

## 5<sup>th</sup> World Congress on

# Virology

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### HIV and other retroviral diseases affecting Afro-Asian continents

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Retroviruses belong to the *Retroviridae* family, involving a group of single-stranded RNA viruses. The RNA virus invades a host cell, releases a reverse transcriptase enzyme and enables the cell to make a pro-viral DNA which gets integrated into host DNA. They can cause serious diseases in humans including tumors, autoimmune diseases, rare anemia and syndromes affecting the immune system of the host cell. Transmission of retroviral diseases is mainly through unprotected sexual contact, contaminated blood exposure or by vertical transmission from mother to child during pregnancy or childbirth. Human Immuno-deficiency virus (HIV) is a retrovirus attacking the immune system of human body, advancing into Acquired Immune Deficiency Syndrome (AIDS). The gradual deterioration of the immune system would compromise the host defense in the dento-gingival region. Certain ulcers or erosions of oral and/or genital mucosa, gingivitis or periodontitis and other oral opportunistic infections increase the risk of HIV acquisition by oral-genital contacts. Based on the data released by WHO, Sub-Saharan Africa is the most affected region, with approximately 24.7 million people living with HIV. Almost 5 million people are HIV infected in South-East Asia. Other retrovirus related human diseases are human T-lymphotropic virus type 1 (HTLV-1) and human T-lymphotropic virus type 2 (HTLV-II). About 2 to 5 percent of HTLV1 infected patients develops ATLL (Adult T-cell leukemia/lymphoma). Africa and East & Central Asia are probably the largest endemic areas for HTLV-1. HTLV1 decreases saliva production resulting in dental infections. The discussion implies on the impact of retroviral diseases on oral diseases.

### Biography

Cathy Nisha John has completed her BDS, from Rajiv Gandhi University of Health Sciences, India. She completed her diploma in Cosmetic Dentistry in 2009 and has achieved a Master's degree in Periodontics in 2012, from the University of the Western Cape, South Africa. She has 3 publications to her credit including an abstract in reputed journals. She has presented her papers in several international conferences. At present, she is working in a private hospital in the Sultanate of Oman. She is still keen on extending her research in various infectious diseases.

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