

SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES

Affiliated To The Tamil Nadu Dr. MGR Medical University, Chennai

Approved by Pharmacy Council of India, New Delhi.

Coimbatore -641035

COURSE NAME: SOCIAL AND PREVENTIVE PHARMACY (BP 802 T)

B.PHARM. VIII SEM / IV YEAR

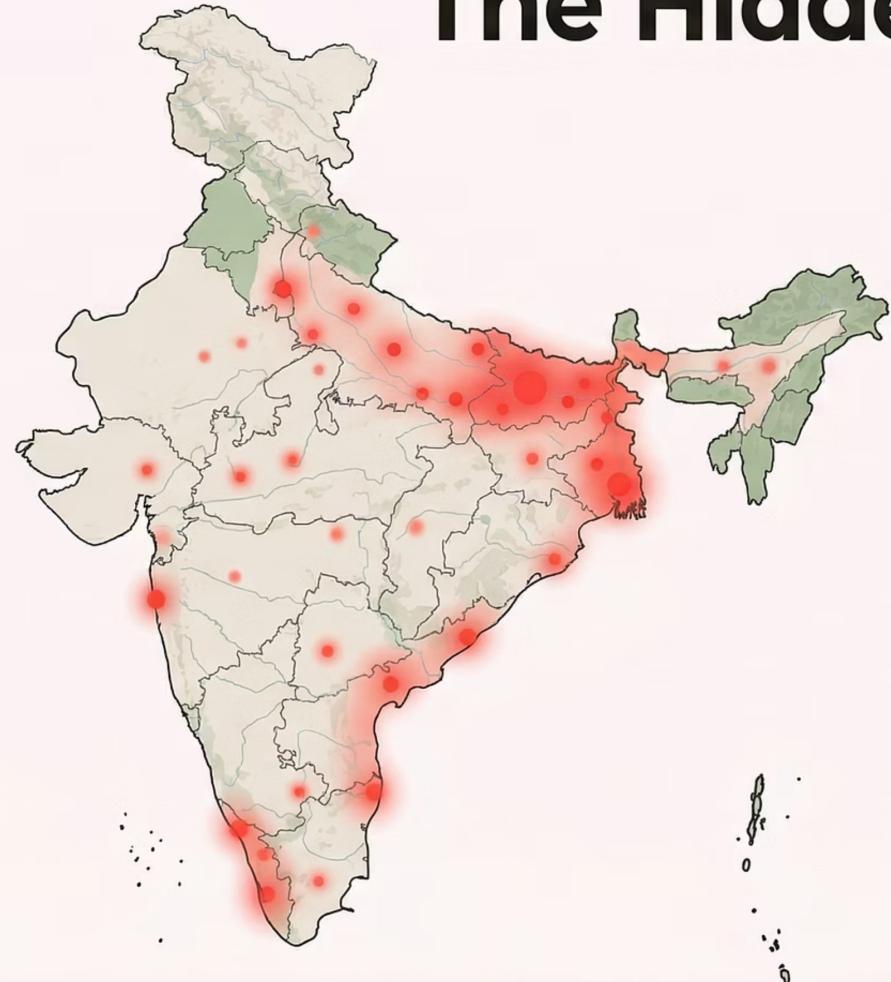
UNIT II: TOPIC 3: GENERAL PRINCIPLES OF PREVENTION AND CONTROL OF FILARIASIS

Lymphatic Filariasis: Breaking the Chain of Silent Suffering



Epidemiology, Pathophysiology, Prevention and Control

The Hidden Epidemic



Over **120 million** people worldwide are infected with lymphatic filariasis, with **40 million** disfigured and incapacitated by the disease.

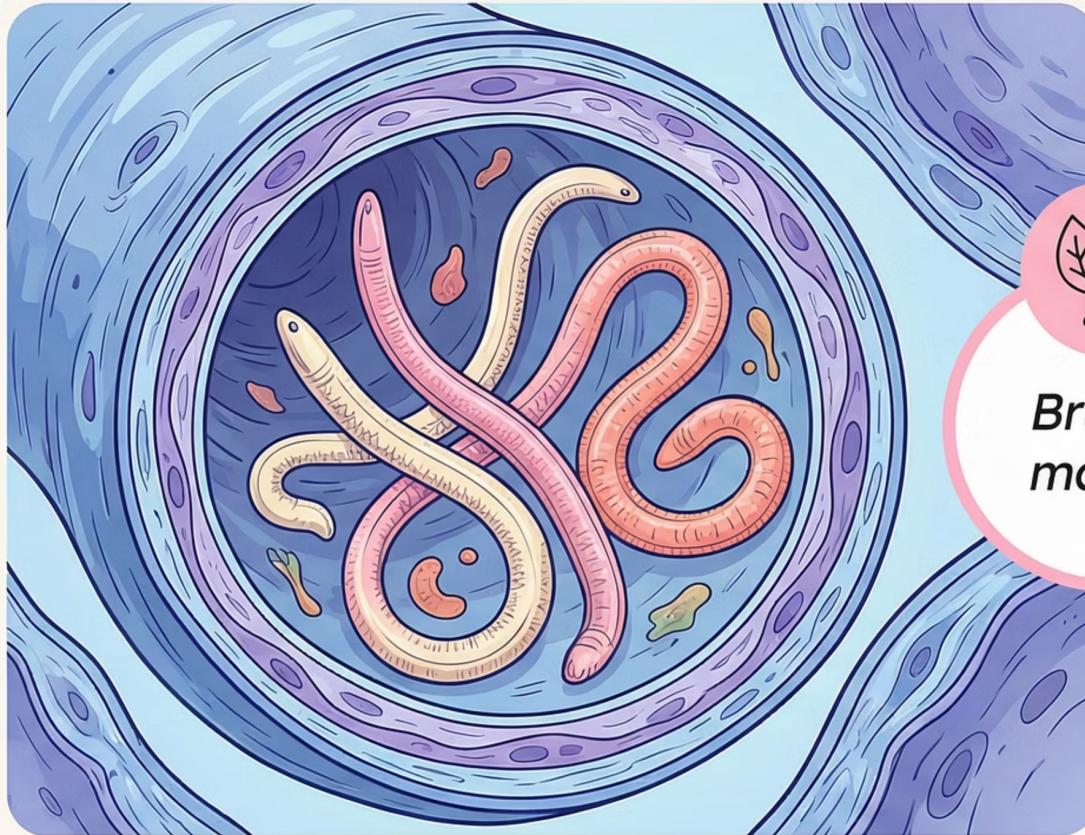
In India alone, **73 million** people are at risk, making it the world's largest burden.



