

Evaluation of HIV status and its spread in HIV patients on RRT and their spouses

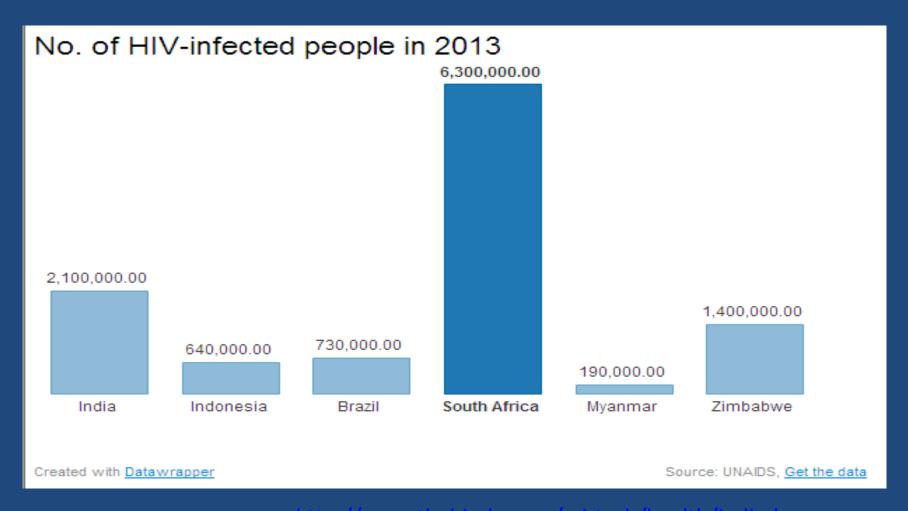
Dr. Aditya Agarwal

Clinical Fellow
Indraprastha Apollo Hospitals, New Delhi, India

 Human immunodeficiency virus (HIV) infection has become a global pandemic.

- According to recent UN report,
 - India has the third largest number of people living with HIV in the world 2.1 million at the end of 2013 and accounts for about 4 out of 10 people living with HIV in the Asia—Pacific region

http://www.thehindu.com/sci-tech/health/india-has-3rdhighest-number-of-hivinfected-peopleun/article6220483.ece?css-print Published July 17, 2014



3rdhighest-number-of-hivinfected-peopleun/article6220483_ece?css=print Published July 17, 2014

- The size of the HIV-infected population and the longevity of HIV-affected patients is increasing due to the Combined anti-retroviral therapy (cART)
- Multiple diseases affecting various organ systems in the normal population are becoming manifest in these HIV patients.
 - One such spectrum of diseases is renal involvement in HIV patients

 Renal disease of any stage is a common complication in HIV-infected patients, affecting up to 30% of patients, and is associated with increased morbidity and mortality.

 Once established, end-stage renal disease (ESRD) and chronic renal replacement therapy (RRT) substantially increase the risk of death and cardiovascular events in the general and HIVinfected populations.

Aim

 As it is evident that awareness and prevention are major tools to combat the spread of HIV infection globally.

Evaluation of HIV status and its spread in HIV patients on RRT and their spouses

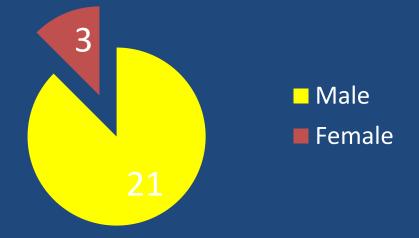
Materials and methods

 HIV positive patients on renal replacement therapy (maintenance hemodialysis or kidney transplantation) and their spouses were interrogated via a questionnaire.

Total No. of patients in study = 24

- Male 21 (85.5%)
- Female 3 (14.5%)

Most of the patients were Male – probably males are getting more attention in society in comparison to females



24 patients (n = 24)

Maintenance HD patient (n=14) Renal Transplant Patients

(n=10)

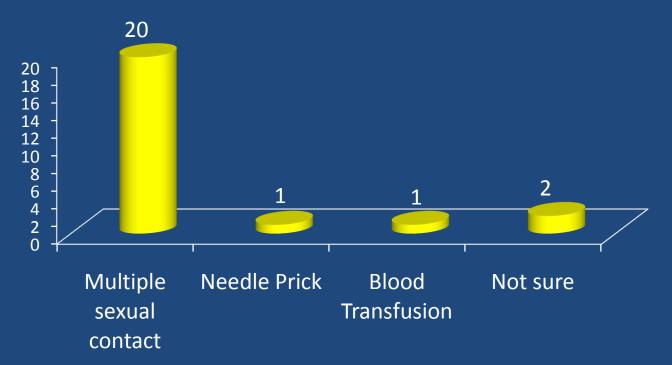
Male (n=12)

Female (n=2)

Male (n=9)

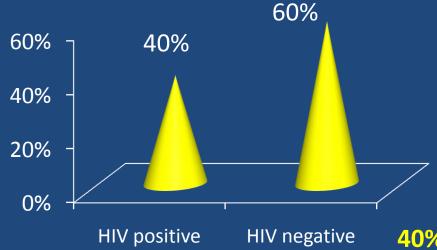
Female (n=1)

Probable mode of spread in patients



Multiple sexual contact is probably most important mode of spread (83.3%)

- Total No. of spouse = 20
 - 20 Patients out of 24 = had spouses
 - » 4 Patient did not have spouses
 - HIV positivity in Spouses



HIV positive = 8 (/20) (40%) all patients were sexually active
HIV negative = 12 (/20) (60%)

40% spouses were found positive for HIV.

