



HIV Testing Policy in **INDIA**

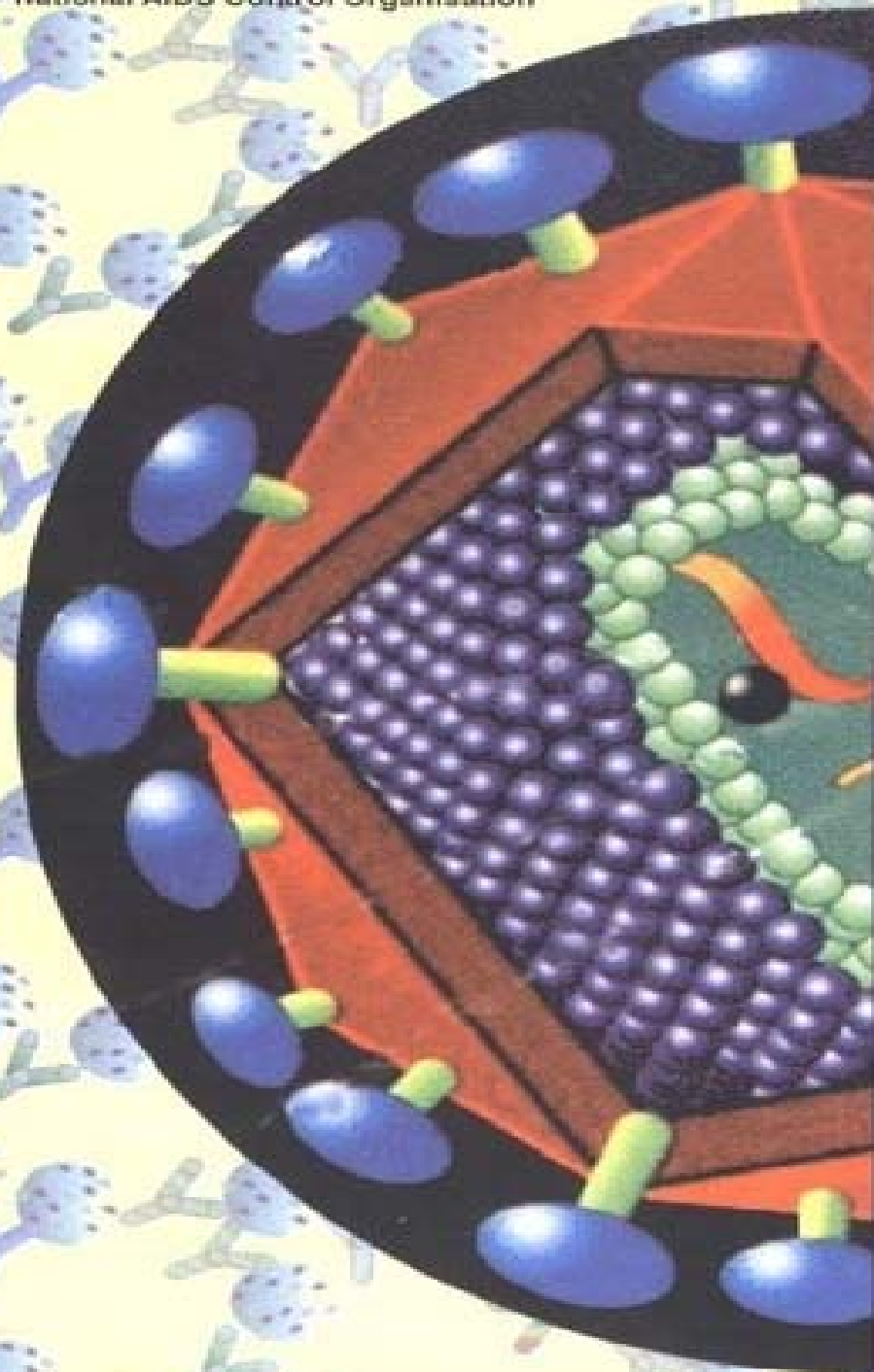
Priyanka Singhal

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VCTC as ICTC: Widening the Umbrella



- Today ICTCs in India – **4905**
- Over **9 million** tested for HIV in year 2008
- Under NACP-III, the target is to counsel and test **22 million** clients annually by the year 2012.



HIV Testing Strategies

Strategy I

Objective of testing	Prevalence of infection
Transfusion or donation safety	All prevalence
Surveillance	>10%



ELISA / RAPID

Strategy II

Objective	Prevalence
Surveillance	<10%
Symptomatic patients	All prevalence
Asymptomatic patients	>10%

ELISA/ RAPID

REACTIVE

Different system
(different antigen and
principle)