Three Parasitic Enemies



Wuchereria bancrofti -
90% global infections



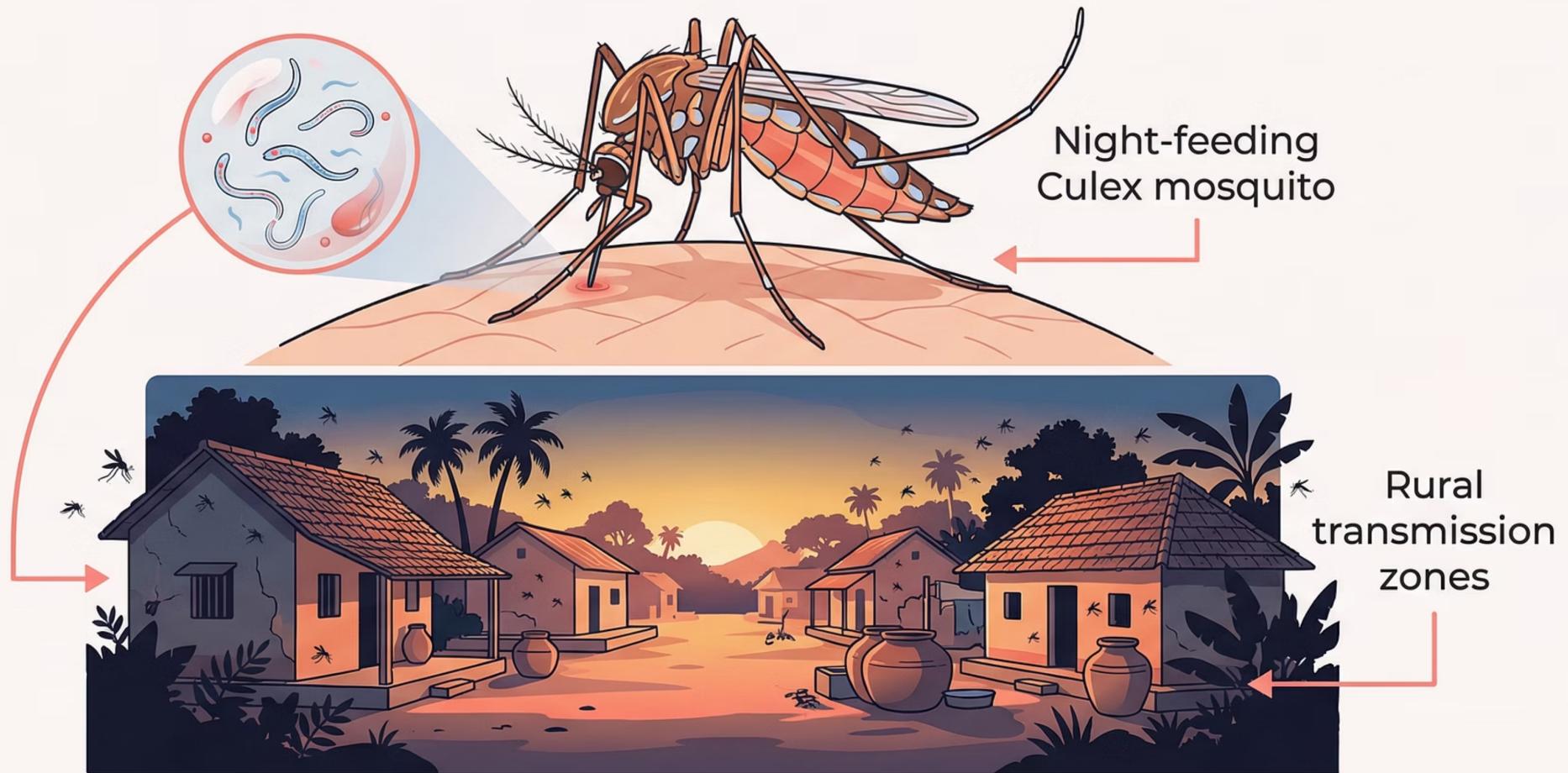
Brugia malayi



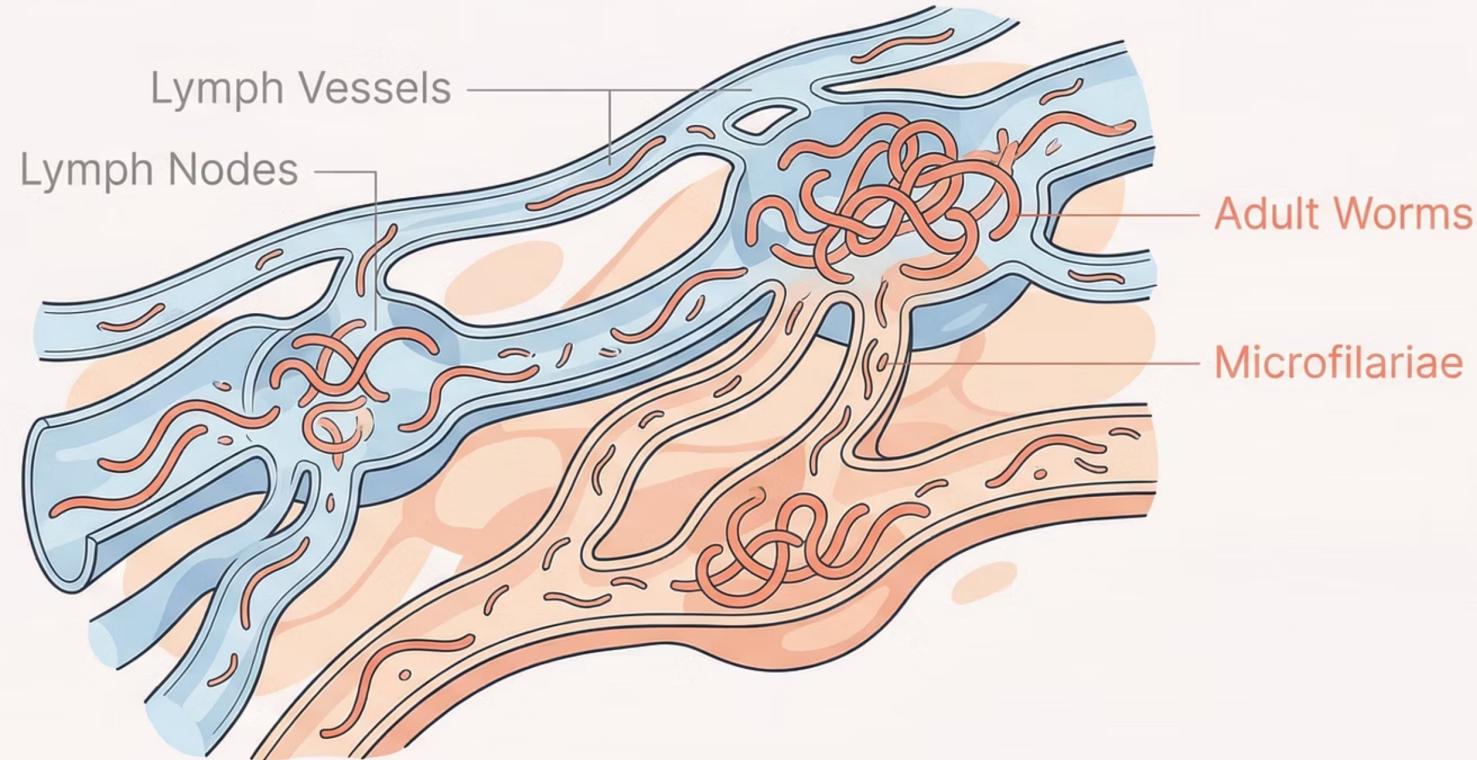
Brugia timori

Wuchereria bancrofti causes 90% of infections globally, while *Brugia malayi* and *Brugia timori* complete this parasitic trio.

