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TEENAGE SEXUAL HEALTH

Recent reports have drawn attention to the increasing prevalence of sexually transmitted infections (STIs) in the UK. This trend has been most apparent in young people aged 16-19. STIs are associated with several potentially serious health outcomes, including infertility and cervical cancer. This briefing describes recent trends in the sexual health of 16-19 year olds, discusses potential contributing factors and analyses two major Government initiatives in this area.

Background

STIs are infections that are passed on through sexual contact (box, page 2). UK surveillance data show that levels of STIs have been rising since the mid 1990s.[1] A 2003 House of Commons Health Select Committee (Health Committee) inquiry into sexual health described a nationwide state of '*crisis*' constituting a '*major public health issue*'.[2] As shown in the table, 16-19 year olds bear a disproportionate burden of the STI problem.

Potential consequences of STIs include infertility, ectopic pregnancy, recurrent infection, cervical cancer and facilitation of HIV transmission (see box). The link between chlamydia and female infertility is a particular area of concern. Several groups, including the Government's Independent Advisory Group on Sexual Health and HIV, have drawn attention to recent recommendations for NHS provision of fertility treatment, which did not take account of rising chlamydia levels. While this briefing focuses on STIs, the poor sexual health of UK teenagers is also reflected in levels of teenage pregnancy, which are the highest in the EU.

Recent trends in STIs

The available data on rates of STIs in 16-19 year olds (summarised in the table) significantly underestimate the overall levels of disease. This is because they relate to patients seen in genitor-urinary medicine (GUM) clinics and do not include the large number of cases treated in primary care, nor those that remain undetected due to the lack any obvious symptoms (see box on page 2).

Trends in STI diagnoses in 16-19 year olds

Infection	No. cases 2002	Percentage increase 96-02	Percentage of all cases 02*
Chlamydia	20,908	67%	34%
Genital warts	12,219	23%	27%
Gonorrhoea	4,994	117%	37%
Genital herpes	2,474	26%	18%
Syphilis	47	571%	13%

***Proportion of all female cases (aged 16-59 years) diagnosed in 16-19 year old women (expected proportion of 10.5%) Source: Health Protection Agency**

Two pilot chlamydia screening programmes, in which screening was offered to women attending various healthcare services, suggested that around 1 in 10 of sexually active 16-24 year olds may be infected.

Distribution of STIs

While patterns of STIs are relatively widely distributed amongst 16-19 year olds, the highest prevalence is seen in women and those living in urban areas.[1] Routine recording of STIs does not include information on ethnicity. However, several studies have shown variations in STI distribution across ethnic groups. For instance, research in London and Leeds showed that levels of gonorrhoea are significantly increased in young people from black minority ethnic groups.[3]

Contributing Factors

Trends in sexual behaviours

It is widely agreed that changes in sexual behaviour underlie the observed trends in STIs. Studies have highlighted several behavioural factors associated with increased levels of STIs in young people:

- A lower average age at first intercourse – from 17 years in 1990 to 16 years in 2000.[4]
- A higher acquisition rate of new partners than other age groups.[5]
- Increased likelihood of being involved in two or more sexual relationships simultaneously. [5]
- A higher rate of acquiring new sexual partners from outside the UK than other age groups (including overseas trips and partners within the UK).[5]
- Inconsistent (but improving) condom use.[4,5]

Other contributing factors

In addition to changes in sexual behaviour, a number of other factors may have contributed to the trends in STIs:

- A large proportion of all STIs, especially chlamydia, go undiagnosed because infection is **asymptomatic** (box). Individuals may be unaware of their infection so do not seek treatment, allowing STIs to spread.
- Young people appear to be at increased risk of STI **re-infection**.[6] This may be due to poor partner notification (in which an infected patient is advised to tell their sexual partner(s) to seek testing and treatment), failure to return for follow-up appointments or poor adherence to treatment plans.[7]
- Young people may have difficulty **accessing sexual health services**.

