

Teenage Knowledge of
Contraception and Sexual
Health: Questionnaire Study
In West Yorkshire

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YOR 800 038134

Introduction

Aims

To determine local teenagers knowledge of contraception and sexual health, including emergency contraception.

To find out whether the local Family Planning facilities are deemed adequate for teenagers.

- a To explore reasons why teenagers are reluctant to seek help.

To look at whether anything else should be done on a local level to improve sexual health services, in particular looking at whether the GP surgery should do more.

Why this project?

The UK has the highest rate of teenage pregnancy in Western Europe, with up to one-third of young people becoming sexually active before the age of 16 ¹. A statement from the Social Exclusion Unit report ² reads " It sometimes seems as if sex is compulsory but contraception is illegal". They found that 50% of sexually active teenagers in the UK use no method of contraception and that around 8,000 under 16-year-olds get pregnant every year in the UK.

Many studies have been carried out to look at reasons why so many young women get pregnant. The Social Exclusion Unit report ² concludes that young people

see no reason not to get pregnant, have low expectations of employment, ignorance about what to expect in relationships and a lack of knowledge about contraception. We know that levels of teenage pregnancy are higher in areas of greater socio-economic deprivation³. A recent study by McLeod¹, demonstrated that the differences in rates of teenage pregnancy between more affluent and more deprived areas have widened.

In response to these facts the NHS Plan⁴ has set a target of a 15% reduction in the rate of conceptions among under 18's. This is to support the longer term Government goal of halving the rate by 2010. These goals are to be achieved by targeting male teenagers, improving sex education and improving young peoples access to contraceptive services². Studies in England have demonstrated that reduced rates of teenage pregnancy are associated with proximity to youth Family Planning Clinics³. Also, that most teenagers who become pregnant had consulted their GP for contraceptive services in the year preceding the pregnancy.

Another related problem is that of sexually transmitted infection (STI). There are increasing numbers of diagnoses of STI's, particularly among teenage girls. Data from the Public Health Laboratory Service⁶, demonstrated that between the years 1999 and 2000 diagnoses of uncomplicated gonorrhoea rose by 29% in males and 24% in females. Diagnoses of chlamydial infection rose by 19% in males and 17% in females during the same period. During the year 2000 almost 40% of diagnoses of gonorrhoea and 34% of chlamydial infection in females were in those aged 16-19 years. After a single episode of pelvic inflammatory disease women have a higher incidence of tubal infertility, chronic pelvic pain, deep dyspareunia, and ectopic pregnancy. We therefore need to do whatever we can now to prevent this future morbidity.

If we are to try and reduce both the number of teenage pregnancies and the prevalence of STI's in young people, I felt it was important to know what the local teenager's knowledge and attitudes were. I therefore decided to devise a questionnaire study to try and answer these questions.

Study Area

The Practice is a large 5-partner practice in West -Yorkshire -- serving --- approximately 10,000 patients. There is a mixed practice population with relatively high levels of socio-economic deprivation. Two secondary schools serve the practice area.

Method

In order to find out about local sexual health services a meeting was arranged with a local School Nurse. She was able to inform me about the local services for young people and also about the current sex education programmes within the two schools.

A questionnaire, (Appendix), was devised consisting of 23 questions, mainly closed tick-box-style questions with some open questions to allow the teenagers to express their views. The questionnaire was aimed at Year 10, (14 and 15 yr. olds). A pilot study was performed on a small group of acquaintances to check basic understanding of the questions, and time taken to complete it. Based on this a few alterations were made before taking it to the schools.

The questionnaires were distributed between the two schools. At School 1 they were completed during a Personal Social Education class with two separate groups of students. At School 2 they were completed during morning registration, again with two separate groups of students. The pupils were encouraged to answer the questions honestly and were asked not to discuss the answers, although they were not performed under strict examination conditions. The anonymity and confidentiality of the questionnaires were emphasised at the beginning of the session. Either the School Nurse or myself were available at the end of each session to answer any questions. Important points such as where the Family Planning Clinics, (FPC's), are held, how long you have to obtain emergency contraception and safe sex were emphasised at the end.

Once all the questionnaires were completed, the papers were read through and the results collated.

Results

100 questionnaires were distributed at the four sessions. Two were spoiled and therefore not included in the results. Of the 98 pupils, (53 boys and 45 girls), who completed the questionnaire, 68 were aged 14 years and 30 were aged 15 years.

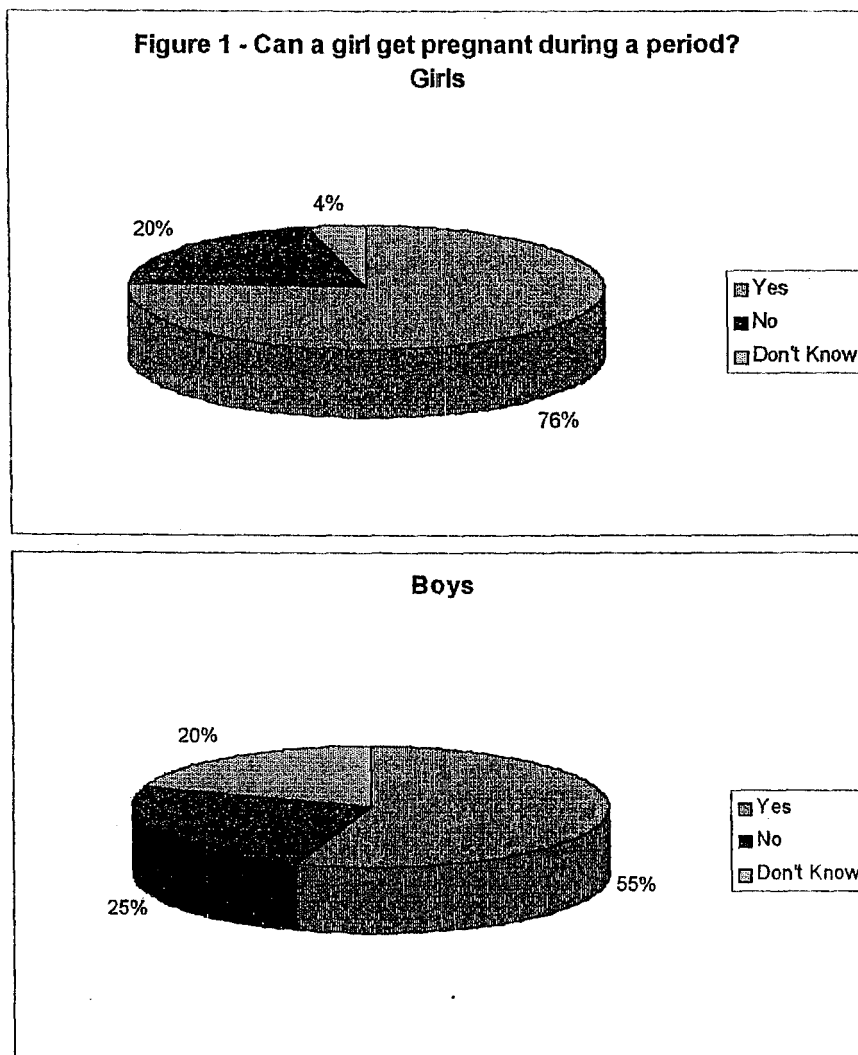
The results were collated for each group e.g. boys, girls, School 1, and School 2. Most of the results were similar between the two schools and so for most of the results the answers have been collated together. Where there was a significant difference between girls and boys or the two schools answers the results are presented separately.

