Ethics of Public health interventions

A view from the frontline

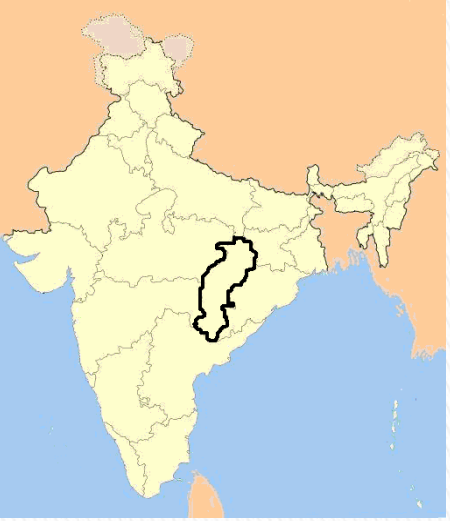
Physicians are the natural attorneys of the poor

Rudolf Virchow

‘small people’, Big problems

People’s Health Support Group

Chhattisgarh, India



The context


CHHATTISGARH
District Map
JHARKHAND
MADHYA PRADESH
ORISSA
MAHARASHTRA
ANDHRA PRADESH
BAIKUNTHPUR
AMBIKAPUR
JASHPURNAGAR
KORBA
BILASPUR
KAWARDHA
JANJGIR
RAIGARH
RAIPUR
RAJNANDGAON
DURG
KANKER
JAGDALPUR
DANTEWARA
LEGEND
State Boundary
District Boundary
State Headquarter
District Headquarter
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Map not to Scale
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Marshal

The program structure at Bilaspur

- Rural agro-forestry economy
- 1500 villages access the referral centre,
- 150 forest fringe and forest villages access the mobile clinics
- 53 villages have an intensive village health worker programme…. 25012 population

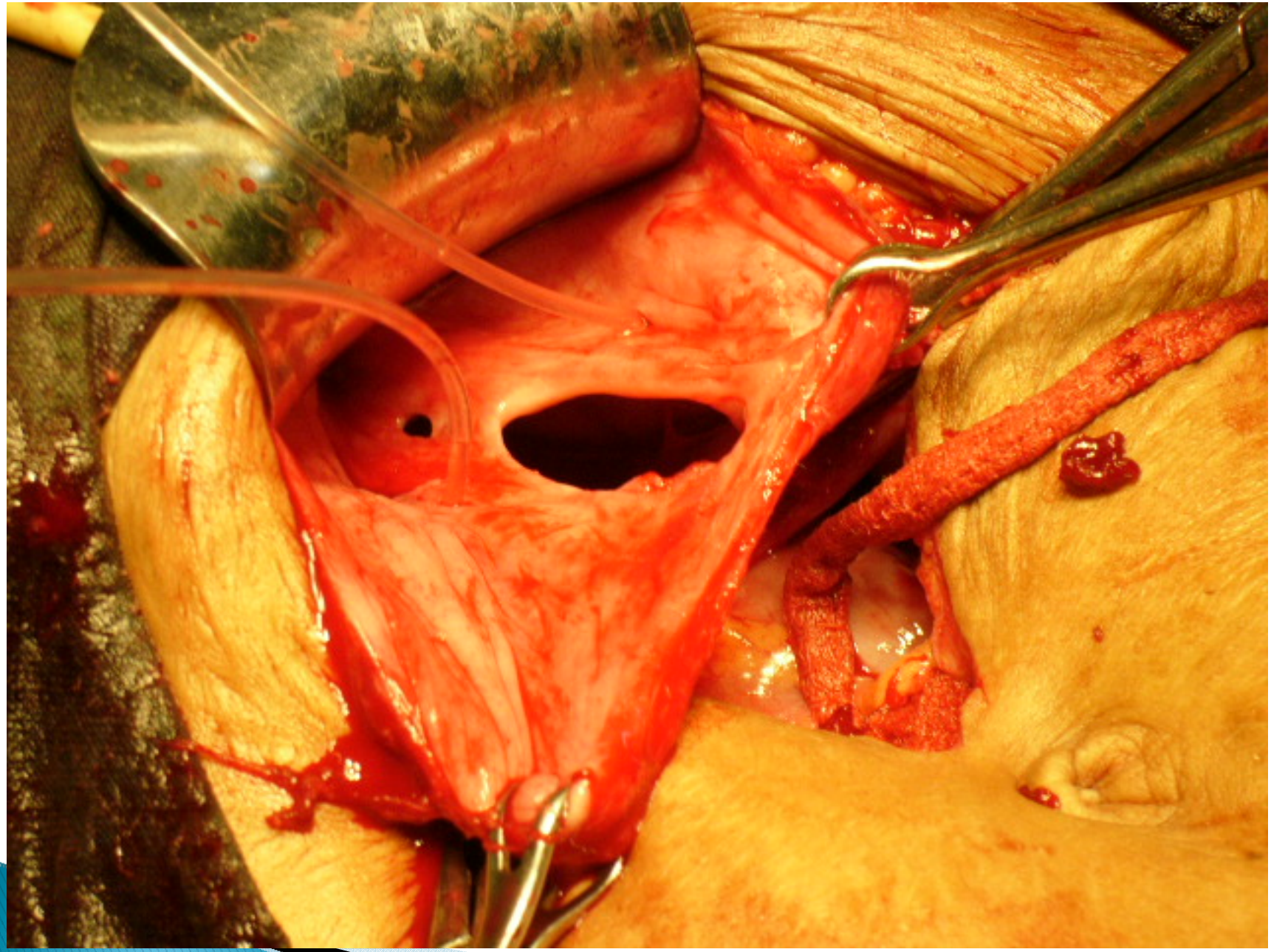

द्वारा संचालित
चिकित्सा केन्द्र


FLU KEM -150
दवा कब लेनी है
सुबह
दोपहर
शाम
रात
गोली/चम्मच दिन में ....
बार, खाने के पहले/बाद में
दिन तक लेना है।


H_2S Bottle
H_2S Bottle


08/07/2008 12:49


17/07/2008 10:14



People in small places do not have small problems

Our focus

- Primary health Care
  - All common and important problems
  - Equity, affordability
  - Acting on the determinants
  - Use of appropriate technology
  - Cost, quality and access are extremely important

Primary health care is not….

- Only primary level care
- Second rate medicine for the have- nots
- Straight-jacketed trivialized protocols and regimes

My thesis

- Public health is not fundamentally different from clinical medicine

- The essential problem is the lack of underpinning of equity in all interventions

Individual and public health

- The yardsticks , the ethics, the goals are similar
- It is a continuum
- The tools may be different
- The scale may be different

Public health Doctors

- Type 1
- Type 2
- Type 3

Finding Solutions to public health problems

- Simple solutions are the best
- But if the optimal solution is complex, so be it
- Not to Scale up by dumbing down!

