Sexual health, contraception, and teenage pregnancy

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ABC of adolescence

Sexual health, contraception, and teenage pregnancy

This is the sixth in a series of 12 articles

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Sexual health becomes a new health priority in early adolescence. The sexual health of young people is a matter of intense public concern. The adverse consequences of unsafe sexual behaviour—such as pregnancy and sexually transmitted infections (STIs), including HIV infection—affect adolescents as well as adults. "Risk taking" behaviours are common when adolescents start being sexually intimate and are often linked with other health risk behaviours, such as substance misuse.

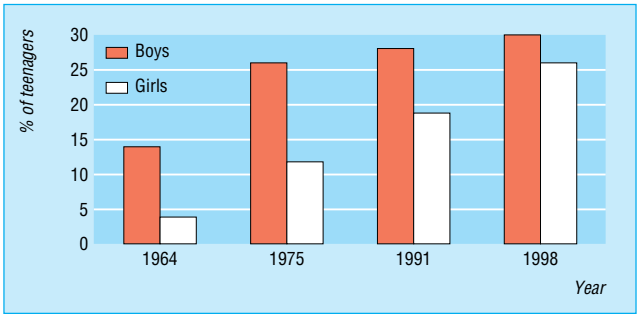
Teenagers assess and evaluate risk differently from adults and health professionals: they would rather reduce their risk of being excluded from the "in-group" or of looking immature than take notice of any perceived health risks

Relationships and sexual behaviour

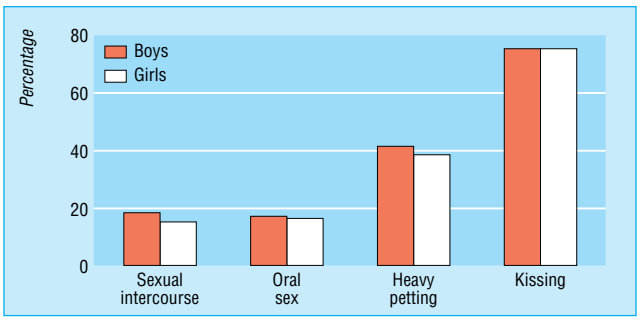
The median age for first sexual intercourse in the United Kingdom dropped during the early 1990s and is now stable at around 16 years for both men and women. The disparity between the sexes observed in the early 1990s has diminished. Before the age of 15, about 18% of boys and 15% of girls report having had full sexual intercourse, with similar proportions having engaged in oral sex.

Having sex for the first time at an early age is often associated with unsafe sex, in part through lack of knowledge, lack of access to contraception, lack of skills and self efficacy to negotiate contraception, having sex while drunk or stoned, or inadequate self efficacy to resist pressure.

About 10% of boys in the United Kingdom report that they were drunk or stoned when they first had sex, and 11% of girls report being pressurised by their partner when they first had sex. Of those under 16 years who have ever had sex, about a third to a half of both sexes report ever having had unsafe sex.



Proportion of UK teenagers who first had sexual intercourse by age 16 years, 1964-98



Percentages of 14 year olds in Scotland engaging in various sexual activities

Sexually transmitted infections

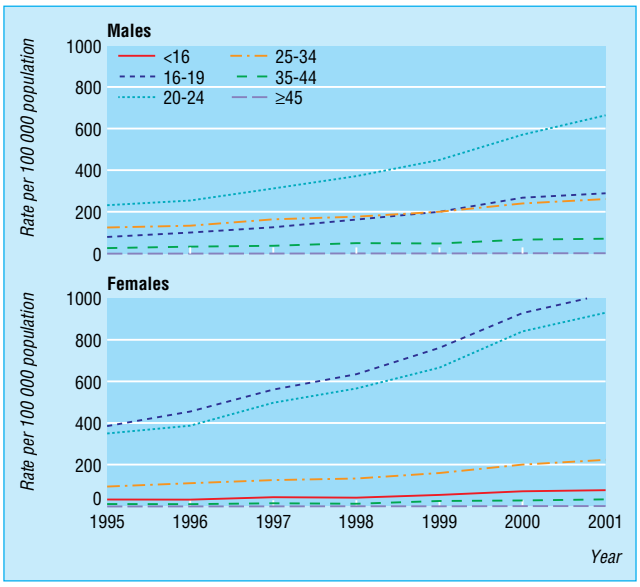
Considerable rises in the incidence of STIs, particularly chlamydia, have led to a major public health problem in the United Kingdom. Although rates in the under 16s have remained low, rates in 16-19 year olds and 20-24 year olds almost trebled in men and more than doubled in women during 1995 to 2001. Some studies suggest that 30-40% of sexually active teenage girls in high risk groups are infected.

