## **Research & Reviews:**

# **HIV and AIDS Research Journal**

# **Advances in HIV Treatment and Antiretroviral Therapy**

Sneha lyer\*

Department of Medicine, Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), Puducherry, India

# **Editorial**

Received: 01-Mar-2025, Manuscript No. HARJ-25-170194; Editor assigned: 4-Mar-2025, Pre-QC No. HARJ-25-170194 (PQ); Reviewed: 20-Mar-2025, QC No HARJ-25-170194; Revised: 26-Mar-2025, Manuscript No. HARJ-25-170194 (R); Published: 30-Mar-2025, DOI: 10.4172/Harj.1000

## \*For Correspondence

Department of Medicine, Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), Puducherry, India

E-mail: sneha.iyer@jipmer.edu.in

Citation: Sneha lyer, Department of Medicine, Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), Puducherry, India. HIV AIDS Res J 7:1.

Copyright: © 2025 Sneha lyer, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

# INTRODUCTION

The advent of antiretroviral therapy (ART) has transformed HIV from a fatal disease into a manageable chronic condition. In India, free ART has been available since 2004 under NACO, benefiting millions of patients [1].

#### **ART in India**

Currently, more than 1.6 million PLHIV in India receive ART through over 600 centers nationwide [2]. First-line regimens typically include tenofovir, lamivudine, and dolutegravir. Studies show high levels of viral suppression among patients adherent to ART [3].

## **Emerging Therapies**

Long-acting injectable ART and two-drug regimens are under evaluation to improve adherence. Research into broadly neutralizing antibodies and therapeutic vaccines also offers hope for functional cures [4].

## CONCLUSION

While India has made significant progress in ART delivery, challenges remain in adherence, drug resistance, and pediatric HIV management. Strengthening adherence support and investing in research are key future priorities.

# REFERENCES

- 1. NACO. ART Guidelines for HIV Care. Govt of India, 2021.
- 2. Sinha A. ART scale-up in India. Indian J Med Res. 2018;148: 701-710.
- 3. Sahay S. Outcomes of ART in Indian patients. J Assoc Physicians India. 2017;65: 24–28.
- 4. Gupta R. Long-acting ART: Indian perspective. Curr HIV/AIDS Rep. 2019:16: 437-444.
- 5. Deshpande P. HIV drug resistance in India. Indian J Med Microbiol. 2020:38: 323–328.