Menstrual cycle

49% of girls and 34% of boys said that mid-cycle is the most fertile part of the menstrual cycle with 33% of girls and 26% of boys saying that just before a period was.

76% of girls and 55% of boys said that a girl could get pregnant during a period, (Figure 1).

All the girls and 85% of boys- said-that- a-girl -could get pregnant-the- -first time - she had sex. 6% of boys said that a girl couldn't get pregnant the first time.



Contraception

91% of girls and 79% of boys said that young people under the age of 16 years could get contraception legally, (Figure 2).

13% of girls and 17% of boys thought that if a girl went to her GP for contraception the GP would inform her parents/guardian.

When asked to write down which methods of contraception they had heard of the most common were condoms, followed by the pill, and the cap, (Figure 3).

Asked which methods of contraception they thought were most reliable for young people to use, condoms were the top answer, followed by the pill, (Figure 4).

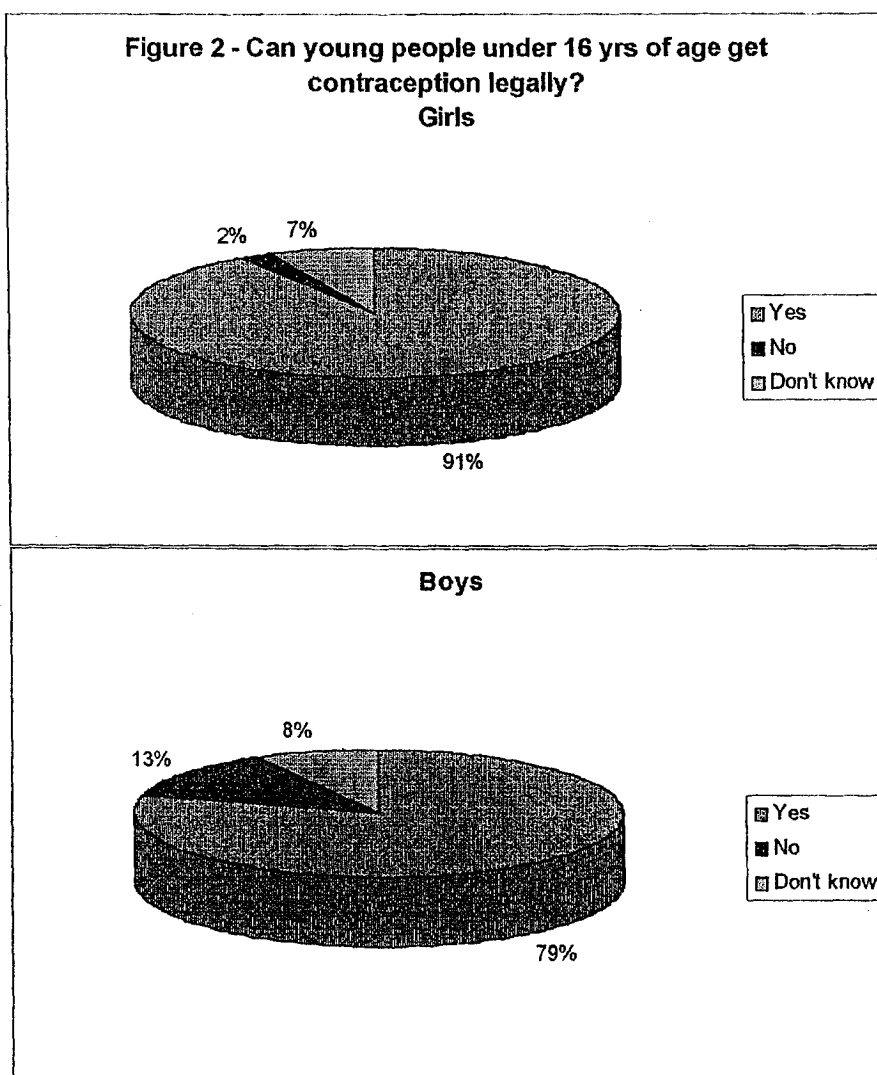


Figure 3 - Methods of Contraception

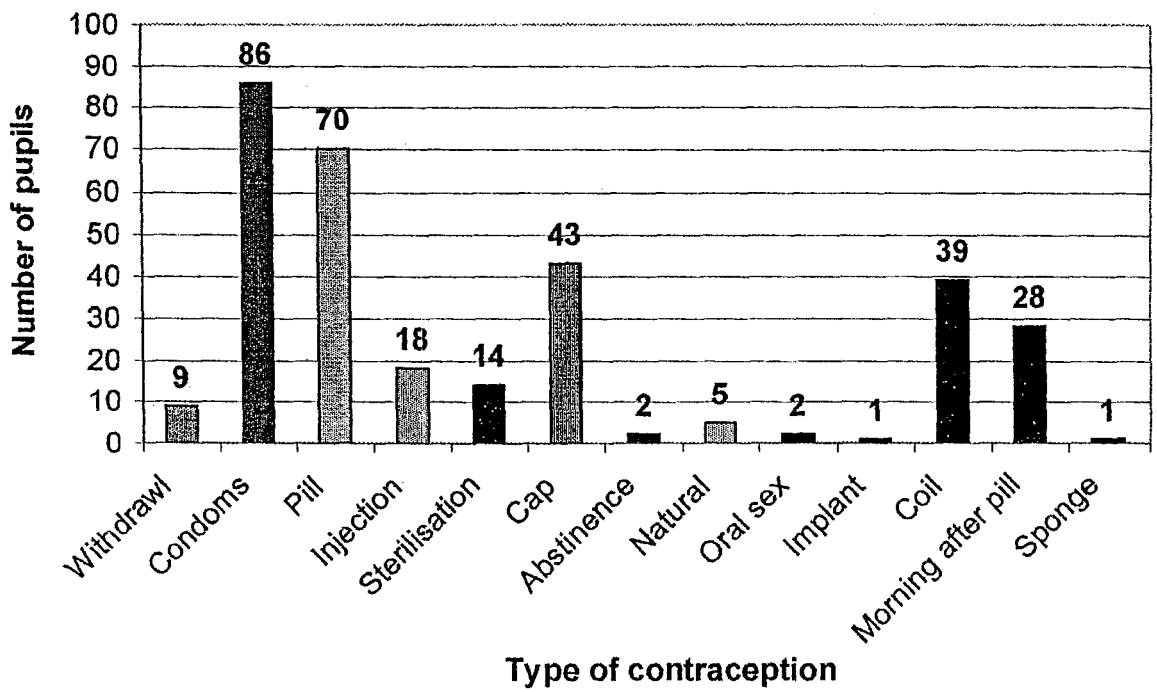
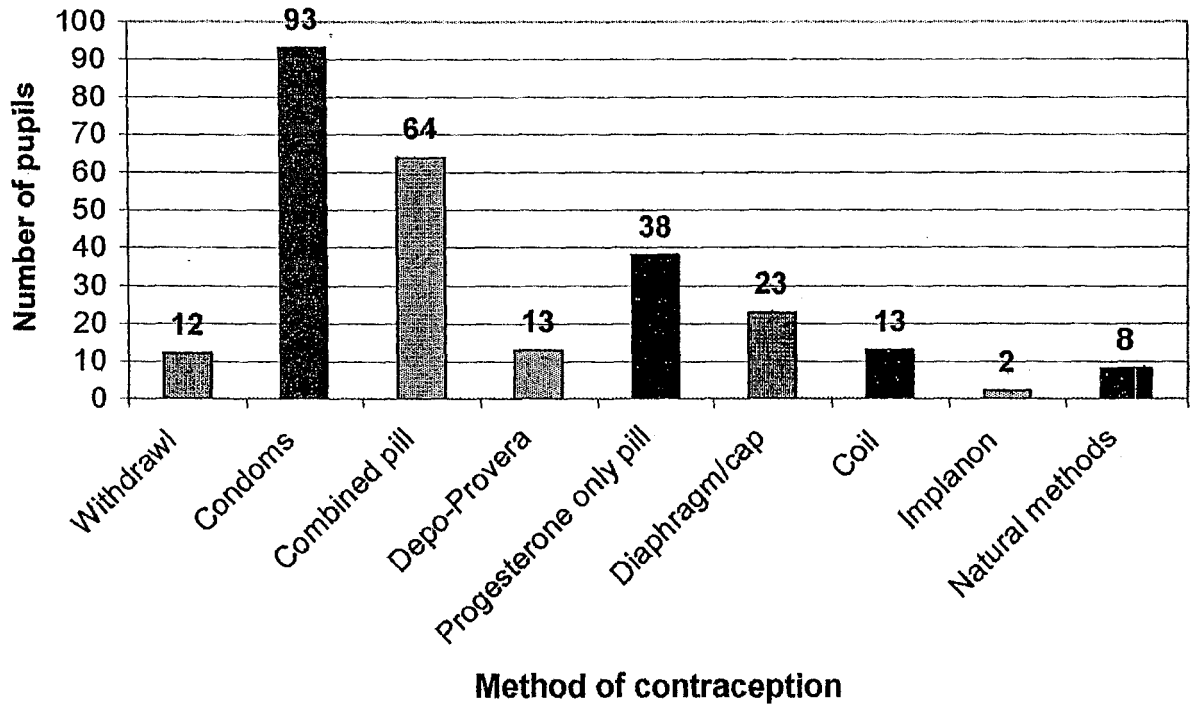


Figure 4 - Which methods are most reliable for young people?



Emergency Contraception

99% of pupils had heard of the emergency contraceptive pill and 76% of the girls and 55% of the boys correctly said you had 72 hours to obtain it. 22% of pupils had heard of the emergency coil but only 2% said you had five days to obtain it.

72% of pupils said you could obtain emergency contraception from Family Planning Clinics, and 49% from Chemists. Only 33% of pupils said you could obtain emergency contraception from a General Practitioner. Almost as many, (27% of pupils), incorrectly thought you could obtain it from a Practice nurse or School nurse.