Gonorrhoea, and to a lesser extent genital herpes, has shown similar increases in incidence. The highest rates of STIs are among black Caribbean and black African young people, suggesting that cultural and socioeconomic factors play a major role in the risk of acquiring and in protection against STIs.

Clinical presentations of STIs in adolescents are similar to those in adults. It is important to note that chlamydia, often asymptomatic in older adolescent girls and women, usually presents with a vaginal discharge in young adolescent girls.

Risk factors for sexually transmitted infections in adolescence

- Unsafe sex
- Multiple, sequential sexual partners
- Concurrent partners
- Mental health problems
- Concurrent substance misuse
- Physiological immaturity (chlamydia seems to easily infect the immature cervix, making teenage girls more susceptible to infection than adults)

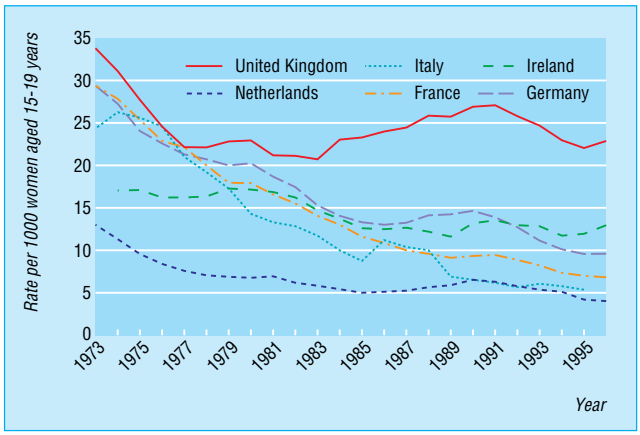


Rates of uncomplicated chlamydia infections in United Kingdom by age, 1995-2001

Early detection and treatment of curable STIs, such as chlamydia, can reduce the risk of further complications, such as infertility and ectopic pregnancy. With the easy availability of highly sensitive new nucleic acid amplification tests on voided urine, current UK recommendations support the opportunistic screening of all sexually active adolescent females attending general practice surgeries and genitourinary medicine and family planning clinics, regardless of whether they have symptoms. Screening young men without symptoms remains more controversial, although many suggest opportunistic screening similar to that provided for young women.

Teenage pregnancy

The incidence of teenage pregnancy across Europe varies considerably. The United Kingdom has the highest rate in western Europe and is lower only than Bulgaria, Russia, and Ukraine in Europe as a whole. Throughout most of western Europe, teenage birth rates fell during the 1970s, '80s, and '90s, but in the United Kingdom, rates have remained high—at or above the level of the early '80s.



Live birth rate to women aged 15-19 years, 1973-96

It is important to recognise that for some young women, particularly from certain ethnic or social groups, teenage pregnancy can be a positive life choice. Rates of teenage pregnancy within marriage are high, for example, in some South Asian ethnic groups in the United Kingdom. However, for many other young women, the costs of teenage pregnancy can be very high, particularly when linked with poverty. These risks include poorer outcomes for the children of teenage mothers as well as for the mothers themselves.

Infant mortality among babies of teenage mothers is about 60% higher than among the babies of older mothers. These infants are also more likely to have lower birth weights, have childhood accidents, and be admitted to hospital during childhood. In the longer term, the daughters of teenage mothers are more likely to become teenage mothers themselves.

