

Summary

- STIs of the reproductive tract were widely noted in visitors from the maternity welfare clinic, youth consultation clinics and dermato-venereological dispensaries;
- microscopy of urogenital smears that is performed in the doctor's office is a rapid method for diagnosing inflammatory processes of the urethra, cervix and vagina. Moreover, it is an informative method for detecting changes of bacterial flora in vagina (BV) and in detecting the presence of some microorganisms (yeast fungi, trichomonas and gonococci) [5]. Furthermore, this method allows the possibility to prescribe treatment already during the patient's first visit to the doctor's office. The method can be used to help define a group of patients with a high risk of infection (e.g., having urethritis or cervicitis), making it possible to examine this group further in order to detect specific microorganisms (*N. gonorrhoeae*, *C. trachomatis* and *M. genitalium*);
- high rates of the reproductive tract infections point out at necessary to use the possibility of screening for those infections, especially among the teenagers attending youth clinics and women who come for pregnancy termination. To make screening more cost-saving, selection for such screening can be made based on microscopic findings of genital smears, behavioral determinants or using a sample-pooling method at the laboratory [6];

- patients from the dermato-venereological dispensaries should be examined for STIs according to existing algorithms for these patients.

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EPIDEMIOLOGIC SITUATION WITH SEXUALLY TRANSMITTED DISEASES (STDs) IN ST. PETERSBURG IN 2006

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The general epidemiologic situation in St. Petersburg regarding sexually transmitted infections (STIs) continues to be a problem. Though the general number of syphilis, gonorrhea, trichomoniasis, urogenital herpes, venereal warts, bacterial vaginosis, urogenital candidosis cases has decreased, morbidity is still very high and in 2006 was 1541 per 100 000 inhabitants. Syphilis and gonorrhea morbidity in St. Petersburg is below the average Russian rates, indicating their incomplete registration.

In 2006, general morbidity due to STIs decreased 1.4%, though morbidity due to syphilis, urogenital herpes and venereal warts increased on 6.1%, 2.9% and 6.6%, respectively (Table 1).

The number of severe syphilis cases was found to increase (30%) at the expense of late forms of the disease. Compared with 2005, the number of neurosyphilis cases increased by 2.5% (from 4.5 to 7.0%). Forms of latent syphilis (early and late latent syphilis) continue to increase (45.% of the general syphilis morbidity), which makes both diagnosis and treatment difficult. Such a situation promotes sero-resistance and could eventually lead to disability. Along with late forms of syphilis, decreasing cardiovascular and visceral syphilis are essentially not detected, showing imperfect diagnostic tests and the necessity for more thorough examination of the patients with the latent forms. In 2006, number

Table 1

Morbidity of sexually transmitted infections (syphilis, gonorrhea, trichomoniasis, urogenital herpes, venereal warts, ureo- and mycoplasmosis, bacterial vaginosis and urogenital candidosis) in 2006.

Infection	Morbidity per 100 000 people	Dynamics	Relative density from the general number of STDs (9 infections)
Syphilis	46,5	+6,1 %	3 %
Gonorrhoea	38,1	-4,1 %	2,5 %
<u>Second generation STDs</u>			
Chlamydiosis	160,3	-5,2 %	10,4 %
Trichomoniasis	133,9	-3%	8,7 %
Urogenital herpes	65,1	+2,9 %	4,2 %
Venereal warts	54,9	+6,6 %	3,6 %
Total of 6 infections	498,4	-1,4 %	32,4 %
Other STDs: Ureo- and mycoplasmosis, bacterial vaginosis, urogenital candidosis (3 infections)	1042,6	-1 %	67,6 %
Total 9 infections	1541,0	-1,1%	****

of cases reported by obstetricians, gynecologists, neurologists, and narcologists decreased both in hospitals and in outpatient departments. Broader testing of patients from the cardiological, neurological and ophthalmological hospital and outpatient departments is needed. The highest occurrence of syphilis is in persons between the ages 20 and 29 years (37.8%). In patients over 60 years of age syphilis morbidity doubled in comparison with the previous year.