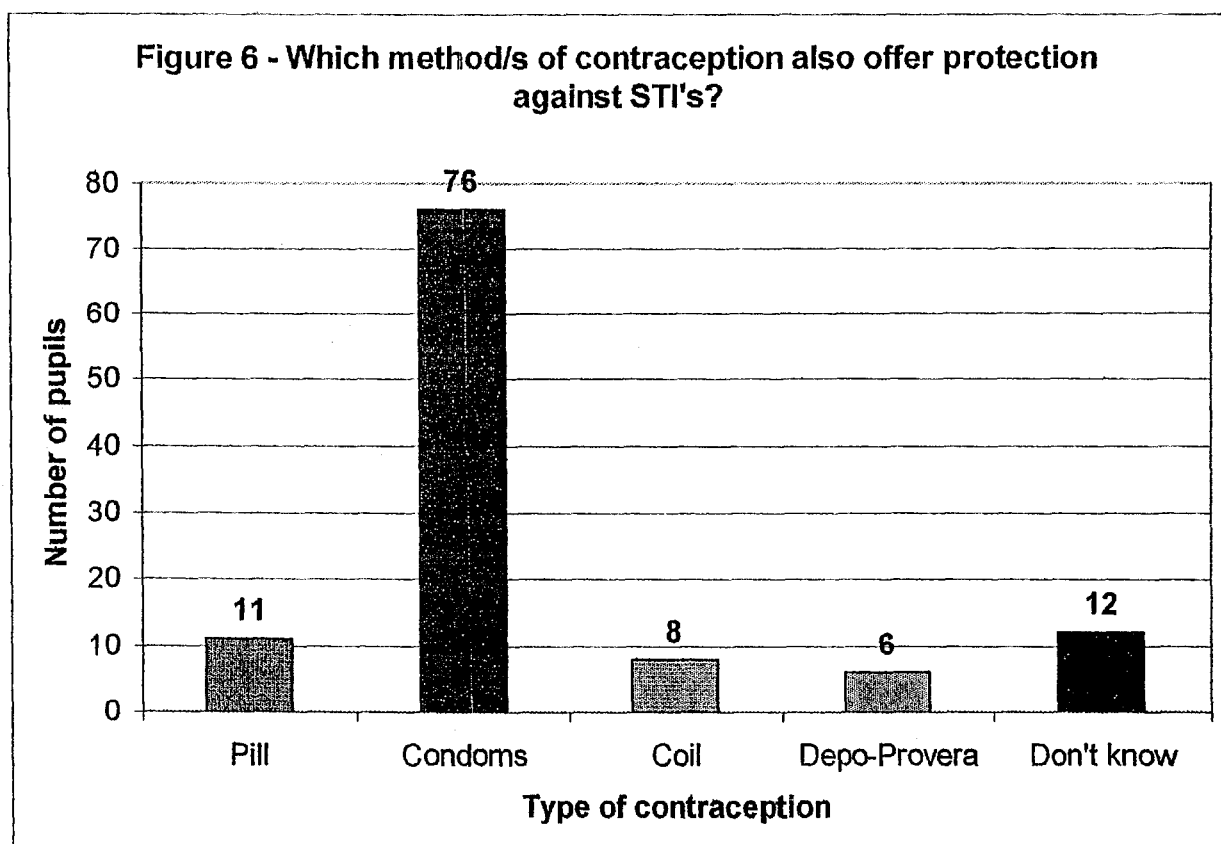
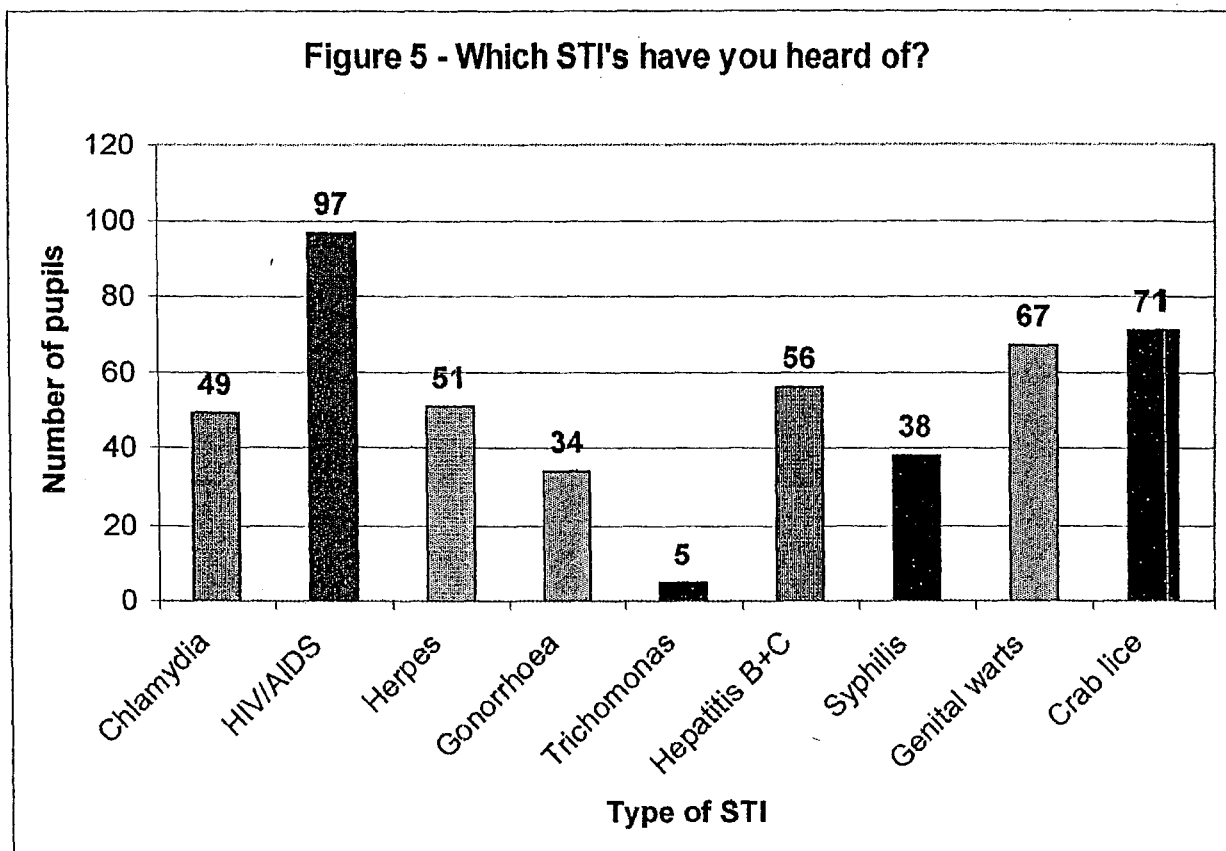
Only 10% of pupils said that the emergency pill is less effective than regular use of the combined oral contraceptive pill, (COCP), and 24% of pupils correctly said that the emergency pill is safer than the COCP.

