

## Human T-Lymphotropic Virus Type I-II Virus Among Blood Donors: A Cross-Sectional Study, South of Iran

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**Background:** Human T-Lymphotropic Virus type is the etiologic agent of two distinct human diseases, adult T-cell leukemia or lymphoma and a chronic, progressive demyelinating disorder. HTLV-II is associated with HAM (HTLV associated myelopathy), but is not known to cause leukemia or lymphoma. One of the major routes of HTLV transmission is parenteral transmission. The aim of this work was to investigate the seroprevalence of HTLV-I/II among blood donors in Jahrom city.

**Methods:** This cross sectional study was carried out on 530 blood donors from 2013-2014. All samples tested for HTLV (I or II) specific antibody by ELISA method and positive samples were confirmed by nested-PCR method.

**Result:** Of all 530 samples, 18 (3.4%) samples were positive for HTLV (I or II) specific antibody, Of 18 positive for HTLV (I or II) specific antibody just 1 of them, was confirmed with Nested-PCR for HTLV-I, which was a blood donor. There was not any HTLV-II positivity (nested-PCR) in the blood donors.

**Conclusion:** The results of this study show that frequency of HTLV-I/II in Jahrom is lower than other cities of IRAN. Further studies with larger samples are recommended to determine the prevalence of these viruses in other community.

**Keywords:** HTLV-I, HTLV-II, Blood donor, Antibody, PCR, Iran