Strategy III

Objective of testing	Prevalence of infection
Asymptomatic patients	<10%

ELISA/ RAPID

REACTIVE

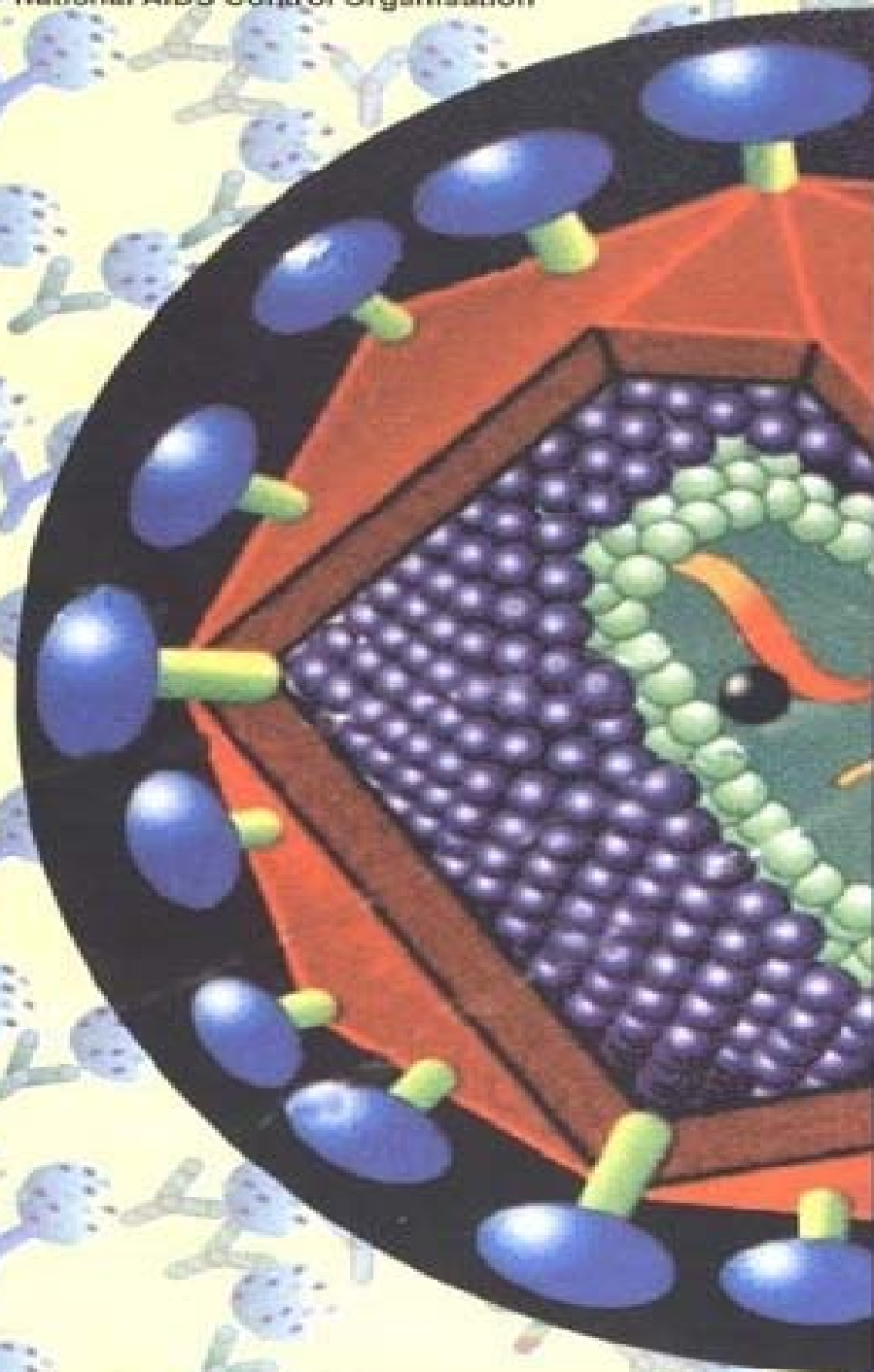
Different system (different antigen and principle)

REACTIVE

Third system (of different antigen and principle)