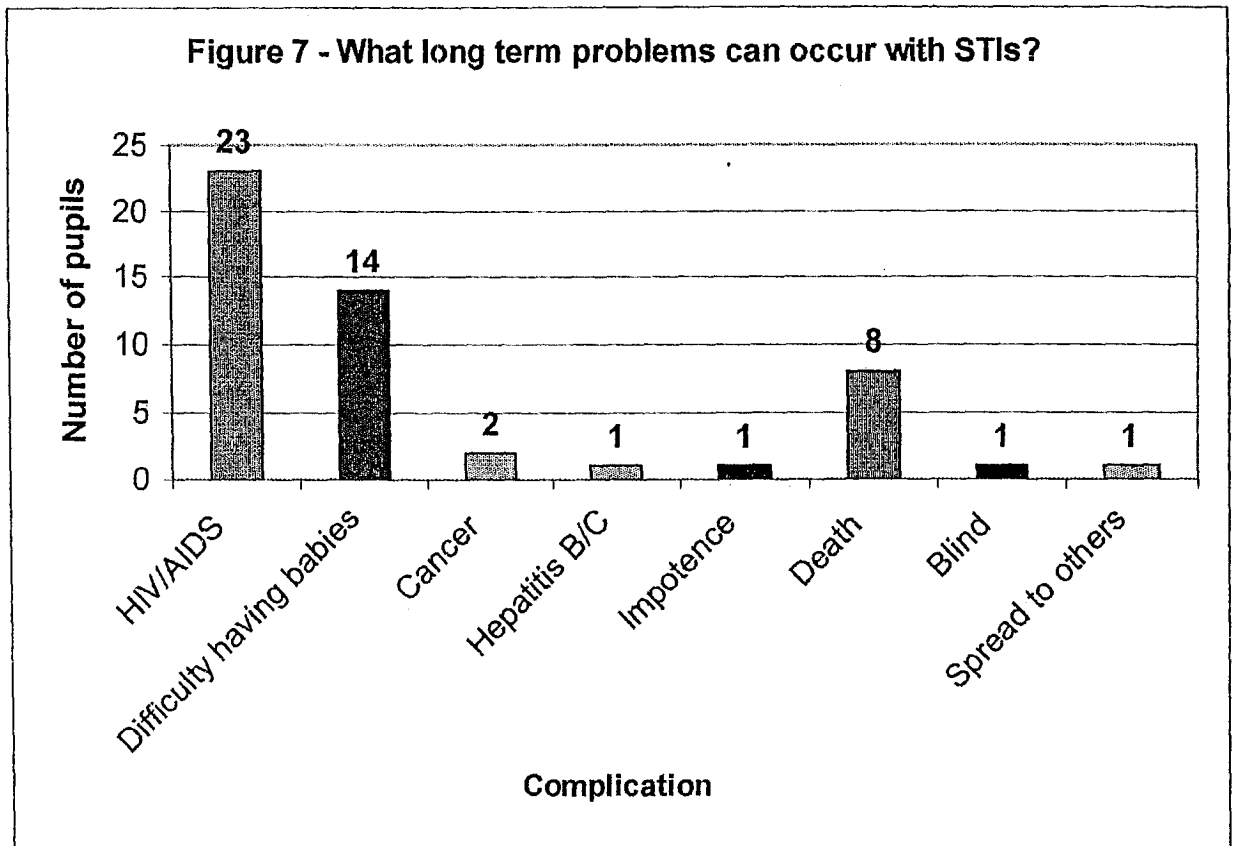
~sexually Transmitted Infections

When asked to indicate which STI's they had heard of, HIV/AIDS was the top response, (99% of pupils). Only 50% and 35% of pupils had heard of chlamydia and gonorrhoea respectively, (Figure 5).

78% of pupils said that condoms offered some protection against STI's. A small, but significant number of pupils thought that the COOP, Depo-Provera and the coil also protected against STI's, (Figure 6).

When asked to name any long term problems that can occur with STI's most left the answer blank. Of those that did respond the two most common answers were HIV/AIDS and difficulty having babies, (Figure 7).





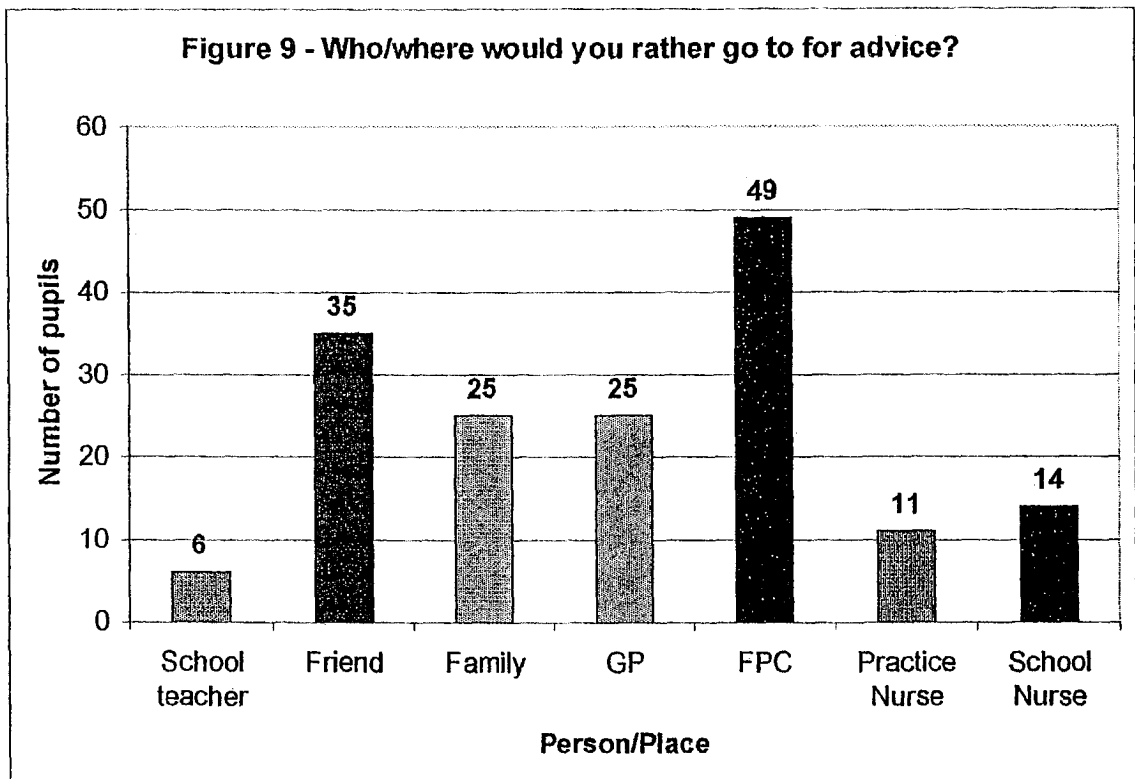
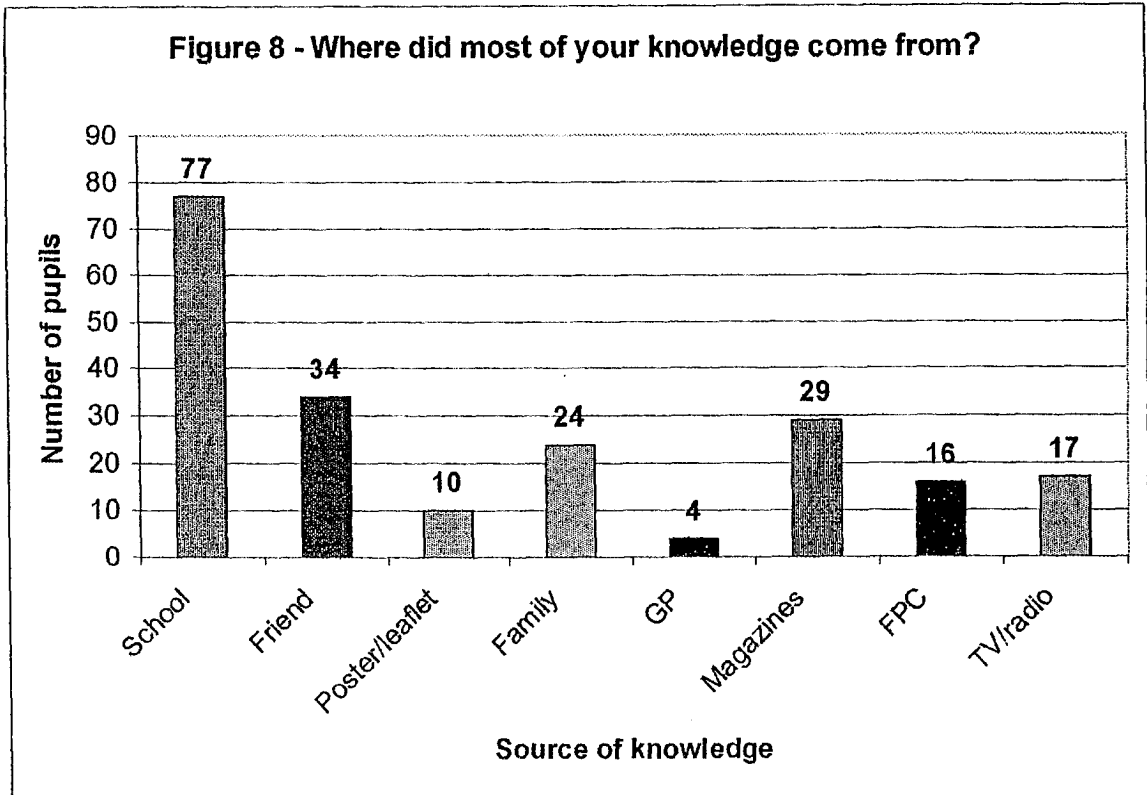
Knowledge

