan *et al.*, 1994 |
| **Korea, Republic of** Kwangju | Secondary school students | 15–22 | Ever had a friend who was pregnant | 21 | Na | Na | Na | Gayun, 1996 |
| **Korea, Republic of** Seoul | Male university students | 14–24 | Ever made a female partner pregnant | Ns | 9 [11] | 91[12] | 11 | Jong Kwon Lim *et al.*, 1995 |
| **Philippines** Dumaguete City | College students | 15–24 | Ever been pregnant; any partner ever been pregnant | 6 | Na | Na | Na | Cadelina, 1998 |
| **Viet Nam** Hanoi, Ho Chi Minh City | College students | 17–24 | Ever been pregnant; any partner ever been pregnant | 11[13] | 0 | 100 | 8[14] | Vu Quy Nhan, 1996 |
| **Argentina** Federal Capital, Chubut | Adolescents at public hospitals for reproductive health services | 13–19 | Ever been pregnant | 27 | 62[15] | 24 | 8 | Pantelides, 1991 |
| **Argentina** Buenos Aires | Students in final 3 years of secondary school | 14–20 | Ever been pregnant or partner ever been pregnant | 3 | (0)[16] | (100) [17] | 2[18] | Mendez Ribas *et al.*, 1995 |
| **Peru** Lima | Youth attending night school | 10–24 | Ever been pregnant, partner ever been pregnant | 24 | 54 | 38[19] | 9[20] | Villanueva, 1992 |
| **Peru** Lima, Cusco, Iquitos | Secondary school students, out-of-school adolescents | 13–19 | Ever been pregnant, partner ever been pregnant | 8–22[21] | 40–93[22] | 50–86[23] | 3–5[24] | Alarcon and Gonzales, 1996 |
| **Peru** San Martin de Porres | Females attending night schools | 10–19 | Ever been pregnant | 4 | 63[25] | 38[26] | Ns | Rodriguez-Lay, 1997 |

[1] Botswana: 72% report a friend who experienced an unwanted pregnancy (Kgosidintsi, 1997).
[2] Not available.
[3] Not studied.
[4] 49% reported a miscarriage.
[5] Of these pregnancies, 69% were reportedly aborted, 17% ended in a live birth, 2% ended in a miscarriage and in the remaining 12% of cases the male partner was unaware of the oucome.
[6] 4 of 200.
[7] Small numbers: 1 of 4.

[8] Small numbers, 3 of 4.
[9] Small numbers, 5 of 43.
[10] Small numbers,38 of 43.
[11] Small numbers,1 of 11.
[12] Small numbers,10 of 11.
[13] Small numbers,2 of 19.
[14] Small numbers,9 of 118.
[15] Another 14% currently pregnant.
[16] Small numbers: 0 of 4.
[17] Small numbers: 4 of 4.
[18] N=5; 3 of 5 males report that pregnancy was terminated.
[19] Another 8% report a miscarriage.
[20] Partners of 35% males reporting an unplanned pregnancy underwent abortion, 9% miscarriage.
[21] Lima, 8%; Cusco, 12%; Iquitos, 22%.
[22] Lima, 93%; Cusco, 40%; Iquitos, 53%.
[23] Lima, 86%; Cusco, 50%; Iquitos, 47%.
[24] 33–65% of partners experiencing an unwanted pregnancy underwent abortion; 33–53% continued the pregnancy.
[25] Small numbers, 5 of 8.
[26] Small numbers, 3 of 8.

Contraceptive experience of abortion-seekers suggests that practice tends to be irregular, or incorrect, and the method of choice is largely traditional. Among young women working in an export promotion zone in the Republic of Korea, almost two-thirds of women who had experienced an abortion also reported use of withdrawal or the rhythm method (Kwon Tai-Hwan, *et al*., 1994). Incorrect use of contraceptives compounded the vulnerability of young women. For example, in the case studies of export zone workers in the Republic of Korea (Kwon Tai-Hwan, *et al*., 1994) and abortion seekers in Dar-es-Salaam, United Republic of Tanzania (Mpangile, *et al.*, 1992), abortion seekers reported incorrect use of contraceptive methods, such as, for example, sharing oral contraceptives with friends, or taking them just before or after intercourse. Abortion-seekers in Dar-es-Salaam, United Republic of Tanzania (Mpangile, *et al.*, 1992) and those with unwanted pregnancies in Manila, Philippines (Bautista, 1989) reported limited overall knowledge of contraception. In the Dar-es-Salaam case study, 88% of adolescents experiencing post-abortion complications lacked complete information concerning contraception. This study also shows that adolescents seeking abortion are considerably more likely than older women to report that their partner at the time of pregnancy was a casual contact (40% compared to 25% and 14% among women aged 20–24 and 30–34, respectively).

Among pregnant adolescents observed at a public hospital in Mexico City (Ehrenfeld, 1994; 1999), 72% of young women who had an unwanted pregnancy that was ultimately carried to full term reported an average of 2.3 unsuccessful attempts at abortion. For the members of the group who did abort the pregnancy, one to four abortion attempts were made before success. Many of these attempts were self-induced, involving typically "strong injections" of unknown drugs and consumption of infusions of various types.

**• Pregnant young women use many different methods to induce abortion and multiple abortions are not unknown.**

Though numbers are small, several case studies point to the experience of multiple abortions among young females. For example, two of four ever-pregnant secondary school adolescents in a case study in Kampala, Uganda (Mathias, 1993), reported more than one abortion, as did 13% of ever-pregnant young women working in an export promotion zone in the Republic of Korea (Kwon Tai-Hwan, *et al.,* 1994), and over 20% of women who had experienced an unwanted pregnancy in sites in Cuba (Lopez, 1997; 1999). Finally, a case study of adolescents with abortion complications drawn from three hospitals in Santiago, Chile (Molino and Toldeo Dreves, 1997) reports that 23% of abortion-seeking respondents had experienced at least one previous abortion.

**• Post-abortion complications are reported frequently.**

Again, despite small numbers, the evidence suggests that complications may be more prevalent among adolescent abortion-seekers than among adults. In settings in which clandestine abortions were sought (e.g. in Mexico, United Republic of Tanzania), complications were particularly prevalent. In the case study in Dar-es-Salaam, United Republic of Tanzania, almost two-thirds of all females suffering from abortion complications were in the 15–24 age group. In a case study of secondary school students in Kam-

pala, Uganda (Mathias, 1993), of the three abortion seekers, one had suffered serious complications. Even in settings where abortion is legally available, shame and lack of knowledge may combine to constrain young women from seeking timely and safe abortions—for example, almost two in five (38-39%) abortion-seekers working in an export promotion zone in the Republic of Korea reported post-abortion complications (Kwon Tai-Hwan *et al*., 1994).

Case studies of pregnant adolescents in Mexico City (Ehrenfeld, 1994; 1999) and Santiago, Chile (Molino and Toldeo Dreves, 1997) highlight the considerable guilt experienced by adolescents who have experienced abortion. The case study in Mexico points out that guilt stems not only from the act of abortion itself but also from having engaged in sexual relations and having "failed" as a "real" woman by opting for abortion. And the case study in Santiago reports a high incidence of depression among pregnant adolescents who opted for abortion.

**• The experience of abortion is associated with considerable guilt.**

**Family support following an unplanned pregnancy**

Two studies discuss perceptions and experiences of family support and findings diverge considerably. A rare look at family reactions to premarital pregnancy comes from a study of about-to-be-married ever-pregnant Chinese women in Shanghai: in this study (Gao, 1998), only 13% reported parents who reacted "sympathetically" to their pregnancies, while others reported such reactions as indifference (40%), surprise (31%) and anger (11%). Neither partners nor friends were much more supportive—only 18%–21% were reportedly "sympathetic" (Gao, 1998). Among pregnant adolescents in hospital settings in Cuba (Lopez, 1997; 1999), in contrast, parents are reportedly extremely supportive, and 80% were reported to have assisted their young daughters in continuing their education or bringing up their children.

**• Experiences and perceptions of family support following an unplanned pregnancy vary.**

A few studies have explored perceptions of family support in case of unwanted pregnancy. In the Sichuan province of China, a study of abortion-seekers observes that while almost all had discussed the choice of abortion with their partners, almost two-fifths (38%) perceived a lack of support from family members, and were too shy to inform their family of their sexual activity. Among pregnant young women working in an export promotion zone in the Republic of Korea, only a third had consulted parents or relatives and even fewer (11%) had consulted the male partner (Kwon Tai-Hwan, *et al*., 1994). And among adolescents attending night school in Lima, Peru, 6% of pregnant adolescents (and 13% of their partners) had consulted their parents (Villanueva, 1992).

The lack of family support operates also at a different level. The case study in Mexico City of adolescents who had experienced a pregnancy reports that decision-making regarding abortion sometimes excluded the pregnant adolescent herself. In this study, mothers and partners were the two categories of people most likely to be consulted by the pregnant woman, and several reported

being "forced" by one or the other to attempt abortion. Friends of either sex were notably absent from the decision-making process (Ehrenfeld, 1994; 1999).

The lack of family support can also limit access to resources needed for a safe abortion. In the case study in Mexico City (Ehrenfeld, 1994; 1999), several pregnant adolescents who would have preferred abortion carried on the pregnancy for want of financial resources and a reluctance to approach families for financial help.

