Handout 19. 4. Sexually transmitted infections (STI)

Sexually transmitted infections (STI) are infections that are transmitted mainly via sexual contacts from one person to another. Some of the infections, like HIV or syphilis can be also transmitted from mother to child during pregnancy and delivery, also via blood transfusion or transmission of tissues or organs. There are more than 30 various bacteria, viruses and parasites that can be transmitted sexually. Full list of STI is provided in actual manuals of WHO. This information material is to review some of them.

**Syphilis**
Syphilis is a bacterial infection that affects skin, mucous coats, internal organs, bones and nervous system.

Causative agent – is syphilitic spirochete or pale treponema (warm-shaped bacteria). It can be detected in blood, sperm or spit. Ordinary it penetrates into human body via mucous coats (mouth, vagina, and urethra) or damaged skin.

Ways of transmission
The most common way of transmission of syphilis is sexual way. Also other ways of transmission like: via wet kissing with infected people that have specific eruption on the tongue or on mucous coats of mouth, via domestic things, via placenta from mother to child and so on – are also possible, as well as getting the infection via blood transfusion from infected donor.

Symptoms
Period from case of infection till clinical symptoms of the disease usually takes about 3-4 weeks. First obvious sign of syphilis is a dense chancre – ulcer or erosion at the place of penetration of the pale treponema (on genitals, lips or skin). The dense chancre is ordinary not painful which is additional sign. In a week a considerable increase of lymphatic glands appears. As a chancre, they are not painful during palpation. Increased lymphatic glands remain from 3 to 5 months. The chancre heals out without medical treatment in 3-6 weeks. Then in a week begins secondary recent syphilis – next stage, which is characterized by numerous rashes on the skin, which disappear in 2-3 months and then appears again as secondary relapsing syphilis. If treatment is insufficient, syphilis may develop into the third stage, which is characterized by heavy affects of internal organs and nervous system that may lead to death.

**Gonorrhea**
Causative agent of Gonorrhea is microbe of gonococcus. This disease affects urethra, but also straight intestine, uterine cervix and eyes.

Ways of transmission
Gonorrhea is transmitted mainly during sexual contacts, including oral sex. Also it is possible that a newborn gets infected with gonococcus during delivery with further development of gonococcus conjunctivitis.

Symptoms
Incubation period takes from several days to several weeks. Symptoms for men: yellow-pale excaudate from urethra, painful urination. Symptoms for women: yellow-pale excaudate from vagina, inter-menstrual bleeding, pain in underbelly. In some cases gonococcus may affect straight intestine (for those who practice anal sex) or throat (in cases of oral sex with infected person). In rare cases, a patient
sick with Gonorrhea under circumstances of poor hygiene may infect own eyes with dirty (infected) hands, which provokes specific eye disease – Blennorhea.
If timely and complete medication of Gonorrhea is not applied, it may lead to chronic and acute conditions which in turn may lead to infertility (for women) and impotence (for men).

**Chlamydia**
Causative agent for Chlamydia is a micro organism Chlamydia trachomatis that affects mainly organs of genitor-urinal system.

Main way of transmission is sexual.

**Symptoms**
Incubation period usually takes 21 days as average (from 5 to 30 days). Symptoms are nonspecific and can be observed in case of other diseases: excaudate from urethra, painfulness and heat during urination or sexual intercourse. It is very often that Chlamydia proceeds with little symptoms or symptomless. Absence of obvious symptomatic often leads to late diagnostics with progression of chronic and complicated states of the disease.

**Trichomoniasis**
Causative agent is the simplest mono-cell microorganisms that have filaments (vagina trichomonad).
The way of transmission is also sexual.

**Symptoms**
Incubation period takes from 7 to 30 days. State of the disease for men is less symptomatic than for women, who have more obvious symptoms. Change in pH of vagina and hormonal destabilization may provoke development of Trichomoniasis.
The infection is more often to affect: external genitals (irritation of mucous coats, swelling, redness, maceration of skin on affected organs, pain during sexual intercourse), vagina (generous pale-green excaudate with foamy consistence and unpleasant smell), urethra (in more than 50% of cases of the disease, painful urination).
Trichomoniasis in chronic state of the disease may lead to infertility.

Main principle for medication of any STI is a timely and qualified medical help. Any self-medication is inappropriate. STI presumes only professional medical treatment based on thorough diagnostics that will help to exclude or minimize possible negative consequences of getting infected with STI.