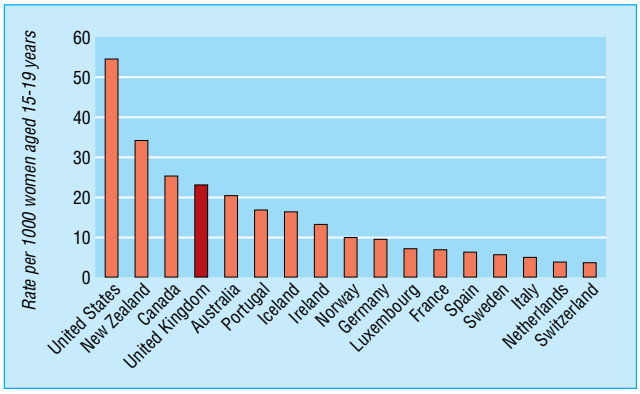
Prevention of unwanted teenage pregnancies is a high priority in many countries. In the United Kingdom, strategies are based on the cycles of social exclusion and disadvantage that both cause and follow teenage pregnancy.

High quality evidence shows that health promotion behavioural programmes using peer educators of a similar age reduce the prevalence of sexual activity at age 16 years. Although programmes that promote abstinence have a logical appeal, no high quality studies have shown the effectiveness of such approaches, and such programmes are not seen as

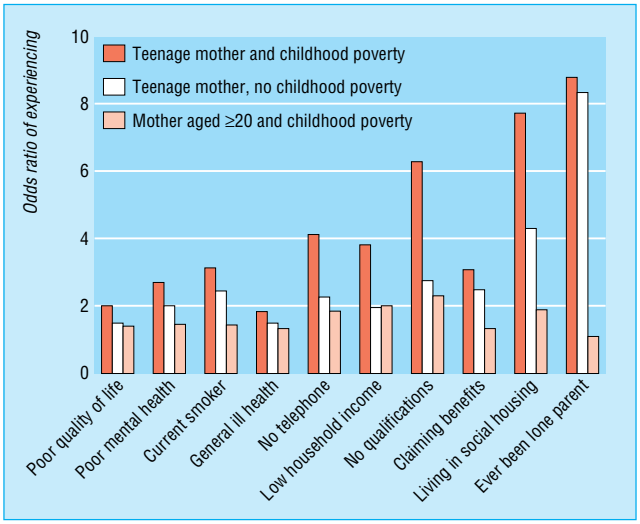
Clinical features of sexually transmitted infections in adolescents

Chlamydia
- No symptoms in half of males and 70% of females
- Vaginal discharge is usual presentation in girls aged under 13 years
- Pelvic inflammatory disease can be asymptomatic

Gonorrhoea
- No symptoms in up to 80% of females
- Urethritis and discharge is common in males
- Girls aged under 13 years usually have vaginal discharge
- Pharyngeal and rectal infections may be present



Births per 1000 women aged 15-19 years, 1998



Adult outcomes of teenage pregnancy compared with a reference level for women who give birth at age 23-32 and had no childhood poverty

Factors known to protect young people from teenage pregnancy include higher levels of connectedness with school and family; long term, stable relationship with a partner; and strong religious beliefs

Risk factors for teenage pregnancy
- Poverty (the strongest risk factor)
- Looked-after children (children "in care")
- Children of teenage mothers
- Low educational achievement
- Poor transition from school to work at age 16 years
- Sexual abuse
- Mental health problems
- Crime

acceptable by many teenagers or professionals as they potentially limit young peoples' rights and autonomy.

Contraception

In the United Kingdom about 75% of young people in early adolescence and 85% in mid-adolescence, of both sexes, have reported that they used an effective form of contraception the last time they had sex.

Teenagers are relatively poor users of both barrier and hormonal contraceptives. Condoms remain the contraceptive of choice of young people; over 75% reported that they used condoms at their last sexual intercourse (15% reported using the oral contraceptive, 1% injectable contraception, and 6% emergency contraception).

The first time a young person has sex is one of the riskiest times for young people in the United Kingdom: half of the under 16s and a third of those aged 16-19 use no contraception the first time they have sex, as much as double the rates in other developed countries, including the United States.

Proportion of adolescents using contraception at first intercourse

Netherlands—85% of "young people"
Denmark—80% of 15-16 year olds
Switzerland—80% of "adolescents"
United States—78% of "adolescents"
France—74% of "girls"; 79% of "boys"
New Zealand—75% of "sexually active teenagers"
United Kingdom—50% of under 16s; 66% of 16-19 year olds

Health promotion targeted at teenagers and the provision of free condoms improves contraceptive use by teenagers. The most appropriate contraceptives for most young people are likely to be condoms and the contraceptive pill. However, teenagers have a relatively high failure rate with both these methods because of "technical problems" (condom failure and irregular use of the pill). Because of this, some countries are promoting the "double Dutch" method—using condoms plus oral contraception to protect against both pregnancy and STIs.