Falciparum Malaria

- Intensive care when you are sick
- Extensive care

Lack of underpinning of equity in public health interventions

Efficiency or equity

Effectiveness and humanity too

Equity vs cost effectiveness

- Us vs amorphous community
- The people who make decisions don't bear the consequences
- The people who suffer don't have a voice

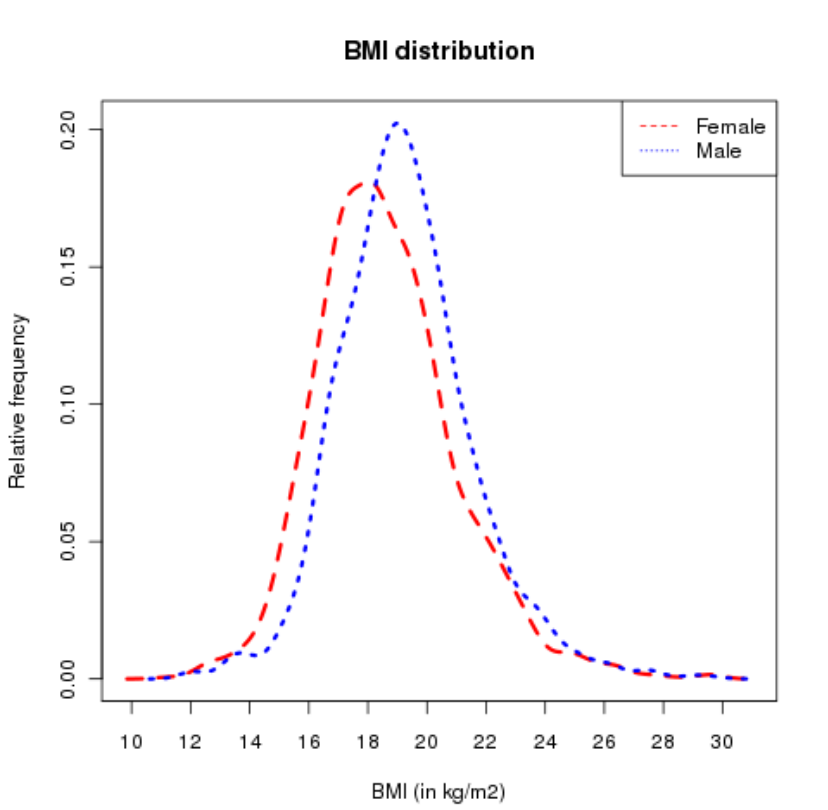
Public health interventions

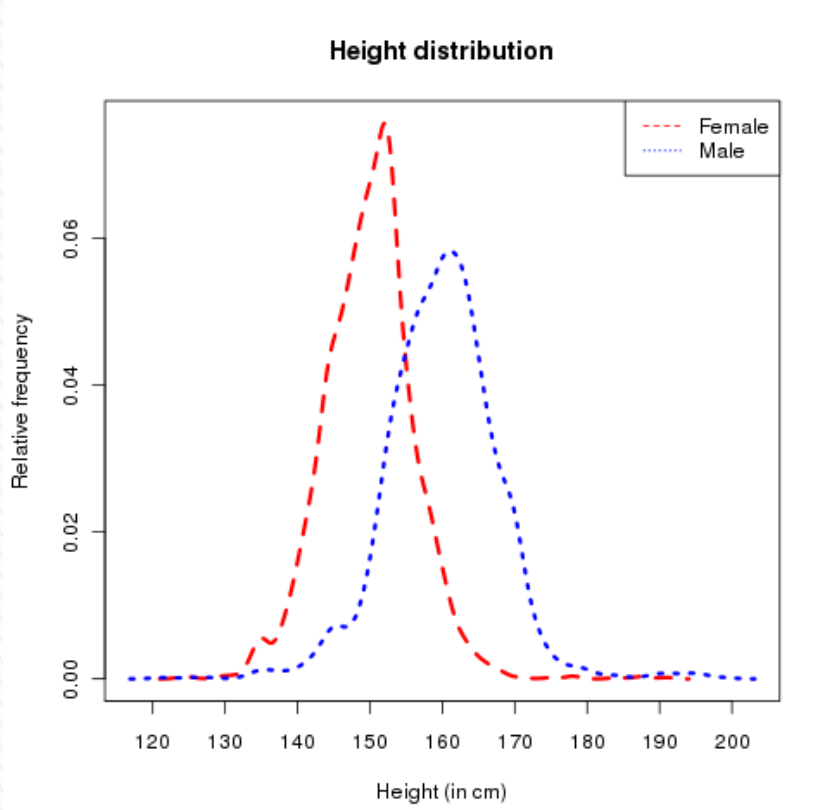
- Make baseless assumptions
- GOBSAT
- Excuses of size, complexity and expense

Will you go through this ?

The PDS

The people: Hunger status





The BMI

The Heights

The pecking order: BMI

caste group	25th centile	median	75th centile
First tribes	17.35	18.36	19.71
Regular Tribes	17.26	18.69	20.18
dalits	17.78	19.11	20.38
Backward castes	17.44	18.75	20.34
Others	17.61	19.35	22.37

Hunger and food security

- Entitlements
- How much per person?
- What price
- What should it include?
- Who decides?

Tuberculosis

The concerns

- Total burden:
- Drug resistance
- Poor compliance
- Poor diagnostic availability
- Poor logistic support

The solutions offered in RNTCP

- Total burden: diagnosis of 70%, category
- Drug resistance: DOTS Plus

- Poor compliance: DOTS

- Poor diagnostic availability: Microscopy centres

- Poor logistic support: centralised programme

Tuberculosis at JSS

- 587 new patients in 2011
- Median weights 42 and 34 kg in men and women
- 18 diabetes; Only 5 HIV
- Already 15 have died
- 69 have category 2 disease, 13 have already been confirmed to have MDR

