

Chapter-11

EMERGING CHALLENGE FOR INDIAN SOCIETY ACQUIRED IMMUNITY DEFICIENCY SYNDROME (AIDS)/HIV

Dr. Anjum Javed*

*Associate Professor, Deptt. Of Jarahat,
Glocal Unani Medical College, Hospital & Research Centre,
Glocal University, Mirzapur Pole, Saharanpur, Uttar Pradesh.*

**Correspondence to: anjum@glocalunanicollege.in*

Dr. Mohd. Imlaque

*Assistant Professor, Deptt. Of Tahaffuzi wa Samaji Tib,
Glocal Unani Medical College, Hospital & Research Centre,
Glocal University, Mirzapur Pole, Saharanpur, Uttar Pradesh.*

Dr. Rehan Safee

*Principal & HOD, Deptt. Of Tahaffuzi wa Samaji Tib,
Glocal Unani Medical College, Hospital & Research Centre,
Glocal University, Mirzapur Pole, Saharanpur, Uttar Pradesh.*

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ABSTRACT

*To write about this disease my aim is to face emergence, structure and dynamics challenges in Indian society. Especially I want to share the dark truth about the hidden facts and how to face such a problem that create every day in Indian society for HIV/AIDS patients. Today in world HIV/AIDS remain is a worldwide issue and for low community it is always a challenge. It is a challenging health issue in Indian population. Some reports are said that estimated 39.0 million [33.1–45.7 million] person living affected from AIDS at the end of 2022 in world. However, in our society still today we have no cure for HIV/AIDS patients and not any private body or our societies help such poor patients which may needs diagnosis, help and assistance for HIV/AIDS patients. HIV infection still today is an emerging and chronic health condition for the population who live their life with HIV/AIDS. Human immunodeficiency virus (HIV) that attacks the human immune system and the major fact is that patient is unknown and when the disease **destroys** the **all-human** immune system patient goes to the physician. Acquired immunodeficiency syndrome (AIDS) virus target human body and weak the human immune system. Slowly it goes to advance stage in human body. The one other fact that it creates many other complications for other unborn disease. It is spread from body fluids or by the infected persons which includes blood, infected syringes, breast milk and vaginal fluid. There are false theories that it can be spread by the kiss hug or with sharing food. But it is a fact it is spread from infected mother to baby.*

Keywords: *Social Implications, late diagnosed cases, clinical symptoms, progression, risk factors, complications, diagnosis*

1. INTRODUCTION

The Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome (HIV/AIDS) is a global problem and not a regional problem nearly 70 million affected and 35 million patients died by the disease (Chaimay et al.2013). In today world many research published or write on this issue (Doms, A., & Schroeder, M., 2005). As we all aware that our immune system is made up of cells, organs and protein which work together to exit the harmful microorganism include virus, bacteria and fungi. Human body immune system fight against to spread the cancer cells in our body but when this immune system affected by any foreign body as virus, bacteria and any other microorganism the result is an immunodeficiency disorder and body get affected. HIV/AIDS is an immunodeficiency disorder. Our immune system is made by Lymphocytes (white blood cells) which are main types of immune cells. Lymphocytes (white blood cells) are two types B cells and T cells. The work of B cells is to secrete the antibodies a type of proteins which enter into body fluids and destroy the antigens while T cells destroy the infected bacteria and antigens. Specifications of HIV/AIDS

virus that after the entry of virus it becomes so strong and kills the T cells. Which are known as helper T cells and killer T cells. Medical research says HIV/AIDS virus remains in our body for several years to decades.

2. SOCIAL IMPLICATIONS OF HIV/AIDS

HIV/AIDS have much social impact when it is diagnosed so late and costs to healthcare systems. It is to be said that if the HIV/AIDS diagnose so late the estimated cost s double for the treatment (Krentz et al. 2004). The late presenters of HIV/AIDS remain on severity with other infections or complications in our body and this may lead to death (Mocroft et al.2013). The living rate in late diagnosed patient is much lower than the comparison with early presenter (Raffetti et al. 2016). So early presenter of HIV/AIDS is much better patients for the society and have low mortality load. Late presenters are 3.5 times more burdens on our community (Marks et al. 2006).

