

MESAS REDONDAS

ESTUDOS POPULACIONAIS DE HTLV-I

Inês Dourado¹, Maria da Gloria Teixeira¹, Maurício L. Barreto¹, Luiz C.J. Alcantara^{2,3}, Bernardo Galvão-Castro²

¹Instituto de Saúde Coletiva/UFBA, ²Centro de Pesquisas Gonçalo Moniz (CPqGM)/ Fundação Oswaldo Cruz (Fiocruz), ³Fundação para o Desenvolvimento das Ciências; Salvador, Bahia, Brazil

The lack of urban cohesiveness and tendency towards unstructured urban growth in many Latin American cities precludes the ability to conduct surveillance by traditional means. As a result, several investigations in Latin America have monitored health problems in urban spaces called "sentinel areas" that were created and selected according to pre-defined criteria. This strategy has been adopted in Salvador to facilitate the evaluation of health interventions on population health. Results from these studies have not only demonstrated the strategy's great potential and timeliness, but have also facilitated epidemiological surveillance within the city, enhanced the analysis of public health issues, and stimulated the development of special epidemiological studies. On the basis of the above mentioned strategy, we estimated the prevalence of HTLV-I in a large representative sample of individuals of all ages (6 months to 98 years of age) from thirty sentinel surveillance areas in Salvador, Northeast Brazil. The overall prevalence (1.7%) was slightly higher than that estimated before in blood donors (1.4%) but increased with age as reported previously. This rate would be considered a low prevalence of endemicity but when we analyzed individuals of 50 years or older, the prevalence reached intermediate values. Similar age curve was reported by Plancoulaine et al in a population based study in Maripasoula, French Guiana but with positive individual in all age groups. In our study, the absence of infection among young individuals under 15 years was unexpected. This observation combined with a sharp increase in older age groups strongly suggests a predominance of HTLV-I sexual transmission in Salvador. Other possible explanation could be a combination of a period, cohort and age effect. The greater prevalence of infection observed in females agrees with previous reports. Therefore, we decided to further explore the role of gender in the association between HTLV-I infection and the variables age, education, income and neighborhood of residence. Although age was associated with infection in both males and females, this association was stronger in males but more precise in females. Education, income, and neighborhood of residence were considered proxy variables for socio-economic status (SES). Adjusted odds ratios suggested a positive association of lower SES and HTLV-I for women, but did not reach statistical significance due to wide confidence intervals. For males, low income also appeared important but did not reach statistical significance. Higher prevalence among those of lower SES has been reported by others. Most of the HTLV-I subtypes circulating in Salvador were found in this study to belong to the Cosmopolitan subtype, Transcontinental subgroup, Latin American cluster. This result agrees with previous studies of Brazilian and Peruvian isolates. Our data shows evidence that a post-Colombian introduction in Salvador is highly likely. Extrapolation of our data to the whole city of Salvador would yield an estimated prevalence of approximately 40,000 individuals [i.e. (23/1385)*2,500,000] infected with HTLV-I. However, this calculation should be viewed with caution, since the sentinel areas represent an approximation of the city of Salvador. Thus, there is an urgent need for preventive measures to control this serious health problem in Salvador, especially considering the increase in length of breast-feeding in the last two decades in Brazil.