Government policy initiatives

The **Teenage Pregnancy Strategy** (TPS) was launched in 1999. It is overseen by the Teenage Pregnancy Unit and implemented at local and regional levels by individual co-ordinators. One of the aims of the TPS is to halve the under-18 conception rate by 2010, which will have an implicit impact on teenage sexual health. However, meeting this target will require a greater reduction than the fall of 9.4% observed between 1998 and 2002.

The **National Strategy for Sexual Health and HIV** (the Strategy) was published in 2001. Among its aims is a 25% reduction in the number of newly acquired HIV and gonorrhoea infections by 2007. Meeting this target will require a reversal of recent trends. The Strategy envisages a three-level model of sexual health service provision, to be implemented by Primary Care Trusts (PCTs). PCTs are supported by a 'Commissioning Toolkit' detailing frameworks for service delivery and individuals who act as local sexual health and HIV 'leads'.

The Strategy and the TPS support a range of initiatives both at national and local levels. The primary targets for these interventions are:

- **changing the patterns of sexual behaviour** in young people through education and public awareness;
- improving **access** to sexual health services;
- **screening** for asymptomatic infection.

The most common STIs

Chlamydia is the most commonly diagnosed bacterial STI in the UK, even though up to 50% of infected men and 70% of women do not show any symptoms. It is estimated that 10-30% of untreated infections in women lead to pelvic inflammatory disease (PID), which can permanently damage the reproductive organs. About 1 in 5 women with an episode of PID will become infertile. Antibiotics are a highly effective treatment for Chlamydia.

Genital warts are the most common viral STI and are usually caused by the Human Papillomavirus (HPV). While some HPVs are relatively benign, others have been strongly linked with cervical cancer. However, in most cases, early signs of changes caused by these HPVs are detected by routine cervical smear tests.

Gonorrhoea, like chlamydia, is a bacterial disease that often lacks any obvious symptoms. Similarly, infection can lead to PID and potential pregnancy and fertility problems. Antibiotic treatment usually leads to a complete cure although there is increasing concern about the spread of antibiotic-resistant strains.

Genital herpes is caused by the Herpes Simplex Virus. Once contracted the virus remains in the body and a small minority of patients experience recurrent symptoms. The virus is spread through skin-to-skin contact (not necessarily involving penetrative sex) whenever symptoms are present. There is no curative treatment, but antiviral therapy can decrease the severity of initial or recurrent infections.

Syphilis is a bacterial disease that can be serious and potentially fatal if left untreated. Infection can be cured by a course of antibiotics.

HIV (Human Immunodeficiency Virus) progressively weakens the immune system until it is susceptible to the opportunistic infections and tumours that characterise **AIDS** (Acquired Immune Deficiency Syndrome). People infected with HIV may have no symptoms for 10 or more years, but can transmit the virus to others. Transmission can occur from mother to baby, by sharing contaminated needles/syringes or through sexual contact. It is now known that the ulceration and inflammation associated with other STIs can facilitate HIV transmission.

Changing patterns of sexual behaviour

Factors that influence sexual behaviour

The sexual behaviour of young people can be influenced by a variety of 'social' and 'personal' factors. Surveys show that 'social' factors including family disruption, lower parental socio-economic status, early school leaving age, lack of formal qualifications and substance misuse are all associated with early and/or risky sexual behaviours in young people.[4] Both the Strategy and the TPS focus on tackling the following 'personal' factors:

- *Knowledge* – Accurate sexual knowledge in young people cannot be assumed (e.g. 10% of teenage respondents in a recent survey thought that having sex for the first time, or having sex while standing up, or washing after sex confers protection against pregnancy).[8] Risky sexual behaviours are more common among young people who cite friends and the media, rather than school lessons, as their primary sources of sex information.[4]
- *Parental input* - Young people whose parents talk to them about sex are less likely to engage in risky sexual behaviour.[4] However, surveys show that around 40% of young people claim to have received little or no sex information from their parents.[8]
- *Beliefs and perceptions* – Distorted perceptions of peer and social norms appear to be common. Surveys have shown that more than 50% of young people believe the majority of their peers have had sex before the age of 16 (a figure reported to be around 30%).[8] In addition, groups including the British Medical Association have commented on the 'sexualisation' of youth media culture, where the portrayal of sexual relationships seldom refers to the risk of STIs.
- *Skills and Awareness* – Young people may lack the practical, communication and negotiation skills to use condoms successfully or manage sexual decision-making effectively. 40% of the teenage boys in a

recent survey were also unaware that free condoms are available from family planning clinics.[8]

Education

How should young people learn about sex?

