



Avoiding 100 M premature deaths in India: DCPP-India

P Jha, R Laxminarayan, S Rao-Seshadri, DT Jamison, GA Alleyne, M Datta Ghose, R Kumar, S Darley, J Chow, A Kurpad, N Dhingra, R Jotkar, S Jha, R Poornalingam, A Singh, L Menezes, P Brown, DK Sikri, S Chandra, L Kant, NK Ganguly on behalf of the DCPP India Study Team



CENTRE FOR GLOBAL
HEALTH RESEARCH

www.cghr.org
prabhat.jha@utoronto.ca

Support: NIH (x 2), IDRC, PRB, Li Ka Shing Knowledge Institute,
Govt of India

A historic opportunity: National Rural Health Mission

- Increase of 1-2% of GDP (at least \$10B/year) on health
 - 30% increase in budget in 2007
- Domestic driven, with strong public demand for better health services and broad political support
- Focus on “EAG + Assam” and on unfinished agenda
- Current approach: “Do everything”
- 0.4 M village health women “ASHAs”- but roles unclear

DCP-2 approach: Focus on 10-12 of the highest impact interventions, identify and “buy out” constraints so as to improve efficiency and outcomes; operational research and rigorous monitoring

Sources of evidence for disease control in India

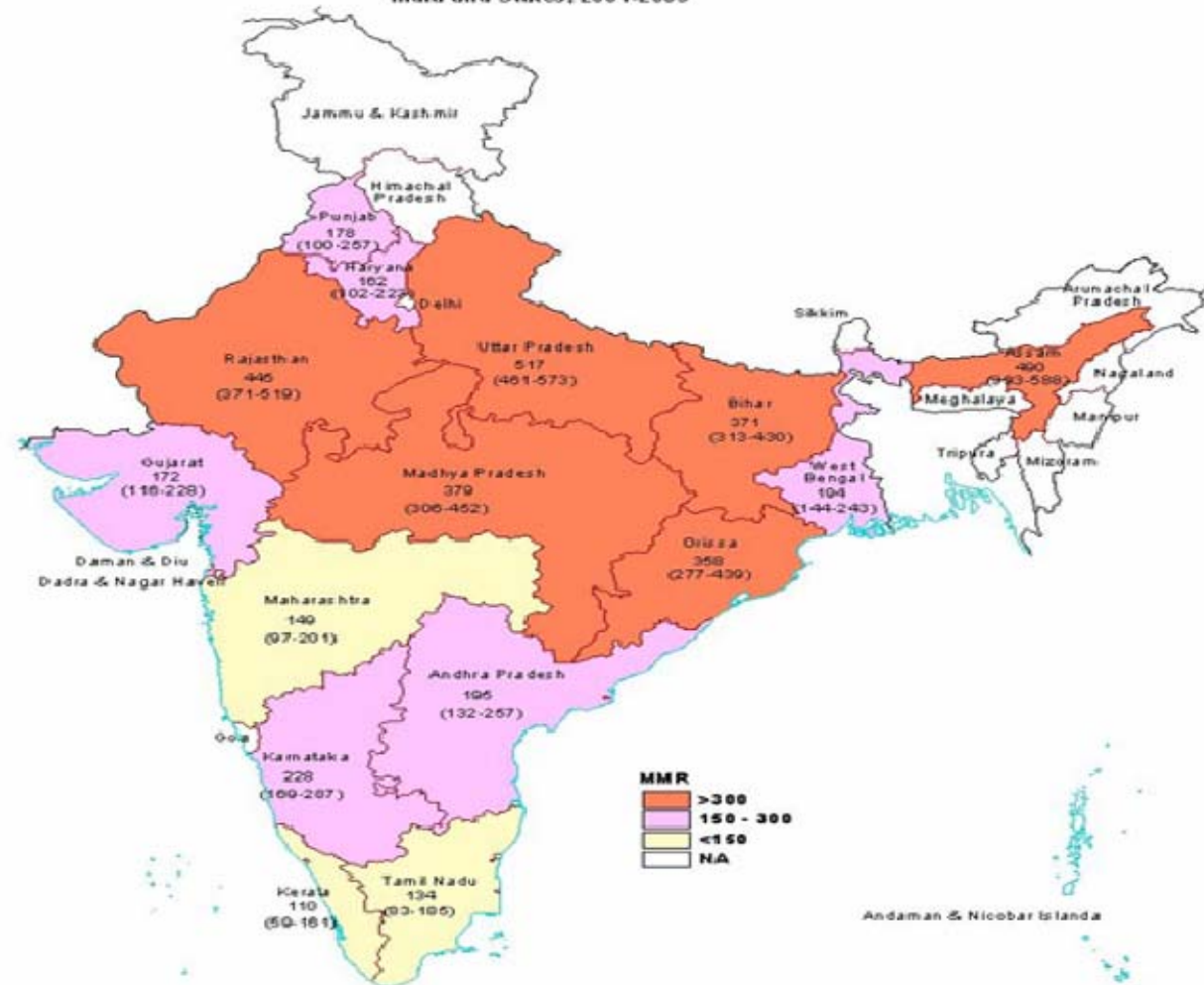
- Burden of avoidable deaths: *Million Death Study* *
- Interventions: *DCPP*
- The opportunity: *NRHM + DCPP + rigorous evaluation*

