

Burden of Infection with Herpes Simplex Virus Type 2 amongst Low Risk Populations in the Western Province of Sri Lanka

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Background/Objective

HSV-2 seropositivity is a marker for sexual behaviour. Genital herpes lesions facilitate HIV transmission. In Sri Lanka there is no information on the burden of HSV-2 infection amongst low risk populations. This study was aimed to determine the age and gender specific seroprevalence of herpes simplex virus type 2 (HSV-2) amongst non-high risk populations of the Western Province, Sri Lanka and compare that of a high risk population attending the STD clinic.

Method

A total of 433 children, 757 ante-natal women, 1347 adult hospital in-patients receiving routine health care and 929 voluntary blood donors were enrolled as low risk populations and their sera were tested for the presence of HSV-2 IgG antibodies using an indirect ELISA. The high risk group included 676 STD clinic attendees and their sera were also tested for HSV-2 IgG antibodies.

Result

The overall seroprevalence of HSV-2 amongst low risk populations was highest in adult inpatients (21%) and lowest in children (5%). Volunteer blood donors and antenatal women showed seroprevalence of 11% and 8% respectively. The overall HSV2 seroprevalence of STD attendees was 39%.

Non-high risk adult males of 40-49 years of age reached the seroprevalence level of male STD attendees of 20-34 years of age (26%) reflecting their high risk sexual behavior. Similarly the highest HSV-2 seroprevalence (20%) amongst male blood donors was observed at the age of 40 years.

Conclusion

These results may have public health importance for Sri Lanka as the high rate of HSV-2 infection amongst non-high risk adult males of over 40 years of age could act as a cofactor for HIV transmission in low risk populations. Testing of volunteer blood donors for HSV-2 IgG antibodies would be a useful to prevent acquisition of HIV and other sexually transmitted infections.

Reference

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