School-based sex and relationships education (SRE) forms the focus of both Strategy and TPS interventions into the factors underlying risky sexual behaviours in young people. SRE in schools continues to be a source of debate, with some religious and other groups believing that sex falls within a set of cultural values that should be addressed solely by family discussion. The importance of parental input is widely acknowledged and local initiatives to improve communication between parents and children are supported by the TPS. However, many agree that school-based SRE should supplement family discussion; over 90% of parents believe SRE makes young people more responsible about sex.[8]

What form should SRE take?

The content of SRE still divides opinion. Several groups argue that a clear message to abstain from sex should be central to SRE. Some groups worry that extended discussion of sex and contraception may encourage early and potentially unsafe sexual behaviour in young people. Results from international abstinence-focused programmes have been used to both support and reject this strategy. The balance of evidence presented in a recent Health Development Agency (HDA) review suggests that SRE does not increase sexual activity.[9] The Health Committee saw no benefit in abstinence-focused approaches and the Government accepted its recommendation that SRE should be taught within a broad emotional and social framework.

Should SRE be statutory?

Currently, only those aspects of SRE that are covered in the science curriculum are statutory. But guidance from the Department for Education and Skills encourages schools to place SRE within a non-statutory personal, social and health education (PHSE) programme. This aims to develop pupils' values and attitudes to sex, as well as addressing personal skills, such as dealing with pressure, negotiation and assertiveness. Worries over variability in SRE provision have led to calls from the Health Committee and others for this broader SRE curriculum to be made statutory. The Government argues that a non-statutory approach allows teachers greater flexibility in delivering appropriate SRE, but has indicated that this status will be subject to future review.

Teacher training

Around 650 teachers are currently following a specialist PHSE certification programme, which includes an SRE module. A further 3,000 teachers are due to undertake the programme in 2005. However, this will not fulfil the Health Committee's call for all primary and secondary schools to have access to a dedicated SRE teacher.

Is peer education effective?

A considerable amount of recent attention has been given to peer-led SRE programmes, which are based on the premise that peers can exert a greater influence than teachers on young people's behaviour. Male peer educators can also partially address the problem of a lack of male input, which can lead to a disengagement of boys from SRE. A recent HDA review found some evidence that peer-education can be effective, although there are concerns that peer influence may have potentially negative results if mishandled.

Public Awareness

Preventing and treating STIs is one of the topics included in the Department of Health's (DH) recently launched public consultation on improving the nation's health and well-being. The DH also supports local awareness initiatives and runs two national campaigns in this area: 'RUThinking?' targets 11-18 year olds and 'Sex Lottery' targets 18-30 year olds. Both campaigns involve radio and print advertising directing young people to websites and telephone help lines for further sexual health information and details on local services. Utilisation of these services appears to be high; the Sexwise telephone helpline answered 1.4 million calls during 2002. While a recent re-launch of the 'RUthinking' website included efforts to target young people from black and ethnic minorities, there are concerns that messages are still not reaching these groups.

Access to sexual health services

Capacity

The Health Committee report highlighted the considerable pressure experienced by existing sexual health services.[2] It described waiting times of up to 6 weeks in some GUM clinics, with average waiting times of 10-12 days. This situation exacerbates the problem of individuals who remain sexually active while waiting for an appointment. In its response to the Health Committee report, the Government agreed on a target waiting time of 48 hours and aims to have a waiting times indicator in place by 2005/06. The Health Protection Agency (HPA) is due to start a national GUM waiting times assessment in May 2004. The Government's response also indicated that sexual health will not be given National Service Framework status, in line with its emphasis on moving away from centralised control. Some concerns have been raised that meeting targets may be impeded by the variable level of priority given to sexual health by PCTs.