The Mosquito Vector Highway

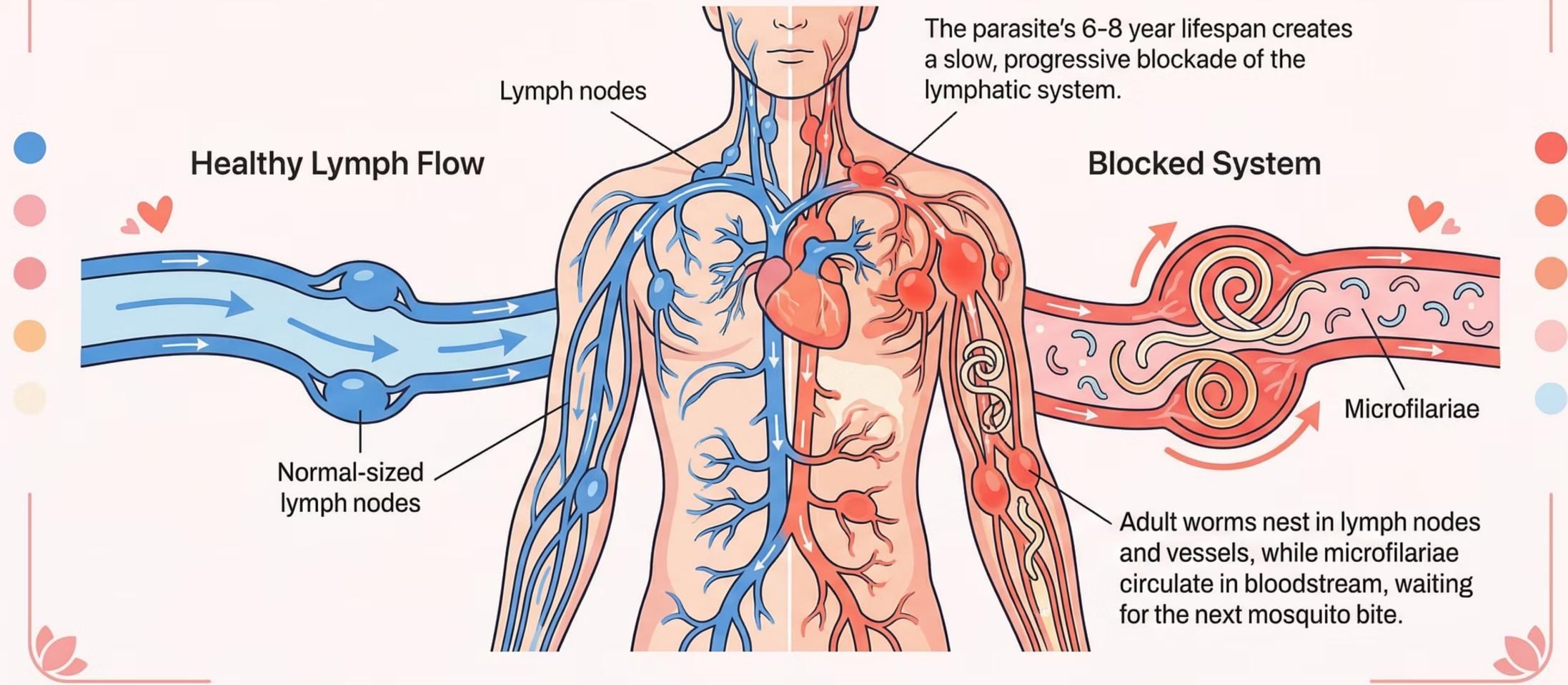


The Parasite's Journey

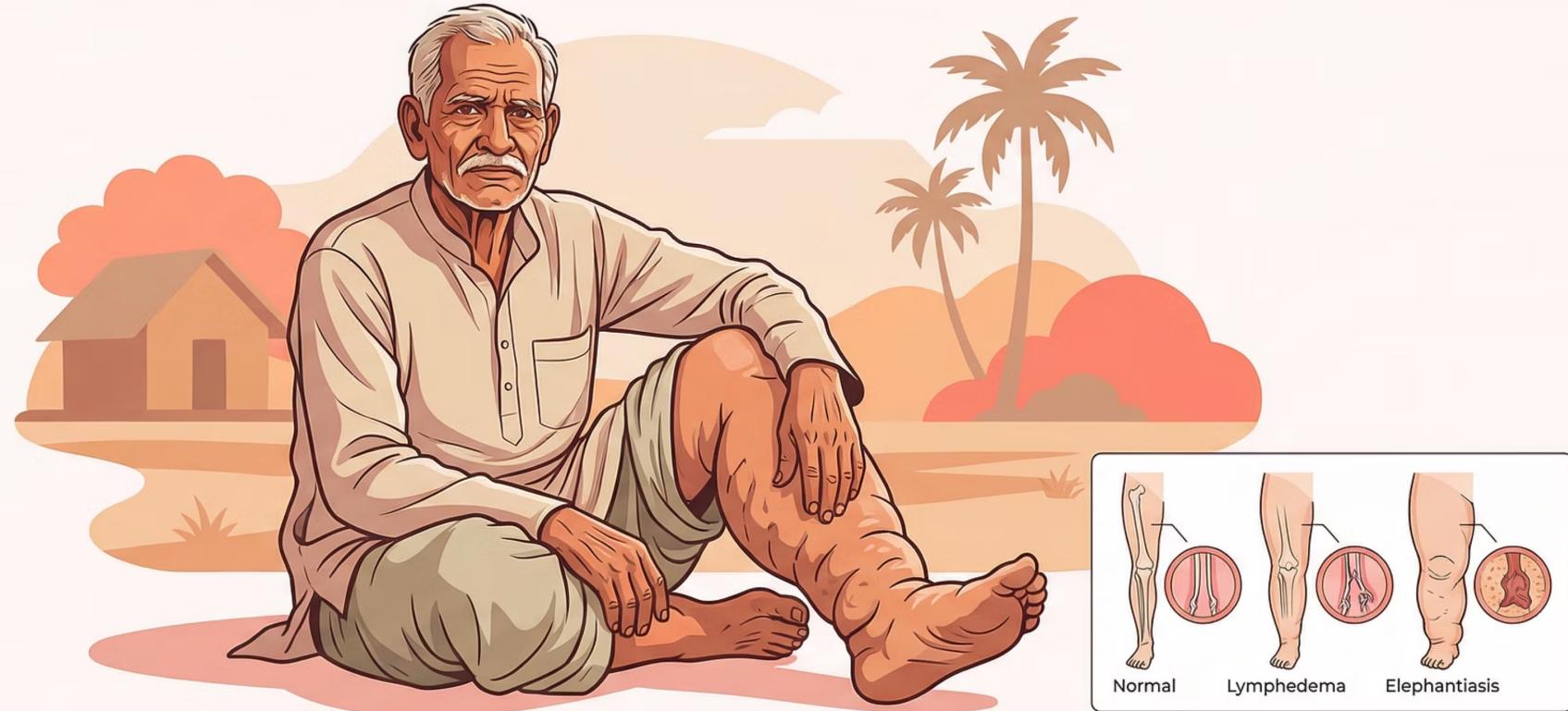


8-10 year lifespan inside human host

'Journey of Destruction'