# INFORMED CHOICES AMONG YOUTH: THE CONTENT AND SOURCES OF INFORMATION

The case studies examined, to some degree, the levels of sexual and reproductive knowledge of youth, and the sources of that knowledge. Some case studies went beyond simple inquiries about awareness (generally the ability to name or list contraceptive methods or diseases) to inquiring about common misconceptions or more in-depth knowledge. Results suggest that, while youth are generally well informed, in-depth knowledge of sexual health issues tends to be quite patchy, and misconceptions concerning safe practices are quite widespread. Sources of information, moreover, tend to be largely informal. This section highlights common misconceptions expressed by youth regarding safe sexual practices, and sources of sexual health information reported by youth.

**Common misperceptions**

Messages generally conveyed to youth in information and education programmes tend to be largely scientific and technical. These messages do not, however, reflect the questions and doubts that young people have concerning healthy sexual practices. As a result, a range of misperceptions continues to exist, side-by-side with sound general information on disease and contraception. These misperceptions may well have contributed to the risky behaviours described above.

- **"A woman cannot become pregnant at first intercourse or with occasional sexual relations."**

Knowledge of conception and the fertile period was generally poor among young people, both female and male; and, interestingly, among educated as well as uneducated youth. A case study of pregnant adolescents in Mexico City goes so far as to report that *"the vagina seemed not to exist for many"* (Ehrenfeld, 1994; 1999). As Table 9 shows, substantial percentages of youth believe that sexual debut or occasional sex carries no risk of pregnancy, and this misperception is held among both females and males. Misconceptions extend to the other extreme as well. In a case study of youth in 13 provinces of Indonesia, for example, 9–13% of males and 6–7% of females believe that pregnancy can occur through physical embrace (Wirakartakusumah, 1997).

- **"Condoms are unsafe."**

Condoms are widely known among youth, and generally outrank such other commonly-known contraceptive methods as the pill, the intrauterine device (IUD), withdrawal and rhythm. Despite this awareness, misperceptions appear to dissuade youth from using condoms. Studies from Africa discuss these misperceptions in detail. A study of secondary school students in Nairobi and Homa Bay, Kenya, reports that awareness of condoms was not an issue—most young people were aware of its role in preventing HIV transmission, and could name several brands. This awareness was, however, countered by considerable mistrust of the condom: "*scientifically the virus HIV is very small such that it can*

Table 9. Percentage of females and males believing that a woman cannot become pregnant at first sex or if one has sex only occasionally.

| Site/country | Sample | Age range | Female | Male | Source |
|---|---|---|---|---|---|
| **Uganda** Kampala | Secondary school students | 14–17 | 42[1] | | Mathias, 1993 |
| **China** Shanghai | About-to-be-married females visiting clinics for required physical examination | 15–29 | 28 | Ns[2] | Gao, 1998 |
| **Argentina** Buenos Aires | Secondary school students | 13–19 | 16 | 19 | Mendez Ribas *et al.*, 1995 |
| **Peru** Lima | Youth attending night school (98% unmarried) | 10–24 | 62 [3] | 52[2] | Villanueva, 1992 |
| **Peru** Lima, Cusco, Iquitos | Secondary school students and out-of-school adolescents | 12–19 | 43–60[4] | 42–66[5] | Alarcon and Gonzales, 1996 |

[1] Combined for females and males; 20% agree; 22% don't know.
[2] Not studied.
[3] Among females, 22% agree and 40% don't know; among males, 24% agree, and 28% don't know.
[4] Female: Lima, 43; Cusco, 54; Iquitos, 60.
[5] Male: Lima: 42; Cusco, 58; Iquitos, 66.

*go through the pores in a condom hence not safe*"; condoms "*burst during use*"; and "*it is risky because it can remain in the vagina*" were commonly voiced concerns, such that only 35% of urban females and males, and 56% of rural ones expressed confidence in the effectiveness of condoms (Nyamongo, 1995). University students in Ilorin, Nigeria, were equally concerned: some 17% of males and 24% of females reported that condoms *"can climb into womb"*. And in a case study of adolescent females in Selibe Phikwe, Mahalapye and Kang in Botswana, 76% of in-school and out-of-school adolescents argued that condoms often slid off (Kgosidintsi, 1997).

**• "You can tell when a person is infected with STD or HIV."**

A number of case studies explore levels of awareness of STI/HIV transmission. Although a general awareness of HIV and AIDS (the latter in particular) was considerable, more in-depth knowledge of the major modes of transmission was limited. For example, over 80% of respondents in case studies in selected sites in China, Guatemala, Indonesia, Kenya, Nigeria, Peru and Thailand were aware of AIDS; but useful, working knowledge of modes of transmission was reported in very few studies—the only positive exceptions appearing to be about-to-be married young women in Shanghai, China (Gao, 1998) and students and factory workers in Bangkok, Thailand (Soonthorndhada, 1994), where 90% and 95%, respectively, were knowledgeable about modes of transmission.

One common and very dangerous misconception relates to the asymptomatic nature of STIs and HIV. In case studies in a range of settings, youth were confident that an infected person would reveal some outward evidence of their condition. A view expressed by young people in a low-income urban area in Argentina reflected the belief that individuals who are HIV-positive are

emaciated: *" She is very thin, surely because she is a carrier."* (Gogna *et al*., 1996). Only 5% of males in the case study of university students in Ilorin, Nigeria, and 7–12% of students in case studies in Hanoi and Ho Chi Minh City, Viet Nam were aware of the asymptomatic nature of STIs/HIV (Araoye, 1995; Vu Quy Nhun, 1996). In one case study alone, conducted among rural youth in North and North-east Thailand (Isarabhakdi, 1995), did the majority of respondents—81% of males and 86% of females—recognise the asymptomatic nature of STIs/HIV.

- **"Symptoms of sexually transmitted diseases go away on their own."**

Another dangerous misunderstanding revealed in case studies is the belief that, rather like many other viral infections, STI symptoms go away of their own accord. Some 22% of secondary students in Kampala, Uganda (Mathias, 1993), and 7% and 12% of male and female college students in Hanoi and Ho Chi Minh City, Viet Nam (Vu Quy Nhan, 1996) believed that such was the case.

Another misperception is that women are responsible for transmitting STIs and HIV. In a case study of youth residing in an urban barrio in Buenos Aires, Argentina, for example (Gogna *et al*., 1996), respondents suggested that the male was more vulnerable to AIDS than the female because the female could infect him without becoming sick herself: *"... the contamination affects me and kills me more quickly than her, because she already has all the defences, I think... and so I die quicker..."* and *"The man is weaker than the woman. The women are stronger in sexual things"*. Young men in this study also suggested that the absence of personal hygiene among "dirty women" was a factor contributing greatly to disease transmission, notably: *"... they don't wash and they do it again and again..., there comes a time when the girl begins to rot"*.

- **"Women are responsible for transmitting STIs/HIV."**

In the same study, respondents perceived menstrual blood as a potent source of STI/HIV transmission; whereas semen, in contrast, represented vitality, and as such was not considered to be an infectious or potentially harmful agent. Menstrual blood was regarded as highly dangerous by young men: *" Many people can become sick, infected by the menstrual blood of the woman... it is stronger than the semen of the man and can infect the man"* .

In a few case studies, large percentages of youth stated that STIs/HIV could be prevented by good personal hygiene—19% of female university students in Ilorin, Nigeria (Araoye, 1995); 30% of youth in sites in Chile (Kleincsek, 1994); and 44% and 50% of young men and women in sites in Guatemala (Mendez, 1994). In the same vein, 65% of male Korean university students in Seoul report that urination after sex gets rid of any infection that might have been transmitted (Jong Kwon Lim *et al.*, 1995).

- **"STIs/HIV can be prevented by good personal hygiene, and AIDS cured by medication."**

Young people also report that "medicines" and the use of antibiotics after sex can prevent infection with HIV. This was reported by 7% and 5% of Nigerian college-going

males and females, respectively, in Ilorin (Araoye, 1996); 40% of Korean college-going males in Seoul (Jong Kwon Lim *et al*., 1995); 28% and 15%, respectively, of young Thai male and female factory workers in Chiang Mai (Rugpao, 1997); and 20% of adolescent females in Lambayeque Department, Peru (Caceres, 1995).

A number of young people report a certain fatalism about contracting STIs and HIV, believing that these infections can be transmitted through such everyday contact as the sharing of glasses or eating utensils, the use of the same toilet as an infected person, poor personal hygiene and mosquito bites.

- **"STIs/HIV are transmitted through everyday activity."**

Eating and drinking with the same utensils as an infected person was indicated as a means of transmission in several case studies: by 37% of young people in 13 provinces in Indonesia (Wirakartakusumah, 1997), 56% of college-going males in Seoul, Republic of Korea (Jong Kwon Lim *et al*., 1995), 70% of about-to-be-married women in Shanghai, China (Gao, 1998), and 82% of young men already infected with an STI and attending a clinic in New Delhi, India (Grover, 1995).

Using the same toilet as an infected person is also described as a source of transmission: this belief was held by 4% and 6% of college-going males and females, respectively, in Hanoi and Ho Chi Minh City, Viet Nam (Vu Quy Nhan, 1996); 13% of youth in sites in Chile (Kleincsek *et al.,* 1994); 26% of factory workers in North and North-east Thailand (Rugpao, 1997); and 56% of college-going males in Seoul, Republic of Korea (Jong Kwon Lim *et al*., 1995).