Emergency contraception is not a substitute for a regular form of contraception and does not protect against STIs. Access to emergency contraception, however, is an important and effective preventive measure against an unwanted pregnancy. In the United Kingdom, knowledge of emergency contraception is low among young people—for example, less than half know about the 72 hour "window of opportunity." Young women aged 16 and over can obtain emergency contraception over the counter at pharmacies. However, for girls under age 16, such contraception is available only on prescription (either from doctors or, in exceptional circumstances, from approved pharmacists), thus imposing substantial limitations on its use by young teenagers at risk.

Good evidence to support current practice is limited. Increasing numbers of people believe that campaigns and educational programmes that promote postponement or temporary abstinence much more strongly than the current British programmes do might result in greater health benefits. ABC programmes (Abstinence, Be faithful, and if not, use a Condom) seem to have been remarkably successful compared with promotion of barrier contraception in some African countries, and the politically driven "abstinence-only" campaigns in the United States have coincided with falls in teenage pregnancy rates without the increases in STIs seen in the United Kingdom.

Factors that reduce rates of teenage pregnancy

- Adequate sex education and information
- Health promotion targeted at teenagers (advising that they consider whether they are ready for intercourse and encouraging the use of barrier and combined barrier and hormonal contraception)
- Sexual health services that are "adolescent friendly"
- Postponement of sexual activity
- "Life option" programmes to give alternatives to early parenting
- Assertiveness training and communication about contraception
- Problem solving and decision making skills
- Improving family communication about sex

Condoms remain the contraceptive of choice of young people, though the combined use of condoms plus the contraceptive pill is probably the most effective option

Promoting contraception in primary care

- Make condoms easily available without the need for counselling or appointments
- Ensure that health promotion materials cover emergency contraception and young people's legal rights to contraception in general
- Ensure that materials are displayed where they will be read
- Offer contraceptive methods that are attractive to young people (such as not stigmatising), useable just at the time of intercourse, and cheap and easily obtainable
- Advise use of "double Dutch" method of contraception

Guidance from UK Department of Health*

A doctor or other health professional providing contraceptive advice or treatment to someone aged under 16 without parental consent should be satisfied that:

- The young person will understand the advice and the moral, social, and emotional implications
- The young person cannot be persuaded to tell their parents or allow the doctor to tell them that they are seeking contraceptive advice
- The young person is having, or is likely to have, unprotected sex whether they receive the advice or not
- The young person's physical or mental health is likely to deteriorate unless they receive the advice or treatment
- It is in the young person's best interests to give contraceptive advice or treatment without parental consent

*Adapted from Department of Health. *Best practice guidelines for doctors and other health professionals on the provision of advice and treatment to young people under 16 on contraception, sexual and reproductive health.* 2004. www.dh.gov.uk (search for: 3382)

Evidence is increasing that, although abstinence campaigns may delay young people's first sexual intercourse, they may also increase their risk of having unprotected sex when they do begin having sex

Providing sexual health services to adolescents

Sexual health services for young people must be available in general practice in addition to specialist services. A recent study reported that over 90% of pregnant teenagers had discussed contraception with their general practitioner in the year before becoming pregnant, confirming primary care as the main provider of health services. Those at risk of pregnancy are also at risk of STIs, and it would be logical to provide both contraceptive and STI testing services together.

Siting of services may be critical. Because of reluctance about being identified as using a sexual health service, young people may prefer to attend a general primary care clinic rather than a specialist service, even if the primary care clinic is not as youth friendly. The sex of the health professional also seems to be important, with a tendency for primary care or family planning services to be used by young women, while young men may simply buy condoms from pharmacies or vending machines.

Providing sexual health and contraceptive services in an "age appropriate" environment and manner is particularly important for adolescents, as they will simply not use services they regard as inaccessible or unfriendly. Young people report that confidentiality, a non-judgmental approach, informality, accessibility, and the ability to choose whether they see a male or female health worker are the most important factors in deciding whether to use services.