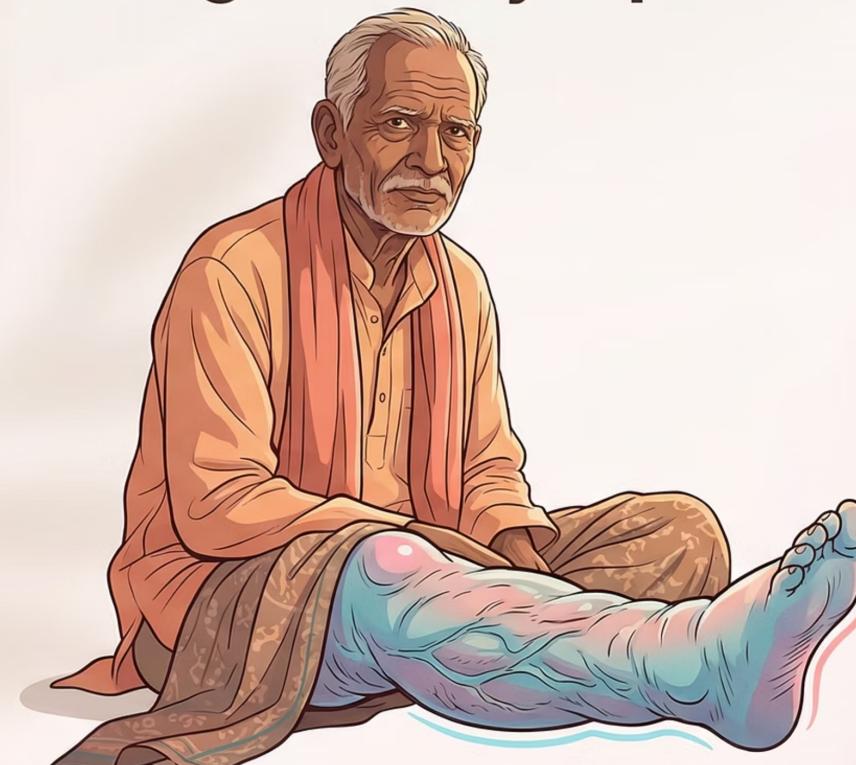
The Face of Elephantiasis



Chronic infection leads to lymphedema, elephantiasis, and hydrocele—causing lifelong disability and social stigma.