Tests Employed in Our Setup

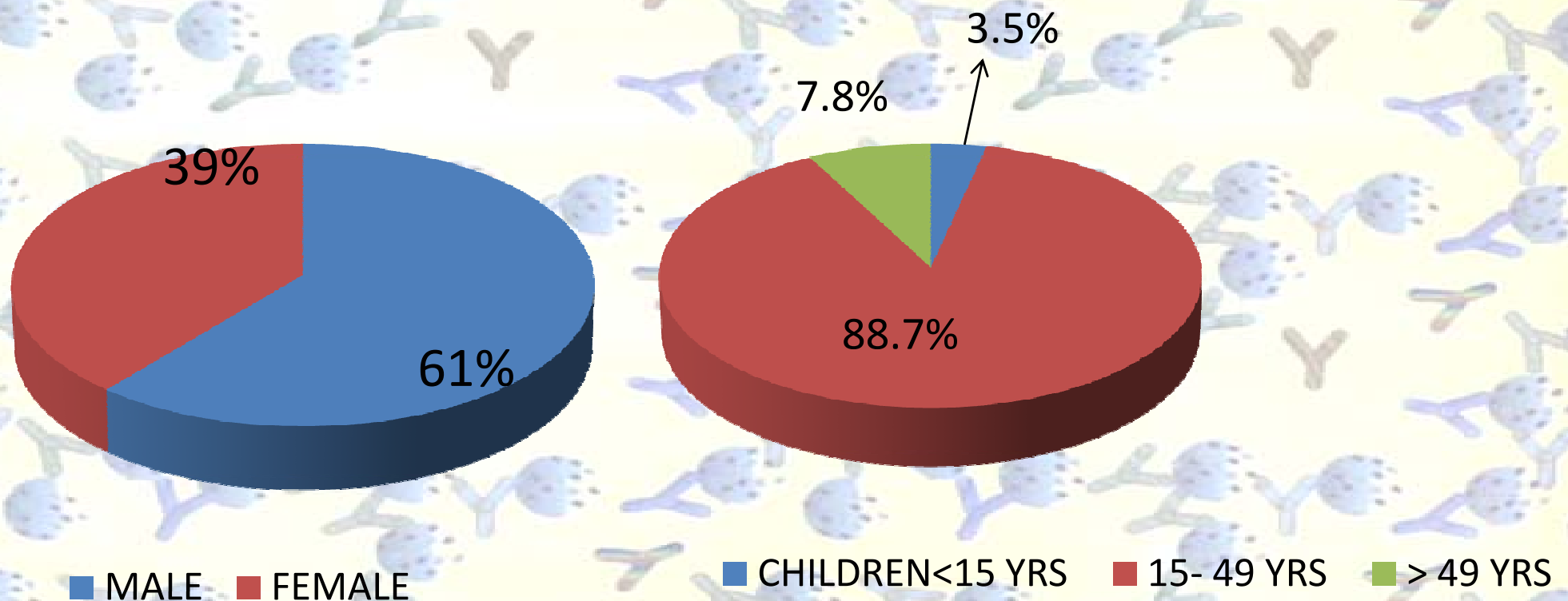
- Each sample tested by 3rd generation ELISA
(Window period 3-4 weeks)
- Positive samples undergo ELISA using different principle and Tridot which can differentiate HIV1 and HIV2
- Dry Blood Testing- done for screening FSW and MSM
- Western Blot- available only at few apex institutes



**Indian
Scenario**

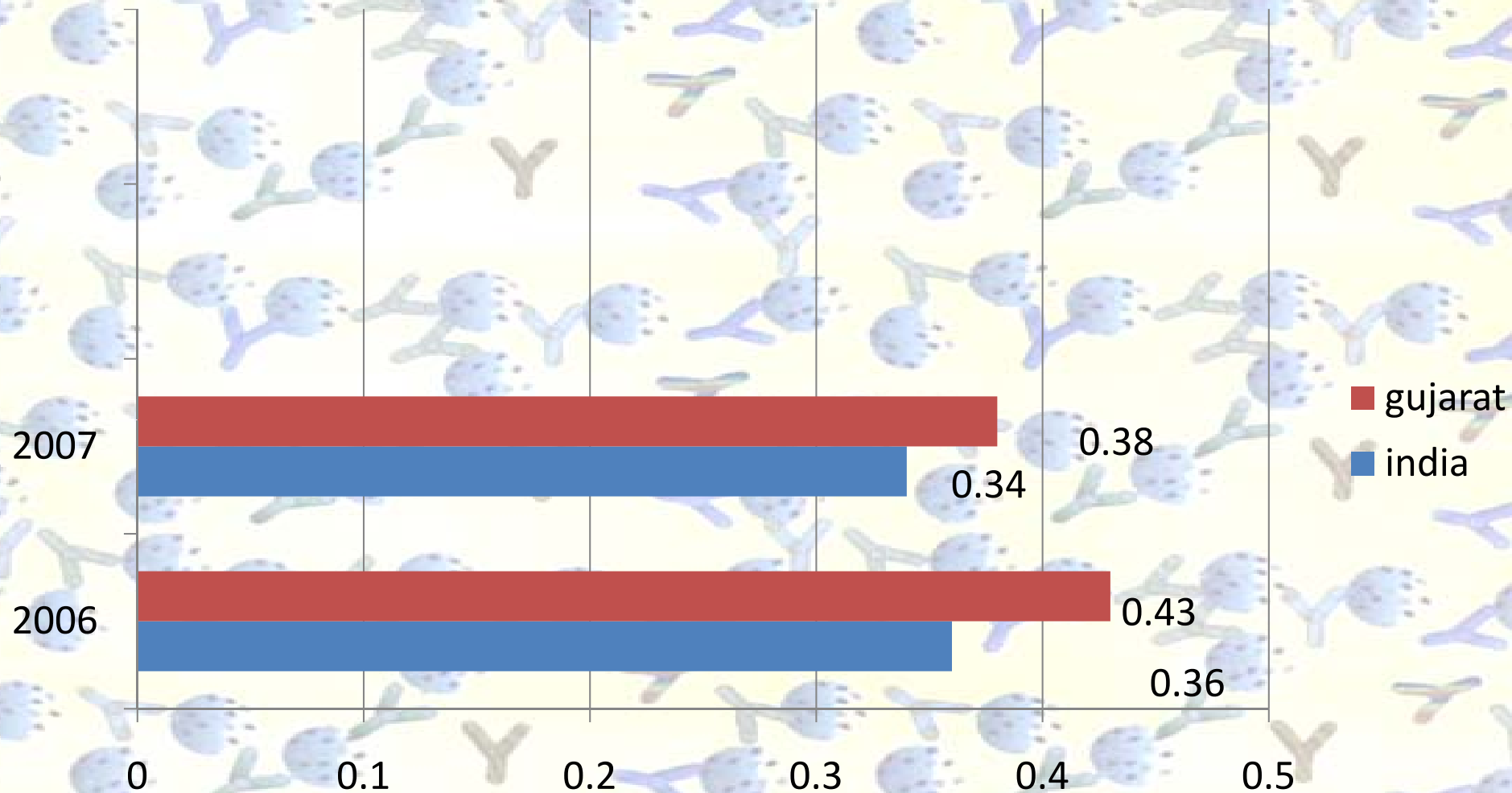
Estimates of HIV burden in India (2007)