Detection of congenital syphilis continues, and registration of cases of stillborns is being made because of syphilitic infection. The number of patients with syphilis and previously convicted patients remain at the same level. The number of homosexual patients with syphilis has grown 1.5 times. At the same time, number of serologic tests done on patients who visit

the municipal outpatient departments has been found to constantly decrease. Such conditions complicate and limit timely syphilis detection and undertaking the antiepidemic measures.

The highest syphilis morbidity is registered among persons 20–39 years of age. However, in 2006, a decrease in morbidity in this age group was noted. An increase of morbidity was observed in the age group 40 years and over (62.8%). It is essential to note that in the age groups over 60 and over 70 years the prevalence of syphilis increased compared to the previous years (fig.1). A follow-

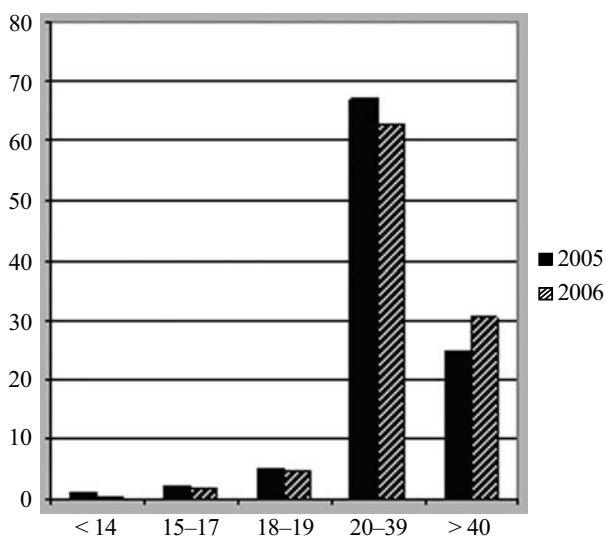


Fig. 1. Age of patients (%) in all registered syphilis cases

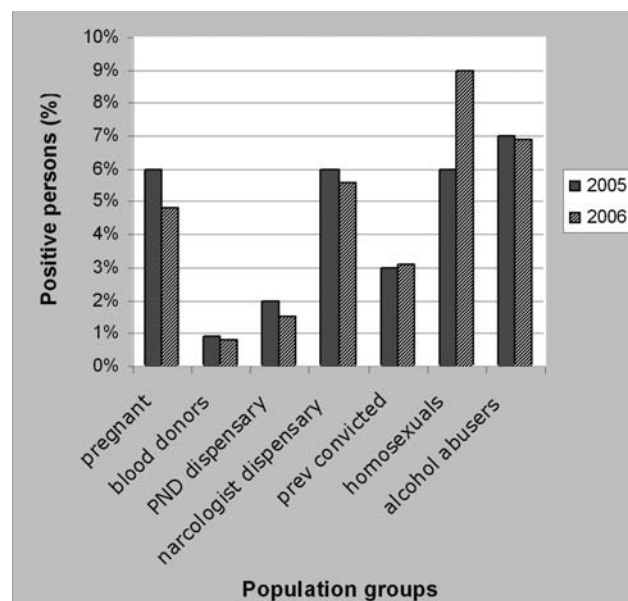


Fig. 2. Syphilis morbidity (%) among pregnant women, blood donors, psychoneurologic dispensary patients, previously convicted persons, homosexuals and alcohol abusers (from all registered cases)

up by narcologists indicated that in patients with syphilis morbidity decreased in pregnant women. Syphilis morbidity in homosexuals and previously convicted persons increased (fig. 2).

