Chlamydia: why you should know about it

This paper is designed to provide professionals with information about chlamydia infection and to help you contribute to raising awareness about it and to preventing or reducing its occurrence.

Chlamydia trachomatis is believed to be the most common sexually transmitted infection in the UK. There is concern about its rapid increase in recent years but the infection can be cured and prevented. It can affect women, men and babies. But in a survey carried out in January 2000 only 42% of people aged between 16 and 24 had heard of chlamydia, and of this 64% did not know what the possible symptoms were or what the effects could be.

Chlamydia trachomatis has been dubbed the 'silent' infection because it often causes no obvious symptoms, but it can have serious long-term health effects, including infertility, ectopic pregnancy and miscarriage.

What is chlamydia?

Chlamydia trachomatis is a bacterium, which reproduces inside body cells and causes genital infection. In this briefing paper we will refer to this infection as chlamydia.

One of the main reasons why chlamydia is so common is that it usually has no obvious symptoms.

Because of this, people often do not realize that they have become infected and they go without treatment, infecting their sexual partners. This makes control of the infection extremely difficult, even though treatment with the right antibiotics at an early stage is cheap, simple and effective.

What are the health risks of chlamydia?

Chlamydia can have serious long-term consequences. These are more common and severe in women. If untreated, chlamydia can lead to:
- pelvic infection (pelvic inflammatory disease or PID);
- infertility in women and possibly men;
- ectopic pregnancy;
- miscarriage;
- infection in babies.

What are the economic costs of chlamydia?

Chlamydia presents serious health consequences both for the individuals affected and for the UK as a whole. The estimated cost of diagnosing and managing chlamydia and its complications in the UK is around £200 million per year.

How is it passed on?

Chlamydia is almost always transmitted by vaginal, anal and possibly oral sex. It is estimated that there is a 66% chance of passing on infection between regular sexual partners. It can also be passed from a pregnant woman to her baby. A condom will help prevent sexual transmission.

What are the signs and the symptoms?

It is estimated that about 50% of men and 70% of women with chlamydia do not have any symptoms. Even if there are symptoms, they may only last for a few days and then disappear, or they may not be noticed or considered important by the person who is infected.

In adults

All the symptoms in women and men listed below are also symptoms of other infections or conditions. If chlamydia is found, it is also possible that another sexually transmitted infection will be present.

A minority of women may have one or more of the following:
- vaginal discharge;
- menstrual disturbance, including spotting between periods or bleeding after sex;
- urethritis (infection of the urethra, the tube from the bladder), which may cause pain when passing urine;
- lower abdominal pain.

A minority of men may have one or more of the following:
- urethritis, which may cause a urethral discharge or pain when passing urine;
- dysuria (pain when passing urine).
In babies
Babies born to mothers with chlamydia may get conjunctivitis or "sticky eyes" (incubation period is usually between 1 and 14 days) or a serious pneumonia caused by chlamydia. About a third of babies born to mothers with chlamydia will get conjunctivitis and a fifth will get pneumonia. Some babies will get both complications; some one or the other.

Who is at risk?
Chlamydia is believed to be most commonly found in people who:
- are under 25 years;
- are sexually active and do not use condoms;
- have recently changed their sexual partner.

We do not have a complete picture of how common Chlamydia is. However, screening has recently been offered to all sexually active women aged 16 to 24 years attending primary care settings in two health authorities.

Preliminary results from these two areas indicate that up to one in ten women in this age group may be infected and analysis of these data may help to identify other risk factors.

The following two graphs, based on data from NHS sexual health (GUM) clinics, show the rates of genital chlamydia infection in England for men and women for the years 1990-99.

Rates of uncomplicated chlamydia in females by age group (1990-99)

As the graphs show, reported chlamydia cases have been increasing since 1990. The high level of chlamydia infection in young people is of particular concern.