- Total No. of spouses n = 20
- Sexually active = 18
- Sexually inactive = 02

Sexually active spouse (n=18)

Sexually inactive n = 2

HIV positive

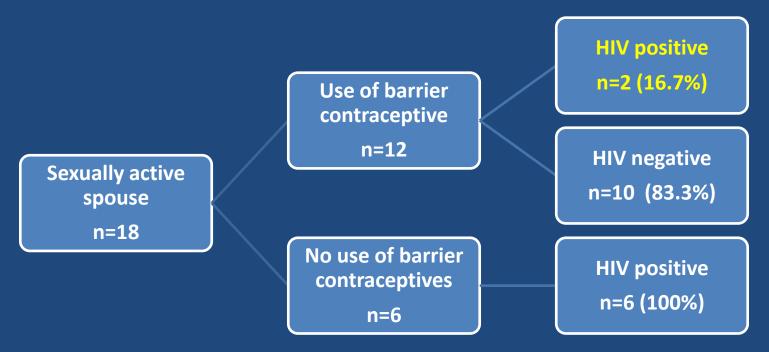
44.4% (n=8)

HIV negative

55.6% (n=10)

*100% spouses who were found HIV positive, belong to sexually active status meaning by that sexual spread is the most important.

HIV positivity in relation with contraceptives



* Barrier contraceptive is effective but not a full proof protection from HIV infection because 2 spouses were infected in spite of barrier contraceptive

Chronic Alcoholism in HIV positive patients

24 (100%)

• Total No. of patient n = 24 (100%)

15 (62.5%)

• Chronic Alcoholism n = 15 (62.5%)

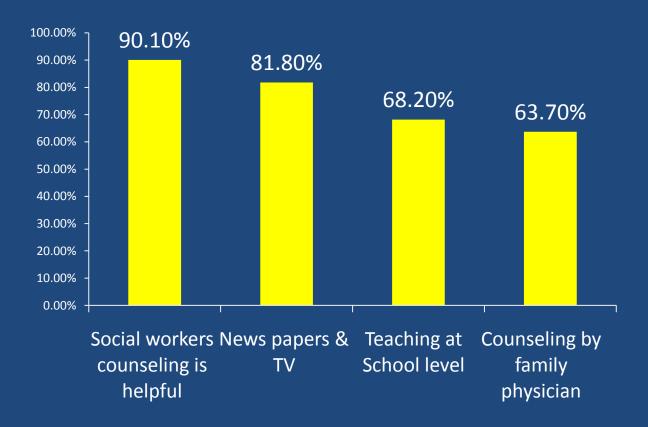
9(37.5%)

Not using Alcohol n = 9 (37.5%)

*Chronic Alcoholism is prevalent amongst HIV infected patients.

Ways of prevention:

• Total No. of persons 44 Patient (24) + Spouse (20) n = 44



*90% subjects were of opinion that out of four methods to prevent spread of HIV infection, social workers counseling is more important

Discussion

- Indian data suggests more men are HIV positive than women
 - Nationally, the prevalence rate for adult females is 0.29 percent, while for males it is 0.43 percent
 - means that for every 100 people living with HIV and AIDS (PLHAs), 61 are men and 39 women*
 - However, in our study 85.5% were male which is higher
 - This may be due to males getting more attention
 - Or we need to study factors which may lead to higher kidney damage in males with HIV

Discussion

- Barrier contraception failure
 - Male condoms are an extremely effective means of HIV, STD and pregnancy prevention
 - What most often limits condoms' effectiveness is user failure rather than product failure
 - For example, users may fail to either put on a condom before genital contact or completely unroll the condom
 - In addition, some people fail to use a condom with every act of sexual intercourse
 - Some don't use condoms because they reduce sexual sensation
 - For others, using condoms is seen as a barrier to intimacy.
 - Above may be reason of our observation 2 spouses were infected in spite of barrier contraceptive

http://caps.ucsf.edu/archives/factsheets/barrier-methods#sthash.PPK3ApbU.dpuf

Conclusions

 Multiple sexual contacts, chronic alcohol abuse, intravenous drug abuse and spouses of patients are at high risk of contracting HIV infection.

 Social workers have tremendous impact in increasing awareness of HIV and restricting its spread along with Media, Educational curriculum and physician's counselling.