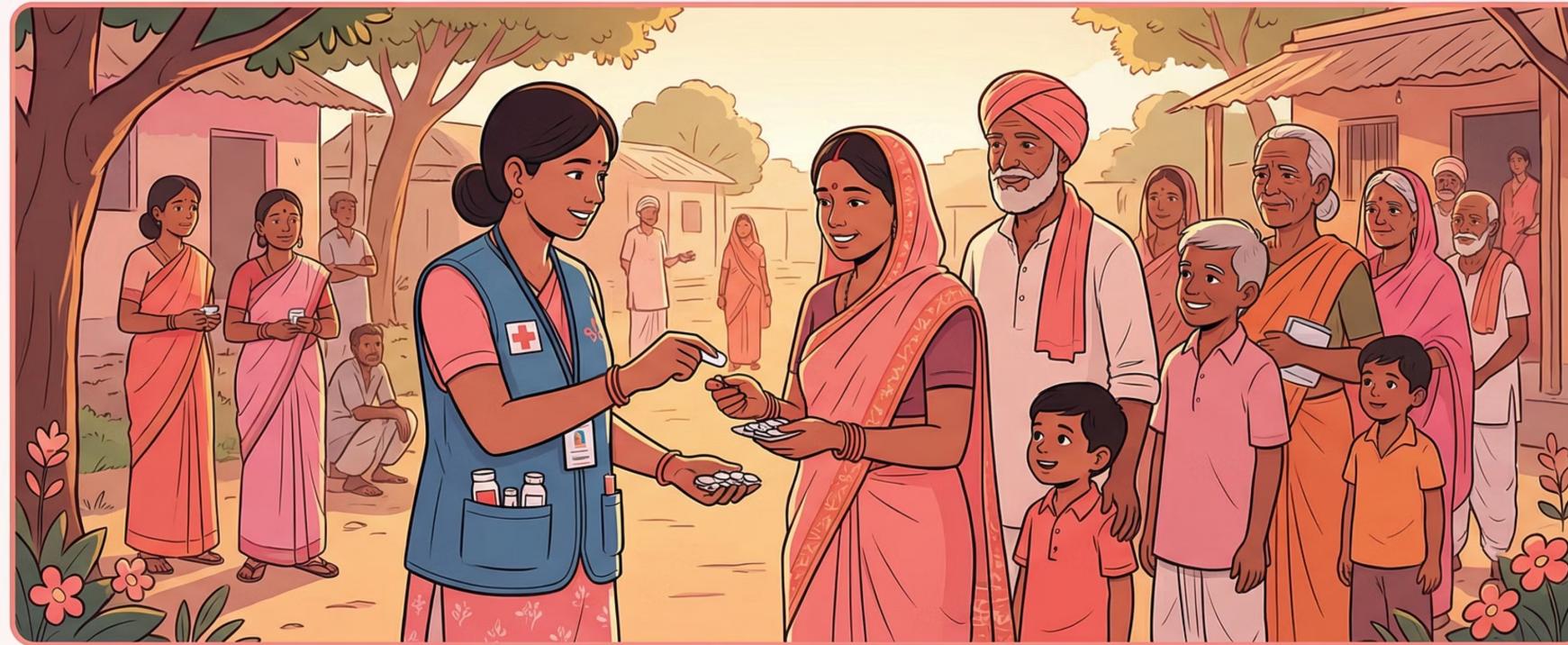
51 Million

Indians Living with Lymphatic Filariasis



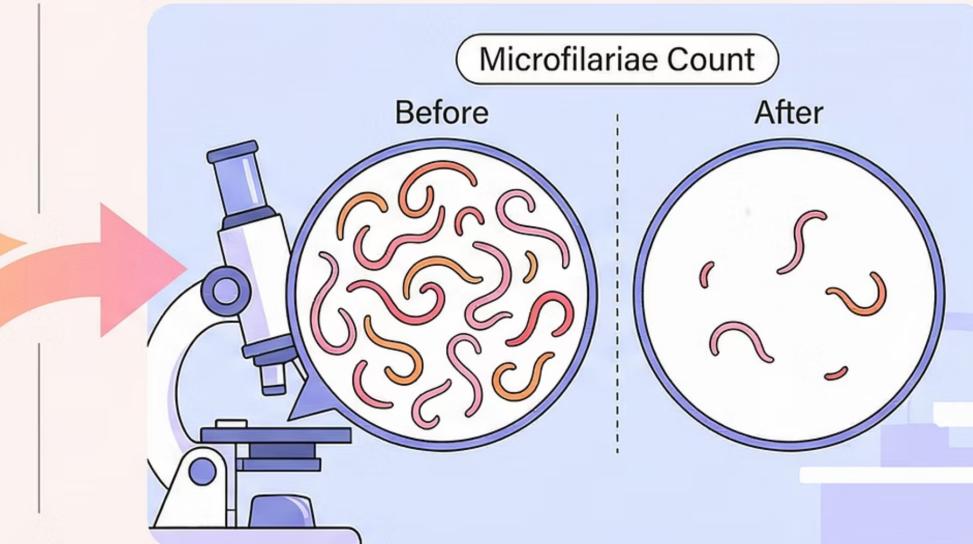
Global burden:
120 million worldwide

Mass Drug Administration



Annual treatment reaching 650+ million

Breaking the Transmission Cycle



Mass Drug Administration
in action



WHO's Elimination Strategy

Mass Drug Administration



Mass Drug Administration

Mass Drug Administration with DEC, albendazole, and ivermectin can reduce microfilariae by 99% when 65% population coverage is achieved.

Vector Control



Vector Control

Vector control through bed nets, environmental management, and community education.