* FIC supported

2/3 of maternal deaths and 3/5 of child deaths occur in 9 states (“EAG” + Assam)



Chart 2: Maternal Mortality Ratio (MMR) along with 95% confidence interval, India and States., 2001-2003



EAG=Empowered Action Group: Bihar, Jharkhand, Orissa, Rajasthan, Madhya Pradesh, Rajasthan, Uttar Pradesh, Uttaranchal

Causes of death, 2001-2003 by state:

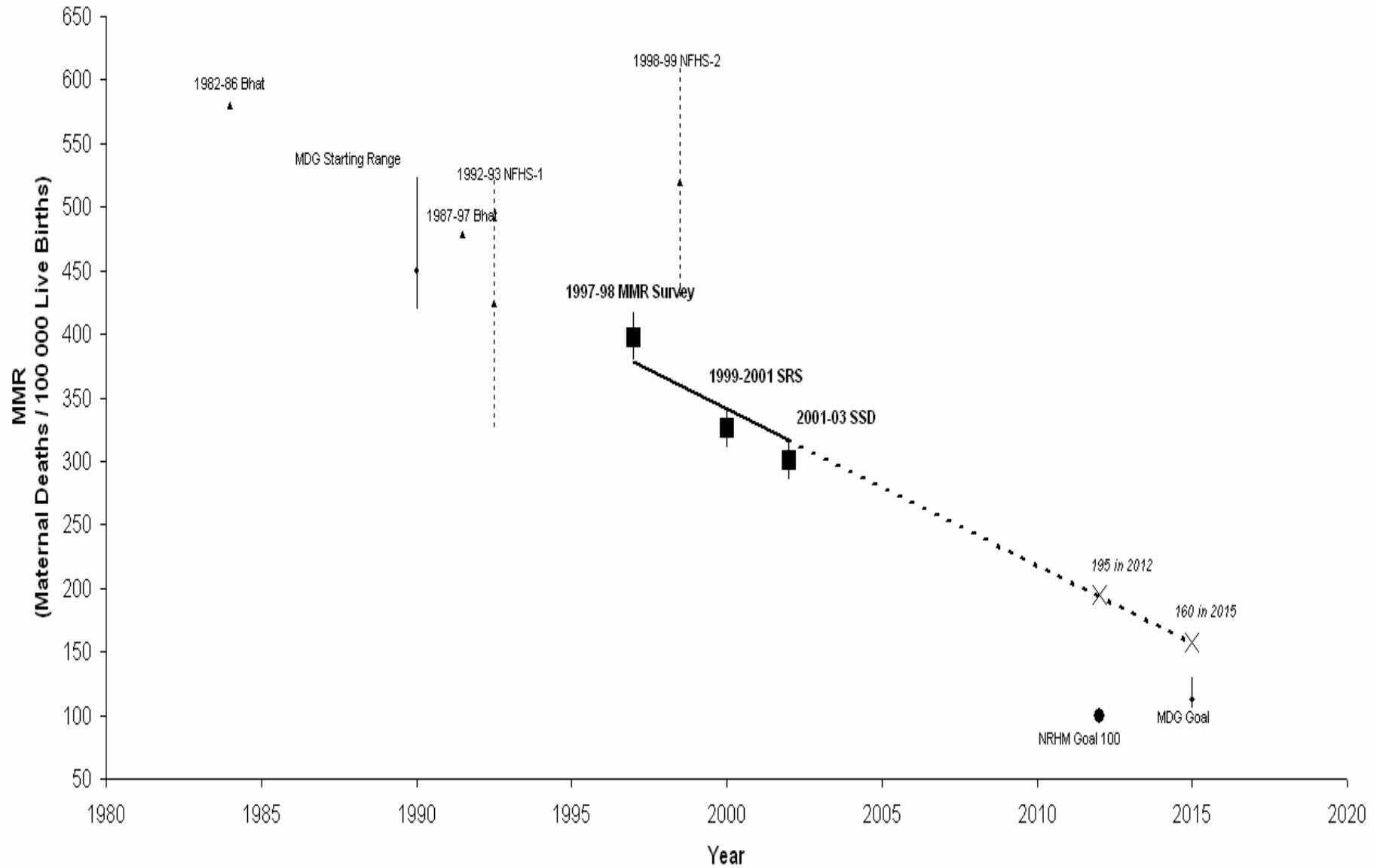
Million Death Study

Major cause-groups *	% of all deaths		
	EAG and Assam	Other states	All India
Communicable, maternal, perinatal and nutritional	45	25	34
Non-communicable diseases	32	49	41
Injuries	8	10	9

