Epidemiological study

INCIDENCE OF SYPHILIS AND GONORRHOEA IN CZECH REPUBLIC AND PRAGUE BETWEEN 1975 and 1994

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ABSTRACT

The epidemiologic situation concerning the infections with syphilis and gonorrhoea in the Czech Republic is shortly reviewed. The yearly incidence of gonorrhoea during the period of observation showed peaks and lows. In the first half of the 1950s there were 70-80 cases per 100 000, later on it dropped essentially to reach a new peak in the late 1960s with 120-140/100 000. During the following years it started to decrease again up to the late 1980s. Since 1990 a clear tendency of increase was noted reaching a new peak in 1992 with 72/100 000. After that a tendency of decline is being observed.

The incidence of syphilis showed a similar course, the highest number of cases being observed in 1951 (almost 12 000) Minor peaks were observed in the years 1972, 1980 and 1991.

KEY WORDS

syphilis, gonorrhoea, Czech Republic, incidence

INTRODUCTION

Data on gonorrhoea, syphilis, chancroid and lymphogranuloma venereum have been included into information systems of Czechoslovak Republic in 1949, in 1986 also data on HIV/AIDS infection. Information concerning trends in incidence of syphilis and gonorrhoea in our republic, with a more detail analysis of the situation within the last 15 years, is the subject of the paper.

DATA ON PATIENTS

In the first half of the 1950s 7,000 new cases of gonorrhoea were reported annually, the incidence of gonorrhoea ranging from 70 to 80 persons per 100 000 inhabitants. During the second half of the

50s the incidence decreased threefold, with the lowest number of 2903 cases in the year 1960. After this year dramatic increase in gonorrhoea incidence was reported with the peak in the late 60s of about 12000 - 14000 new cases annually (120 - 140/per 100 000). Since that time the incidence of gonorrhoea gradually decreased until the second half of the 80s, when the incidence leveled on the annual number of 6000 new cases. Such a development is similar to the situation in West European countries in the 80s.

In the year 1990 a new increase in incidence of gonorrhoea was noticed, in comparison with the previous year by 2,5 In the year 1991 the increase reached 12,7% and it continued even in the year 1992 (another 2,3%). In 1989 the incidence was 59.9, next year 62.4, in 1991 it was 70.7 and in 1992

Table 1. Newly notified cases of gonorrhoea in Czech Republic between 1975 and 1993

year	absolute numbers	per 100000 habitants
1975	11901	118.3
1980	9091	88
1985	7378	71.4
1986	6875	66.5
1987	6110	59
1988	6554	63.3
1989	6211	59.9
1990	6463	62.4
1991	7283	70.7
1992	7455	72.3
1993	4584	46

72,3 cases/100 000 inhabitants (Tab. 1).

As to the male:female ratio, a continuing prevalence of males, especially in acute forms of the disease, has been noticed.

The situation in the incidence of syphilis vas influenced by the so-called "VD action" in the year 1951, when nearly all people in the country were tested for syphilis and about 12 000 new cases of syphilis were traced and treated. Within following years a dramatic decrease in the syphilis incidence was noticed. In the 1963 for instance only 4 new cases of early syphilis were reported. However, since 1965 growing numbers of patients with early syphilis were newly reported, with the peak incidence in the first half of the seventies. After a transient decline in the late 70s came an increase in the years 1980-1985 and than the number of newly notified cases leveled in the range of several tens of new patients a year until the beginning of 90s.

In 1991 the annual number of syphilis cases increased, in comparison with the previous year, by 51,8%, whilst the number of patients with early syphilis increased dramatically by 230%. Such a trend continued even in the following years. Generally speaking, an increase in early syphilis incidence and a decrease in late syphilis incidence is characteristic for the last years (Tab. 2). In contrast to gonorrhoea, an increase in syphilis incidence, especially in the incidence of early syphilis, continued even in 1994.

Incidence of congenital syphilis is very low, rather exceptional (annually from 0 to 4 cases).

In Prague, the incidence of gonorrhoea between years 1988 and 1994 was similar to the situation in

Table 2. Newly notified cases of syphilis in Czech Republic between 1975 and 1993

	absolute		
year	total	early	%
1975	660	253	38.3
1980	557	323	57.6
1985	320	120	37.5
1986	222	49	22.2
1987	232	47	20.4
1988	243	71	29.5
1989	171	33	19.4
1990	164	40	25
1991	249	134	53.6
1992	265	172	64.9
1993	222	112	50.9

the whole republic. After a slight decline in 1989 the annual number of newly notified cases has not changed significantly until the year 1993, when a sudden drop by 83% was noticed. A moderate decrease continued even in the year 1994.

The annual number of syphilis cases decreased in the year 1989 as well, this time significantly - by 105%. In the following two years a moderate increase in the incidence of syphilis was noticed, with a sudden decrease in the next two years, especially in the year 1993 - nearly by the 50%. This trend was suddenly reversed in 1994, when a dramatic increase in the incidence by over 50% was reported. It concerned mainly the early syphilis, where the increase reached 300% (Tab. 3).

The part of foreigners in the incidence of gonorrhoea and syphilis ranges from 2 to 5% (with the only exception in 1989 when foreigners made nearly 20%). However, these figures usually do not include short term visitors, who as a rule take their disease home.

Table 3. Newly notified cases of syphilis in Prague between 1990 and 1994

		183	
year	total	early	%
1990	42	6	14.2
1991	69	23	33
1992	55	15	27
1993	37	14	37.7
1994	83	42	50.6
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The most affected age group was that of 15-24 years, with 70% of the total number of the patients. The second most affected was the age group of 25-34 years with 20% of the whole number.

Sudden reversal in the steady increase of gonorrhoea was noticed in 1993, with a dramatic decrease of newly reported cases. In comparison with the year 1992 the fall reached in Prague as much as 83%. In absolute figures it was a decline from 7455 to 4584, respectively 1131 to 617 reported cases.

The reason for this sudden decline in gonorrhoea incidence is definitely not a decrease in the number of STD, but very probably discrepancy between the real incidence of gonorrhoea and the number of statistically notified cases, although the mode of reporting remains identical. However, some physicians

treated urethritis without any diagnosis or notification. It may be explained by changes in the transformation of the health service and its privatization, by insufficient legislation and by neglect of the reporting system by non-venereologists and general practitioners. Some people avoided contact with the health-care system due to the fear of AIDS and loss of employment.

The nearly dramatic increase in the incidence of syphilis observed in 1994 has very probably several reasons. It may indicate that certain patients group, especially young heterosexuals, were not reached by public educational programs about STD. It may also indicate increasing role of drug abuse. However, promiscuity with frequently changing partners, uncontrolled prostitution and self treatment may have played significant or main role in the last year spread of syphilis.

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