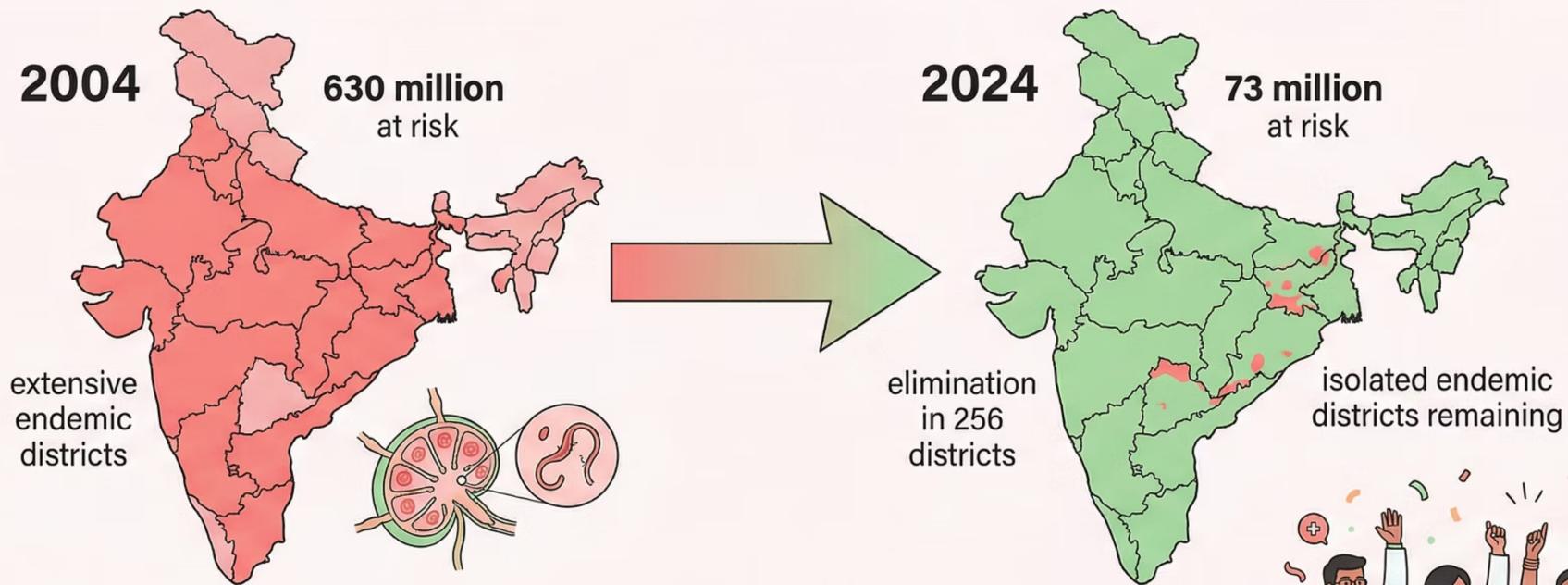
Community Education



Community Education

Community education, awareness, and empowerment are crucial for sustained impact and behavioral change.

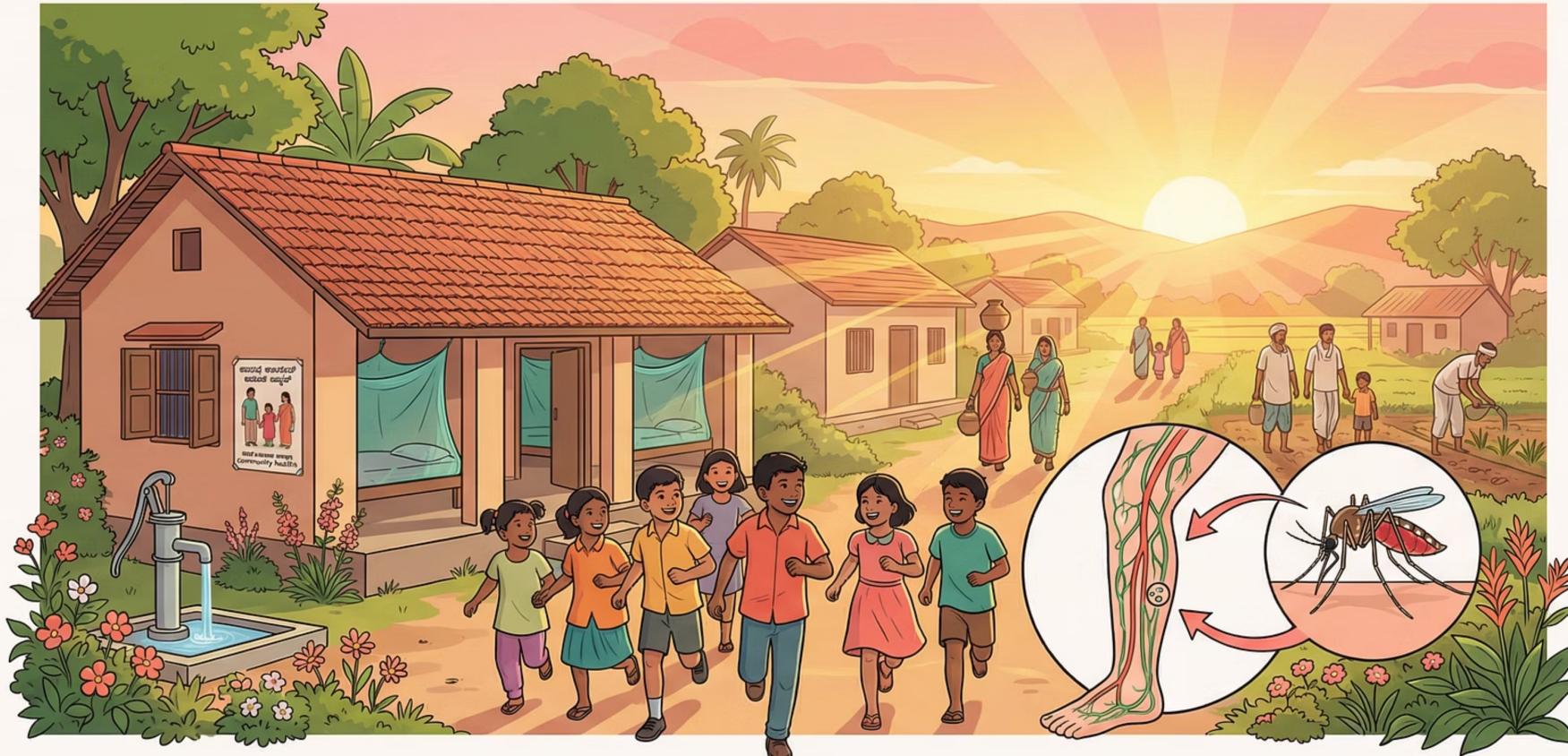
India's Success Story



From **630 million** people at risk in 2004 to **73 million** in 2024—India has eliminated lymphatic filariasis from **256 districts**.