* Also, ill-defined medical of about 15%- mostly at ages 70 or higher



Chart 1: Maternal Mortality Ratio (MMR) in India: Trends from 1980-2020

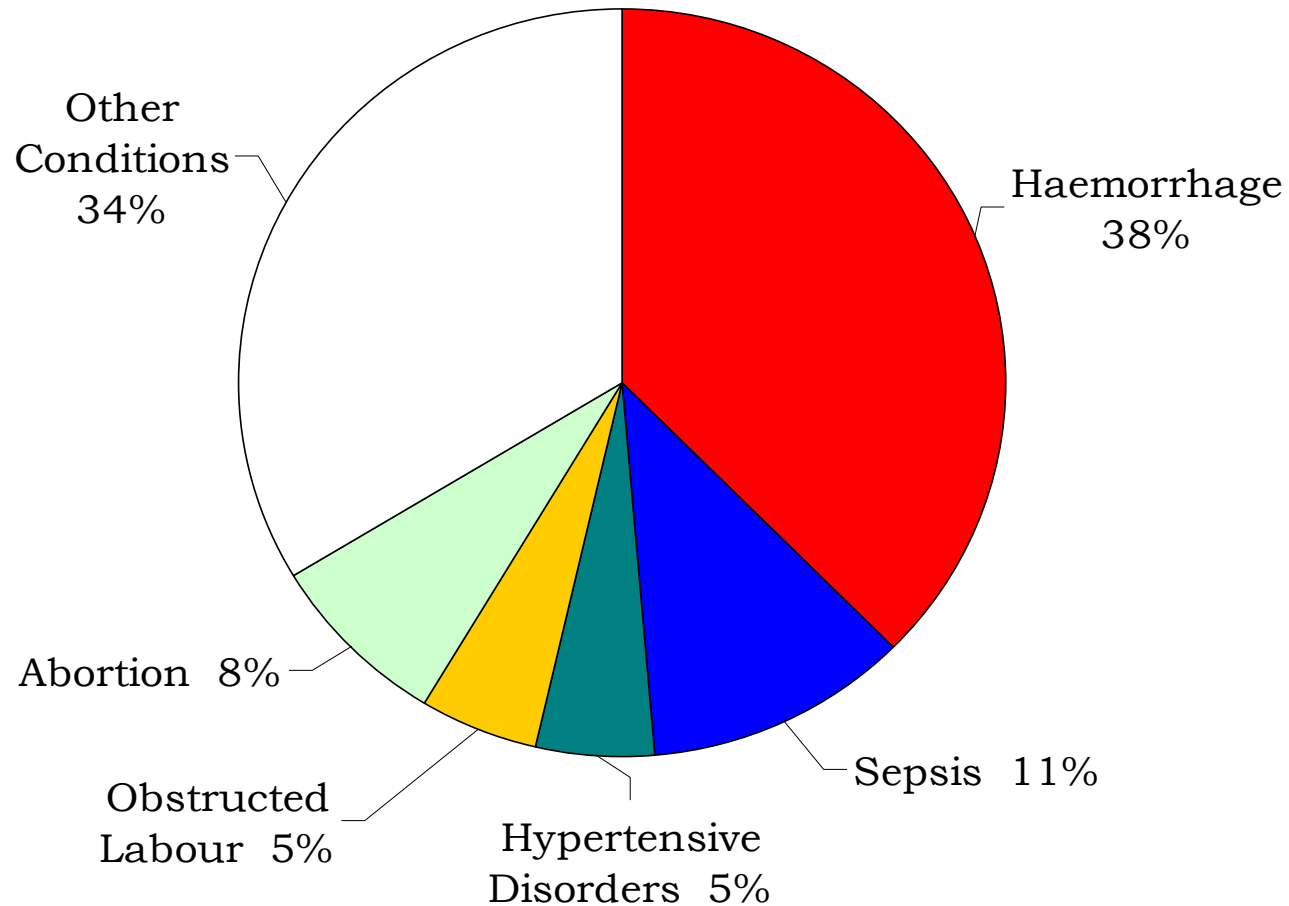


Source: RGI-CGHR Study Collaborators, 2006

Causes of maternal death, 2001-2003:

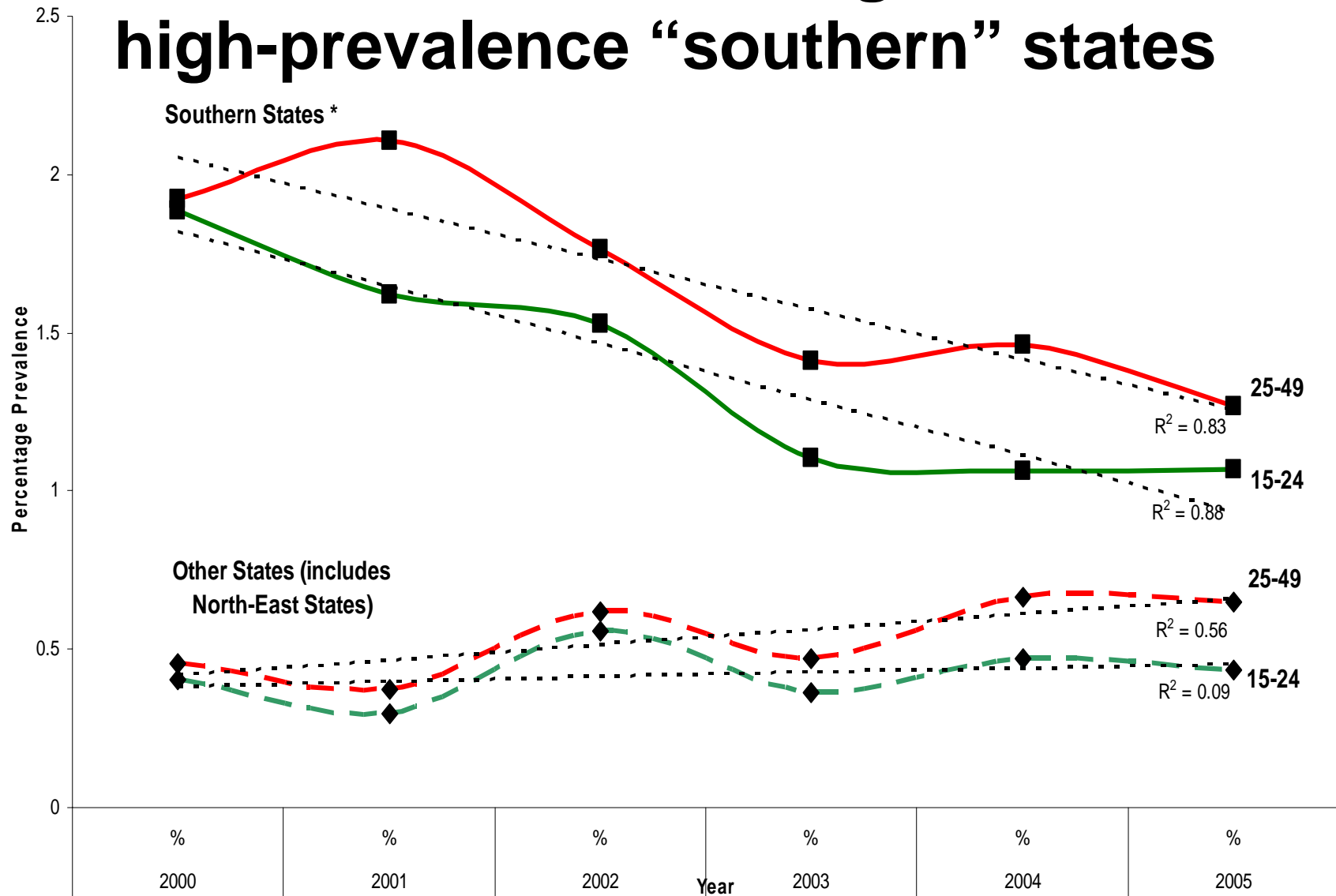


Million Death Study



Source: RGI-CGHR, 2006

Declines in HIV-1 among women in high-prevalence “southern” states



Source: Kumar, Jha, Arora, et al *Lancet*, April 2006

Note: Data presented are preliminary

AIDS deaths in India, 2001-3

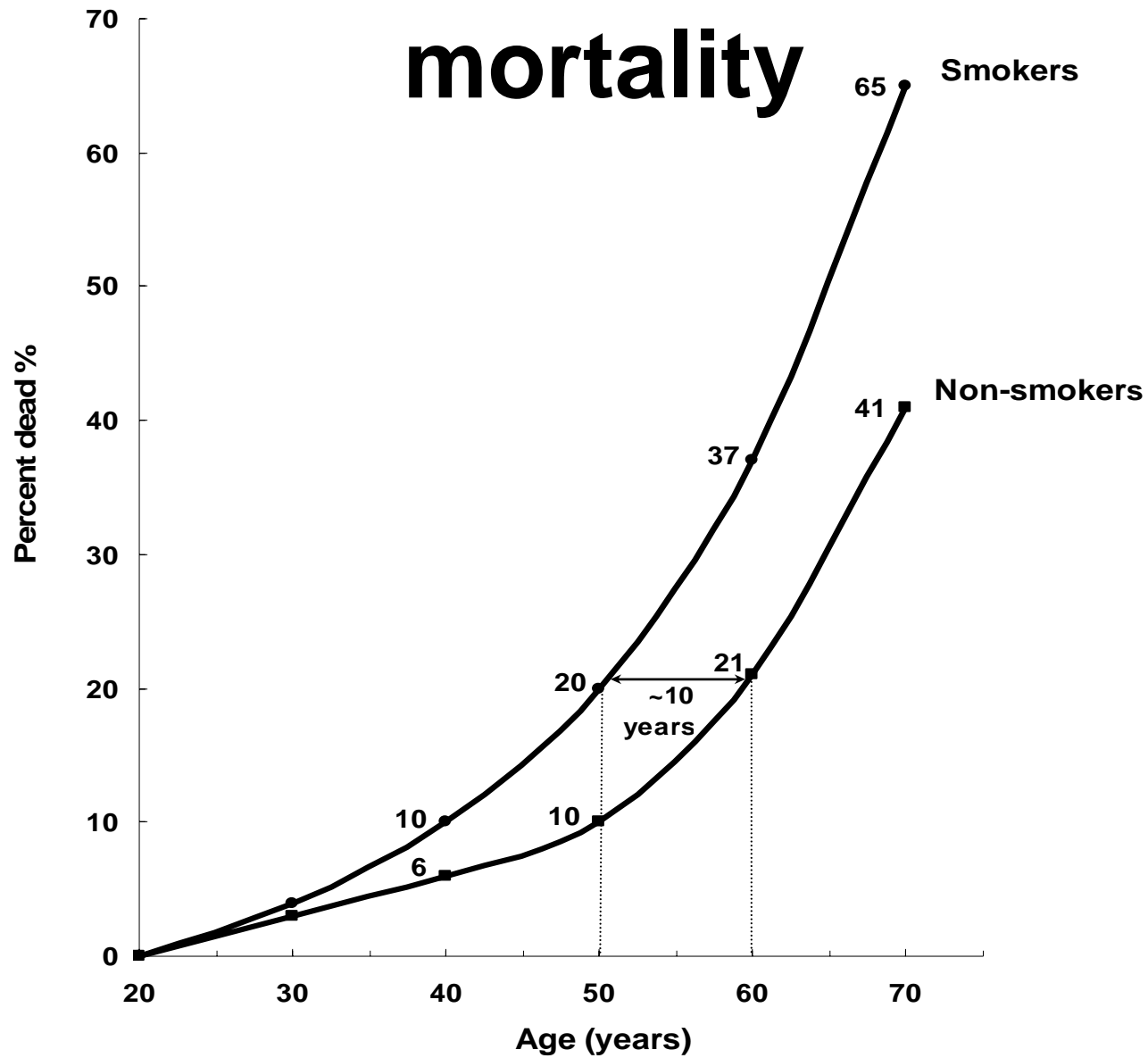
% of deaths at ages 15-59 years

Region	Million Death Study (direct)			WHO GBD estimates (econometric)		
	Men	Women	Both	Men	Women	Both
India	1.3	0.6	1.1	8.6	3.0	6.2
High prevalence states	3.6	1.9	3.3			
Low prevalence states	0.4	0.2	0.4			

Source: RGI-CGHR Million Death Study, 2006

Note: Data presented are preliminary

Indian smoker vs. non-smoker mortality



Source: Jha et al, 2007

Note: Data presented are preliminary

DCPP-India: methods

1. New burden estimation, using Million Death Study and updated cost-effectiveness analyses (RFF), stratified by EAG/other states
2. ~14 background papers on major conditions and system issues