Mosquito bites are another oft-mentioned source of transmission: 12% of male and 20% of female college students in Hanoi and Ho Chi Minh City, Viet Nam; 25%-28% of night school students in Lima and San Martin de Porres, Peru (Villanueva, 1992; Rodriguez-Lay, 1997); and as many as two in five (38%-44%) females in three settings in Guatemala (Mendez, 1994).

Youth in other case studies maintain that infection is transmitted through kissing (Gao, 1998, about-to-be-married women in Shanghai, China, 44%), touch (Grover, 1995, male patients attending an STI clinic in New Delhi, India, 78%), and even being in the same room as an infected person (Wirakartakusumah, 1997, youth from 13 Indonesian provinces, 24% and 28% of females and males, respectively).

Young people tend to distance themselves from perceiving personal risk, and are reluctant to accept that their behaviours might be risky for a range of reasons. A number of case studies highlight the extent to which young people underestimate the risks they face; in general, case studies suggest that between one in three and one in five youth consider themselves at any risk. In the border towns of Nepal, although 52% of men residing in border towns and 38% of those visiting these towns did not use condoms in their last sexual contact with a non-regular partner, only 11% and 24%, respectively, considered themselves at risk of

- **"It can't happen to me."**
- **"There's nothing I can do about it."**

contracting AIDS (Tamang, 1999). A similar situation was observed in a case study of university students in Ilorin, Nigeria (Araoye, 1995), where only a minority of sexually active males (21%) and females (38%), classified as being at high risk for AIDS, perceived themselves to be in any danger of acquiring HIV. In a case study in Chile (Kleincsek, 1994) also, while fewer than 20% of sexually active youth used condoms regularly, only 29% perceived themselves to be at risk. Among young factory workers in Chiang Mai, Thailand, those engaging in risky behaviours were only moderately more likely to perceive themselves to be at risk than were those practising safer sex measures: 14% compared to 9% (Rugpao, 1997). Even in a STI outpatient clinic in New Delhi, India (Grover, 1995), only one quarter of young men questioned recognised themselves to be at risk of acquiring HIV.

Reasons for this vary. One apparent factor is the way in which they perceive their relationships: many young people express trust in the monogamous nature of the relationship and fidelity of their partner, and display this trust in their beliefs concerning the partner's infection status and loyalty to the relationship. Another misperception is that sex worker contacts are safe, because sex workers are regularly monitored for infection. For example, in a case study of men in the border towns of Nepal, young men engaging in casual sex reported that if one chooses one's casual sex partners carefully, condoms are unnecessary: *As I have sex with clean or disease-free women, there is no need to use condoms…I take precautions by being selective about my partners" (*22-year-old lorry driver, Tamang, 1999). In addition, it is apparent that many young people consider that HIV is only a serious risk for members of special groups, sex workers and drug addicts, for instance. In a case study conducted among urban barrio residents in Buenos Aires, Argentina, for example, young people argued that the HIV virus is transmitted through the saliva of homosexuals or when several persons shared a marijuana cigarette, thereby distancing themselves from any fear of risk (Gogna *et al*., 1996).

And finally, young people display a fatalistic outlook concerning their chances of contracting infection. In a focus group discussion, youth from low-income urban areas in Buenos Aires, Argentina, expressed a sense of resignation and personal vulnerability: *"I think that one is not going to be very careful for themselves all their lives".* Similarly, young men in the border towns of Nepal argued that consistent condom use is impossible, citing the concern that condoms interfere with pleasure *"unless your semen does not come out, we do not enjoy."* (23 year old); an 18-year-old student observed that it is difficult in practice to interrupt the sexual act: "*the brain does not work while enjoying…"* (Tamang, 1999).

**Sources of information**

Studies reiterate the fact that information on sexuality, conception, pregnancy, contraception, and disease is rarely imparted by teachers or health professionals. Moreover, parents are frequently *not* the primary source of information. Ranking high as main sources of information are friends and the media. This can have disastrous consequences: a study of first-time mothers in Manila, Philippines, reports that 28% learned about sex from the man who made them pregnant. A further 32% garnered their knowledge from friends, and another 13% from the media (Bautista, 1989).

- **Peers are a major source of information on sexuality for many youth.**

Case studies in several settings suggest that peers remain the main source of information on sexuality. Among secondary school students in Nairobi and Homa Bay, Kenya, 35% of females and 51% of males reported frequent discussions of sexual matters with their peers (Nyamongo, 1995). Among college students in Hanoi and Ho Chi Minh City, Viet Nam, over 90% of youth report that they are most comfortable discussing sexual and reproductive health with peers of their own sex, while far fewer report discussion with their parents (Vu Quy Nhan, 1996). In a case study in 13 provinces of Indonesia (Wirakartakusumah, 1997), peers outrank parents as the main source of information on sexual matters for both females and males: 74% of males and 65% of females obtain their information from their peers, compared to 13% and 23% of males and females, respectively, who report parents as their source of information. Also, 47% of males and 44% of females name teachers as their main source of information. Only in case studies in Peru of in- and out-of-school adolescents in Lima, Cusco, and Iquitos (Alarcon and Gonzales, 1996); and night school students in Lima (Villanueva, 1992), are both peers and parents cited as main sources of information on sexuality.

- **Youth prefer different sources of information for different aspects of sexual health.**

Even so, young females are more likely to obtain their information from the family—usually the mother—than are young males. In case studies in some Asian settings, for example, while peers are the preferred source of information, females are far more likely than males to discuss sexual and reproductive health issues with their parents, usually mothers. Among college students in Hanoi and Ho Chi Minh City, Viet Nam, while 70% of females discuss these issues with one of their parents, only 49% of males do so. In contrast, males are more likely than females to discuss their sexual and reproductive health needs with outsiders such as colleagues, pharmacists, medical practitioners, and Youth Union members (Vu Quy Nhan, 1996). In a case study in 13 provinces of Indonesia (Wirakartakusumah, 1997), while peers, and even teachers, outrank parents as the main source of information about sex for young people, females are more likely than males to rely on their parents (23% versus 13%), somewhat less likely to rely on peers (65% versus 74%), and about as likely to rely on teachers (44% versus 47%).

- **Youth are interested in learning more about sexual health.**

Case studies in Latin America support these findings. In the case study of school-going and out-of-school adolescents in Lima, Cusco, and Iquitos, Peru (Alarcon and Gonzales, 1996), females are more likely than males to report parents as their main source of information on sexuality (43–58% compared to 33–41%), and are correspondingly less likely to get their information from peers (16–18% compared to 23–26%). Among night school students in Lima, Peru (Villanueva, 1992) too, mothers were reported as one of the sources of information on sexuality by 23% of females compared to 4% of males, and fathers by 8% and 14%, respectively; in contrast, males were more likely to report consultation with friends (32% compared to 21%) and of books (16% compared to 8%). Among adolescents attending health

services in Federal Capital and Chubut, Argentina, similarly, while almost half of all females discuss sexuality with their parents, only one in three males report the same (Pantelides, 1991).

It is very likely that youth prefer to obtain information on different aspects of sexuality and safe sex behaviours from different sources. One case study (Mendez Ribas, et al., 1995) of adolescents in secondary schools in Buenos Aires, Argentina, reveals, for example, that mothers are the main source of information for their daughters on topics of menstruation (84%) and the risk of pregnancy (65%); although the mothers remain important sources of other information, adolescent females are more likely to consult peers on other topics, such as sexual relations, contraception and ejaculation. Males, in contrast, obtained information from their fathers, but equally, on almost every topic, from their peers, the school and the media.

In some settings, the mass media are the predominant source of information on HIV/AIDS, though—interestingly—this is not necessarily the case regarding other aspects of sexual health. For example, among young females in several sites in Guatemala (Mendez, 1994), Chile (Kleincsek, 1994) and adolescent factory workers in Chiang Mai, Thailand (Rugpao, 1997), the vast majority—over 70%—obtained HIV/AIDS information from television and radio; in contrast, only 25% of youth in the Chilean case study obtained information about other STIs from these media. This trend is in part testimony to the public education and information campaigns that have been implemented in these and other study sites.

Health care providers were rarely cited as a major source of information. The one exception was a study of secondary school students in Kampala, Uganda, in which about 50% reported that their sources of information were teachers (50%) or health providers (49%).

A few case studies—in Argentina, Kenya, Peru and the Philippines—explored young people's impressions of sex education in schools. The majority of respondents (over 50% in most cases) rated the information provided by schools as inadequate. Several expressed the view that, where sex education was imparted, teachers focused on discouraging students from sexual activity without pointing out dangers or explaining and teaching safe sex behaviour. One student made the complaint: *"The Ministry of Education is afraid to face the fact…students are engaging in sex. They are not advising the students on the dangers of sex. They leave the whole issue to parents, who in most cases shy off."* (Kenya, Nyamongo, 1995).

Generally, young people in these studies argued for a much more explicit focus on sexuality in the school curriculum. A clear desire exists among youth for diverse, wide-ranging information and counselling on sex-related issues. In a case study of secondary school students in Kampala, Uganda (Mathias, 1993), for example, between half and three-quarters of all respondents requested further information on a vast range of topics encompassing: the prevention of pregnancy and disease; the use of contraceptive methods; friendship; dating; and human reproduction. Surprisingly, the large majority expressed a preference towards health providers, rather than teachers or parents, as information sources. Among university students in Dumaguete City, Philippines, (a large number of whom classified themselves as Catholic and/or attended Catholic educational institutions, 86% favoured the establishment of sex education programmes at school level. Among those who did not,

leading reasons included the views that sex education was "irrelevant", would "corrupt the minds of students," and was "against religion" (Cadelina, 1998). Likewise, large proportions of about-to-be-married Chinese women in Shanghai (Wang, 1996) articulated a strong need for information on contraception (76%) and STIs (41%) among youth, and for more accessible, free contraceptive services (45%). In a case study in Seoul, Republic of Korea, a majority of male university students recognised a need for more information on sexual health (65%) and counselling (34%), (Jong Kwon Lim *et al*., 1995).