Total no of people with PLHA- 2.5 million

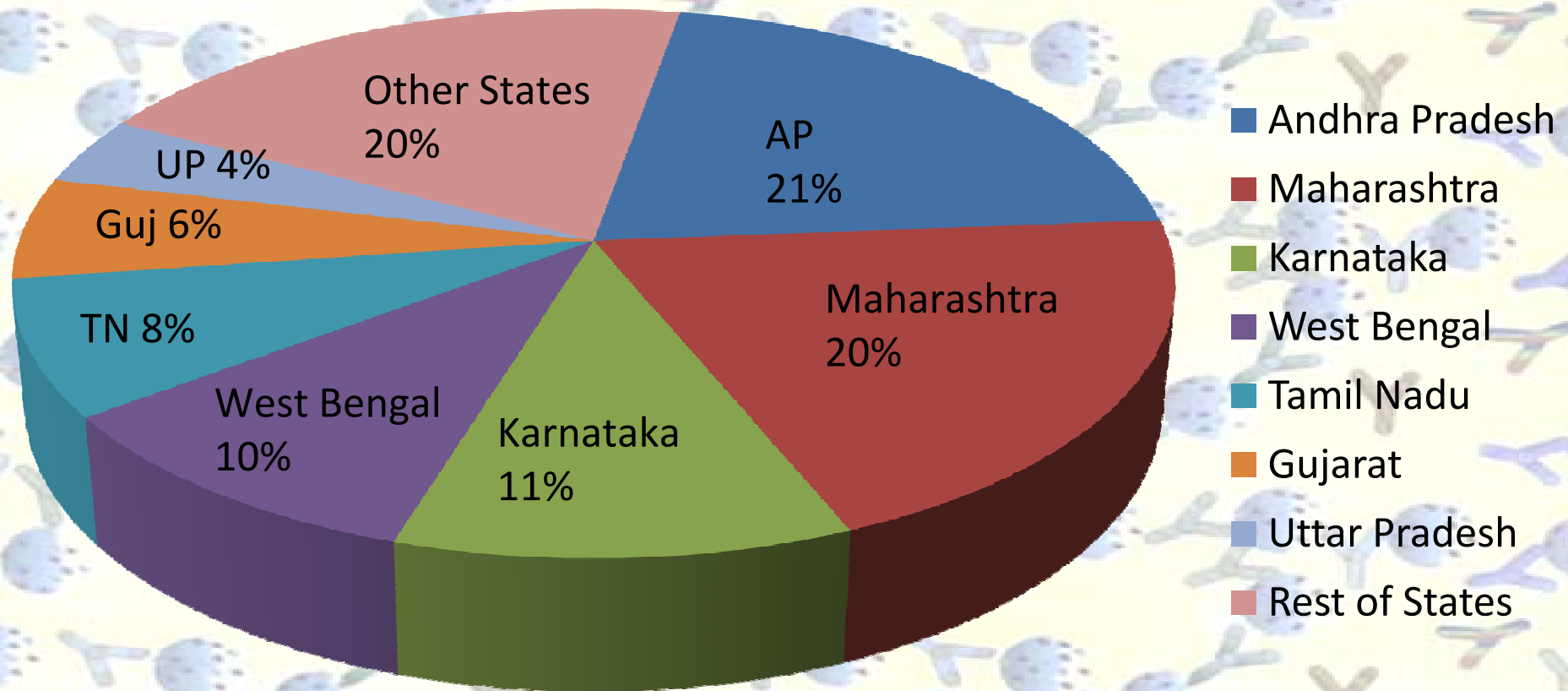


Adolescents make up **25%** of country's population but they account for **31%** of AIDS burden