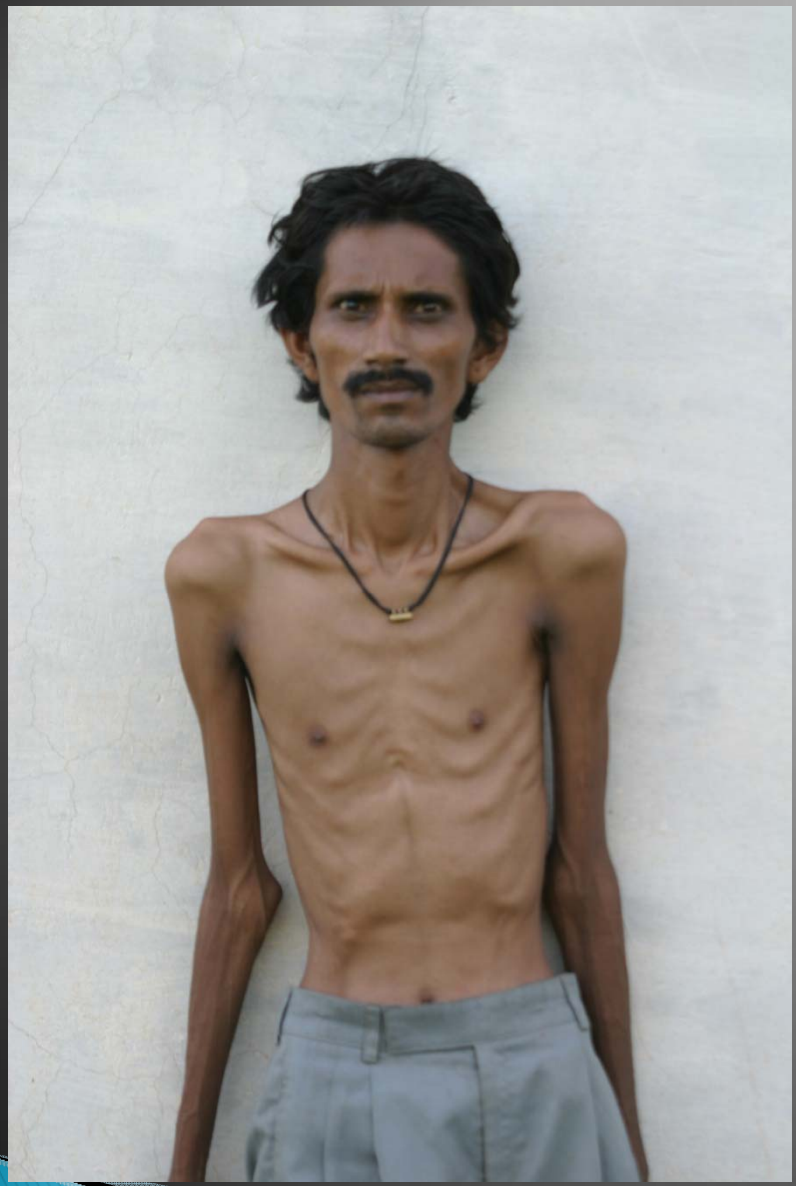
Associations of TB in Chhattisgarh : the other MDR

- M- malnutrition
- D- diabetes
- R- Retrovirus (HIV)

Major problems

- Categories
- Intermittent treatment strategy
- Drug resistance testing
- DOTS provider
- Food

Food and Tuberculosis



Implications of Malnutrition in a patient with tuberculosis:

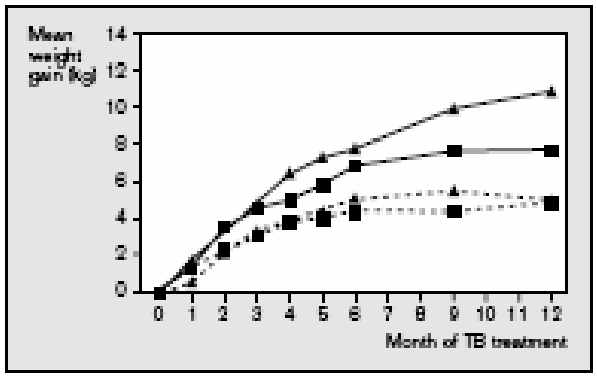
- Associated with more extensive disease.
- Associated with higher risk of death(e.g. 3% in those above 40 kg, cf to 14% for <35 kg.(Tiruvallur study)
- Higher risk of drug toxicity
- > risk of malabsorption of drugs
- Higher risk of relapse.

  relapse risk was high among persons who were underweight at diagnosis (19.1 vs. 4.8%; p < 0.001) or who had a body mass index of less than 18.5 kg/m2 (19.5 vs. 5.8%; p < 0.001).[1]

[1] Khan A etal. Lack of Weight Gain and Relapse Risk in a Large Tuberculosis Treatment Trial Am J Resp Crit Care Med 2006;174:344-48.

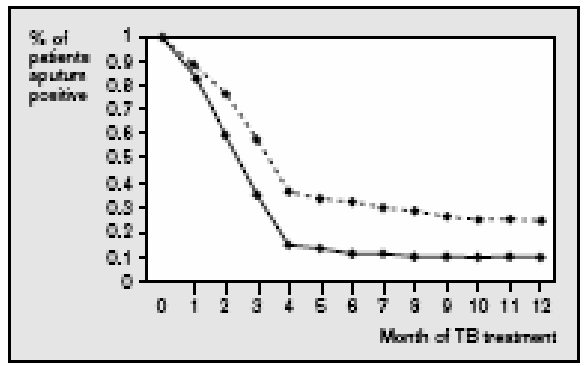
The madras trial revisited..

Figure 1. Mean weight gain in tuberculosis (TB) patients in a randomized trial conducted in Madras, India in 1957 [67], comparing home treatment with sanatorium treatment.



—— Sanatorium; - - - - - - home; ■ men; ▲ women.

Figure 2. A Kaplan–Meier plot of the probability of remaining sputum positive for mycobacteria, calculated from data in Ramakrishnan et al. [67], demonstrates a shorter time to microbiological cure with sanatorium treatment ($P<0.002$, log-rank analysis).



—— Sanatorium; - - - - - - home.

A. Schwenk, DCMcallan. Current opinion in Clinical Nutrition and Metabolic care.2000.3;285-291.

Food and treatment for TB: A lesson from Haiti

	Free Rx+nutritional counselling	Free Rx+food suppl+$30/month
Cure rate	56.7%	100%
Death rate	10%	0%
Residual sym.	43.3%	6.7%
Return to work	46.7%	93.3%
Gain in weight	1.7 lb	10.4 lb

Farmer P etal.. Tuberculosis, poverty, and "compliance": lessons from rural Haiti. Semin Respir Infect. 1991 Dec;6(4):254-60.

The agony of Consumption

- Who advises the government?
- Why don't our leaders see reason?
- Why can't we have DOTS plus for our people?
- Why no supplemental food?
- The academia have failed the people

Will you take RNTCP regimes if you develop Tb?

Leprosy

The disease

Disease of nerves, skin.