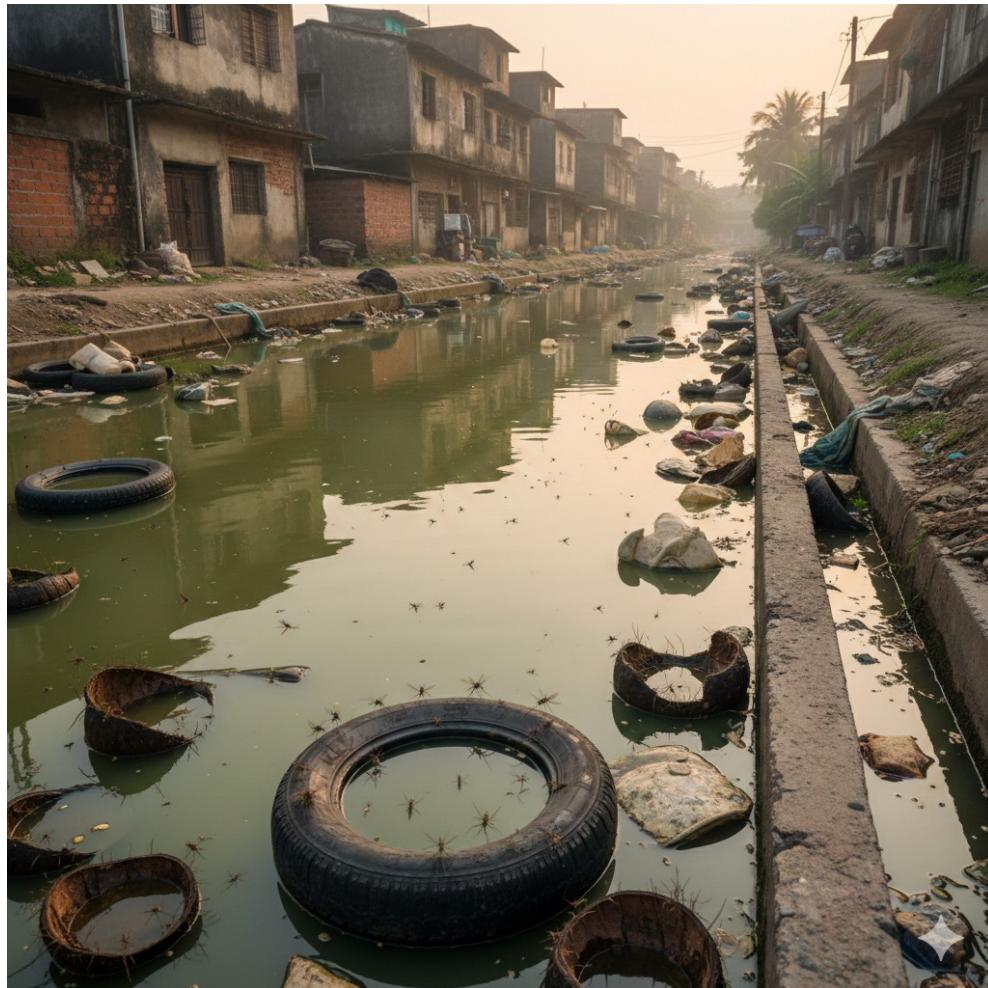


The Path to Zero



With sustained commitment to mass drug administration and vector control,
we can eliminate lymphatic filariasis as a public health problem by 2030!

ASSESSMENT 1



Based on the image, identify the **most effective preventive strategy** to control filariasis transmission ?

ASSESSMENT 2

Which **level of prevention** is illustrated in the image?



ASSESSMENT 3



What is the **main objective** of
Mass Drug Administration in
filariasis control?

ASSESSMENT 4

Why is **night blood sampling** important in filariasis surveillance?



ASSESSMENT 5



Which strategy is being highlighted in the image?

REFERENCES

1. Short Textbook of Preventive and Social Medicine, Prabhakara GN, 2nd Edition, 2010, ISBN: 9789380704104, JAYPEE Publications
2. Textbook of Preventive and Social Medicine (Mahajan and Gupta), Edited by Roy Rabindra Nath, Saha Indranil, 4th Edition, 2013, ISBN: 9789350901878, JAYPEE Publications
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4. Essentials of Community Medicine—A Practical Approach, Hiremath Lalita D, Hiremath Dhananjaya A, 2nd Edition, 2012, ISBN: 9789350250440, JAYPEE Publications

Thank you