# GENDER IMBALANCES INFLUENCING RISKY SEXUAL BEHAVIOUR

The case studies included in this paper point to a number of gender imbalances that underscore stereotypical perceptions of the sexual/reproductive roles of young females and males. An illuminating example of such differences comes from a case study of secondary school students in Buenos Aires, Argentina (Mendez Ribas *et al.*,1995) which identifies three characteristic patterns of sexual debut. Each pattern is clearly much more highly preferred either by females or by males.

One pattern, reflecting a committed relationship, was experienced by 48% of all youth (of whom the majority—just under two-thirds of the 48%—were female). In this category, sexual debut occurred in a committed relationship, at ages 16–18, with the intention of strengthening the relationship. This debut occurred in the home of one of the partners, and the immediate main reactions were pain and fear of pregnancy. The decision to have sex was made jointly by the couple, and some method of contraception—usually withdrawal—was used.

The other two patterns were more likely to characterise males than females. The first, labelled "impulsive," covered 26% of the sample, of which 99% were males. This group was characterised by early debut (15 or younger), motivated by "physical need", curiosity, or peer pressure; and the partner at debut was usually a sex worker (for males). The decision to have sex was made either alone or among peers, and initiation typically occurred in a hotel or brothel. The predominant immediate reactions were anxiety and fear of AIDS. If any method of contraception was used, it was usually a condom. The second pattern typical of males was labelled "occasional", comprising 26% of youth, of whom 79% were male. In this group, sexual debut occurred with a friend or casual acquaintance (usually sexually experienced). Age at initiation in this group varied as did the location of first sex—from the home of one of the partners, to the beach, or in a car. Initiation was usually spontaneous and, typically, sex occurred without contraception; the typical reactions were confusion and a fear of being discovered.

While this typology is not intended for generalisation, it does highlight major differences in the attitude and behaviour of young males and females that are evident, to some degree, in all settings, and can be adapted in other settings as well. Likewise a number of case studies in diverse settings highlight the extent to which the context defining the formation of sexual partnerships between young people is gender-specific.

A number of case studies highlight continuing, widespread, gender-specific attitudes to premarital sexual activity. Generally, males continue to be more likely to consider premarital sexual activity to be acceptable than are females; and, furthermore, both females and males consider premarital sex to be more acceptable for males than for females.

- **Young people themselves appear to condone, or even encourage, premarital sexual relations for males, but *not* for females.**

As seen in Table 10, these double standards are particularly evident in case studies in Asia, but can be seen in case studies in Latin America as well. For example, among rural youth in North and North-east Thailand, 46% of females and 32% of males hold the view that men should be virgins at marriage; in the case of females, however, these figures increase to 71% and 63%, respectively (Isarabhakdi, 1995). In a case study of college students in Hanoi and Ho Chi Minh City, Viet Nam, while 8% of females agree that casual sex can be fun, almost two in five males (37%) state this opinion (Vu Quy Nhan, 1996). Among youth attending night school in Lima, Peru, 49% of females and 68% of males agree that males should gain sexual experience prior to marriage; yet 73% of females and 59% of males hold the view that females must be virgins at marriage (Villanueva, 1992).

Exceptions do emerge. Among secondary school students in Kampala, Uganda (Mathias, 1993) and in Buenos Aires, Argentina (Kornblit, 1993), large majorities of males and females—over 70% in Uganda, and some 75–85% in Argentina—agreed that premarital sexual activity was "normal" for both females and males.

- **Gender-based double standards are often considered socially justifiable.**

The case studies suggest that young females and males accept—and in many case justify—sexual double standards and the constraints imposed on the sexual behaviour of women. Males, for example, are widely perceived to *need* sexual experience and a variety of partners; women are not. One case study among adolescents attending reproductive health services in two hospitals in Argentina reports the widespread belief that male "sexual urges" are uncontrollable, and consequently explain the greater "need" that men have for casual sexual relations (Pantelides, 1991). Adolescent schoolgirls and factory workers in Bangkok, Thailand, concur, believing that "*all men are just like that. I think they have a lot of sex urge"* (Soonthorndhada, 1994). And university students in a case study in Dumaguete City, Philippines, argued that *"men should have experience…women do not need experience,"* and justify this with the view that "*if a man does not get quite a lot of experience before marriage he'll want even more after…. Women are more idealistic than men"* (Cadelina, 1998).

Correspondingly, findings imply that young females recognise the ways in which these double standards constrain the behaviour of females relative to that of males. Adolescent female factory workers and students in Bangkok, Thailand, for example, recognise that: *"We cannot do whatever we want, roaming, smoking, drinking…."; "we are brought up this way"; "it's social expectations, they will look down on you if you go loose"; "men can go anywhere, do whatever they like, even trying sex…."*; and *"no-one wants a woman who has had sexual experience"* (Soonthorndhada, 1994). Similarly, low-income young women in Buenos Aires, Argentina, argue that "*the man can go with many women and not lose his reputation, but if the woman does the same thing with men, they will always say bad things about her"* (Gogna *et al*., 1996). And young women in this study recognise their limited options relative to young men. When asked, young women considered the roles of men far preferable to their own, citing the greater freedom and independence of males as reasons: *"The life of a man is easier, they come and go as they please, however many times. The woman has to stay home and care for the children."*

Table 10. Attitudes to premarital sex.

| Site/country | Sample | Age range | Question wording | Female respondents | | Male respondents | | Source |
|---|---|---|---|---|---|---|---|---|
| | | | | Attitudes of males to premarital sex | Attitudes of females to premarital sex | Attitudes of males to premarital sex | Attitudes of females to premarital sex | |
| **Uganda**<br>Kampala | Secondary school students[1] | 14–17 | Should not have sex before marriage | 73 | 78 | 73 | 78 | Mathias, 1993 |
| **Korea, Republic of**<br>Export Promotion Zone | Females in manufacturing sector, residing in dormitories | 19–29 | It must be forbidden until marriage | Na[2] | 61 [3] | Ns[4] | Ns | Kwon Tai-Hwan *et al.*, 1994 |
| **Korea, Republic of**<br>Seoul | Unmarried male university students | 15–29 | Chastity should be kept at all costs | Ns | Ns | 16 | 29 | Jong Kwon Lim *et al.,* 1995 |
| **Philippines**<br>Dumaguete City | College students | 18–24 | Not all right | 73 | 92 | 42 | 71 | Cadelina, 1998 |
| **Thailand**<br>North and North-east | Rural household survey | 15–24 | Should be virgin at marriage | 46 | 71 | 32 | 63 | Isarabhakdi, 1995 |
| **Thailand**<br>Bangkok | Females, school-going and factory workers[5] | 15–19 | Agree that single <19 should not have sex | 43 | 86 | Ns | Ns | Soonthorndhada A, 1994 |
| **Thailand**<br>Chiang Mai | Factory workers, married and unmarried | 13–25 | Premarital sex not acceptable | 46 | 85 | 2 | 50 | Rugpao, 1997 |
| **Viet Nam**<br>Hanoi, Ho Chi Minh City | College students | 17–24 | Sex should only take place in marriage | Na | 98 | 74 | Na | Vu Quy Nhan, 1996 |
| | | | Sex okay if couple is engaged | | 8 | 43 | | |
| | | | Casual sex can be fun | | 8 | 37 | | |
| **Argentina**<br>Buenos Aires | Secondary school students[6] | 13–19 | Should be virgin at marriage | 16 | 25 | 16 | 25 | Kornblit, 1993 |
| **Peru**<br>Lima | Youth attending night school (2% m/f married) | 10–24 | Males should gain sexual experience before marriage | 49 | Na | 68 | Na | Villanueva, 1992 |
| | | | Woman must be virgin at marriage | 73 | NA | 59 | Na | |
| **Peru**<br>Lima, Cusco, Iquitos | Secondary school students and out-of-school adolescents | 12–19 | Should not have relations before marriage[7] | 51–52 | 37–43 | 31–35 | 24–28 | Alarcon and Gonzales, 1996 |

[1] Percentages of overall sample, i.e. male and female respondents combined.
[2] Na = not available.
[3] May be tolerated if marriage is promised: 20%.
[4] Ns = not studied.
[5] Rough, based on responses on scale ranging from 1 (strongly disagree) to 5 (strongly agree) : mean values are 2.13 and 4.30, respectively.
[6] Percentages of overall sample, i.e. male and female respondents combined.
[7] Range over three settings: Lima, Cusco, Iquitos.

- **Young people's motives for engaging in sexual activity differ widely.**

Results from several case studies indicate that males and females engage in sexual relations with very different motives. Two case studies, one among rural adolescents in North and North-east Thailand (Isarabhakdi, 1995), and a second among secondary school adolescents in Buenos Aires, Argentina (Mendez Ribas *et al.,* 1995) highlight these disparities.