Diagnosis : clinical .

Treatment :
"Curable."
Multi-drug therapy (MDT) for 6-12 months.

Treatment can be punctuated by worsening of status by reactions.

The Case of Leprosy

- The National Leprosy Eradication Programme (NLEP),WHO, World Bank achieve a Virtual Elimination of Leprosy

  and a

  Real Elimination of Concern for Patients

WHO CHANGES THE GOALPOSTS

1991

- Target : Elimination of leprosy *as a public health problem by 2000.*

- *Novel definition evolved:*

  Elimination not measured by absence of incidence but by reduction of *prevalence* below 1 case per 10,000.

Unethical practices in India.

- “The SLO (State Leprosy Officer) issued an order in May 2000 that patients having no ration card or voter’s identity card should be treated separately.

- Their cases should not be reflected in the reports on the grounds that the PR (Prevalence Rate) was not coming down even after repeated efforts.” – Comptroller Auditor General’s report.

1. SHORTENING OF THE DURATION OF TREATMENT.

   24 months to 12 months.

2. “CLEANING OF THE REGISTERS”.

Unethical practices : January 2005 : Kathmandu recommendations

- Every leprosy case detected was to be confirmed by a special team at district level.

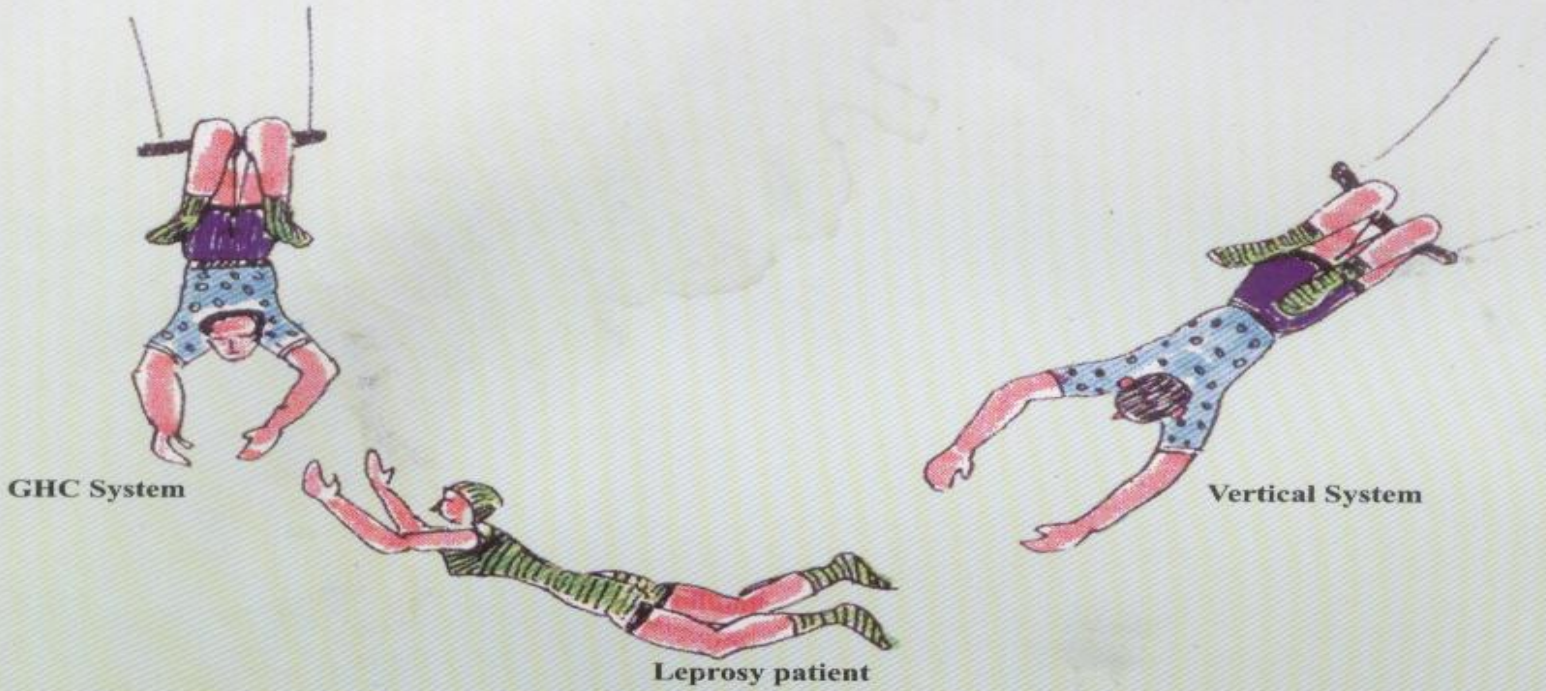
- Active case detection to be discontinued

Leprosy was
Declared Eliminated as a
Public Health Problem
from India
on the Predetermined Date of

December 31, 2005

On this Auspicious Date the Point Prevalence of Leprosy Supposedly fell below
1 case per 10,000 Population

Integration Scenario Today



"Leprosy paitent transferred from the vertical system
is yet to be received by GHC system"

Cartoon courtesy : Dr Kirubakaran, GLRA, Chennai

LEAP

Evidence of Faulty Planning

It seems that the decision to change leprosy care from a vertically administered programme to a horizontally integrated service was based more in changes in funding than in ground realities.

It is interesting to note that the decision of the WHO to use Rifampin, the most potent drug against *Mycobacterium leprae,* only once a month and not every day is based on the cost of the drug, which is much cheaper today than what it was in the 1980s, when this decision was taken. In fact, in the United States, Rifampin for the treatment of leprosy is given every day rather than every month.

Source: Wallace RJ, Griffith DE. Antimycobacterial agents.
In: Harrison's Principles of Internal Medicine. 16th ed.. New York: McGraw-Hill; 2004: 946-53.

CONCLUSION

- Leprosy is on its way out. Unfortunately, leprosy is not a punctual customer and elimination may not be achieved by an arbitrary date set by man.

- There is no shame in accepting as much and modify our actions accordingly rather than expect *Mycobacterium leprae* to change its behaviour to follow our wishes.

Mothers giving birth in institutions and…

Home based newborn care

Why institutional birthing?

- Poor skills among home care providers
- Immediate help available
- Institutions can be made skilled and equipped
- People still don't come
- Transportation is necessary

strategies

- Train health personnel in obstetric care
- Accredit facilities for birthing
- Conditional cash transfers
- Offer transport, one way…

Progress and status

- More deliveries in hospitals
- And in vehicles
- Go back on their own
- Abysmal quality of care
- Ostracize the Dai

Ethics of conditional cash transfers

Newborn care

- Home based can bring down mortality at low rates
- Parents don't like to take their sick newborns to hospitals. Why?
- Do we need hospital based care for some sick newborns?