3. LOSS OF LATE DIAGNOSED CASES

It is to be noted that males are more late diagnosed cases in the comparison of females (Jeong et al. 2016). Late diagnosed cases have some many facts such as lower education level, low awareness and economical issues in the society (Ang et al. 2021). The other factors of late diagnosed cases are male persons, older age and intravenous drug abusers (De Coul et al. 2016). HIV/AIDS affected persons have very decrease CD4 (<200 cells/mm³) caused by low immunity (Vaillant, A. A. J., & Naik, R., 2023). Bacterial infections have more high rate in late diagnosed cases as said to be 10 times higher than the normal population and three general infections are pneumonia, tuberculosis and meningitis (Ruxrunghtham et al. 2004). Some other main challenges are to late diagnose cases drug toxicity and drug interactions (Korean Society for AIDS. 2013). Antiretroviral therapy (ART) suggests for best therapy to initiate for produce immunity in late diagnosed cases (Choy et al. 2022). In other managements of late diagnose cases are screening and vaccinations for improve the immunity and remain with untouched with other infections. Antibiotics management is a best option for infections.

i. Clinical Symptoms

Clinical symptoms of HIV/AIDS affected persons are not appear early but it is depending on the phase of infections.

ii. Primary Infection (Acute HIV/AIDS)

After the virus enter into human body patient feel flu like in 2-4 weeks. This condition known as primary (acute) HIV infection which may lasts up to many weeks. Some other possible sign and symptoms are fever, headache, muscle aches and joint

pain, Sore throat and painful mouth sores, diarrhea, weight loss, cough and night sweating. These symptoms appear so mild that cannot be noticed. However, the virus load in patient blood stream remains so high. At this time infection enter into next stage in human body very easily.

iii. Latent Infection (Chronic HIV/AIDS)

In this stage the infection remains in the human body but patient feels no clinical features during this period of infection. This type of infection may be lasts for many years if the patient has antiretroviral therapy (ART).

iv. Symptomatic HIV/AIDS Infection

After enter of virus in human body it multiplies and destroy immune cells very fast and patient have developed chronic sign and symptoms such as fever, fatigue, diarrhea, weight loss and some serious infections which can remain upto many weeks.

4. HIV/AIDS PROGRESSION IN HUMAN BODY

Human bodyhave infected from HIV virus by infected human blood, male person semen or female vaginal secretions by following ways.

- **Having sex-** HIV infected person having sex as vaginal, anal or oral sex may proceed to HIV/AIDS progression in human body. Virus enters in our body by mouth sores and small tears which develop in the rectum or infected women vagina. It can be done through sexual activity.
- **Infected needles and syringes-** Use of contaminated syringes and needles may develop the HIV/AIDS in body. This is the higher risk category of this disease.
- **By blood transfusion of infected person-** However now a day's blood screening is must but in some areas the hygiene level is not good in hospitals and infected blood may be transmitted the HIV/AIDS virus in body.
- **By pregnant mother or through breastfeeding-** Those mothers who are infected by virus they can transmit the disease into their newborn babies.

5. RISK FACTORS OF HIV/AIDS

Unprotected sex is a big issue in this infection. In our society this is a big problem and such patients who had been affected by disease work as carriers. Anal sex is more risky in the comparison of vaginal sex. STD (sexual transmitted disease) has also a big risk factor in HIV/AIDS.

6. COMPLICATIONS

As the infection enters in chronic stage many complications have produced as pneumonia, Candidiasis (thrush), tuberculosis, meningitis and certain types of cancers.

7. HIV TESTS FOR DIAGNOSIS

- Antibody test is to be taken for scanning the antibodies in HIV person through blood or by oral fluid.
- Antigen/antibody tests are to be for both HIV antibodies and antigens findings.

