

Topic: Sexually Transmitted Infections (STIs)

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Introduction

Sexually Transmitted Infections (STIs) are a group of infections acquired mainly through sexual contact. Your sexual transmission occurs when a sexual risk behaviour, which can be defined as a history of at least one unprotected penetrative sexual contact with a person which ignores whether or not an STD, or known is presented that have. In 400 BC, the Greek physician Hippocrates said that gonorrhoea was excessive indulgence in the pleasures of Venus because Venus was the goddess of love, these were called venereal diseases. Thus, STIs are known since ancient times, they were associated with forbidden love. They were grouped based on signs and symptoms frequent occurrence that may suggest a pathogenesis, an evolution, a family history or a common therapeutic selection.

Epidemiology

STIs include a number of diseases caused by Viruses, bacteria, fungi, protozoa and ectoparasite in sex transmission is relevant from an epidemiological point of view (Sharma & Khandpur, 2004). Even excluding infection with Human Immunodeficiency Virus (HIV), STIs are a major public health problem, both the burden of disease generated, such as complications occur if not diagnosed and treated early. Additionally, STIs acquire relevance because they increase the risk of acquisition and transmission of HIV through mechanisms that modify host susceptibility and infectiousness of the case index (Cohen, 2004; Rottingen et al, 2001; Zetola et al, 2009). Moreover, by sharing transmission paths and have HIV shorter latency periods, STIs can be early indicators of trends in sexual risk behaviours.

According to estimates by the World Health Organization (WHO), in 1999, 340 million new cases of the four most common STIs: syphilis (12 million), gonorrhoea (62 million),

Chlamydia infection (92 million) and trichomoniasis (174 million) were registered worldwide in people aged 15 to 49 years. The incidence is usually higher in people living in urban areas and young unmarried and risk of infection by these pathogens increases with low condom use and the number of sexual partners. In developing countries, STIs and their complications are among the five most common causes of demand for health care (World Health Organization, 2001).

Since 1996, there were increases in reported cases of gonococcal in the UK, Ireland, the Netherlands and Sweden (Fenton & Lowndes, 2004). Syphilis cases increased from that date in several countries in northern and western Europe and numerous outbreaks have been reported in European cities mainly affecting young people, men who have sex with men (MSM), heterosexual contact prostitution and drug users (Fenton et al, 2008). Other STIs, such as chlamydia, genital herpes simplex and genital warts, also experienced increase (Lowndes & Fenton, 2004) and have been described in several outbreaks of lymphogranuloma venereum (LGV) in different European countries with involvement of MSM infected HIV ((Vall et al, 2008; Van de Laar, 2006); in Spain and Portugal have also been detected in cases of LGV heterosexuals (López-de Munain et al, 2008; Gomes et al, 2009).

The epidemiological situation in Europe in 2008 shows that the STI chlamydia is most frequent bacterial but not all countries have implemented surveillance and mainly affects young women; gonococcal infection has increased, although not consistently in all countries, and, like syphilis has also experienced growth, it is more common among MSM (European Centre for Disease Prevention and Control, 2010). In Spain, according to the information system of mandatory disease reporting, since 1995 had been observed a decrease in the number of syphilis and gonorrhoea cases, which lasted until 2001; on this date, the rate of syphilis stood at 1.8 per 100,000 cases of gonorrhoea and in 2.0 per 100,000. But since then there have been continuous

advancement in the incidence of both conditions; particularly noteworthy is the significant increase in incidence of syphilis that from the year 2004 exceeded the 1995 figures. Recently there have been changes in the EU to improve monitoring and control of STIs. Europe includes the assumption of epidemiological surveillance of these diseases by European Centre for Disease Control (ECDC) and the publication of case definitions across the EU in 2008.

Impact of Culture

Throughout the historical time it was considered that changes in culture negatively affect community life aspects as their protectors. However, it is not the cultural change that has an impact on health; it is rather the degree of magnitude of change and how it affects cultural values and rules of conduct. Another problem is the medical practice that must be provided equally to all patients regardless of their origin, race, religion and culture. The mass migration of undocumented Africans in Europe and Latin America, with no guarantee of social security, does not allow to be cared for by health services for their illegal status. Segregation and discrimination made by the services themselves with patients belonging to minorities, is a cause less explored in the available studies, but it is likely that the health system also reproduces stereotypes that exist in society in general, and for this satellite strengthen general discrimination or increased it (Navarro, 1998).

Additionally, much of the developed countries attach certain profiles of infectious diseases to immigrants from developing countries, such as HIV / AIDS. This causes diseases that persist in marginal population groups are not diagnosed and treated promptly becoming the latest reflection of a complex structural issues framed in the phenomena of migration.

Early Detection

Early diagnosis of STIs is important for both patients and for public health. There are many patients who, while being infectious, are asymptomatic, and others which, being symptomatic, sometimes do not seek appropriate assistance for fear of stigma or not having a clear perception of risk for STIs (Marks et al, 2006). STIs screening must be based on the sexual history of each patient (sex orientation, unsafe sex etc.).