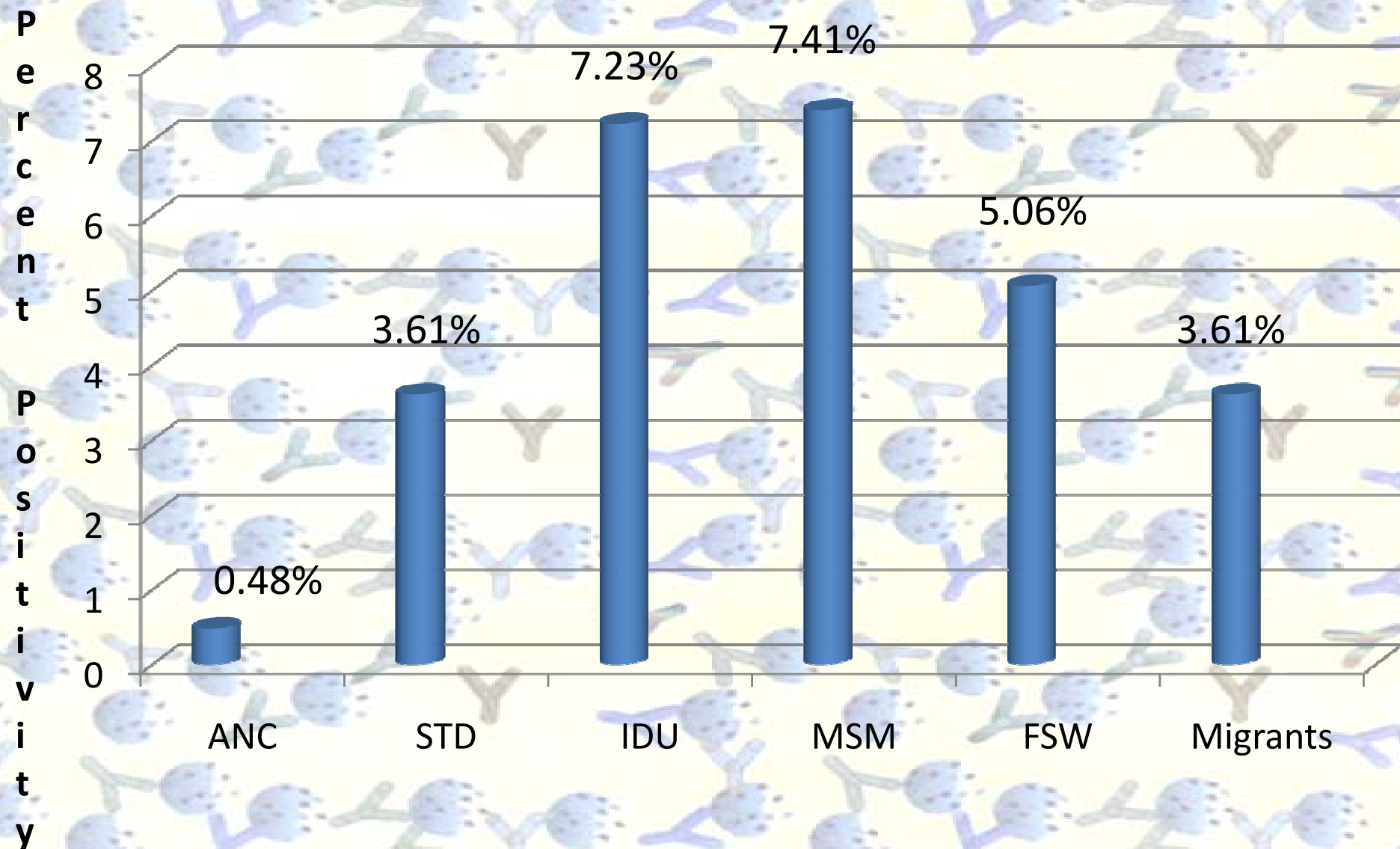
Adult HIV prevalence, 2006-2007



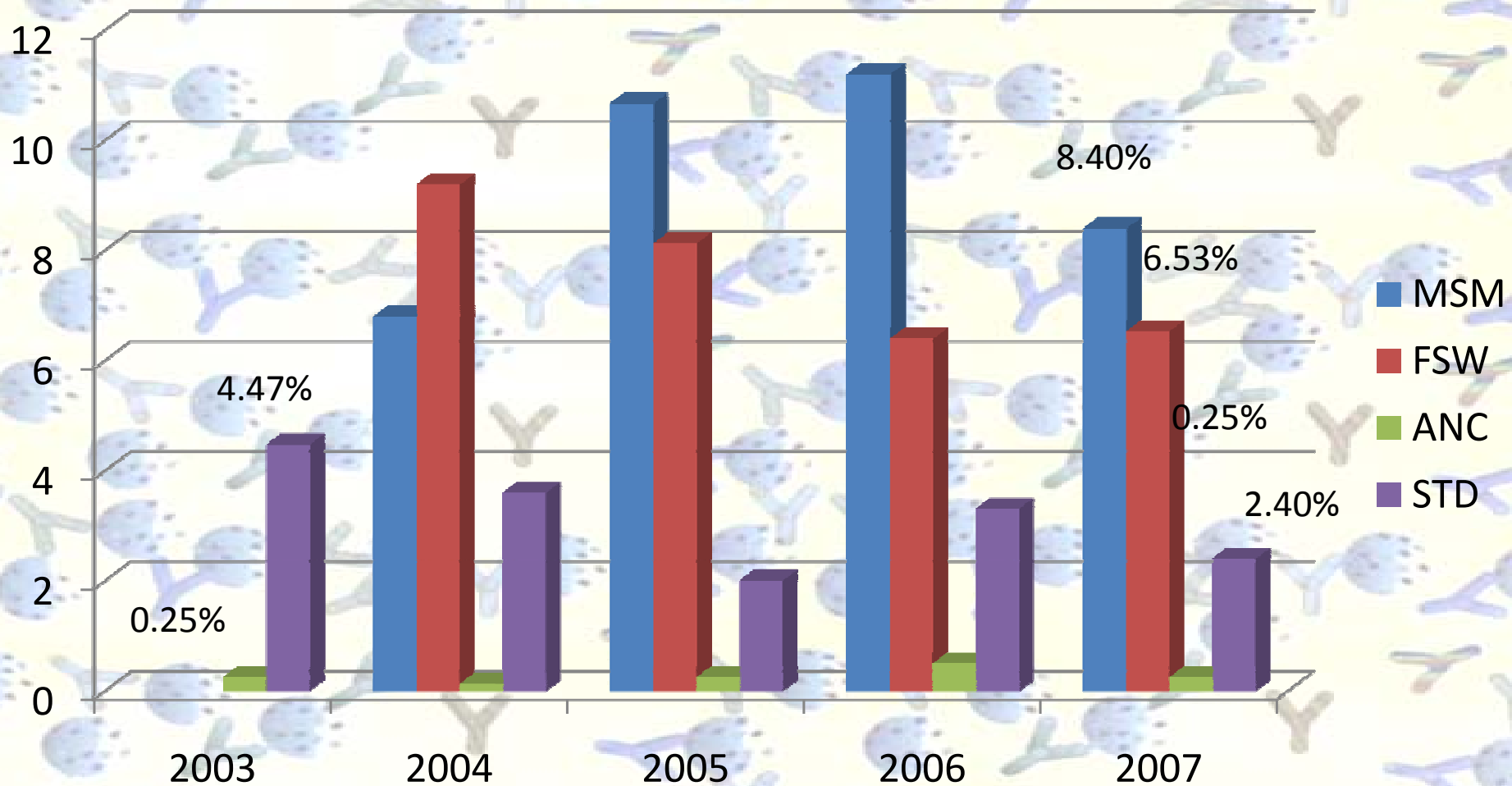
Distribution of PLHA