As seen in Table 11, for females, the leading reasons expressed by females for having sex were love and the desire to strengthen a committed relationship. Reasons commonly given included the desire to express or prove love, the need to strengthen the relationship, and a wish to "share" (see for example, Argentina, Pantelides, 1991, Mendez Ribas, *et al*., 1995; Thailand, Isarabhakdi, 1995). Although a large number of males also expressed a similar position, leading motives among them also included curiosity, "physical need" and peer pressure.

Motives can also be gleaned from responses of females and males to questions concerning decision-making on sexual debut and relations. For example, the majority (53%) of females in secondary school in Buenos Aires, Argentina (Mendez Ribas, *et al*., 1995) reported that decisions on the timing of sexual debut were made jointly with their partners, suggestive of perceptions of a stable relationship; only 7% reported making the decision on their own. Males, in contrast, reported a different decision-making scenario: while 22% reported joint decision-making, an additional 18% reported making decisions on their own, and 22% reported making the decision along with their peers (no females reported this).

Table 11

Table 11. Percentage distribution of main reason(s) given for engaging in sexual activity: Argentina and Thailand.

| Reason given | Argentina[1] Buenos Aires Secondary school students Ages 13-19 | | Thailand[2] Rural north and north-east Household sample Ages 15-24 | |
|---|---|---|---|---|
| | **Females** | **Males** | **Females** | **Males** |
| Love | 68 | 19 | 55 | 43 |
| Partner "insisted" | 18 | 11 | - | - |
| Curious | 2 | 15 | 36 | 87 |
| "Physical need" | 7 | 45 | 9 | 66 |
| Peer pressure | 0 | 7 | 9 | 40 |
| Force/rape | 2 | 0 | 27 | 10 |
| Forced by partner | 3 | 3 | - | - |
| Spontaneous | - | - | 46 | 37 |

[1] Mendez Ribas *et al.*, 1995.
[2] Isarabhakdi, 1995.

A third study, among adolescents attending public hospitals for reproductive health services in two sites of Argentina (Pantelides, 1991), also highlights differences in the reactions of males and females to sexual relations. In this study, males tended to report "satisfaction" and a sense of "winning"; while females seem much more likely to experience a sense of "sharing" or "feeling good with their partner".

- **Fear of losing the partner prevents young females from making informed choices about sexual relations.**

Case studies suggest that fears of losing their partner, incurring his anger, or jeopardising the relationship appear to be important factors inhibiting young females from exercising choice in the timing of sexual activity or negotiating contraceptive or condom use. In the case study of female students and factory workers in Bangkok, Thailand, adolescents state the belief that "*women have less power to bargain, they think that if they have sex with their boyfriends they will get them forever and that is a big mistake. Men never want only one, they want more and more"* (Soonthorndhada, 1994). In a similar vein, the case study in Mexico (Ehrenfeld, 1994; 1999) reports that a majority of ever-pregnant adolescents, including both those who chose to continue pregnancies and those who did not, reported that sexual activity was initiated through subtle pressure and promises of a permanent relationship by the partner.

Young females face the same dilemmas when negotiating contraceptive or condom use. In the case study in three sites in Botswana (Kgosidintsi, 1997) women reported an inability to negotiate condom use, for fear of incurring their partner's anger and/or risking the continuation of the relationship. One-third of adolescent, schoolgoing and out-of-school females responded that they were not confident that they could decline sex if their partner refused to use a condom; and another 5% reported that they would certainly have sex anyway in order to maintain the relationship. And in a case study of young women working in export promotion zones in the Republic of Korea (Kwon Tai-Hwan, *et al*., 1994), unmarried females were reluctant to insist on using condoms, for fear that they would be labelled "bad quality girls" with "loose morals".

- **Fear of disclosure compounds the reluctance of sexually active young females to seek contraception.**

Even after the experience of an unwanted pregnancy, young females in a case study in Mexico City, Mexico, continued to leave contraceptive decisions to the male partner—"*he looks after me*" was a typical justification. Even those who chose to undergo an abortion without informing their partners were not necessarily exercising informed choice—they did so out of the fear that, *"I was going to lose my boyfriend,"* or that *"he would abandon me"* (Ehrenfeld, 1994; 1999).

Efforts to adhere to behavioural double standards make young unmarried women fear disclosure of their sexual activity, and can inhibit them from seeking contraception. In the case study of pregnant young women in Shanghai, China (Wang, 1996), in which 27% had ever used a contraceptive, and 16% had ever used one with any regularity, a leading reason for non-use was fear or embarrassment (30%); in contrast, only 9% cited poor access to supplies. The case study of students and

factory workers in Bangkok, Thailand (Soonthorndhada, 1994), reports that pharmacies and department stores were the preferred sources of contraceptive supplies, because of the privacy and anonymity these sources enabled.

- **Despite constraints, some young females appear to be refusing sex without condoms.**

There is, however, emerging evidence of an increasing ability among females to say "no" to unprotected sex. In the case study of schoolgoing and out-of-school females in sites in Botswana, for example, over two in five report that they would refuse sex without contraception. Similarly, in a qualitative study in Argentina (Gogna *et al*., 1996), responses included: *"as much as I would like children or the pleasure of being with him… how it is today is that I have to put myself first… use the condom or, if not, nothing will happen"*; and *"he can go wherever he wants (to sleep), as long as he uses a condom and does not bring any disease home to me"*.

# SUMMARY AND RECOMMENDATIONS

Despite the non-representative nature of the studies and wide disparities between cultural settings represented, this review suggests clear global trends in the sexual and reproductive health situation of youth.

The picture that emerges suggests that risky sexual behaviour is typical of substantial proportions of young people in every setting studied. Multiple partners, irregular use of condoms and other contraceptives, unwanted pregnancies, the frequent occurrence of unsafe abortions, and the experience of being forced or coerced into having sex are not uncommon.

Despite such behaviour, relatively few young people consider themselves to be at risk of disease or unwanted pregnancy. Awareness of safe sex practices seems to be superficial, and misinformation regarding the risks of unsafe sex and its consequences is widespread.

Above all, these case studies suggest that gender inequalities are already present in adolescence. Double standards regarding the acceptability of male and female premarital sexual behaviour are evident in the attitudes and behaviour of youth in all settings; and the vulnerability of young females, already a matter for concern, is exacerbated by these unequal values.

There are, finally, hints of a shift towards greater informed choice and powers of negotiation among young females, and towards more consistent condom use among youth generally. These conclusions are tentatively drawn from qualitative studies, and have not been substantiated by large-scale representative samples.

**Programmatic recommendations**

Findings from these case studies stress the global need for: adolescent- and youth-friendly sexual and reproductive health services; counselling on sexuality, pregnancy, post-abortion issues and family planning; and sex education programmes that are age-appropriate and sensitively imparted. Several additional programme recommendations stand out from this review.

- **Build life skills among youth.**

The case studies have pointed to the constraints that youth, particularly young females, face in exerting informed choice and in acquiring family planning services and information. Findings highlight: (i) the difficulties that young females have in refusing sex or insisting on condom use with their partners, and their general tendency to acquiesce to the authority of their partners in matters of sexual initiation, contraceptive use, the decision to become pregnant and/or whether or not to have an abortion; (ii) the inhibitions that young males face in exerting informed choice about contraception, when faced by peer and social pressures that strongly encourage sexual activity; (iii) the

difficulties young females face in countering threats of sexual coercion and force; and (iv) the reluctance of young people to seek appropriate and timely care for sexual and reproductive health needs.

These findings point to a general need—especially among young females—to build negotiation skills that will enable safe and informed choices.

As explained, gender-based double standards are widespread; and there is a general need for parents, educational institutions and community institutions to address and correct them.

- **Address double standards and gender disparities.**
- **Raise awareness of sexual force and coercion, and equip youth to counter them.**

The case studies have documented the prevalence of sexual coercion and force against females in various settings, and against males in some settings. Sexual coercion is frequently perpetrated by adults. Findings such as these bring into question current intervention strategies that assume that sexual activity is voluntary. Programmes are needed that inform youth and adults about the threat of sexual violence, and that empower youth to protect themselves from, and take appropriate actions against, the perpetrators of sexual violence.

- **Dispel myths and misconceptions.**

While young people may be aware of sexual and reproductive risks in general, their information is incomplete and they hold a number of misconceptions that are rarely addressed in health programmes. Risk behaviours are practised partly as a result of such mistaken beliefs as, for instance, that STIs can be prevented by good personal hygiene, or that women cannot become pregnant at first sex. There is a great need, therefore, to understand common misperceptions in different settings and to provide not only basic information on STIs and contraception, but also information that attempts specifically to dispel existing misconceptions.
In particular, the message needs to be clearly imparted that *every* sexual act risks disease and unwanted pregnancy.

This review suggests that young females and males have different preferences for information sources, with females tending to prefer family sources, and males tending to prefer the mass media. There is also some indication that youth prefer to be informed about different aspects of sexual and reproductive health in different ways. These preferences need to be accommodated.

- **Provide information through media acceptable to youth.**
- **Involve parents in communicating information on safe sex behaviour.**

Parents have a considerable role to play in assuring that their children lead healthy sexual and reproductive lives; yet parents are inhibited, for many reasons, in assuming this role. In some cases, parents assume that their children are unlikely to engage in sexual relations or are not mature enough to need relevant knowledge; and in other cases, parents

may assume that these information needs are better met in school. Nonetheless, studies have suggested that, especially among young females, the actual and preferred sources of information on many dimensions of sexuality are parents, and particularly mothers. Parents in many settings are not, however, prepared to respond to this need.

