**Introduction**

Morbidity that is due to sexually transmitted infections (STIs) in the city of St. Petersburg remains alarmingly high. An increase in the latent forms of syphilis (45.7%), late forms (6.7%) and neurosyphilis (7%) calls alert to the growing problem of STIs in St. Petersburg. Furthermore, the reported number of cases of gonococcal infection since 1993 has decreased 12-fold.

In 2006, the ratio between the morbidity of syphilis and gonorrhea has changed such that there is a marked increase in syphilis (1.2:1). The ratio in 1989 was 1:33.

In the current epidemiological situation of a high prevalence of STIs it is difficult to overestimate the necessity of strong cooperation of public health institutions and dermatovenerologic services.

Laboratory diagnostics of STIs is a determining factor in secondary prevention. Until 1995, laboratory diagnostics of STIs (primarily syphilis and gonorrhea) in St. Petersburg have been mostly carried out in dermatovenerologic laboratories. Centralized serological and bacteriological laboratories at dermatovenerologic clinics provide services for all the institutions of the city. Only microscopic testing for gonococci and trichomonas was carried out elsewhere, i.e. in polyclinics, maternity welfare clinics and maternity hospitals.

During the past 10 years, the introduction of numerous non-governmental institutions providing diagnostic services and anonymous examination has led to the decentralization of laboratory diagnostics of STIs.

**Materials and methods**

The institutions surveyed in this study included all laboratories and other STI testing centers in St. Petersburg. All institutions in St. Petersburg providing any microbiological or immunological diagnostic services, according to the list of the Health Commit-
tee of St. Petersburg in the year 2005, were asked to list those STIs that they provided diagnostic services for as well as the methods they used. All institutions that confirmed that they performed STI testing were included in the study and subsequently received a second questionnaire.

Results

The present survey revealed the following information: (a) absence of a legalized methodical documentation at both the federal and local level; (b) violation of algorithms during examination of the patients; (c) absence of special courses; (d) absence of continuity in cases when there was a change in the staff; (e) unfounded or incorrect (inconsistent) interpretation of test results; (f) absence of books with telephone messages regarding positive results of syphilis; (g) blood collection performed in the laboratory without an appointment card from the physician; (h) cases in which the test results were directly given to the patient; and (i) absence of external quality control (EQC) of STIs (77.1% of the participants), 16 (14.4%) were dermatovenereologic institutions and 95 (85.6%) were various medical institutions. In the end, 121 questionnaires were subjected to analysis: 20 questionnaires were from laboratories from 16 (16.5%) dermatovenereologic clinics and 101 questionnaires were from laboratories from 95 (83.5%) medical institutions.

The administrative structure of the laboratories participating in the present study is shown in Table 1. The number of laboratories performing diagnostics for syphilis, gonorrhea, trichomoniasis and chlamydial infection in St. Petersburg is presented in Table 2.

Results from the different methods applied in diagnosing syphilis in the St. Petersburg laboratories are presented in Table 3.

Results from the different methods applied in diagnosing gonorrhea in the St. Petersburg laboratories are summarized in Table 4.

Results from the different methods applied in diagnosing chlamydial infection in the St. Petersburg laboratories are given in Table 5.

Discussion

Based on the present findings, only 25% of the Dermato-venereologic laboratories are performing diagnostics for syphilis, gonorrhea, trichomoniasis and chlamydial infection.

The aim of health care and licensing authorities in St. Petersburg is to achieve good coordination among medical institutions. In total, 154 questionnaires from 144 institutions were completed and collected. In 33 institutions (22.9% of the participants) diagnostics of STIs were not carried out. From 111 institutions that did perform diagnostics the various activities of unspecialized institutions of public health con-
The present study calls attention to several important implications for decision making and public health policy in St. Petersburg. First, the centralization of laboratory services for specific tests is worth considering in order to ensure availability as well as quality assurance and adherence to testing protocols. Second, the main problem in the diagnostics laboratory system dealing with STIs is associated with the absence of an advising, coordinating and controlling system. For further improvement of laboratory diagnostics of STIs in such a big city as St. Petersburg, the establishment of a reference center for STIs is recommended. Such a center would be responsible for the following updating diagnostic techniques and procedures currently in use, coordinating the introduction of EQC programs (including inter-laboratory comparisons), performing adequate confirmatory diagnostics for smaller institutions and providing continuous professional training. Because an increasing number of STI diagnostics (especially screening tests and microscopy) are performed, quality assurance control of the utilized tests and training of specialists deserve high priority.