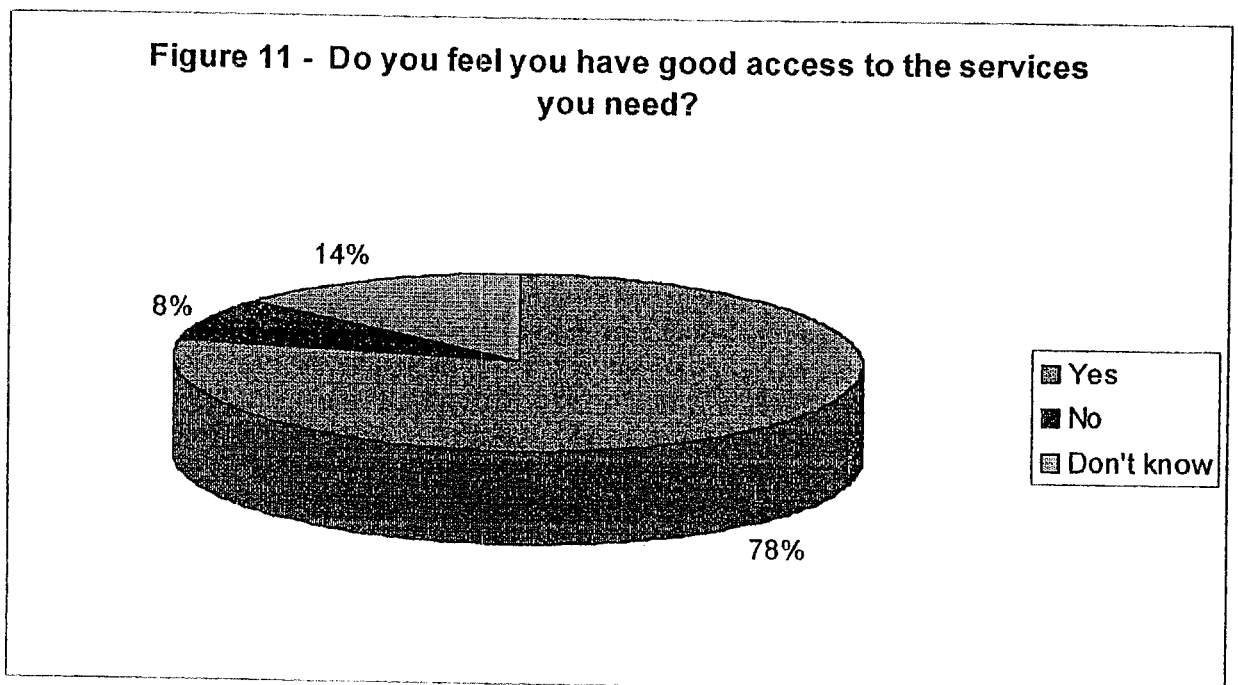
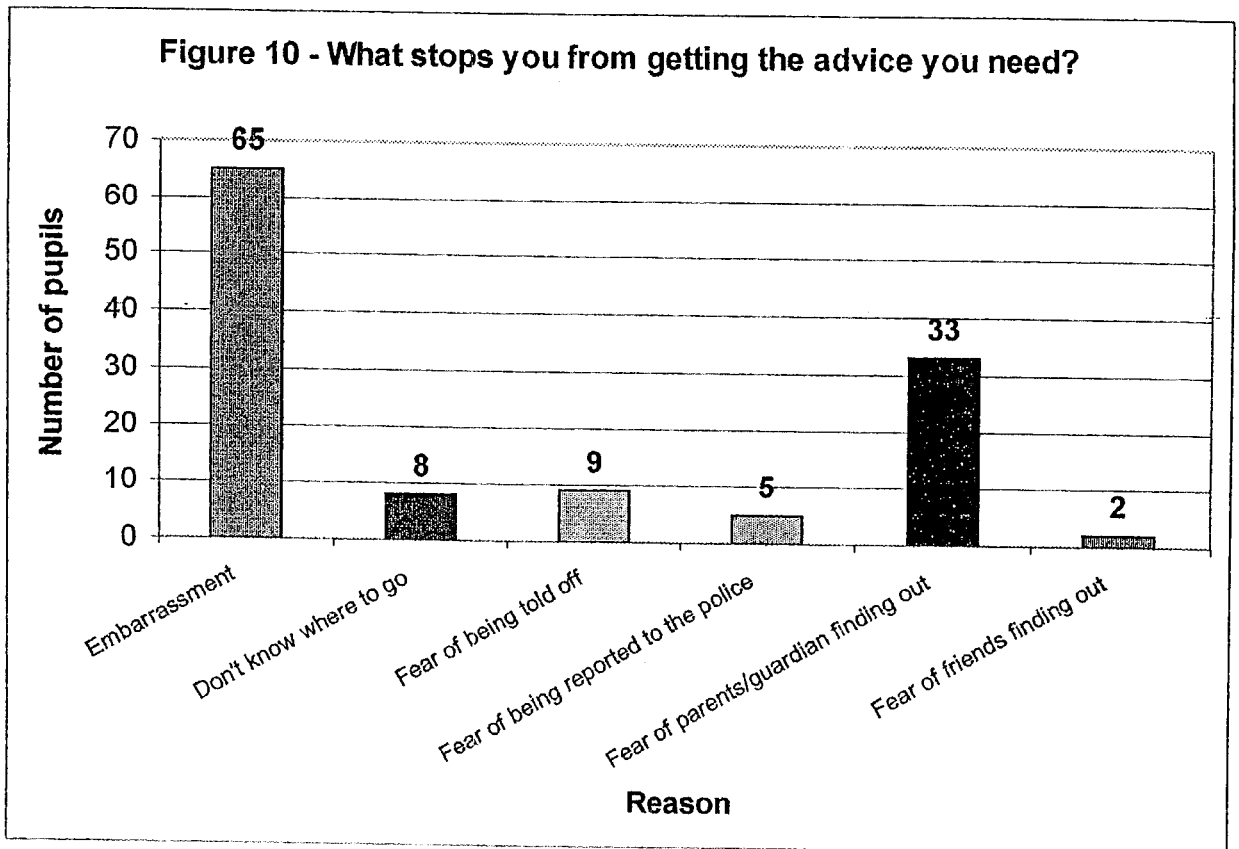
When asked where most of their sexual health knowledge came from, pupils gave school and friends as the top answers. 49% of girls gave magazines compared to only 13% of boys, (Figure 8).