Furthermore, the case studies have suggested that sexual debut frequently occurs in the home, spontaneously (this is particularly true for females), when parents are absent: finding such as these need to be transmitted to parents, and efforts must be made to involve mothers and fathers to deal realistically with the sexual affairs of their adolescent children.

Young males and females have quite different preferences concerning sources of information; and also have obvious misconceptions, concerning various and diverse issues of sexuality, that need to be addressed. Misconceptions can and do spread (as is clear from the fact that many young people cite their peers as major sources of information). Such findings point to the need to involve youth in the design and implementation of programmes to raise awareness of risk and safe sex behaviours. Furthermore, the preferences and perceptions of youth need to be incorporated into every such programme.

- **Involve youth in programmes aimed at imparting information and developing educational strategies.**

- **Promote access to confidential and private sexual and reproductive health care services.**

The case studies have suggested that fear of disclosure prevents many young people—again, particularly females—from seeking appropriate and timely care for a variety of sexual and reproductive health needs. In some settings, a major reason for unprotected sexual activity is fear of disclosure while seeking contraceptives; in others, abortion is delayed till the second trimester or sought from unqualified providers because of a similar fear. There is a need to tailor family planning services and delivery mechanisms such that they inspire trust among young people concerning issues of confidentiality. At the same time, providers should be trained to respect the right of youth to privacy and confidentiality.

**Research recommendations**

Gaps in our understanding of the sexual and reproductive health of young people continue to be numerous and wideranging. The case studies have clearly shown that: young people are not a homogeneous group; their sexual and reproductive health situation varies even over a couple of years of age; the consequences of ill-health are manifested in different ways; and the needs and perspectives of youth vary by age. They have also highlighted the extent to which gender relations tend to be unbalanced among young people, and the severe way in which such imbalances affect not only the reproductive and sexual health of young females but also their ability to make choices that affect it.

This review suggests a need for more in-depth community- and facility-based behavioural research

that focuses on the perspectives and experiences of youth in different settings. Central among themes deserving investigation are the vulnerability of young people to sexual and reproductive ill-health, the community and social forces and gender imbalances that limit their choices, and the influence of the former on the latter.

Following is a summary of priority research needs.

- **Investigate the determinants of positive behaviours and outcomes.**

- **Investigate the gender roles and life skills that affect the health situation of young women.**

Much of our research has tended to focus on risk behaviours and their determinants. Yet, findings have pointed to such desirable positive outcomes as gender-balanced relationships, behaviour that demonstrates sophisticated negotiation skills, the making of informed sexual and reproductive choices, and prompt and appropriate health-care seeking. There is a need for small, in-depth studies: to determine the characteristics of, and circumstances surrounding, such examples of positive deviance; and to identify and analyse the strategies used successfully by the young people concerned.

Research is needed that explores the ways in which gender roles/expectations and power imbalances in family structures limit or affect life skills among youth. More specifically, research is needed to examine ways in which social constraints make young women particularly vulnerable and unlikely to exert choices relating to their sexual and reproductive lives—whether concerning the prevention of risk behaviour, the timing of marriage, or choices regarding motherhood. Of interest in many settings is research that explores the constraints that married adolescent and young women face in accessing information and services, in influencing decisions about fertility, contraception, morbidity and sexual relations, and in remaining free from disease, violence and unwanted pregnancy. Research is also needed to identify circumstances under which adolescent and young women may be able to exercise greater autonomy in these matters.

The patterns of formation and conduct of sexual partnerships among young people remain an important, unexplored area of research. Questions that need attention include: What are the nature and duration of different types of partnerships? Do females and males have different perceptions or expectations of relationships? How do females and males perceive sexual responsibility or "appropriate" behaviour within relationships? How do expectations of a relationship influence decisions to practice contraception or safe sex? And to what extent, and by whom, are choices exercised regarding sexual behaviour and the avoidance of disease and unwanted pregnancy?

- **Explore premarital sexual behaviour, the ways in which sexual partnerships are formed among youth, and the respective social meanings that females and males attribute to relationships.**

- **Investigate the ways in which sexually active youth deal with the dual risks of unwanted pregnancy and sexually transmitted infections.**

Despite increasing levels of sexual activity and the corresponding increase in the risk of contracting STIs, the issue

of dual protection among youth has rarely been addressed. Research is needed that: (i) ascertains the opinions of sexually active youth about the risks they face concerning unwanted pregnancy and HIV/STIs; and (ii) explores the ways in which young people cope with these risks, and the constraints they face in changing behaviours.

- **Explore the issues of sexual coercion, force and violence, concerning both married and unmarried youth.**

Young people, especially females, are observed to be particularly vulnerable to sexual coercion and violence. Sometimes this coercion clearly involves the use of force, at other times it is more subtle and involves economic or psychological manipulation. A considerable amount of further research is needed that sensitively explores the levels, patterns, nature and extent of sexual coercion and violence. Another question that must be answered is that of how the presence or threat of violence/coercion limits the ability of young women to negotiate safe sex and/or contraception, their ability to make reproductive choices, and their ability generally to influence their own reproductive and sexual health.

- **Investigate young people's access to health care, and the constraints they face in the pursuit of good health.**

Research is needed that explores the use of reproductive health services by youth, and the sociocultural and programme-related constraints they face in doing so. Guidelines need to be developed on ways of overcoming the common fear of disclosure, and the way in which to design and implement appropriate and acceptable mechanisms for the provision of effective sexual and reproductive health care to youth.

This is a daunting agenda. Securing informed health choices for young people entails changes in multiple sectors: the family, society and health and educational systems. It requires a rethinking of what programmes offer, who programmes are directed to and how programmes are delivered. It requires an acceptance of changing norms and the provision of an environment that will support young people to make healthy and informed choices.

# REFERENCES

1. Alarcon I, Gonzales GF. *Attitudes towards sexuality, sexual knowledge and behaviour in adolescents in the cities of Lima, Cusco and Iquitos*. Lima, Peru, Cayetano Heredia Peruvian University (unpublished final report submitted to the Programme in December, 1996).

2. Araoye M. *Sexual behaviour patterns and contraceptive choice, Nigeria*. Ilorin, Nigeria, University of Ilorin Teaching Hospital (unpublished final report submitted to the Programme in May, 1995).

3. Austin KL. *Some psychosocial characteristics that play an important role in adolescent pregnancies in the Metropolitan and San Miguelito health regions of the Republic of Panama.* Panama City, Panama, Center for Research in Human Reproduction, Ministry of Health (unpublished final report submitted to the Programme in June, 1996).

4. Bautista PF. *Young unwed mothers: medical, psychosocial and demographic implications*. Quezon City, Philippines, Management Communication Systems (unpublished final report submitted to the Programme in June 1989).

5. Caceres S. *Sexual behaviour of adolescents at Department of Lambayeque and risk of sexually transmitted disease/HIV infection.* Chiclayo, Peru, Faculty of Health Sciences, University of Chiclayo (unpublished final report submitted to the Programme in February, 1995).

6. Cadelina C. *Sexual behaviour and level of awareness of STDs: a survey among college students*. Dumaguete City, Philippines, Department of Sociology/Anthropology, Silliman University (unpublished final report submitted to the Programme in August, 1998).

7. Ehrenfeld N. *Female adolescents at the crossroads: sexuality, contraception and abortion in Mexico*. Mexico City, Mexico, Dr Manuel Gen Gonzalez General Hospital (unpublished final report submitted to the Programme in October, 1994).

8. Ehrenfeld N. Female adolescents at the crossroads: sexuality, contraception and abortion in Mexico. In: Mundigo A, Indriso C, eds. *Abortion in the developing world*. London, Zed Books, 1999: 368–386.

9. Gao E. *Study on the needs and unmet needs for reproductive health care among unmarried women in Shanghai*. Shanghai, People's Republic of China, Shanghai Institute of Planned Parenthood Research (unpublished final report submitted to the Programme in March, 1998).

10. Gayun Y. *Determinants of sexual behaviour and gender power relations among Korean adolescents*. Kwangiu, Republic of Korea, Chonnam National University (unpublished final report submitted to the Programme in January, 1996).

11. Gogna M, Pantelides EA, Ramos, Silvina E. *Cultural and psychosocial factors affecting prevention and treatment of STDs: power, affection and pleasure in the negotiations between the genders, Argentina*. Buenos Aires, Argentina, Centre for Population Studies (unpublished final report submitted to the Programme in May, 1996).

12. Grover V. *Sex behaviour and risk perception among men attending an STD clinic in the capital city of India*. New Delhi, India, University College of Medical Sciences and GTB Hospital (unpublished final report submitted to the Programme in May, 1995).

13. Isarabhakdi P. *Determinants of sexual behaviour that influence the risk of pregnancy and disease among rural Thai young adults*. Nakorn Pathom, Thailand, Institute for Population and Social Research (unpublished final report submitted to the Programme in November, 1995).

14. Jong Kwon Lim, Han Hyong Kim, Hye Ryun Kim, Dong Hyon Chang, Joo Hyung Kim, *Sexual behaviour and contraceptive use of Korean young men*. Seoul, Republic of Korea, Korean Institute for Health and Social Affairs (unpublished final report submitted to the Programme in February, 1995).

