

Prevalence and risk factors for human T-cell lymphotropic virus (HTLV) in blood donors in Brazil – a 10-year study (2007-2016).

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Background:

It is unknown whether HTLV-1/2 prevalence has been stable or changing with time in Brazil. We present a 10-year (2007-2016) analysis of HTLV-1/2 infection in first-time blood donors from four blood banks in Brazil. The Brazilian blood centers participating in this multicenter Recipient Epidemiology and Donor Evaluation Study (REDS) are located in Recife in the Northeast and in São Paulo, Rio de Janeiro and Belo Horizonte located in the Southeast of the country.

Methods:

A previous REDS study using the same database from 2007 to 2009 showed that the prevalence per 100,000 donors was 222 in Recife, 83 in Belo Horizonte and 101 in São Paulo. From 2007 to 2016, HTLV-1/2 prevalence was calculated by year, blood center and birth cohort. Covariates included age, gender, schooling, self-reported skin color and type of donation.

Results:

From 1,092,174 first-blood donations, in the general analysis, HTLV-1/2 infection predominated in females, donors over 50 years of age, black skin color and less educated. The average prevalence was 228 per 100,000 donors in Recife, 222 in Rio de Janeiro, 104 in Belo Horizonte and 103 in São Paulo. In the 10-year analysis, HTLV-1/2 prevalence was stable, but a trend was observed toward an increase in HTLV-1/2 infection among younger people ($p < 0.001$), males ($p = 0.049$), those with white skin color ($p < 0.001$), and higher education ($p = 0.014$).

Conclusion:

Therefore, this 10-year surveillance of the infection showed stable HTLV-1/2 prevalence overall but a trend toward increased prevalence among the younger and more educated donors despite Brazilian policies to control sexually transmitted infections being in place for more than 10 years.

Disclosure of Interest Statement:

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