

Epidemiology of Syphilis, Gonorrhoea and Chlamydia Trachomatis Infection in Finland in the 1990s

Eija Hiltunen-Back

Department of Dermatology and Venereology, University of Helsinki, Finland. E-mail: eija.hiltunen-back@hus.fi

In 1995, the incidence of syphilis doubled in Finland to 3.3/100 000 and the main reason for the increased incidence was the import of syphilis by Finnish heterosexual men from Russia. The source partners were mostly sex workers. In 1990 the incidence of gonorrhoea (55/100 000) was markedly higher than in the other Nordic countries. In a prospective study the incidence of endemic gonorrhoea decreased rapidly in 1990–1995 while the amount of imported cases remained at the constant level.

The incidence of *Chlamydia trachomatis* infection has been high (150/100 000) in the 1990s. In order to obtain more detailed information especially on the risk factors of *C. trachomatis* infection and also other sexually transmitted infections a special sentinel STD surveillance network was established in 1995. The network consisted of six STD outpatient clinics, three health care centres, two university student health care units and two university hospital departments of gynaecology. Most *C. trachomatis* infections



Eija Hiltunen-Back (*left*); Department of Dermatology and Venereology, University of Helsinki, defended her thesis on October 25, 2002. Professor Annamari Ranki (*middle*), University of Helsinki, Finland, was Chairman, and Faculty Opponent was Professor Harald Moi (*right*), University of Oslo, Norway.

detected in this network were endemic and the prevalence was highest in the age group of 15–19 years. The main risk factors for *C. trachomatis* were high number of sex partners, history of previous infection, and in women the use of oral contraceptives. According to data from the National Infectious Disease Register in 1995–2000, the rise in the incidence of *C. trachomatis* infection was most evident among people living in non-urban, densely populated areas. The increase was highest, 1.37-fold in women and 1.69-fold in men, in the 10–19-year-old age group. In this age group the incidence was five times higher for women than men. In 2000 a higher percentage (18.8%) of women in the age group 10–29 years reported five or more annual sex partners compared to 1995 (8.3%).

In males no similar increase was evident, 32.6% and 38.2%, respectively.

List of original publications

- I. Hiltunen-Back E, Haikala O, Koskela P, Vaalasti A, Reunala T. Epidemics due to imported syphilis in Finland. *Sex Transm Dis* 2002; 29: 746–775.
- II. Hiltunen-Back E, Rostila T, Kautiainen H, Paavonen J, Reunala T. Rapid decrease of endemic gonorrhoea in Finland. *Sex Transm Dis* 1998; 25: 181–186.
- III. Hiltunen-Back E, Haikala O, Kautiainen H, Paavonen J, Reunala T. A nationwide sentinel clinic survey of *Chlamydia trachomatis* infection in Finland. *Sex Transm Dis* 2001; 28: 252–258.
- IV. Hiltunen-Back E, Haikala O, Kautiainen H, Ruutu P, Reunala T. Nationwide increase of *Chlamydia trachomatis* infection in Finland: highest rise among adolescent women and men. *Sex Transm Dis*, in press.