15. Kgosidintsi N. *Sexual behaviour and risk of HIV infection among adolescent females in Botswana*. Gaborone, Botswana, National Institute of Development, Research and Documentation (unpublished final report submitted to the Programme in October, 1997).

16. Kleincsek MM. *People identifying AIDS and STDs as problems leading to sexual behaviour changes*. Santiago, Chile, Educacion para el Mejoramiento de la Calidad de Vida (unpublished final report submitted to the Programme in September, 1994).

17. Kornblit AL. *Sexual models among young and adults: convergences and divergences, Argentina*. Buenos Aires, Argentina, Faculty of Social Sciences, University of Buenos Aires (unpublished final report submitted to the Programme in October, 1993).

18. Kwon Tai-Hwan, Jun Kwang Hee, Cho Sung-nam. Sexuality, contraception and abortion among unmarried adolescents and young adults: the case of Korea. In: Mundigo A, Indriso C, eds. *Abortion in the developing world*. London, Zed Books, 1999: 346-367.

19. Kwon Tai-Hwan, Jun Kwang, Cho Sung-nam. Sexuality, contraception and abortion among unmarried adolescents and young adults: the case of Korea. Seoul, Republic of Korea, College of Social Sciences, Seoul National University (unpublished final report submitted to the Programme in December, 1994).

20. Lopez MM, Madan LF, Perez CR. Pregnancy in adolescents. Havana, Cuba, National Centre for Sex Education (unpublished final report submitted to the Programme in October, 1997).

21. Luo Lin, Wu Shi-zhong, Chen Xiao-qing, Lin Min-xiang. *Induced abortion among women in Sichuan Province, China: a survey*. Chengdu, People's Republic of China, Sichuan Family Planning Research Institute (unpublished final report submitted to the Programme in October 1995).

22. Luo Lin, Wu Shi-zhong, Chen Xiao-qing, Li Min-xiang. Induced abortion among unmarried women in Sichuan Province, China: a Survey". In: Mundigo A, Indriso C, eds. *Abortion in the developing world*. London, Zed Books, 1999: 337–345.

23. Mathias A. *A study of reproductive knowledge, sexual attitudes and behaviour among secondary school students in urban Kampala, Uganda: KAP study, sexual knowledge, beliefs, practices.* Kampala, Uganda, Makerere University (unpublished final report submitted to the Programme in December, 1993).

24. Mendez DA. *Knowledge, beliefs, attitudes and behaviour of the female adolescents at high risk of HIV or other venereal diseases in Guatemala*. Guatemala City, Guatemala, University of Valle de Guatemala (unpublished final report submitted to the Programme in September, 1994).

25. Mendez Ribas JM, Necchi S, Schufer M. *Risk awareness and sexual protection: perceptions and behaviour among a sexually active population, Argentina*. Buenos Aires, Argentina, Hospital Clinic, University of Buenos Aires (unpublished final report submitted to the Programme in May, 1995).

26. Mpangile GS, Leshabari MT, Kihwele DJ. *Induced abortion in Dar es Salaam, United Republic of Tanzania*. Dar-es-Salaam, United Republic of Tanzania, Uzazi Na Malezi Bora United Republic of Tanzania (UMATI) (unpublished final report submitted to the Programme in October, 1992).

27. Mpangile GS, Leshabari MT, Kihwele DJ. Induced abortion in Dar-es-Salaam, United Republic of Tanzania: the plight of adolescents. In: Mundigo A, Indriso C, eds. *Abortion in the developing world*. London, Zed Books, 1999: 387–403.

28. Nyamongo I. *Investigation into condom acceptability, sexual behaviour and attitudes about HIV infection and AIDS among adolescent students in Kenya*. Nairobi, Kenya, Institute of African Studies, University of Nairobi (unpublished final report submitted to the Programme in January, 1995).

29. Pantelides E. *1. Knowing the fertility situation of adolescents in Argentina, quantifying the phenomenon and describing its characteristics 2. Exploring the network/complex of factors that determine whether an adolescent will be a father or a mother, Argentina*. Buenos Aires, Argentina, Centre for Population Studies (unpublished two-part final report submitted to the Programme in June, 1991).

30. Rodriguez-Lay G. *Research about acceptability and effectiveness of family planning services for young people who belong to an educative system*. Lima, Peru, Institute for Population Studies (unpublished final report submitted to the Programme in December, 1997).

31. Rugpao S. *Sexual behaviour in adolescent factory workers*. Chiang Mai, Thailand, Chiang Mai University (unpublished final report submitted to the Programme in March, 1997).

32. Soonthorndhada A. *Adolescent sexual attitudes and behaviour and contraceptive use of late female adolescents in Bangkok: a comparative study of students and factory workers*. Nakorn Pathom, Thailand, Institute for Population and Social Research, Mahidol University (unpublished final report submitted to the Programme in December, 1994).

33. Tamang A. *Sexual risk behaviour and risk perception of HIV-AIDS transmission among men in border towns of Nepal*. Kathmandu, Nepal, Centre for Research on Environmental Health and Population Activities (unpublished final report submitted to the Programme in March, 1999).

34. Villanueva M. *Pregnancy and reproductive health in students that attend night school*. Lima, Peru, Cayetano Heredia Peruvian University, Institute for Population Studies (unpublished final report submitted to the Programme in June, 1992).

35. Vu Quy Nhan. *Survey on young adults' reproductive behaviour: KAP study*. Hanoi, Viet Nam, National Committee on Population and Family Planning (unpublished final report submitted to the Programme in January, 1996).

36.Wang J. *The resolution of pre-marital pregnancy in Shanghai, China*. Shanghai, People's Republic of China, Institute of Population Research, Fudan University (unpublished final report submitted to the Programme in January 1997).

37. Wirakartakusumah D. *Indonesian teenage reproductive health*. Jakarta, Indonesia, University of Indonesia (unpublished final report submitted to the Programme in January, 1997).

38. Toleo Dreves, Virginia and Ramiro Molina, Carlos. *Mental health profile in adolescents with interruption of their pregnancy with induced abortion,* Santiago, Chile, Escuele de Salud Publica, Psiquiatra Infanto Juvenil Centro de Medecina Reproductiva y Desarollo Integral del Adolescente (CEMERA), Universidade de Chile (unpublished final report submitted to the Programme in January 1997).

## Annex 1. Summary description of the studies

| Country | Study population | Sample characteristics | | | | Sample size | | | | Design | Author |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample drawn from | Age range | Married (M) or unmarried (U) | Sex | Total sample | % <25 years | Female | Male | | |
| **Africa** | | | | | | | | | | | |
| Botswana | In-school and out-of-school adolescents, Selibe Phikwe, Mahalapye, Kang Purposive, systematic sampling of students from enrolment lists | Schools | 13–19 | U | F | 1366 | 100 | 1366 | - | Survey, SAQ[1] | Kgosidintsi, N. (1997) |
| Kenya | Secondary school students from eight purposively selected secondary schools in Nairobi (urban) and Homa Bay (rural) district (girls only, boys only and a mixed school) Forms 1–4. Students randomly selected through enrolment registers of each Form. | Schools | 12–21 | U | F & M | 375 | 100 | 166 | 209 | Survey, SAQ, and free listing | Nyamongo, I. (1995) |
| Nigeria | University students, Ilorin, Kwara State purposively selected university; systematic random sample of students. | University | 15–24 | U | F & M | 1000 | 100 | 500 | 500 | Survey, ½ SAQ ½ FTFI[2] | Araoye, M. (1996) |
| Tanzania, United Republic of | Women admitted to four public hospitals in Dar-es-Salaam with abortion complications. All women hospitalized. | Hospitals | 14–49 | M & U | F | 455 | 62 | 282 | - | Survey, FTFI, IDI[3] | Mpangile, G.S. *et al.,* (1992) |
| Uganda | Secondary (high) school adolescents from 10 schools in urban Kampala. Stratified random sample of students from 10 randomly selected schools. | Schools | 14–17 | U | F & M | 400 | 100 | 200 | 200 | Survey, FTFI | Mathias, A. (1993) |
| **Americas** | | | | | | | | | | | |
| Argentina | Adolescents attending two public hospitals for adolescent reproductive health services for the first time, one each in Federal Capital and Chubut. Random selection of adolescents at two purposively selected facilities. | Hospitals | 13–19 | U | F & M | 373 | 100 | 134 | 239 | Survey, FTFI | Pantelides, E. (1991) |

| Country | Study population | Sample characteristics | | | | Sample size | | | | Design | Author |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample drawn from | Age range | Married (M) or unmarried (U) | Sex | Total sample | % <25 years | Female | Male | | |
| Argentina | Four public, secondary municipal schools in the Buenos Aires city area. Random selection of students from classes 1–3 and 4–6 of 4 randomly selected schools. | Schools | 13–19 | U | F & M | 395 | 100 | 217 | 178 | Survey, SAQ | Kornblit, A.L. (1993) |
| Argentina | San Fernando, barrio of Buenos Aires Purposive sample. | Barrio and participants | 18–25 | U & M | F & M | 50 | 100 | 24 | 54 | FGDs[4] and IDIs[5] | Gogna, M. *et al.,* (1996) |
| Argentina | Adolescents attending final 3 years of secondary schools of different types, public, adolescents attending private, religious, non-religious, boys only, girls only and mixed schools in Buenos Aires. Random selection of 30 adolescents per class drawn from stratified sample of schools. | Schools | 14–20 | U | F & M | 952 | 100 | 420 | 532 | Survey, SAQ | Mendez Ribas, J.M. *et a.,* (1995) |
| Chile | Urban-based group attending general medicine and other departments and special programmes of hospital centre in four regions of Chile. Purposive selection. | Hospitals | 15–40 | M & U | F & M | 1209 | 45 | 616 | 593 | Survey, SAQ, semi-structured survey | Kleincsek, M. *et al*., (1994) |
| Chile | Adolescents with abortion complications and those deciding to carry their pregnancies to full term, attending three hospitals in Santiago, Chile (and followed up at months 6 and 12). Purposively selected facilities; all adolescents entering for post abortion complications and a matched control group of adolescents attending facilities for delivery. | Hospitals | <19 | M & U | F | 680 | 100 | 680 | - | Survey, FTFI | Molina, R. *et al*., (1997) |