Asked where they would rather go to for advice, FPC and a friend, came out in favour, (Figure 9).

Asked what prevented them from getting advice, embarrassment, and fear of parents finding out were the most popular answers, (Figure 10).

Generally the pupils felt they had good access to the services they needed, (Figure 11).





Improvements

At the end of the questionnaire the pupils were quizzed for any ideas they had as to how we could improve the services available to young people and whether they felt GP's should do more. The most common replies were:

- More clinics;
- More time available in school hours to talk to people;
- Earlier sex education;
- More contraception teaching -including more videos -at school;
- Free condoms from school;
- More confidentiality;
- GP's should not inform parents or the police;
- GP's should not keep records;
- More open communication about sex;
- To have younger people to talk to about sex;
- More information from GP's such as posters/leaflets;
- More information about where the FPC's are;
- Ability to talk to a stranger rather than family doctor;
- Ability to talk to people on the phone;

Discussion

Knowledge about the menstrual cycle and fertility was slightly lacking with 23% of pupils thinking a girl could not get pregnant during a period. Although fertility is reduced at this time, it is not zero and this could lead to unplanned conceptions. Worryingly 6% (all boys) thought a girl could not get pregnant the first time she had sex.

Knowledge about patient confidentiality was fair with 85% of pupils answering that a girl under 16 years of age could get contraception legally. 85% of pupils also knew that the General Practitioner would not inform the girl's parents/guardians of her request for contraception. However, despite this knowledge many still stated fear of *parents finding out* as a reason for them not seeking help.

Knowledge of the different types of contraception was quite extensive. In terms of reliability for young people, 95% opted for condoms, which although very important for prevention of STI's are not a very reliable method for young people because of their higher failure rates. I feel it is important to educate young people of the need to use condoms for STI protection as well as a more reliable method of contraception such as COCP or Depo-Provera.

Knowledge of emergency contraception was generally good with 99% having heard of the emergency pill. This is higher than in some previous studies. In 1995 Pearson et al interviewed 167 pregnant teenagers of whom 81% had heard of the emergency pill. Graham et al (1996), performed a questionnaire survey of 1206 pupils aged 14 and 15 years old and found 93% pupils had heard of the emergency pill. Knowledge of time restrictions for the emergency pill varied between the sexes

and also between the two schools. 90% of girls and 75% of boys from School 1 said the correct time limit of 72 hours, whilst only 63% of girls and 32% of boys from School 2 answered correctly. Compared to other studies the pupils in this survey did well. Pearson et al found only 22% of pregnant teenagers knew the correct time limit.

The difference between the two schools is presumably *due to differences in the sex education provided at each school. It is interesting that School 1 has a structured programme of sex education with all of the pupils receiving contraception and sexual health lessons, compared to School 2 where sexual health teaching is directed at small groups of at risk youngsters.

Knowledge about the emergency coil was very limited. Although coils are not always ideal for young people, the emergency coil is a very effective method of post-coital contraception and I feel teenagers should know of its existence.

Knowledge about safety and efficacy of the emergency pill was poor. However, Burton et al^v found that many health professionals lack sufficient knowledge about emergency contraception. It may be therefore that we have to initially direct the education at the health professionals.

Regarding STI's, most had heard of HIV/AIDS but only smaller numbers had heard of chlamydia and gonorrhoea. The worry with this is that young people may take an it *couldn't happen to me* attitude regarding HIV/AIDS and therefore put themselves at risk of other infections. Interestingly when asked to name long-term complications from STI's, again HIV/AIDS was the top answer. Very few mentioned infertility or cancer, and no one mentioned chronic pain or ectopic pregnancy. It would seem wise that information about all STI's and the possible complications should be conveyed to young people to try and encourage more condom usage.

The fact that some of the pupils thought the pill, Depo-Provera and coil gave some protection against STI's, re-iterates the importance of safe sex education.

School was the most commonly cited source of information regarding sexual health. A study by Mellanby et al¹⁰ highlighted the crucial part played by schools in a structured--school-sex education-programme: This demonstrated increased -knowledge and reduced sexual activity. Health professionals were not a prominent source of information in this survey with only 4% stating General Practitioners as their source of information. Obviously GP's do not have the same access to teenagers as the schools do, however a teenager consults his/her GP two to three times a year". Should we be using this opportunity to promote sexual health? 26% said they would rather go to their GP for advice yet few actually seem to. What is stopping them?

Consideration of change

One of the main questions I wanted to answer from this survey was what GP's could be doing to help contribute towards the Government strategies regarding teenage pregnancy and sexual health. In particular, whether the practice I am currently working at could be doing any more. The Practice does not currently have a designated teenage sexual health clinic, and being located in an area of low socio-economic deprivation I wondered whether this would be advantageous to the local teenagers. From the survey it seems that this is not necessary. The majority of pupils felt that they had good access to the services they need and most would prefer to attend a dedicated FPC rather than their own GP.

Embarrassment and fear of parents finding out were the main reasons given as

to what prevented the teenagers from getting the advice they needed. Embarrassment is a *difficult* problem to overcome. Some had ideas as to how we could help to reduce embarrassment such as speaking to a doctor other than their own GP or talking on the telephone. It may be possible to set up a telephone session at the surgery where teenagers can phone for anonymous advice. However, this may prove difficult from a medico-legal viewpoint, as all conversations with patients should be documented. One GP who has tried to tackle these problems is Dr Ann McPherson, who has set up the Teenage Health Freak Website [t2](#), providing advice on all aspects of health for teenagers. Teenagers can e-mail embarrassing questions which are then answered anonymously on the website in simple language. In the current computer orientated society this may prove a very good way of getting information across to teenagers.

Confidentiality also needs to be tackled. GP's generally don't advertise the fact that they offer a confidential service and many teenagers' fear their parents or even the police may be told. It may be that having leaflets and/or posters displayed in surgery waiting rooms advertising that teenagers can get free and confidential contraception and sexual health advice would be an effective and cost effective way of dealing with some of the problems. Some practices have a system of appointment cards that the young people can show to the receptionist when needing to see a Doctor e.g. for emergency contraception. This prevents the teenager from having to state the problem in a room full of people. Another idea may be for the practice to automatically send out information by post to young people, say on their thirteenth birthday including e.g. leaflets about STI prevention, contraception, FPC's. This would obviously have resource implications in terms of cost and time, but may still be worth considering.

Evaluation of project

I feel the questionnaire study has given me a good insight into local teenager's knowledge and attitudes towards sexual health and contraception. The study sample of 98 pupils was sufficient for my purpose, but ideally all pupils in each school could be surveyed on a set day. Although the pupils were not selectively picked-and did include pupils of mixed academic abilities there will have undoubtedly been some bias. It may also have been better to complete the questionnaires under strict examination conditions.