What are the effects of chlamydia?
Untreated chlamydia infection can lead to health problems several months or years after infection.

Pelvic inflammatory disease (PID) and infertility

Women
In women, chlamydia can result in PID (infection of the womb and fallopian tubes), including salpingitis (inflammation of the fallopian tubes). This can be symptomless but also can be very painful and may lead to chronic inflammation with ongoing abdominal pain, which can in turn lead to blocked fallopian tubes and tubal factor infertility.

Tubal factor infertility accounts for about 25% of all infertility in women aged 25 or over. Since the 1960s hospital admissions for the treatment of acute PID have increased substantially, particularly in women under 30.

The likelihood of infertility in a woman after a single, severe episode of PID is about 20%. The risk of infertility more than doubles with each episode of PID.

Men
In men, chlamydia can result in epididymitis, a painful infection of the epididymis (the tube that carries sperm from the testicles). If untreated, epididymitis can affect the transport of sperm and reduce fertility.

Ectopic pregnancy
An ectopic pregnancy is a pregnancy in which the embryo starts to develop in the fallopian tubes instead of in the womb. It is estimated that chlamydia accounts for about 40% of ectopic pregnancies. Some 10% of women with untreated PID who conceive are likely to have an ectopic pregnancy.

Ectopic pregnancy accounts for about 4% of all maternal deaths in the UK.

Miscarriage
There is some evidence that chlamydia may be linked with early miscarriage and pre-term labour.

Infection in babies
A pregnant woman with chlamydia can infect her baby. The baby can get conjunctivitis and serious pneumonia.

Cervical cancer
A recent study from Scandinavia examined data from cancer registrations and exposure to Chlamydia trachomatis in 530,000 women and found an association between past infection with chlamydia and cervical cancer. Other studies have found no association and more research is needed in order to clarify this issue.

What tests are there for chlamydia?

For women
There are three kinds of specimens that can be used for testing:
- a swab taken from the cervix (neck of the womb) during an internal examination - a cervical swab;
- a urine sample (becoming more widely used for testing);
- a vulvo-vaginal swab taken by a woman herself (so far only used in research studies).

For men
There are two kinds of specimens that can be used for testing:
- a swab taken from the urethra - a urethral swab;
- a urine sample (becoming more widely used for testing).

Specimens for testing can be taken at most NHS sexual health (GUM) clinics. This can also be done at some GP surgeries and family planning clinics. Clinics should have the telephone numbers of local clinics.

If someone has a positive test at an NHS sexual health (GUM) clinic they will be encouraged to tell their sexual partner(s) so that they can be tested too. Some may prefer the clinic to notify partners. This is carried out confidentially, without identifying the original infected person.

What is the treatment for chlamydia?
If chlamydia is found quickly it can be treated with a course of antibiotics and further damage avoided. However, if a woman has PID there may be permanent damage such as scarring of fallopian tubes even if the infection is eradicated.

Even if chlamydia is only suspected it is worth having treatment to make sure the infection does not get passed on. Treatment is also recommended for all sexual contacts.

How can chlamydia be avoided?
- Infection during sexual intercourse can be reduced by using an appropriate form of contraception. Young people need to know that safer sex can help to prevent sexually transmitted infections like chlamydia, as well as helping to prevent HIV and unwanted pregnancies.
- Someone who has chlamydia should make sure their sexual partners are notified and tested too. This is a particularly important message to get across because most men and women with chlamydia have no symptoms or their symptoms go unnoticed.
- NHS sexual health (GUM) clinics have confidential systems for partner notification. An untested and untested sexual partner will simply re-infect the person who has been tested and treated. Re-infection rates are estimated to be 3-4% per year among people who attend clinics, and almost certainly higher than this among teenage girls.
- Anyone who is sexually active and does not use condoms consistently should be encouraged to seek advice from their local NHS sexual health (GUM) clinic or GP. There should be no stigma attached to this. It is a sensible precaution to take.