8. TREATMENT

HIV/AIDS treatment is a group of pills which given to orally and it is called antiretroviral therapy (ART). There are some types of medications are

- Nucleoside reverse transcriptase inhibitors (NRTIs)
- Non-nucleoside reverse transcriptase inhibitors (NNRTIs)
- Protease inhibitors (PIs)
- Integrase strand transfer inhibitors (INSTIs)
- Attachment inhibitors
- Pharmacokinetic enhancers

9. CONCLUSION

HIV/AIDS is a burden if any family adult had been affected from this disease. When an adult dies in a family than his spouse and orphan children are very helpless so my aim to write this chapter to aware our society for the prevention of HIV/AIDS. The long period of illness from HIV/AIDS ruined the whole family income and the last balance is zero.

REFERENCES

1. Chaimay, B., Woradet, S., Chantutanon, S., Phuntara, S., & Suwanna, K. (2013). *Mortality among HIV/AIDS patients coinfectd with Mycobacterium tuberculosis in southern Thailand. Southeast Asian Journal of Tropical Medicine and Public Health*, 44(4), 641.
2. Doms, A., & Schroeder, M. (2005). *GoPubMed: exploring PubMed with the gene ontology. Nucleic acids research*, 33(suppl_2), W783-W786.

3. Krentz, H. B., Auld, M. C., & Gill, M. J. (2004). *The high cost of medical care for patients who present late (CD4 < 200 cells/ μ L) with HIV infection.* *HIV medicine*, 5(2), 93-98.
4. Mocroft, A., Lundgren, J. D., Sabin, M. L., Monforte, A. D. A., Brockmeyer, N., Casabona, J., ... & Collaboration of Observational HIV Epidemiological Research Europe (COHERE) study in EuroCoord. (2013). *Risk factors and outcomes for late presentation for HIV-positive persons in Europe: results from the Collaboration of Observational HIV Epidemiological Research Europe Study (COHERE).* *PLoS medicine*, 10(9), e1001510.
5. Raffetti, E., Postorino, M. C., Castelli, F., Casari, S., Castelnovo, F., Maggiolo, F., ... & Torti, C. (2016). *The risk of late or advanced presentation of HIV infected patients is still high, associated factors evolve but impact on overall mortality is vanishing over calendar years: results from the Italian MASTER Cohort.* *BMC Public Health*, 16(1), 1-10.
6. Marks, G., Crepaz, N., & Janssen, R. S. (2006). *Estimating sexual transmission of HIV from persons aware and unaware that they are infected with the virus in the USA.* *Aids*, 20(10), 1447-1450.
7. Jeong, S. J., Italiano, C., Chaiwarith, R., Ng, O. T., Vanar, S., Jiamsakul, A., ... & Choi, J. Y. (2016). *Late presentation into care of HIV disease and its associated factors in Asia: results of TAHOD.* *AIDS research and human retroviruses*, 32(3), 255-261.
8. Ang, L. W., Toh, M. P. H. S., Boudville, I. C., Wong, C. S., Archuleta, S., Lee, V., ... & Leo, Y. S. (2021). *Epidemiological factors associated with the absence of previous HIV testing among HIV-positive persons in Singapore, 2012–2017.* *BMJ open*, 11(8), e050133.
9. De Coul, E. L. O., Van Sighem, A., Brinkman, K., Van Benthem, B. H., Van Der Ende, M. E., Geerlings, S., & Reiss, P. (2016). *Factors associated with presenting late or with advanced HIV disease in the Netherlands, 1996–2014: results from a national observational cohort.* *BMJ open*, 6(1), e009688.
10. Vaillant, A. A. J., & Naik, R. (2023). *HIV-1 associated opportunistic infections.* In *StatPearls [Internet]*. StatPearls Publishing.
11. Ruxrungtham, K., Brown, T., & Phanuphak, P. (2004). *Hiv/aids in asia.* *The Lancet*, 364(9428), 69-82.
12. Korean Society for AIDS. (2013). *The 2013 clinical guidelines for the diagnosis and treatment of HIV/AIDS in HIV-infected Koreans.* *Infection & Chemotherapy*, 45(4), 455-461.
13. Choy, C. Y., Wong, C. S., Kumar, P. A., Olszyna, D. P., Teh, Y. E., Chien, M. F. J., ... & Archuleta, S. (2022). *Recommendations for the use of antiretroviral therapy in adults living with HIV in Singapore.* *Singapore Medical Journal*.