Maternal Death Audit in Tamil Nadu: Its impact of health system Dr Dileep V. Mavalankar¹, Dr Padmanbhan², Ms Parvathy Sankara Raman³

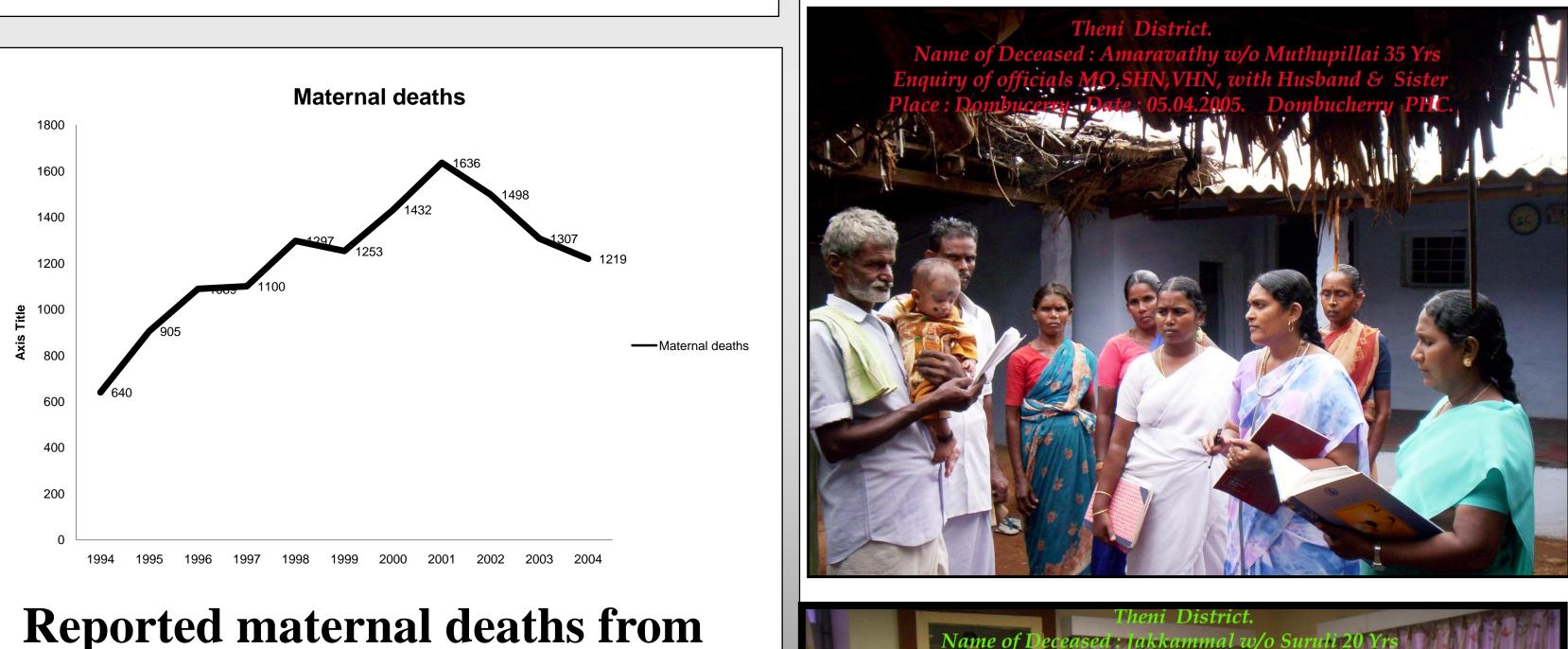
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Key health indicators of Tamil Nadu and India

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	Tamil Nadu	India
Total population (Census 2001) (in million)	62.41	1028.6 1
Decadal Growth (Census 2001) (%)	11.72	21.54
Crude Birth Rate (SRS 2007)	15.8	23.1
Crude Death Rate (SRS 2007)	7.2	7.4
Total Fertility Rate (SRS 2007)	1.6	2.7
Infant Mortality Rate (SRS 2007)	35	55
Maternal Mortality Ratio (SRS 2004 - 2006)	111	254
Sex Ratio (Census 2001)	987	933
Population below Poverty line (%)	21.12	26.10
Schedule Caste population (in million)	11.86	166.64
Schedule Tribe population (in million)	0.65	84.33
Female Literacy Rate (Census 2001) (%)	64.4	53.7

How Maternal Deaths are reported

- 3. health office



Other interventions for MH

- services

Rationale, Objectives and Methodology

•Tamil Nadu is the first state in India which has setup a system to register all maternal deaths and developed maternal death audit

•Objective is to describe how maternal death audit system was developed and its 1mpact

•Secondary literature review including government reports, interviews with key officials and presentations made by them Compulsory reporting of maternal deaths within 24 hours from public and private facilities

Official orders were issued in 2004 Government health system staff report home and institutional maternal deaths to the district

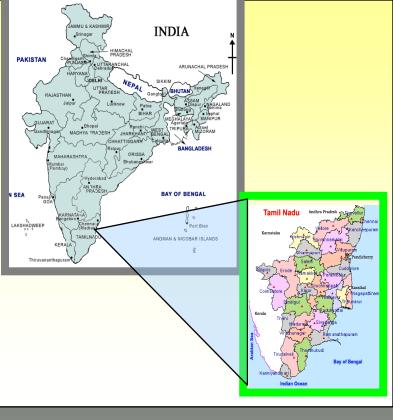
1994-2004

Increase in institutional deliveries Certification of CEmOC to CEmNOC Cash payment to poor mothers 3 staff nurse poster at PHCs for 24/7

Process of Maternal death review

- Health officials conduct Verbal autopsy for each maternal death
- Audit reports are prepared and 2. placed before the district collector
- District collector invites relatives 3. of the deceased women for further investigation of social and governance factors





Factors identified for maternal deaths through audit

- Shortage of staff at the facility
- Delay in transportation
- Multiple referrals 3.
- Facilities not ready for EmOC
- Blood not available 5.
- Illegal payments demanded 6.

Impact on health system

- Hiring contractual staff nurses
- Contracting private anesthetist and obgyns for emergency Csection
- Contracting with private partners 3. for Ambulances
- Certification of CEmNOC centers for making the facility accountable for EmOC functions
- Reduction of MMR 5.

Conclusions

- Maternal death audit helped in improving health systems leading to reduction in maternal mortality
- Maternal mortality reduced from 167 in 1997-2003 to 111 in 2007
- Increased accountability of staff and health system