Poster Sessions

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Objectives Aim of the present study was to evaluate the seroprevalence of HSV-1, and HSV-2 infections among various population groups in Siberia, Russia.

Methods A sample of 1014 persons aged 14–64 years (47% males) were randomly selected from the general population in urban Novosibirsk (predominantly Caucasians) and rural regions of Tyva and Altai Republic (predominantly persons of Asian origin). The study includes data obtained in 1994–2005. The current investigation was performed as an optional fragment of international WHO MONICA study, and HAPJIE study (Wellcome Trust Fund 064947/Z/01/Z and 081081/Z/06/Z). Sera were tested for IgG antibodies to HSV infections with type-specific ELISA (VectoHSV-1 IgG, VectoHSV-2 IgG, Vector-Best, Novosibirsk, Russia).

Results The overall prevalence of HSV-2 positivity was 21% being higher in females (26.4%) compared to males (17.0%, p=0.01). Seroprevalence rates increased with age from 0% at 14–17 years to 22.8% at 55–64 years in males and from 1.8% at 14–17 years to 31.6% at 55–64 years in females. Neither difference was observed between urban and rural population, nor in surveyed persons of Caucasian and Asian origin. Ten-year trend showed a decrease in the frequency of HSV-2 detection equally in different populations by 20%. HSV-1 seroprevalence was uniformly high in each population group (99–100%). In conclusion, HSV-2 is common in Russia with the prevalence rates close to USA and Scandinavian countries. The sex and age distribution of the infection in Russia is similar to other populations. In Siberia, ethnicity and standard of living do not influence HSV-2 prevalence. However, HSV-1 infection rates may influence HSV-2 infection distribution by cross-reactive immunity patterns.

INCIDENCE RATE OF HERPES SIMPLEX VIRUS TYPE 2 (HSV-2) IN THE USA, 1988–2008
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Background HSV-2 infection remains a major public health problem in the USA, where the prevalence is 16.2% in persons aged 14–49. In this report, we provide national estimates of new HSV-2 infections in the USA and examine trends in incidence over the past 2 decades.

Methods A simple catalytic model was used to estimate HSV-2 force of infection (FOI), defined as the incidence of HSV-2 in the susceptible population, from National Health and Nutrition Examination Surveys (NHANES) in the USA from 1988 to 2008. HSV-2 serology was included in the nationally representative surveys during 1988–1994 (NHANES III) and in continuous NHANES from 1999 to 2008. Incidence rates and trends over time were estimated by age, sex and race/ethnic group for non-Hispanic whites, non-Hispanic blacks, and Mexican-Americans.

Results HSV-2 FOI rates were highest in non-Hispanic blacks and lowest in non-Hispanic whites, with the FOI among 25-year-old non-Hispanic black women more than 13 times greater than white men of the same age. Rates were highest between ages 25 and 35 years for all sex-race/ethnicity groups (peak in non-Hispanic white and black women aged 25 years, in non-Hispanic white and black men aged 35 years and in Mexican-American women in their early-30s) except for Mexican-American men, for whom there was less variation in FOI by age. Over the last 20 years, age-adjusted FOI rates were stable for the sex-race/ethnicity groups examined except for non-Hispanic white and Mexican-American women, in which there were decreases after 2002 and 2001, respectively. FOI rates were lower in men than women among non-Hispanic blacks and Mexican-Americans, and in non-Hispanic whites prior to 2002. Overall, the estimated number of new HSV-2 infections in 2007–2008, among these three groups, aged 14–49 years, was in excess of 750,000, with 48% (~360,000) occurring in women and 52% (~392,000) in men. Nearly half (45%) of all infections occurred in persons under 25 years old (34% and 57% of infections in men and women, respectively).

Conclusion Risk of HSV-2 infection varies substantially across the US adult population, with the highest risk among non-Hispanic black men and women. Information on the detailed distribution of new infections can help improve the efficiency of interventions. In addition, although we found evidence for substantial reductions in the risk of HSV-2 among some race/ethnicity groups, FOI in groups with the highest rates has not changed in 20 years.

TREND OF SEXUALLY TRANSMITTED DISEASES DIAGNOSED BY SYNDROMIC APPROACH IN AN INSTITUTE SETTING
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Background The paradigm of research in sexually transmitted diseases (STD) has recently shifted to HIV/AIDS. Recent trend of sexually transmitted diseases in India is lacking.