| Country | Study population | Sample characteristics | | | | Sample size | | | | Design | Author |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample drawn from | Age range | Married (M) or unmarried (U) | Sex | Total sample | % <25 years | Female | Male | | |
| Cuba | Adolescents attending four hospitals in Havana, Pinar del Rio, Matanzas for pregnancy termination or delivery<br>Purposively selected facilities; all adolescents entering in May–Aug 1994. | Hospitals | 12–19 | M & U | F | 801 | 100 | 801 | - | Survey, FTFI | Lopez, M.M. *et al.,* (1997) |
| Guatemala | Target populations: purposively drawn sites.<br>1. Urban group living in city slums, uprooted migrants.<br>2. Rural group from 3 large towns with Indian and Hispanic components.<br>3. Transient group from 5 localities with heavy tourism, truck movement, harbours, ports, bars and houses of prostitution, varying in size and level of urbanization<br>Purposive selection of sites, respondents randomly selected. | Household, or meeting places | 13–20 | M & U | F | 758 | 100 | 758 | - | Survey, FTFI | Mendez D.A. (1994) |
| Mexico | Low-income clients at the Obstetrics and Gynaecology Clinic of a public hospital, Mexico City.<br>Quota sample of pregnant adolescent females. | Hospital | <20 | M & U | F | 72 | 100 | 72 | - | FGDs, & IDIs | Ehrenfeld, N. (1994) |
| Panama | Adolescents pregnant for the first time, attending antenatal care services in 8 health centres of the Metropolitan and San Miguelito health regions.<br>Purposive selection of facilities; all adolescents. | Health centres | <20 | M & U | F | 424 | 100 | 424 | - | Survey, FTFI | Austin, K.L. (1996) |

| Country | Study population | Sample characteristics | | | | Sample size | | | | Design | Author |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample drawn from | Age range | Married (M) or unmarried (U) | Sex | Total sample | % <25 years | Female | Male | | |
| Peru | Adolescents from 14 districts/conglomerates in the Dept. of Lambayeque.<br>Random selection of one district in each of 14 clusters; systematic random sample of households in each district. | Households | 12–19 | Not reported | F & M | 1803 | 100 | 909 | 894 | Survey, SAQ | Caceres, S. (1995) |
| Peru | Students in 7 purposively selected night study centres in Metropolitan Lima<br>Stratified random sample. | Night study centres | 10–24 | M & U | F & M | 1150 | 100 | 764 | 386 | Survey, SAQ | Villanueva, M. (1992) |
| Peru | Students attending one night school (educational night centre), San Martin de Porres.<br>All female students at one purposively selected night school. | Night school | 10–19 | M & U | F | 228 | 100 | 228 | - | Survey, FTFI | Rodriguez-Lay, G. (1997) |
| Peru | Urban adolescent students of secondary, public and private schools, and out-of-school youth, Lima, Cusco, Iquitos<br>Cities purposively selected; stratified random sample of in-school students; purposive selection of out-of-school adolescents. | Schools, homes | 13–19 | U | F & M | 5202 | 100 | 2537 | 2665 | Survey, FTFI | Alarcon, I. *et al.,* (1996) |
| **Asia** | | | | | | | | | | | |
| China | Women visiting MCH centres for the required premarital examination, Shanghai 3 urban districts and 2 rural counties.<br>Purposively selected sites; women randomly selected. | MCH centres | <21<br>>26 | U | F | 2580 | 87 | 2245 | - | Survey FTFI, FGDs[6] | Gao Ersheng (1998) |

| Country | Study population | Sample characteristics | | | | Sample size | | | | Design | Author |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample drawn from | Age range | Married (M) or unmarried (U) | Sex | Total sample | % <25 years | Female | Male | | |
| China | Pregnant rural and urban women, presenting for premarital examination or for abortion, 2 districts in urban Shanghai and 2 rural counties. Purposively selected sites. | Health facilities | 17–25 | U | F | 1111 | 100 | 1111 | - | Survey, FTFI | Wang Jufen (1996) |
| China | Abortion seekers in first trimester of pregnancy. Sites in six rural counties of Sichuan province. Prospective follow-up on days 15, 90 and 180 at purposively selected hospitals/family planning clinics. | Hospitals or family planning clinics | 18–40 | U | F | 457 | 93 | 457 | - | Survey, FTFI | Luo L, *et.al*., (1995) |
| India | Randomly selected from outpatient STD clinic at a university-affiliated hospital in New Delhi. Purposive selection of clinic; random selection of clients. | Clinic | 15–40 | M & U | M | 397 | 45 | - | 179 | Survey, FTFI | Grover,V. (1995) |
| Indonesia | Respondents were randomly selected from 13 provinces, (N Sumatra, W Sumatra, S Sumatra, Lampung, Greater Jakarta, West Java, Central Java, Yogyakarta, East Java, Bali, West Nusa Teggara, Kalimantan, S Sulawesi). Representative sample. Provinces purposively selected based on sampling structure of 1993 National Economic and Social Survey. Households randomly selected in each survey region. | Households | 15–24 | U | F & M | 2994 | 100 | 1378 | 1616 | Survey, SAQ | Wirakartakusumah, D. (1997) |

| Country | Study population | Sample characteristics | | | | Sample size | | | | Design | Author |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample drawn from | Age range | Married (M) or unmarried (U) | Sex | Total sample | % <25 years | Female | Male | | |
| Korea, Republic of | Single women in dormitories in three export zones who agreed to attend an educational programme (other groups also studied, not reported here), Kuro (Seoul), Kumi (Kyongbuk), Masan-Ch'angwon (Kyongnam). Purposive selection of dormitories. | Dormitories | <19–29 | U | F | 326 | 91 | 326 | - | Survey, FTFI | Kwon Tai-Hwan *et al.,* (1994) |
| Korea, Republic of | University students from four universities, living in and around Seoul. Two-stage systematic sampling of universities, stratification by grade, 30 students per grade. | Universities | 14–29 | U | M | 1103 | 80 | - | 875 | Survey, SAQ | Jong Kwon Lim, *et al.,* (1995) |
| Korea, Republic of | School students (from 9th grade in school to seniors in college) in Kwangju metropolitan, and surrounding rural areas Purposive sample of school students. | Schools | 15–22 | U | F & M | 849 | 100 | 400 | 449 | Survey, SAQ | Gayun, Y. (1996) |
| Nepal | Recruited from five border towns along the Indian–Nepal border (resident and non-resident). Cluster sampling to identify resident men; purposive sampling by occupation for non-resident men. | Household, places of work or meeting places | 18–40 | M & U | M | 800 | 41 | - | 326 | Survey, FTFI, IDI | Tamang, A. (1999) |
| Philippines | First-time mothers, married and unmarried, Metro Manila. Purposive sample of sites. | NGOs for unwed mothers; maternity hospitals for married | 15–24 | M & U | F | 200 | 100 | 200 | - | Survey, FTFI, IDI | Bautista, P.F. (1989) |
| Philippines | College students, Dumaguete City Systematic random sampling of students. | Colleges | 15–24 | U | F & M | 1196 | 100 | 503 | 693 | Survey, SAQ | Cadelina, C. (1998) |

| Country | Study population | Sample characteristics | | | | Sample size | | | | Design | Author |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample drawn from | Age range | Married (M) or unmarried (U) | Sex | Total sample | % <25 years | Female | Male | | |
| Thailand | Female factory workers and students, Bangkok. Twelve randomly selected schools and 18 randomly selected garment factories. | Schools and factories | 15–19 | U | F | 500 | 100 | 500 | - | Survey FTFI, FGDs | Soonthorndhada, A. (1994) |
| Thailand | Young factory workers from 50 purposeively selected factories in Chiang Mai, participants randomly selected. Purposively selected factories. | Factories | 13–25 | M & U | F & M | 1210 | 100 | 609 | 601 | Survey, FTFI | Rugpao, S. (1997) |
| Thailand | Adolescents from rural areas of six provinces in north and north-east Thailand, study sites purposively selected, participants randomly. | Households | 15–24 | M & U | F & M | 1228 | 100 | 605 | 623 | Survey, SAQ, FGDs | Isarabhakdi, P. (1995) |
| Viet Nam | College students from eight university campuses in Hanoi and Ho Chi Minh City; Random selection of 4 institutions each in Hanoi and Ho Chi Minh City, random selection of students. | Universities | 17–24 | U | F & M | 1603 | 100 | 803 | 800 | Survey, FTFI | Vu Quy Nhan (1996) |

[1] SAQ: Self-administered questionnaire.
[2] FTFI: Face-to-face interview.
[3] IDI: In-depth interview .
[4] FGD: Focus group discussion.

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