

AN EPIDEMIOLOGICAL STUDY TO KNOW PREVALENCE OF HIV PATIENTS WITH STI CO-INFECTIONS IN OSMANIA GENERAL HOSPITAL FROM JUNE 2014-JULY 2015P. Vijay Sekhar¹, Malini Panati², Yaswanth³, G. Venkat Ramana⁴**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: An Epidemiological study was conducted to know Prevalence of HIV patients with other STI co-infections in Osmania General Hospital from June 2014 - July 2015. A total of 339 HIV positive patients were selected and screened for other STIs with thorough clinical examination and with relevant investigations like STS, Serological tests for Hep-B, Hep-C and HSV. For patients with Genital ulcers, dark ground illumination (DGI), smear for multinucleated giant cells, Gram's stain, and Giemsa staining of tissue smears were done. In cases presenting with urethral discharge, KOH & Gram's stain were done. The findings were recorded in the STD case file. VAGINO-CERVICAL discharge was the most common STI in Females and HERPES GENITALIS was the most common STI in Males. Genital Molluscum was the least common STI in both sexes.

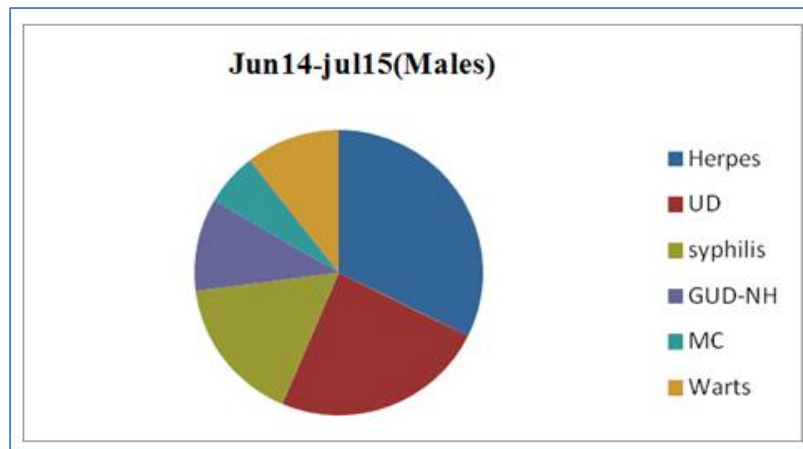
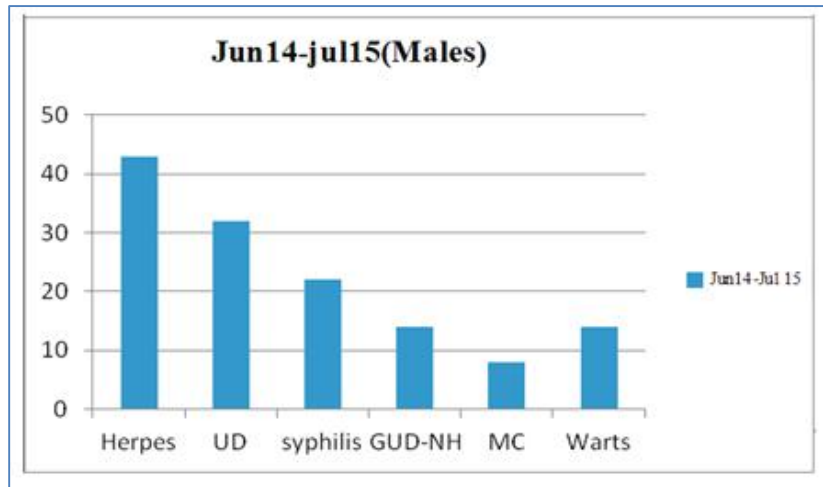
KEYWORDS: HIV, Herpes, Urethral Discharge, Syphilis, Candidial Balanoposthitis, Genital Ulcer Disease-Non Herpetic, Molluscum Contagiosum, Warts, Urinary Tract Infections.