Generally the closed questions were answered by most. Unfortunately, a lot of the open-ended questions were left blank. It would have been advantageous to have piloted the questionnaire on a group of 14 and 15 year olds as some of the wording could have been made more teenager friendly.

Conclusion

Generally, knowledge of contraception and sexual health by teenagers in the local area is reasonable with most being aware of the basics but lacking detailed knowledge. The importance of good sex education has been highlighted. Schools and the media could be used more effectively to get messages across to young people. General Practices can help by advertising their service as free and confidential and giving more information to teenagers about sexual health and details of local FPC's. General Practices can also help by ensuring that those who do seek help are given correct and sufficient information e.g. correct usage of the COCP, including the 7 day

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- ³ Diamond I, Clements S, Stone N, Ingham R. Spatial variation in teenage conceptions in south and west England. *J R Stat Soc SerA* 1999; 162: 273-289
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- ⁹ Burton R, Savage W. Knowledge of use of post-coital contraception: a survey among Health Professionals in Tower Hamlets. *13r J Gen. Pract.* 1990; 40: 326-330
- ¹⁰ Mellanby AR, Phelps FR, Crichton NJ, Tripp JH. School sex education: an experimental programme with educational and medical benefit. *BMJ* 1995; 311: 414-417
- ¹¹ Department of Health. *General household survey*. London: HMSO, 1992
- ¹² www.doctorann.or_
- ¹³ White C, Government announces "safe sex" campaign for England. *BMJ* 2001; 323:250
- ¹⁴ Polak M, DoH sexual health plan will not affect GP work. *GP News*, Aug 2001.
- Word Count 2,988

Appendix Contraception and Sexual Health Questionnaire

This questionnaire is entirely anonymous and confidential; please answer as truthfully as possible (No conferring!)

About you

Are you male or female? (Please tick box)

Male	<input type="checkbox"/>
Female	<input type="checkbox"/>

Age yr.

Section 1- Menstrual Cycle

1. Which part of the menstrual cycle are girls more fertile and therefore more at risk of pregnancy? (Tick correct answer)

During a period	<input type="checkbox"/>
Mid-cycle	<input type="checkbox"/>
Just before a period	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

2. Can you get pregnant during a period? (Tick correct answer)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

3. Can you get pregnant the first time you have sex? (Tick correct answer)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Section 2 - Contraception

4. Can young people under the age of 16 get contraception legally?
(Tick correct answer)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

5. If a 15-year-old girl goes to her GP for contraception will the GP tell her parents/guardian about the request? (Tick correct answer)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

6. Which methods of contraception have you heard of?

(Write down as many as you can)

7. Of the following forms of contraception which do you think are the most reliable for young people to use?

(Tick the 3 you think are most reliable for young people)

Withdrawal	
Condoms	
Combined Contraceptive Pill	
Depo-Provera injection	
Progesterone "mini-pill"	
Implanon	

Section 3 - Emergency contraception

8. Which of the following methods of emergency contraception have you heard of?
(Tick box/s)

Morning after pill (hormonal method)	
Emergency coil	

9. If you have unprotected sexual intercourse how long do you have to take the emergency contraception pill (tick correct answer)

Up to 12hrs	
Up to 24hrs	
Up to 48hrs	
Up to 72hrs	
Up to 1 week	
Don't know	

10. If you have unprotected sexual intercourse how long do you have to get an emergency coil fitted? (Tick correct answer)

Up to 24hrs	
Up to 72hrs	
Up to 5 days	
Up to 7 days	
Don't know	

11. Where can you get emergency contraception? (Tick the correct answer/s)

General Practitioner	<input type="checkbox"/>
Chemist	<input type="checkbox"/>
Accident and Emergency	<input type="checkbox"/>
Family Planning Clinic	<input type="checkbox"/>
School Nurse	<input type="checkbox"/>
Practice Nurse	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

12. How effective is the-morning-after-pill in -preventing pregnancy compared -to the---
contraceptive pill? (Tick correct answer)

Less effective than the Contraceptive pill	<input type="checkbox"/>
The same as the Contraceptive pill	<input type="checkbox"/>
More effective than the Contraceptive pill	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

13. How safe is the morning after pill? (Tick **correct answer**)

Safer than the Contraceptive pill	<input type="checkbox"/>
More dangerous than Contraceptive pill	<input type="checkbox"/>
The same as the Contraceptive pill	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Section 4 - Sexually transmitted infection

14. Which of the following sexually transmitted infections have you heard of?
(Tick the boxes)

Chlamydia	<input type="checkbox"/>
HIV/AIDS	<input type="checkbox"/>
Herpes Simplex	<input type="checkbox"/>
Gonorrhoea	<input type="checkbox"/>
Trichomonas	<input type="checkbox"/>
Hepatitis B and C	<input type="checkbox"/>
Syphilis	<input type="checkbox"/>
Genital warts	<input type="checkbox"/>
Crab lice	<input type="checkbox"/>

15. Which of the following symptoms do you think someone may get if they have a sexually transmitted infection? (Tick the boxes)

None	
Vaginal discharge	
Itching of genitals	
Abdominal pain	
Discharge from penis	
Sore penis	
Abnormal vaginal bleeding	
Pain during sexual intercourse	

16. Do you know of any long-term problems that can occur with sexually transmitted infections? (Write them below)

17. Which of the following methods of contraception also protect you from sexually transmitted infection? (Tick the correct answer/s)

Contraceptive pill	
Coil	
Condoms	
Depo-Provera injection	
Don't know	

Section 5 - Information

18. Where did most of your knowledge about contraception and sexual health come from? (Tick 2 boxes)

School	
Friend	
Poster/leaflet	
Family member	
General Practitioner	
Magazines	
Family Planning Clinic	
TV /radio	

19. Who/Where would you rather go to for advice about contraception and sexual health? (Tick 2 boxes)

General Practitioner	<input type="checkbox"/>
Friend	<input type="checkbox"/>
Family Planning Clinic	<input type="checkbox"/>
School Teacher	<input type="checkbox"/>
Family member	<input type="checkbox"/>
School nurse	<input type="checkbox"/>
Practice nurse	<input type="checkbox"/>

20. Do you feel you have good access to the advice you need? (Tick box)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

21. What stops you from getting the advice and help you need? (Tick box/s)

Embarrassment	<input type="checkbox"/>
Don't know where to go	<input type="checkbox"/>
Fear of being told off	<input type="checkbox"/>
Fear of parents/guardians finding out	<input type="checkbox"/>
Fear of being reported to police	<input type="checkbox"/>

Any other reason? (Write below)

22. Can you think of any way in which we can improve the situation? (Suggestions please)

23. Do you think General Practices should do anything else to improve the situation? (Suggestions please)

Thank you for your help in completing this questionnaire.