Desirable features of sexual health services for adolescents

- Confidentiality
- Knowledge about the legal framework covering services to adolescents
- Good access (the setting and the approach of staff should be adolescent friendly; services should allow self referral; they should be close to areas used by young people and be accessible by public transport; after-school and/or weekend sessions should be available)
- "Men only" clinics as well as clinics for females
- Non-judgmental attitudes
- Choice of staff by gender where possible
- Awareness of cultural issues (particularly in relation to Asian ethnicities)
- Contraceptive methods appropriate to age of young person
- Free and on-site provision of treatment for sexually transmitted infections
- Counselling services appropriate for young people
- Clear routes of referral to and liaison with specialist services (including genitourinary medicine, child health professionals, and social services)

Further reading and resources

- Rogstad KE, Ahmed-Jushuf IH, Robinson AJ. Standards for comprehensive sexual health services for young people under 25 years: UK national survey. *Int J STD AIDS* 2002;13:420-4.
- Social Exclusion Unit. *Teenage pregnancy report*. London: Stationery Office, 1999.
- Toumbourou J, Patton GC, Sawyer S, Olsson C, Webb-Pullman J, Catalano R, et al. *Evidence based health promotion. No 2. Adolescent health*. Melbourne: Department of Human Services, Victoria, 2000.
- Trust for the Study of Adolescence. *Key data on adolescence*. Brighton: TSA, 2003.

The first graph is adapted from Coleman and Schofield (*Key data on adolescence*. Brighton: Trust for the Study of Adolescence, 2003). The graph showing the sexual practices of Scottish 14 year olds is adapted from Todd J et al (*Health behaviours of Scottish schoolchildren. Sexual health in the 1990s*. Edinburgh: University of Edinburgh, 1999). The graph showing rates of chlamydia infection is adapted from PHLS, 2001. The graphs showing births per 1000 women, live birth rates, and adult outcomes and the box on contraception at first intercourse are adapted from the Social Exclusion Unit's *Teenage Pregnancy Report* (see "Further reading" box). The photograph of the condoms is published with permission from RESO/Rex and the cartoon on this page with permission from IPPF/BBC.

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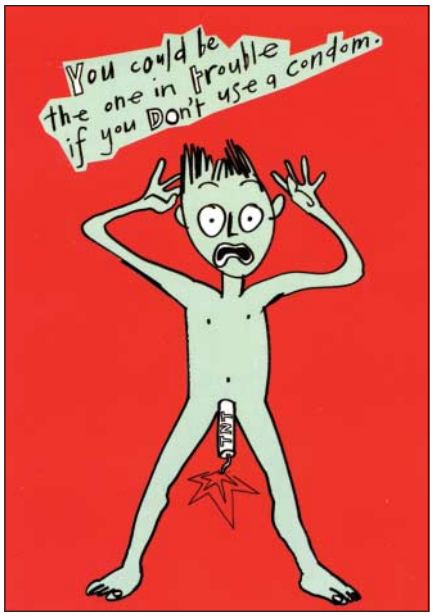

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The ABC of adolescence is edited by Russell Viner, consultant in adolescent medicine at University College London Hospitals NHS Foundation Trust and Great Ormond Street Hospital NHS Trust (rviner@ich.ucl.ac.uk). The series will be published as a book in summer 2005.

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One hundred years ago

Military midwifery

American Medicine of December 24th contains a communication from Major Charles E. Woodruff, Surgeon U.S. Army, in reply to one by a Chicago physician who had implied that the opinions of "an army surgeon of several campaigns" on obstetrics and maternal impressions were of no particular value. Whereunto Major Woodruff makes the somewhat startling reply that American army surgeons are really obstetricians. "They are supposed," he says, "to be official experts in the speciality of military medicine, including all the branches of camp and barrack sanitation, relations to health of clothing, climate and food, modifications of civil surgery found necessary in the same classes of cases far from modern operating rooms, whether found on the battlefield, lines of communication, or in temporary sheds in dirty surroundings, where a modern surgeon would not dream of operating, diseases peculiar to troops, anthropology as related to the selection of recruits, and a host of other sub-branches about which a civil physician never bothers. But, legally, army surgeons are specialists in only one thing—obstetrics." (*BMJ* 1905;i:145)