Accessibility

Locations, opening hours and long waiting times at sexual health services can conflict with school or home commitments, reducing visiting opportunities. The role of schools in improving accessibility features strongly in both Government initiatives. This can involve establishing links between schools and local sexual health services, e.g. through familiarisation of young people with the services available and/or establishing dedicated youth clinic visiting times. Guidance on forging these links has been issued by the Sex Education Forum, the TPS *Best Practice Guidance*, and the Royal College of General Practitioners (RCGP). Sexual health is not included in the 'essential services' of the new GP General Medical

Services contract, leading some to voice concerns over the future role of GPs in this area.

The Government is encouraging Local Education Authorities (LEAs) to set up extended school-based services which include a sexual health component. Two thirds of LEAs have at least one school currently running or planning an on-site service.[10] The Health Committee also endorsed the establishment of 'one stop shops', in which contraceptive advice, STI testing and treatment services are provided on a single site. DH evaluations of three 'one stop shops', including one service targeted directly at young people, will inform further policy.

Acceptability

Young people are discouraged by what they view as youth-unfriendly sexual health services, where they perceive staff behaviour to be judgemental. Many agree that tailoring sexual health services to the specific needs of young people will improve their acceptability. Youth-orientated services might also improve processes of partner notification, follow-up appointments and treatment compliance, although these are not mentioned explicitly in either strategy. The Health Committee stressed that sexual health staff must be trained in the skills, values and attitudes appropriate for young people. However, a 2002 DH national audit found marked inconsistency in the range of sexual health training available. It recommended the establishment of a national structure for training sexual health trainers, with standardisation of content, assessment and accreditation.

Confidentiality

Provision of confidential advice and services

Research consistently shows that young people will not use sexual health services unless they are sure of complete confidentiality. A RCGP 'Confidentiality Toolkit' that provides advice on confidentiality for under 16s requesting contraceptive or STI services is used by 85% of local authorities.[10] However, 45% of 13-17 year olds in a recent survey felt that a confidential service was not available in their area.[8] Some groups, including the Family Education Trust, feel that parents of under 16s should be involved in all decisions relating to their child's welfare, including those concerning sexual health. Despite Government and RGCP guidelines, around 14% of general practices have a least one GP who will not see under 16s without a parent present.[10]

Confidentiality and legislation

Several groups, including the Family Planning Association, are concerned that the Sexual Offences Act (which comes into effect on 1st May 2004) may confuse perceptions of confidentiality. It is feared that measures included in the Act may make young people unsure about their rights to confidential sexual health services and confuse professionals about their responsibilities in providing confidential advice. To counter this, the Government is issuing all relevant professionals with revised guidance on confidentiality and the under 16s. It is also including 'right to confidentiality' messages in its newest advertising campaign. There is concern (e.g. from the British Association for Sexual Health and HIV) that information sharing measures included in the Children's Bill may impact on the provision of confidential services.

Chlamydia screening

Screening is an effective method for detecting asymptomatic infections such as Chlamydia. The DH is currently rolling out a National Screening Programme, based on pilot studies at two sites where testing was offered to 16-24 year old women attending various healthcare services. The importance of male screening in preventing onward transmission is also widely acknowledged. Men are less likely than women to access current screening settings and the Strategy encourages outreach schemes such as testing in secondary schools, large local employers, prisons and youth offender institutions. However, regrets have been expressed that the current opportunistic screening scheme is not being systematically evaluated against alternative strategies, for instance comparison of cyclical, women-only and both sex programmes.[11] The HPA is currently conducting a recall study at the two original pilot screening sites, to be published next year. This data will inform the screening programme by estimating infection and re-infection rates and recommending screening interval times.

Overview

It is widely agreed that tackling the problem of teenage sexual health requires a range of education, public awareness, access and screening strategies. Current interventions must achieve a rapid and significant impact in order to reverse recent trends. This reversal is crucial in meeting existing sexual health targets and averting long-term implications for fertility and public health.

Endnotes

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