among high burden states 2007



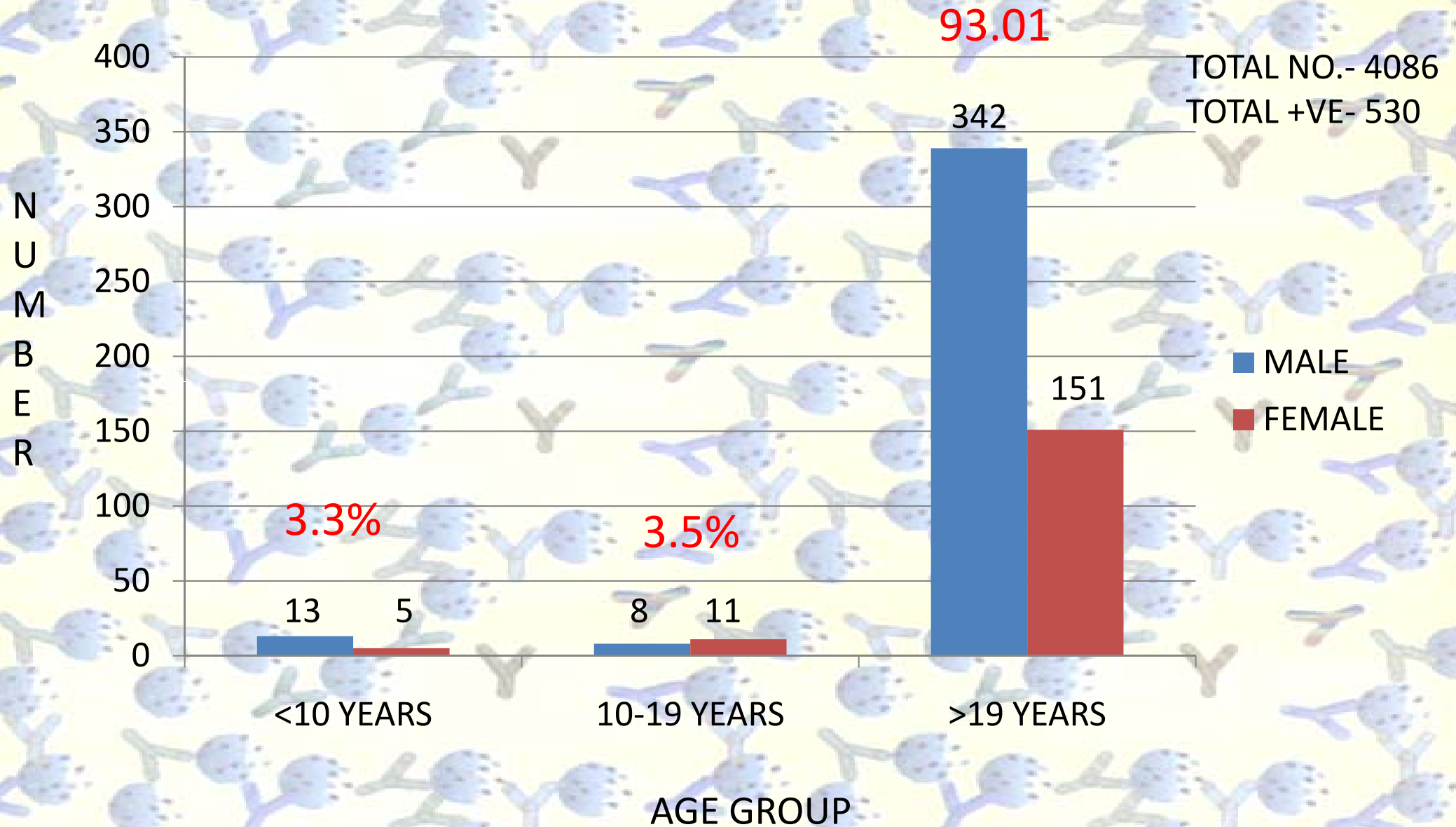
HIV prevalence among different population groups in India(2007)