Prevention of transmission of STIs from infected mother to the child is based on notarized screening in all pregnant women, for HIV markers of hepatitis B virus and syphilis. Furthermore, if risk is suspected infection of hepatitis C virus is discarded, chlamydial and gonococcal. In addition to allowing the early diagnosis of infected pregnant women, these programs are a measure of primary prevention in first order to reduce vertical transmission of STIs.

There is evidence that contact investigation is effective to detect new STIs (Hogben, 2007; Mathews et al, 2001), but it is not an easy activity, for practical reasons or because of ethical and emotional connotations that surround it (Apoola et al, 2006). In a survey conducted in 14 countries of the European Union (EU) and Norway, only eight had national guidelines about it and only five have this activity that was included in public health programs. Although only in Norway and Sweden contact investigation is mandatory, it is done in most countries, especially in bacterial STIs (gonorrhoea, syphilis). This study also shows that in most countries seeking contact is made on all query-specific STIs and less in others health centres, one aspect to consider where STIs are diagnosed mainly in non- specialized clinics (Arthur et al, 2005).

Communication contacts possibility of infection can be made by the case (the patient is responsible for informing their contacts), the physician responsible for the case or other health

professionals dedicated specifically to this task. There is no clear agreement on which is the best strategy. In a systematic review by Hogben (2007), the notification to the contact by a clinician with patient consent was more effective in some STIs such as gonorrhoea or syphilis, but other authors note that this approach is more costly in resources and less accepted by patients (Apoola et al, 2006). The WHO (2001) recommends that the patient be informed that their situation to their contacts and CDC does not opt for one system or another. In the study of the countries of the European Union (EU) and Norway previously mentioned (Arthur et al, 2005) found that, generally, research contact was made through the patient, although medical intervention was offered as an additional service in 5 of the 15 countries consulted; however it was not possible to assess the effectiveness of these strategies, and Denmark than just collect systematic information on contacts investigated.

When the patient is responsible for performing the process, in some places resorts to give treatment to provide it to their partner. This may be done when there is high suspicion that the partner(s) of the case will not go to a health centre, and only in the case of infection or gonorrhoea clamida.

Prevention and Control

Prevention is usually caused by improper use. To be effective they must be used regularly, following some basic rules (Centres for Disease Control and Prevention, 2010):

- Always use condoms and use one for each sex, vaginal, oral or anal;
- Avoid damage to the nails, teeth or any sharp object to operate the condom;
- Placing the condom with the erect penis before sexual act and any genital, oral, vaginal or anal contact with partner;

- Achieving adequate lubrication during intercourse, whether vaginal or anal, using lubricants if necessary;
- When latex condoms are used, use only aqueous lubricants base, since the oil based can damage;
- To prevent slippage when removing the condom after intercourse, perform this manoeuvre the penis is still erect, holding the condom on the penis

The female condom is a lubricated polyurethane membrane or nitrile, with a ring at each end, which is inserted into the vagina. It is an effective barrier against sperm and STIs when used properly and consistently (Centres for Disease Control and Prevention, 2010). Advantages of using stresses that supports any type of lubricant are less risk breakage, less risk of slipping and the outer ring does not permit, not have been reported cases of allergy, covers the external genitalia including the labia majora, the woman may decide to use it before the man has an erection and also serves for anal sex. They are more expensive than male condoms but they can be used in heterosexual relationships. Spermicides and contraceptive methods, including the diaphragm, without effect serve no mechanical barrier to prevent STIs (Centres for Disease Control and Prevention, 2010).

In susceptible people some STIs can be prevented by vaccination. Vaccination strategies against hepatitis B in children and teenagers have gotten the vast majority of those born after 1980. However, there are still many unvaccinated adults who maintain risk practices. Therefore, they should be vaccinated against hepatitis B to all evaluated for any patient who has not passed STI. The hepatitis A vaccine is indicated for MSM, IDU, persons with multiple sexual relationships and sex workers.

The implementation of routine vaccination programs should be supplemented by sex education for children and parents, in order to avoid a false protection of other STIs responsiveness condom disuse, and the need to continue screening in the vaccinated population because the vaccine protects only against seven out of ten cancers. Even after achieving widespread coverage of population with the vaccine, screening with Pap smears should continue to cover those women at risk of developing cervical cancer, either because they were infected with HPV 16 or 18 prior to availability of the vaccine or because their infection is due to an HPV type not included in the vaccine. To date there are unresolved issues regarding these vaccines, such as the period of protection, whether or not administered dose, the inclusion of other genotypes or vaccination in children.

Conclusion

The STI control requires knowledge of the epidemiological situation and monitoring over time, so it must notify all those who should be notified. Currently the STI surveillance in the EU countries is very heterogeneous which is difficult to make comparisons between countries. However, the ECDC began in 2009 to coordinate the STI surveillance in the EU level and in the year 2008 approved case definitions for reporting across the EU, so it is likely an improvement of the situation in future dates. The major changes in epidemiological surveillance of STIs that European authorities have made are the following: a) inclusion of *C. trachomatis* infection and LGV among notifiable diseases and b) collection of a minimum set of variables for all STIs under surveillance.

As for the features of the HIV notification, legislation exists in which the need to notify all states new HIV diagnoses with a minimal set of variables. In the present work, it is to adapt to European requirements of surveillance system in the near future.

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