



National AIDS Control Organisation

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Ministry of Health & Family Welfare, Government of India
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Ministry of Health & Family Welfare
Government of India



IS IT POSSIBLE TO **REDUCE DEATHS** AMONG PEOPLE ON ANTI-HIV TREATMENT?



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EXECUTIVE SUMMARY

In 2017, the death rate among the general population in India was 6.4, in Maharashtra it was 5.9 and in contrast, among PLHIV in Maharashtra it was 83, much higher.

In order to understand and act on the factors associated with mortality among People Living with HIV (PLHIV) accessing Antiretroviral therapy (ART) services, the HIV programme in Maharashtra analysed 61113 PLHIV older than 15 years, registered and on anti-HIV treatment at 73 ART centres in Maharashtra (excluding Mumbai) during the calendar years 2015-17.

The analysis found that patients should be encouraged to be tested early for HIV, and those who test positive should be encouraged to initiate early treatment. Major efforts are required not only to trace those who are lost to follow-up but to initiate mechanisms to trace these patients early, when they have missed their monthly dose of treatment.

Effective implementation of test and treat with proper monitoring of patients in the first three months of treatment will reduce the mortality and will increase the survival among PLHIV.



THE ISSUE

In 2017, the death rate among the general population in India was 6.4, in Maharashtra it was 5.9 and in contrast, among PLHIV in Maharashtra it was 83, much higher.

Considering mortality is amenable to health care, as informed by the global and Indian literatures, the HIV programme in Maharashtra wanted to understand and act on the factors associated with death among PLHIV accessing ART services. The factors that needed to be explored included gender, age, immunological status and duration on ART.

Effective implementation of test and treat with proper monitoring of patients in the first three months of treatment **will reduce the mortality and will increase the survival among PLHIV**

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THE STUDY

- To identify the factors associated with death among PLHIV accessing anti-HIV treatment in ART centres of Maharashtra, India.
- To inform the programme managers on the importance of intervening at the first three months of ART initiation in reducing the death among PLHIV on anti-HIV treatment in Maharashtra, India.

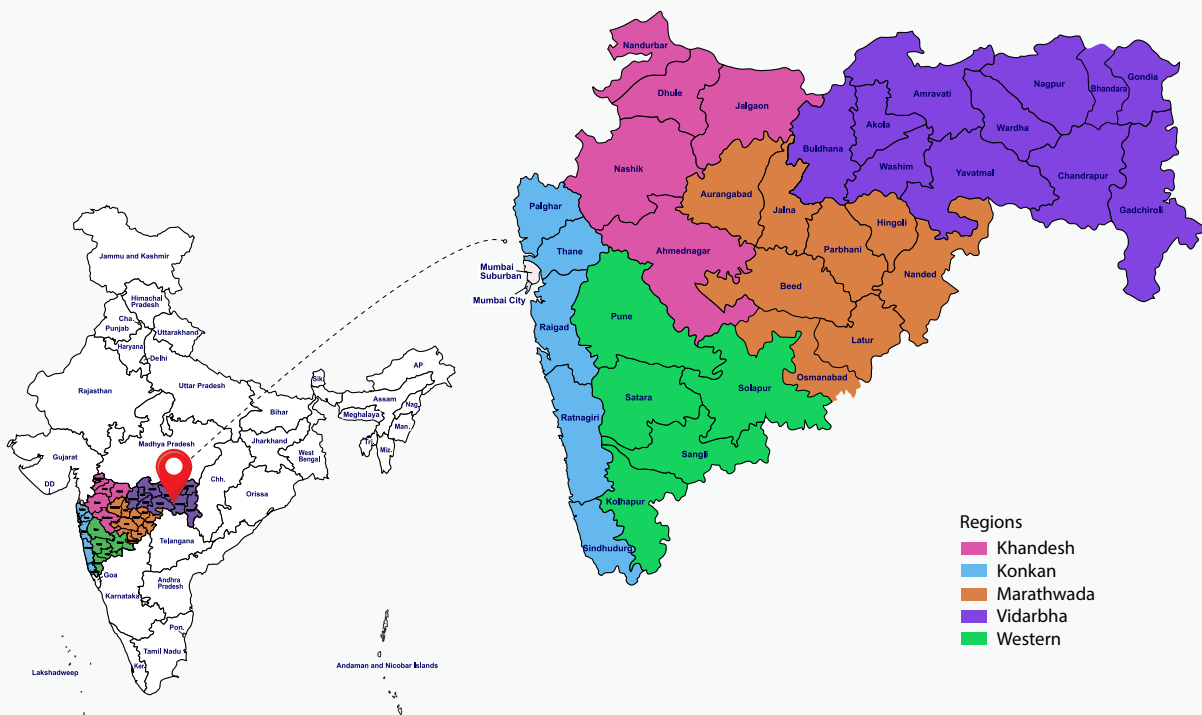
Only PLHIV age > 15 yrs were considered for analysis, as there is a difference in blood count (CD4 level) between children and adult for ART initiation



THE METHODOLOGY

- Data about 61113 PLHIV registered and on anti-HIV treatment at 73 ART centres in Maharashtra (excluding Mumbai), during the calendar years 2015-17, was analysed.
- The end point of follow-up of those registered was July 2018.
- PLHIV Transferred-out and without date of ART initiation, were not considered for this analysis
- Only PLHIV age > 15 yrs were considered for analysis, as there is a difference in blood count (CD4 level) between children and adult for ART initiation.
- Mortality density (per thousand months) was calculated.
- Factors associated with death were explored.
- Regional data was analyzed

Map on the regional-wise representation of 73 ART centres at Maharashtra



Characteristics	N	Khandesh (9226)	Konkan (8967)	Marathwada (8749)	Vidarbha (12586)	Western (21585)
Gender						
Female	26932	10%	11%	10%	11%	9%
Male	31952	17%	17%	17%	17%	14%
Age group						
<45 yrs	54322	13%	13%	12%	12%	10%
>=45 yrs	6791	25%	24%	23%	24%	18%
Baseline CD4						
BCD4> = 100	13143	9%	9%	9%	9%	7%
BCD4 < 100	46142	29%	29%	29%	29%	25%



FINDINGS

- Half of the 7875 deaths reported, occurred within the first three months of ART initiation.
- Death rate is higher among:
 - » Males as compared to females
 - » Elderly patients (more than 45 years) as compared to younger ones (less than 45 yrs)
 - » Those with white blood cell count (CD4) less than 100, during registration.



RECOMMENDATIONS

- Increase attention in the first 3 months of anti-HIV treatment initiation
- Provide close follow-up to male patients
- Provide additional care for elderly (above 45 years) PLHIV on anti-HIV treatment
- Ring the alarm among health care providers for patients presenting themselves late with lower blood cell count
- Develop a statewide strategy as no regional variation was observed

Half of the **7875 deaths** reported, occurred within the **first three months** of ART initiation

ACKNOWLEDGEMENT

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