Why can't we have a nuanced programme for

Obstetric and newborn care??

The Frontline

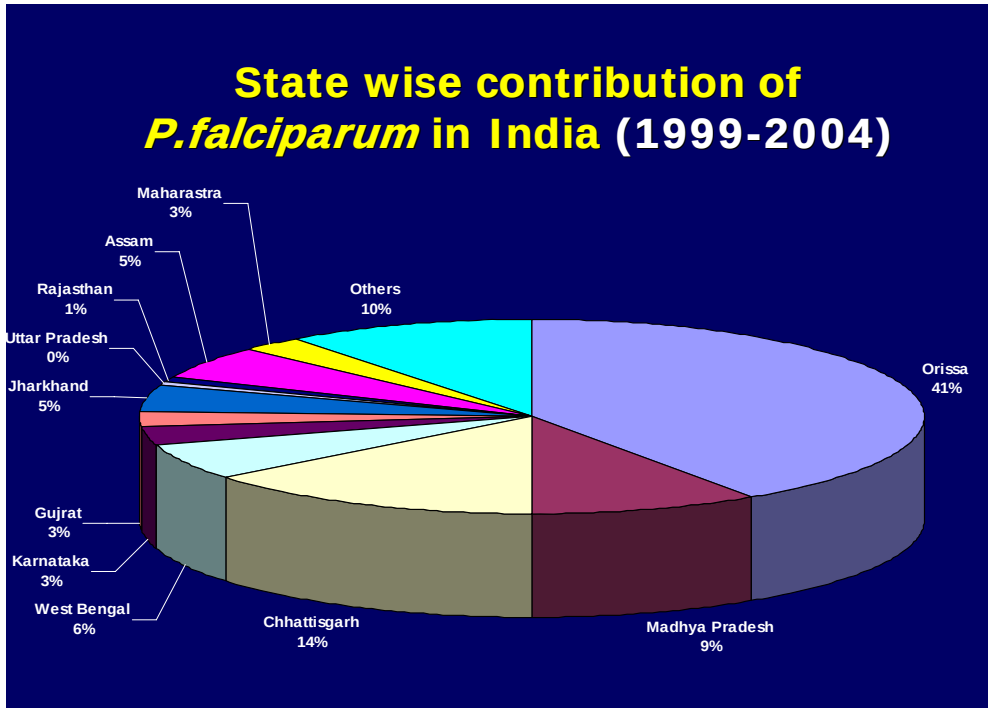
- Most people, and most poor people still live in rural India.

- The burden of disease and its effects are disproportionately seen in the poor with a clear gradient in illness and mortality seen in the poor.

Falciparum malaria

The Disease

- 8 lac cases of malaria
- Over 50% is falciparum malaria
- 1000 deaths!



Falciparum malaria

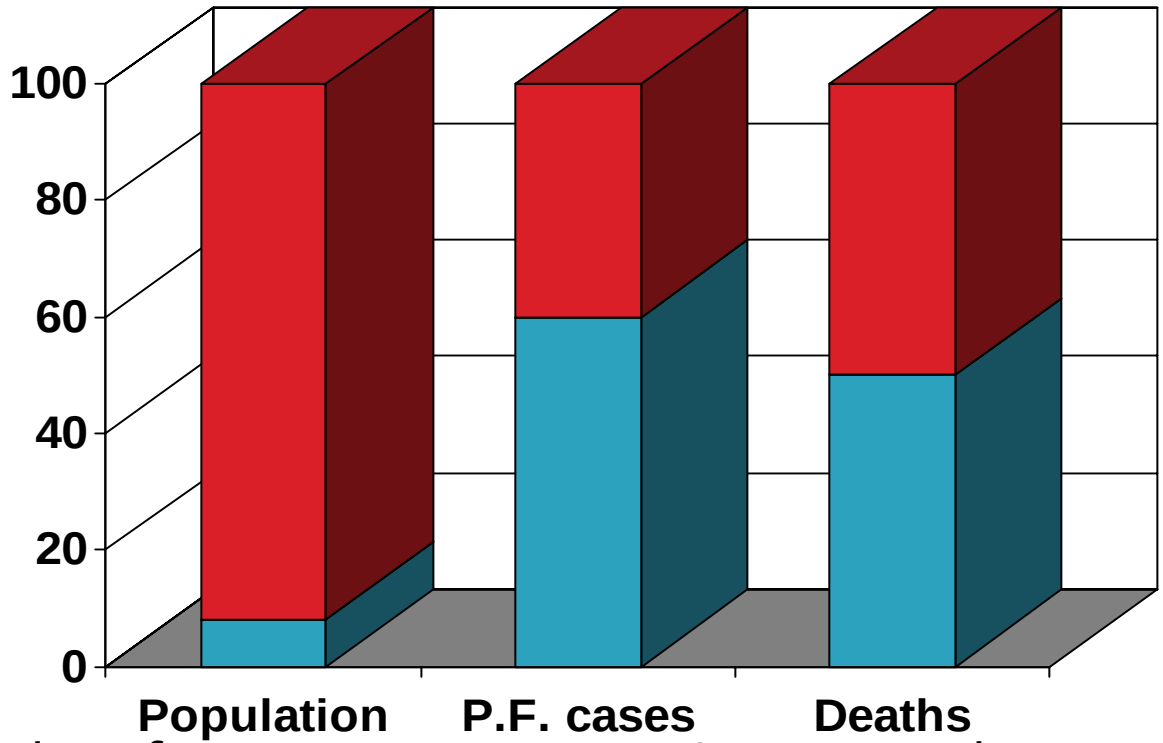
- 1 per 1000(0.1%) die even in the best scenario
- Usually it is between 1% and 3%

