What is HIV AIDS?

Human immunodeficiency virus (HIV) is a RNA- retrovirus which causes the infection AIDS i.e acquired immunodeficiency syndrome, this syndrome leads to severe irreversible immune suppression and is the clinical end stage of HIV infection.

It is usually found in the child bearing age and is also one of the sexually transmitted diseases found in humans.

HIV breaks down the body's immune system, leaving the victim vulnerable to a host of life threatening opportunistic infections.

Causes

AIDS is predominantly a sexually transmitted infection and is found in sexually active individuals, both unprotected homosexual as well as heterosexual intercourse. More commonly seen in persons with multiple sexual partners and sex workers.

Other modes of transmission are:

- -Sharing of Intravenous injection needles (found in drug users).
- -Contact with infected body fluids such as blood, semen, vaginal secretions, saliva, tears, breast milk.
- -Blood transfusion of HIV contaminated blood which has not been screened properly (used to take place in the past).
- -Health care workers who handle infected individuals are also vulnerable to getting infected.
- -From mother to her baby (perinatal transmission).

Effects / natural course of infection

After infection, the person may have no symptoms or show some symptoms within 3-6 weeks.

Initial symptoms are nonspecific like:

Fever

Headache

Tiredness

Muscle pain

Body ache

Rash

Gastric upset

After these initial symptoms the patient enters into the 'no symptoms' phase, this can last for 8-10 years. But the disease keeps on progressing and the immune system becomes weaker gradually, some signs like swollen lymph nodes may be seen within 3 years.

Clinical HIV infection symptoms

- Swollen lymph nodes of the body.
- Unexplained fever
- Tiredness, body aches
- Sudden weight loss and muscle loss
- Oral ulcers not responding to normal treatments
- Reactivation of herpes zoster
- Decrease in platelet count
- Various skin infections
- Tuberculosis infection

Once infected, the person I probably infected for life.

Importance of HIV AIDS awareness

AIDS is a terminal illness which can affect the patients as well as their entire family in various ways, hence, it is very important to talk about it and provide support to the affected individuals.

Physical impacts:

Mentioned above are the various physical symptoms a person living with AIDS experiences. We should know that people suffering from AIDS do not die from the disease itself, rather their immune system is made so weak by the virus that they can easily catch some other infection (For eg- TB). While unaffected persons can easily battle these infections with the help of a strong immune system, those suffering from AIDS cannot do the same due to an extremely weak immune response and lose their battle with these opportunistic infections which leads to their death.

So, the role of family and support groups is very important where patients can be made aware about the precautions they need to take to keep themselves safe and healthy so as to increase their lifespan despite living with AIDS.

Patients are physically weak and vulnerable, they need to take care of themselves and take proper treatment on time.

Mental impacts:

This disease takes a toll on the affected individual as well as their families. Society even today considers AIDS as something to be ashamed of and there is a lot of stigma attached, this leads to:

- -Patients hiding information about their disease
- -Patients not seeking treatment due to shame
- -Shunning of the patient and their family from the society
- -Job losses due to the illness
- -Blaming the patient that it is their fault that they are suffering from AIDS
- -Depression amongst the patients and their families
- -Females having depression due to complications with pregnancy

The shame of suffering with this disease also leads to less information dissemination to the patients about prevention and protection as well as how to use proper measures if you are indulging in sexual activities so as to protect your partner.

The family

- -May need mental support while caring for the patient
- -Depression amongst married partners due to lack of knowledge is commonly seen
- -Females who give birth to HIV positive babies, may battle with mental and physical stress of both her health as well as that of her child
- -Sometimes the family is also shunned by the society due to the stigma around AIDS and this leads to serious health impacts
- -Friends and relatives should offer moral support)

We have to decrease the stigma of HIV AIDS, it is not a disease that spreads from touching the patient or sitting and talking with them .

Prevention

Education

There is no vaccine or permanent cure for AIDS and until then educating the masses is the only way to help prevent this disease.

- Avoid sharing of toothbrushes
- Avoid using shared razors
- Intravenous drug users should be warned against using shared needles and syringes.
- Women suffering from AIDS or who are at a high risk of infection should avoid getting pregnant since infection can be transmitted to the unborn or newborn.
- Sexual education amongst teenagers is very important and should be introduced in schools with proper knowledge of contraception.

Contraception

- Male and female condoms i.e barrier protection should be used to prevent transmission of infection to the unaffected partner.

Blood borne HIV transmission

 People in high risk group should refrain from donating blood, body organs, sperm or other tissue

NACO

National AIDS control organisation in India was established to help control the spread of AIDS. This Organization works as follows:

- screening high risk HIV cases like sex workers and IV drug users.
- They treat HIV cases free of cost and follow up with the patients.

- Prevention of HIV and spreading education for barrier contraception and prevention of spread to offspring.
- Taking care of orphans and affected children.
- Educating teachers regarding sexual education.

Treatment

Presently, there is no vaccine or permanent cure for treatment of HIV infections/AIDS. There has been development of treatment drugs for suppression of AIDS and prolonging the life of the patient.

Antiretroviral drugs/ therapy (ART) has helped suppress the replication of HIV virus in the body and prolong the life of the patient.

ART in combination with barrier contraception has shown great results—it is unusual for the patient to transfer the virus to their sexual partner if they have achieved optimal viral suppression after proper ART.

REFERENCES

Shaw's textbook of gynaecology

Park's textbook of Preventive and social medicine