3. Briefings of Prime Minister, Health Minister, Planning Commission members & other senior officials
4. National Advisory Committee; consultations in Paris, 2004; Bangalore 2006; and Delhi 2007
5. **“Choosing Health: An Opportunity for India”** to be published in Sept 2007
6. Partners at NRHM, PGIMER, SJMAS, PRI, RGI, ICMR and others (managed by S. Rao Seshadri)



DCPP-India: implementation



1. Review of national programs versus DCPP evidence (inc evaluation of specific programs)
2. DISHA project: pilot DCPP methods in 1-2 districts (funded by GOI) and eventually intervention trial of in 5-10 districts vs. 10-20 control districts
3. Randomize dissemination of “Choosing Health” to 545 Members of Parliament: outcome of survey MPs and district health officers
4. Specific dissemination of tobacco evidence

Potential benefits: avoid 100 million premature deaths



Age at death	Current deaths (M)	<u>Future deaths (M) per year</u>		
		<u>At current rates</u>	<u>At achievable rates</u>	<u>Lives saved</u>
	9 M Deaths		25 M Births	
Childhood/early adulthood*				
age 0-25	~3	3-4	0.5-1**	2-3
Middle Age				
age 25-69	~3	8-10	4-7**	3-4
Old Age				
age 70+	~3	11-14	17-20	--
TOTAL	9	25	25	5-7 **

*2/3 at ages 0-4; ** At least 100 M over three decades (given lag times for action)

DISHA: Core strategies



Manage

- Secure political support for reform
- Train district officers on DCP-2 framework
- Tamil Nadu procurement system
- Technical assistance on specific diseases (e.g. maternal mortality) and systems (e.g. MIS)

Innovate

- Maternal mortality/neonatal mortality reduction
- Novel measles elimination paired with new antigens (Hib, Pneumococcus, Rotavirus)
- Generic risk pill for CVD

Measure

- District surveys to compare pre-post changes in use and mortality
- Costs of interventions
- Evaluation of national programmes

Disseminate

- Close link with GOI and NRHM
- Best practices/IAS training/what works series