- 30% can become severe

- 10% minimum mortality in severe malaria

Tribals in India and falciparum malaria

-



1. Ecology favoring transmission. Occupational reasons.
2. Poor access to primary health care.
3. Development projects.

Controlling Malaria

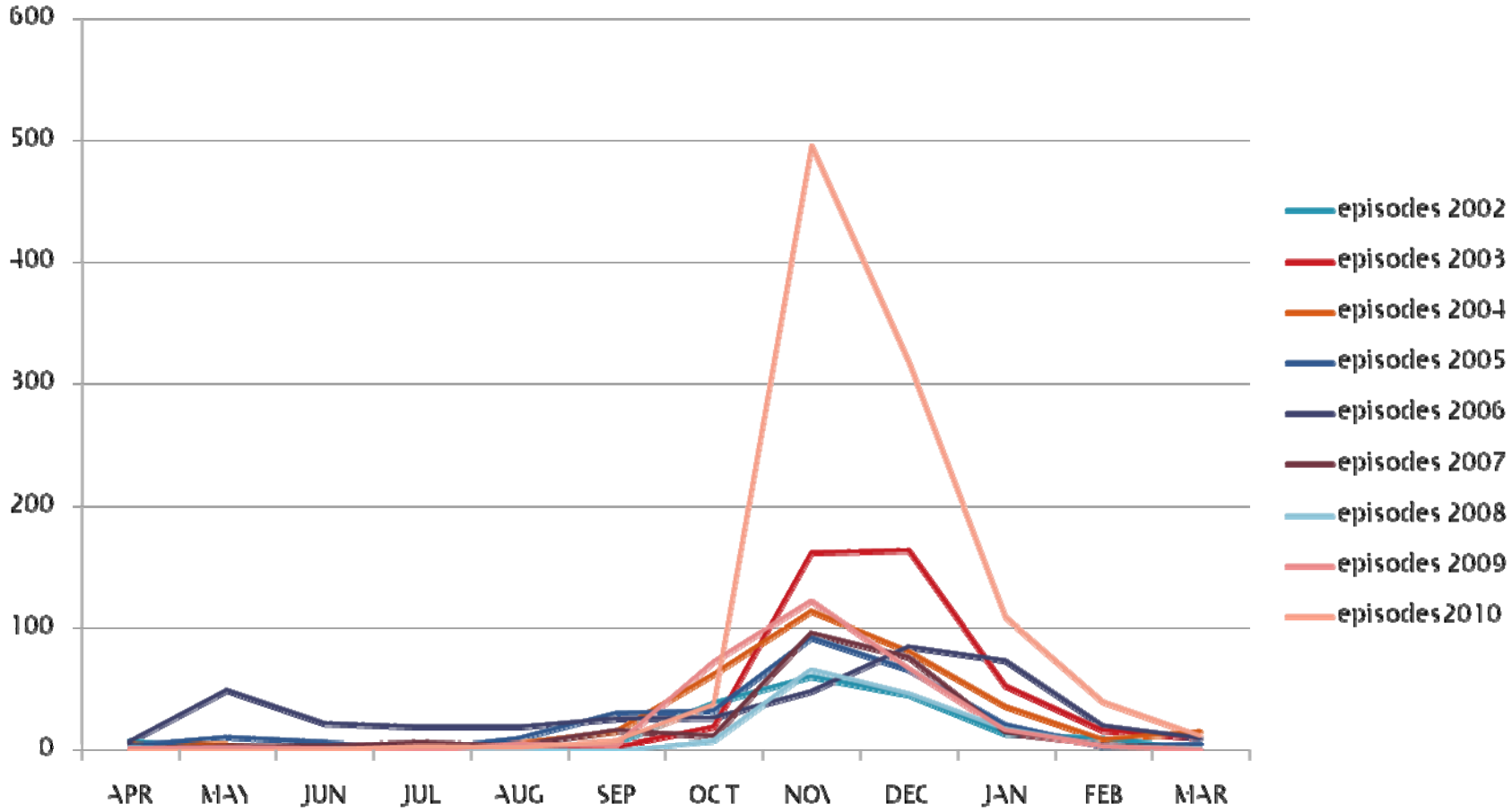
- Primary Health Care Approach
- But when severe disease happens, you require the highest level of tertiary care

The New NVBDCP strategy 2008

- ACT, Rapid kits and long lasting nets
- ASHA as the key person
- No chloroquine for falciparum
- Surveillance

1. No blood, no dialysis no intensive care, and no monitoring of severe malaria cases
2. no control over prescriptions
3. Microscopy being discredited
4. Surveillance failed completely