There was a reduction in the detection of gonococcal infection and the number of chronic forms was also found to decrease. The number of reported cases by obstetricians and gynecologists decreased from 21% in 1990 to 7.0% in 2006. Reduction of reported cases of gonococcal infection is observed during the last ten years. One of the factors affecting this pattern could be suboptimal laboratory diagnosis of this infection. In 2006, gonorrhea morbidity was 38.1 per 100 000 inhabitants, which is 4.1% lower than in 2005. Lower morbidity rates were found to decelerate (in 2005 they were 13%). In 2006, there were 52 teenagers registered having gonococcal infection. Of these, 6% had police records (in 2005 — 1%), 2% were using drugs, 29% were having multiple sexual partners and 39% lived with a one-parent family (in 2005 — 28%).

In all actively detected patients (i.e. those who were called on by the venereologist's check-up) 56% were detected as a result of the contact tracing. 30% of these patients were either women who came under syphilis examination during the gynecology check-up or pregnant women who were registered because of pregnancy. The rest (14%) were revealed by non-venereologists, while treating patients for other diseases. During the periodic medical check-ups and examinations in the hospitals, 2% of patients were detected (fig. 3).

In 2006, the morbidity of general trichomoniasis, chlamydiosis, urogenital herpes and venereal warts decreased by 2% and was 414.1 per 100 000 inhabitants. An increase in viral infections was registered, i.e. there was an increase of 2.9% in urogenital herpes and 6.6% in venereal warts. The morbidity rate of these infections and chlamydiosis in St. Petersburg exceeded the average rate in Russia.

During many years patients with STIs are observed having high morbidity of HIV infection. In 2006, the number of HIV patients was 466.7 per 100 000 patient examinations, which is 35% higher than in 2000. In 2005, in dermato-venereological dispensaries 326 patients infected with HIV were detected, while in 2006 there were 341 HIV positives. Of these, 27% had syphilis, 20.6% had gonorrhea

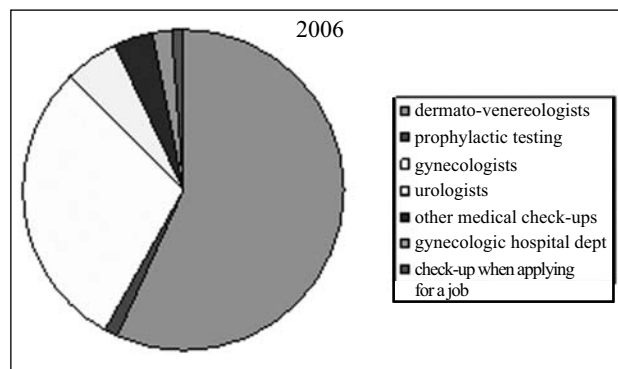


Fig. 3. Number of reported gonococcal infections by different physicians in different situations

and other STIs and 18.5% were detected having dermatopathia. Changes in the STI/HIV morbidity make prognosis of the reproductive health development in Russia unfavorable.

Conclusions

To improve specialized help for patients with STIs it is necessary to do the following:

- consolidate the doctors in issues regarding early diagnostics, registration and treatment inpatients with syphilis and other STIs;
- refine legal questions with respect to quality diagnostic and treatment control for patients with syphilis and other STIs in commercial clinics;
- work out in detail and ensure interdepartmental succession in questions of antiepidemic arrangements in the nidus of STI cases;
- try to achieve that syphilis cases would be treated exceptionally by venereologists;
- to assure the quality of serologic and bacteriologic diagnostics for STIs, by centralization the of syphilis testing at interregional laboratories and guaranteeing regional and federal quality control;
- enhance the responsibility of the heads of the clinics that existing orders regarding early diagnostics, registration and treatment of patients with syphilis, gonorrhea and other STIs and contagious dermatopathia would be followed;
- pay closer attention to the role of STIs in the epidemiological process of HIV/AIDS;

Well organized primary and secondary STI prevention guarantees improvement of sexual and reproductive health of the population and deduction of morbidity due to HIV/AIDS.