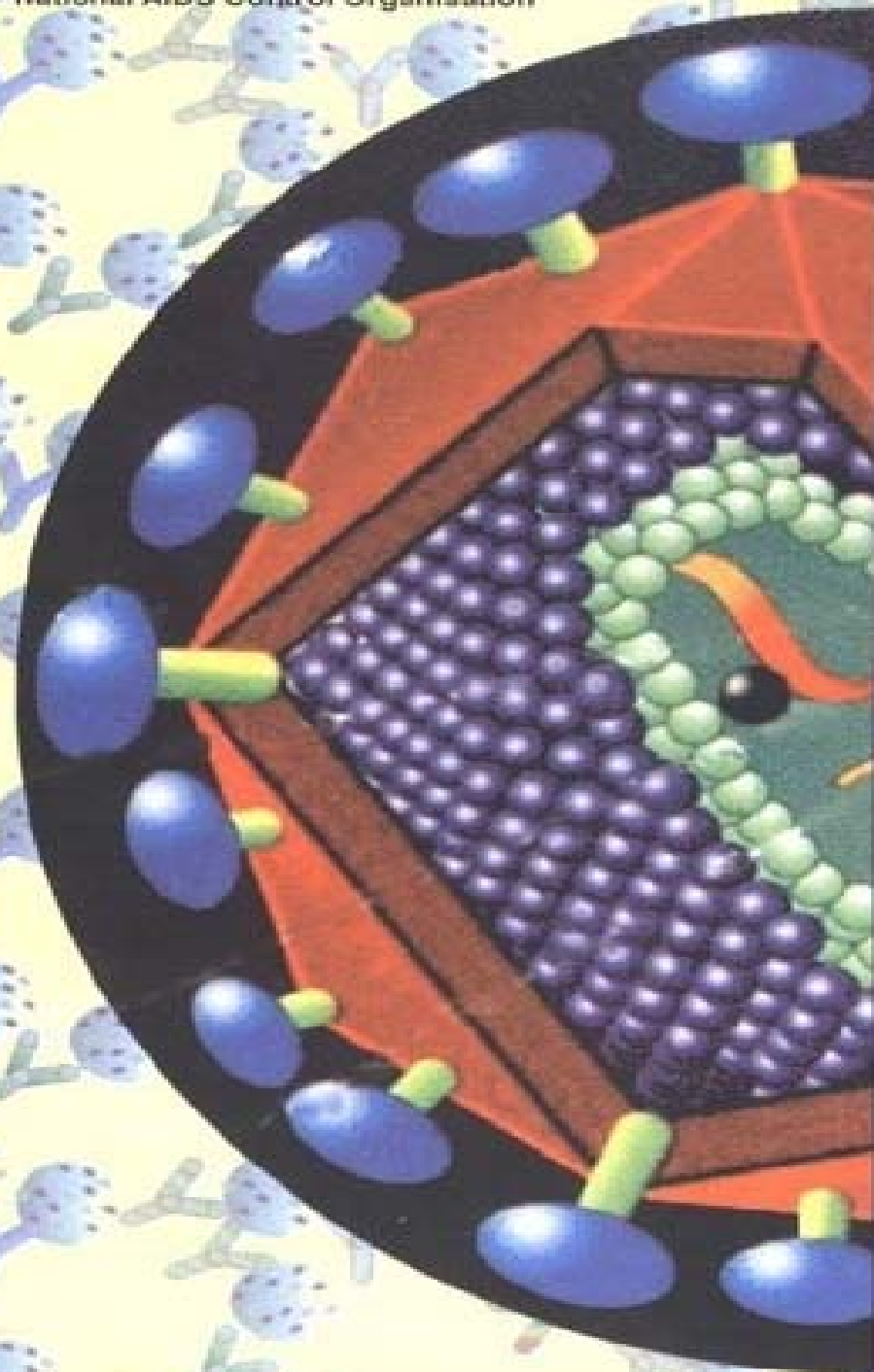


HIV prevalence in different groups in Gujarat



2008 DATA SSGH MCB





Testing Issues

HIV TESTING AS A PREVENTIVE TOOL

- USA -25% of HIV positive cases are **not aware** about their positivity
 - 40% are tested late (testing within 1 year prior to death)
- India-Only 13-25% of HIV +ve cases are knowing their status
 - People are tested late and less
- Message
- Encourage early testing
- Referral to VCTC
- Early testing means an opportunity for prevention and treatment