Seasonality of malaria 2002-11



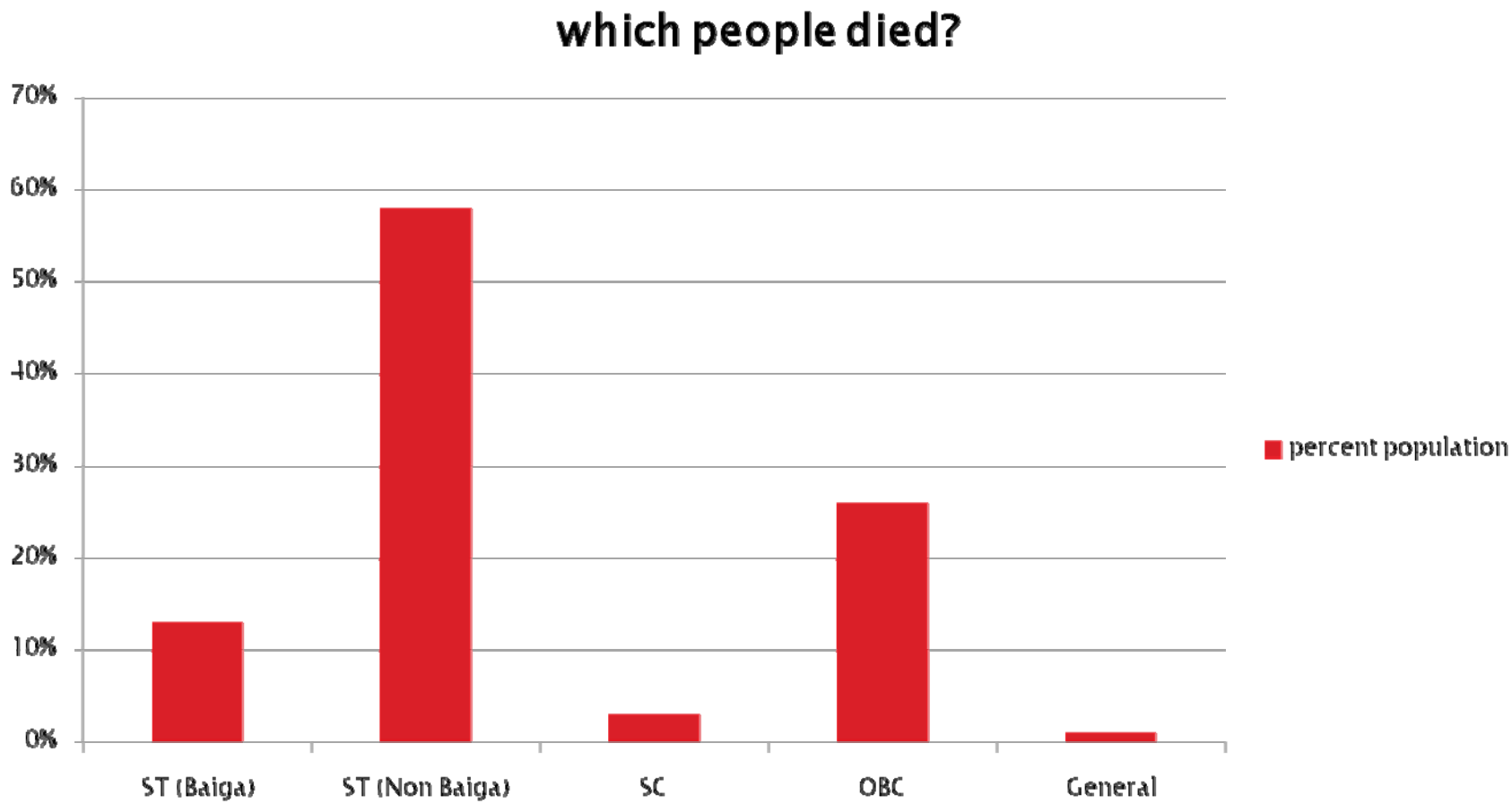
Bilaspur and Chhattisgarh 2010

	population	total cases	API 2010	API 2009
Chhattisgarh	248000	1,20,000	6.14	5.22
Bilaspur	2436445	10,131	4.72	1.35
JSS	28112	1026	36	10.6

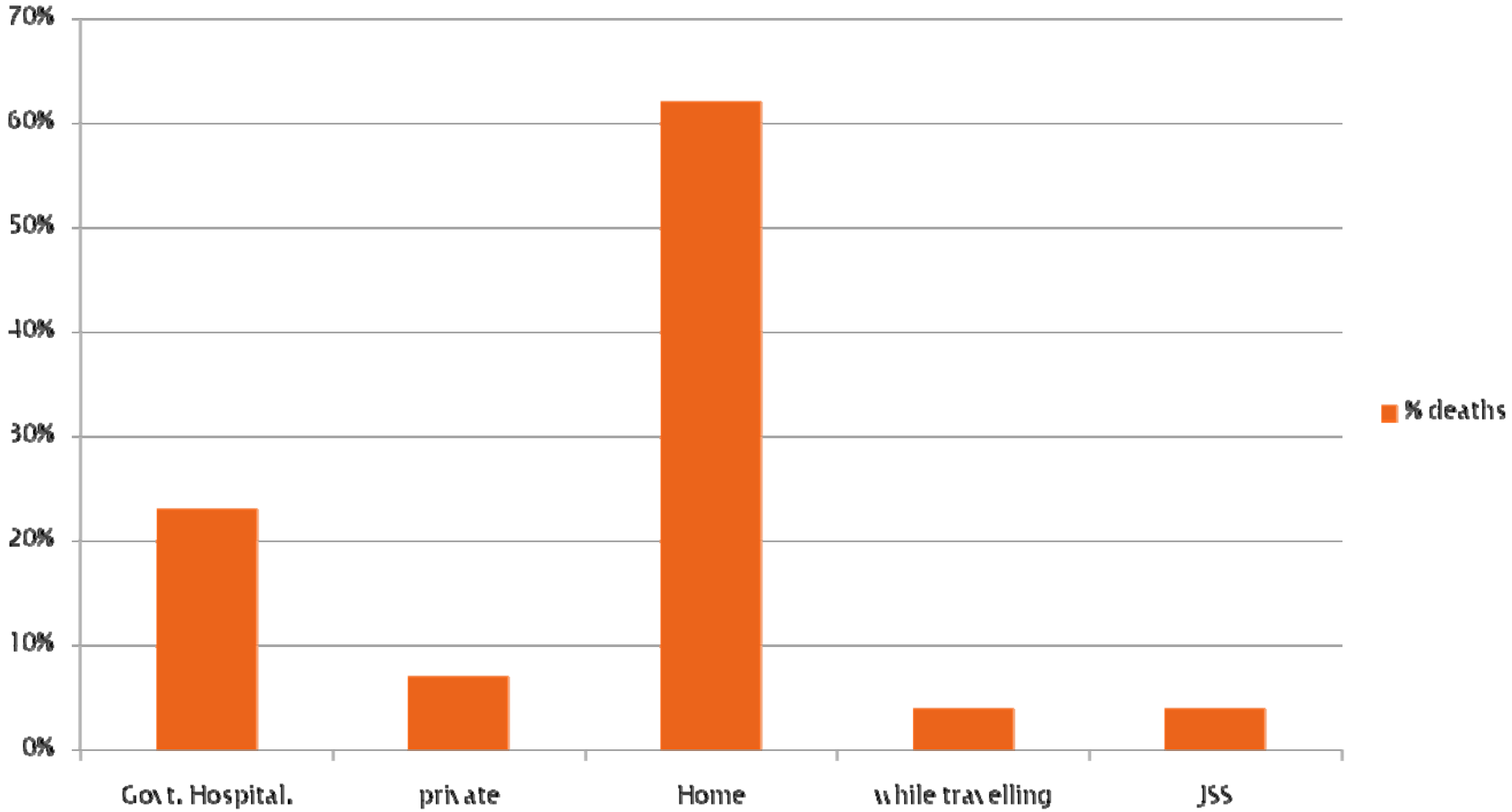
….and the deaths

	cases	deaths 2010	deaths 2009	Case fatality rates 2010
Chhattisgarh	1,20,000	47	11	0.039%
Bilaspur	10,131	9	0	0.089%
JSS	1026	16	4	0.2%

Caste groups among the dead



Where did people die?