INTRODUCTION: Sexually transmitted infections may cause acute and chronic illness, infertility, long-term disability and death, with severe medical and psychological consequences for millions of men, women and children. Apart from being serious diseases in their own right, sexually transmitted infections increase the risk of acquiring or transmitting HIV infection. The presence of an untreated disease (Ulcerative or non-ulcerative) can increase by a factor of up to 10 times the risk of becoming infected with HIV. Individuals with HIV infection are also more likely to transmit the infection to their sexual partner if either of them already has a sexually transmitted infection. Early diagnosis and treatment of all sexually transmitted infections are therefore important.

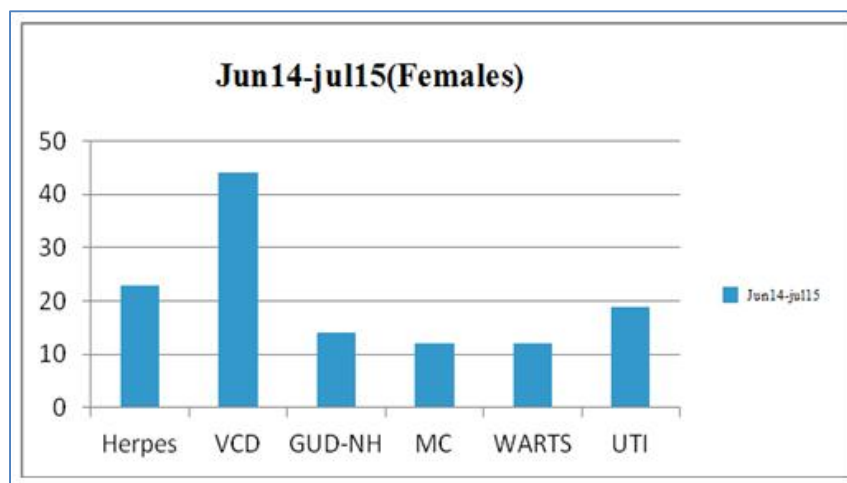
MATERIALS AND METHODS: Case records of the patients attending the STD clinic of Osmania General Hospital, Hyderabad, from June 30, 2014, to 1st July 2015, were analyzed. Diagnosis was based on detailed history, clinical examination, and relevant investigations. The VDRL (Venereal Disease Research Laboratory) test, ELISA for HIV, Viral screening for Hepatis B, Hepatitis C was done in all cases. For patients with Genital ulcers, dark ground illumination (DGI), smear for multinucleated giant cells, Gram's stain, and Giemsa staining of tissue smears were done. In cases presenting with urethral discharge, KOH & Gram's stain were done. The findings were recorded in the STD case file.

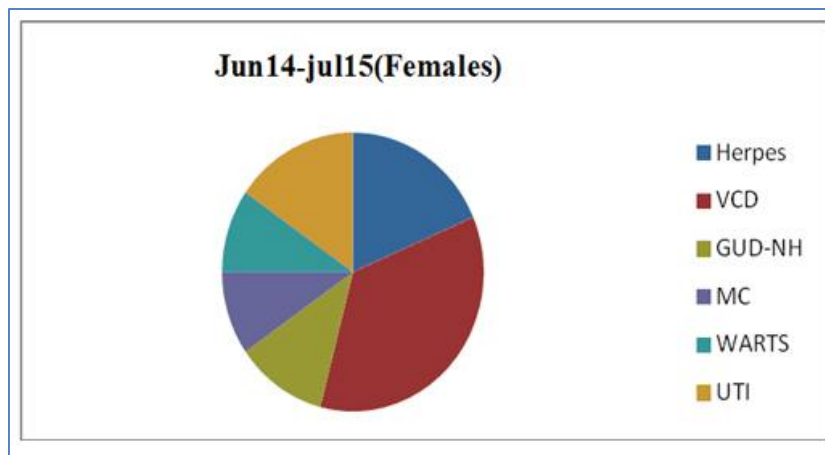
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RESULTS:



HERPES-43, UD-32, SYHILIS-22, GUD-NH-14, MC-8, WARTS-14





HERPES-23, VCD (Trichomoniasis) - 44, GUD-NH-14, MC-12, WARTS-12, UTI-19

DISCUSSION: The prevalence of STI co-infections in HIV positive men and women were different. The most common co-infection in Men was HERPES whereas in Women the most common co-infection was VCD out of which TRICHOMONIASIS was the most common among the VCDs. This study was compared with other studies,^{[2][3][4][6][7][12]} which almost showed the same result in with Herpes being most common in men and Trichomoniasis in women. The average prevalence by type of STI was as follows:

- Herpes-32.3%.
- UD-24%.
- Syphilis-16%.
- GUD-NH-10%.
- MC-6%.
- Warts-10%.
- In women the prevalence rates are as follows.
- Herpes-11.1%.
- VCD (Trichomoniasis)-21.3%.
- GUD-NH-6.7%.
- MC-5.8%.
- Warts-5.8%.
- UTI-9.2%.

This shows that more than 90% of men have STI co-infections whereas in women STI co-infections are around 65%. According to previous studies Overall, an average of 16.3% of the people living with HIV were co-infected with an STI^[1]. The average prevalence by type of STI was as follows:

- Syphilis – 9.5%.
- Gonorrhea – 9.5%.
- Chlamydia – 5%.
- Trichomoniasis – 18.8%.

This clearly shows that there are changing trends in HIV patients with STI co-infections. As the HIV transmission rates are 5 to 10 times higher in these patients,^{[2][5][8][9][10][11]} early diagnosis and treatment is vital in these patients in preventing the spread of HIV in the Community.

REFERENCES:

1. Seth C Kalichman; Jennifer Pellowski; Christina Turner, Prevalence of Sexually Transmitted Co-infections in People Living with HIV/AIDS, *Sex Transm Infect.* 2011; 87(3):183-190.
2. Ward H, Ronn M. Contribution of sexually transmitted infections to the sexual transmission of HIV. *Curr Opin HIV AIDS* 2010; 5:305–10.
3. Barbour JD, Sauer MM, Sharp ER, et al. HIV-1/HSV-2 co-infected adults in early HIV-1 infection have elevated CD4+ T cell counts. *PLoS One* 2007; 2:e1080.
4. Royce R, Sena A, Cates W, et al. Sexual transmission of HIV. *N Engl J Med* 1997; 336:1072–8.
5. Boily MC, Baggley R, Wang L, et al. Heterosexual risk of HIV-1 infection per sexual act: systematic review and meta-analysis of observational studies. *Lancet* 2009; 9:118–29.
6. Aboud S, Msamanga G, Read JS, et al. Genital tract infections among HIV-infected pregnant women in Malawi, Tanzania and Zambia. *Int J STD AIDS* 2008; 19:824–32.
7. McCoy SI, Eron JJ, Kuruc JD, et al. sexually transmitted infections among patients with acute HIV in North Carolina. *Sex Transm Dis* 2009; 36:372–4.
8. Cohen MS. When people with HIV get syphilis: triple jeopardy. *Sex Transm Dis* 2006; 33:149–50.
9. Tobian AA, Serwadda D, Quinn TC, et al. Male circumcision for the prevention of HSV-2 and HPV infections and syphilis. *N Engl J Med* 2009; 360:1298–309.
10. Buchacz K, Patel P, Taylor M, et al. Syphilis increases HIV viral load and decreases CD4 cell counts in HIV-infected patients with new syphilis infections. *AIDS* 2004; 18:2075–9.
11. Duffus WA, Mermin J, Bunnell R, et al. Chronic herpes simplex virus type-2 infection and HIV viral load. *Int J STD AIDS* 2005; 16:733–5.
12. White MK, Gorrill TS, Khalili K. Reciprocal transactivation between HIV-1 and other human viruses. *Virology* 2006; 352:1–13.

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