“Take Test, Take Control”

Delayed Diagnosis: Missed Opportunity

When and why of HIV testing in adolescents

Reasons for testing (n=31)

Reasons for testing	No. of cases (n=31)
Fever / cough/ diarrhea	14 (45.1%)
Parents positive	07 (22.6%)
Spouse positive	01 (3.2%)
Tuberculosis (TB)	04 (12.9%)
Herpes zoster	04 (12.9%)
Other infections	01 (3.2%)

Late Testing: Loss of opportunity

Clinical Stage at Time of Presentation

Clinical stage	No. of cases (n=31)
Asymptomatic	04 (12.9%)
Symptomatic	08 (25.8%)
AIDS	19 (61.2%)

- **Early diagnosis and intervention may help to prevent developmental delay**
- **Treatment seeking behavior of the cases need to be modified**

Early Diagnosis: Opportunity to intervene

REASONS FOR HIV TESTING IN WOMEN

- In **51%** cases, testing was carried out because of unexplained illness, suggesting late testing.
- **49%** were subjected to testing because either their spouse or child were positive / as a part of antenatal or as a pre-operative workup.
- **Usually females are tested less and late.**

AGE - WISE DISTRIBUTION (n=357)

Age Group (years)	No. of Females	%
0-15	20	5.6
16-30	164	45.9
31-45	141	39.5
>45	32	9.0
Total	357	100

- **46 %** females were in the age group of **16-30** years.
- All these females were having potential for conception and thereby vertical transmission.

MARITAL STATUS OF HIV POSITIVE WOMEN

Marital status	Present study	%
Married	277	77.5
Widow	44	12.3
Divorce	13	3.7
Unmarried	23	6.5
Total	357	100

The potential of intramarital HIV transmission is very high taking into account **unprotected sexual activity** in married couples and **high-risk behaviour** of male spouses.

The commonest mode of HIV transmission in our country is marital sex

DETAILS OF SEXUAL ACTIVITY AFTER KNOWING HIV STATUS

Sexual activity	No. of females	Present study % age	RN Gupta et al % age
Stopped intercourse	31	37	43
Continued with condom	25	30	35
Continued without condom	27	32	22
Total Females	83	100	100

“Behind most females with AIDS there is a male without condom”



AN EPIDEMIOLOGICAL STUDY OF HIV SEROCONCORDANT Vs SERODISCORDANT COUPLES (A FEMAL BASED STUDY)

Sharma Archana*, Marfatia Y S**

- **105 HIV positive married females were enrolled**
- **Their spouses were tested for HIV**
- **Seroconcordance i.e. seropositivity in both partners was observed in 60%.**
- **53% of females and 36% of males in the seroconcordant group had STDs that was significantly high ($P < 0.0001$, C.I.=95%) compared to STD rate in the serodiscordant group.**
- **In serodiscordant group, circumcision was observed in more number of cases (37%), than seroconcordant group (6.50%).**

Prevention of Parent to Child Transmission (PPTCT)

Indian Scenario

- **27 million** new pregnancies per year
- **97,000** in HIV +ve mothers (prevalence- **0.36%**)
- **30,000** HIV infected babies (**25-30%** transmission rate)
- **< 5%** of all pregnant women receive HIV testing and counseling
- **< 5%** of HIV +ve pregnant women received ART

ISSUES RELATED TO PPTCT IN INDIA CASE STUDY - 1

F/24, pregnant, tested +ve by ELISA, Husband -ve



As there was no risk factor and no evidence of STD
in couple



Repeat ELISA in different lab. +ve



Western Blot -ve



Suggestive of **false +ve ELISA** due to pregnancy

Confirmation of HIV status is a must before starting ART

Blood safety

- **One / 5000-10,000** bottles may be collected in window period.
 - Presently **>50%** blood collected through replacement donor
- As per a study HIV, HBV & Syphilis seropositivity is more from this group as compared to voluntarily donated blood
- Only **1%** of healthy population of the country donates blood but according to WHO atleast **5%** of healthy population must donate blood.

No Transfusion is the Best Transfusion

Blood safety in SSG Hospital, Vadodara

TOTAL UNITS COLLECTED (JAN-MAY 2009)	AVERAGE % OF VOLUNTARY DONORS	NUMBER OF HIV POSITIVES
2681	48.32%	5

- All samples tested with 3rd generation ELISA and Rapid Test
- Single positive test- blood discarded
- HIV +ve in year 2008 among blood donors in SSG Hospital- 15

Miles to go...

- Widening the umbrella- testing and reporting
- Reducing the window period- advanced techniques

Thank you