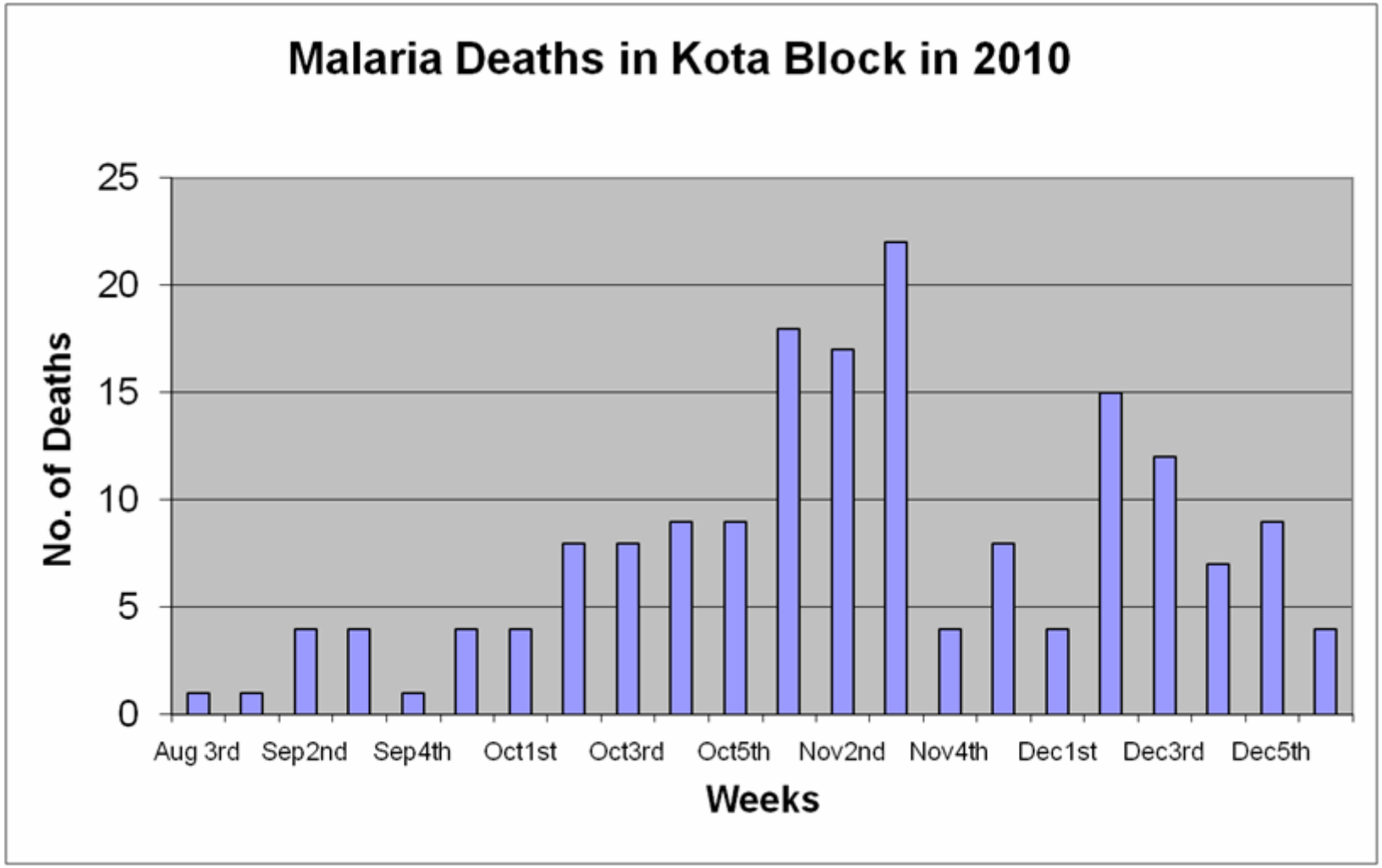
The public health system

- no surveillance worth the name
- no warning signals
- spray poor (20%)
- spray with DDT
- CQ was the only drug for much of the outbreak
- when ACT came, then it was with the physicians

- Not enough nets(18%) had one net in the family

The Hospitals

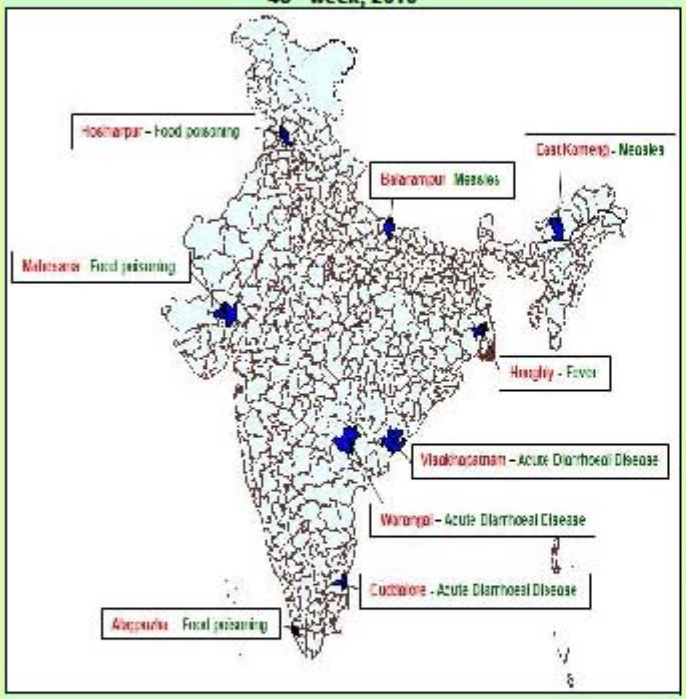
- no artesunate or artemether
- not enough blood
- Dialysis not supported
- no good transport
- quinine for a few hours


Malaria Deaths in Kota Block in 2010
No. of Deaths
25
20
15
10
5
0
Aug 3rd
Sep2nd
Sep4th
Oct1st
Oct3rd
Oct5th
Nov2nd
Nov4th
Dec1st
Dec3rd
Dec5th
Weeks

DISEASE ALERTS/OUTBREAKS REPORTED AND RESPONDED TO BY STATES/UTs THROUGH INTEGRATED DISEASE SURVEILLANCE PROJECT (IDSP)

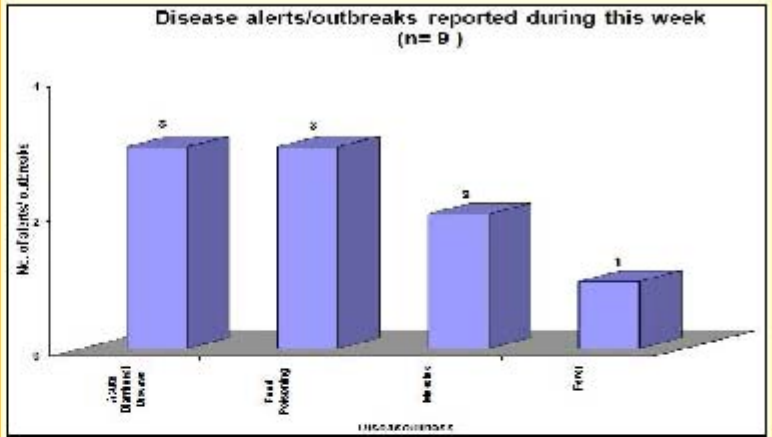
45th week (ending 7th November) 2010

District wise disease alerts/outbreaks reported in the 45th week, 2010

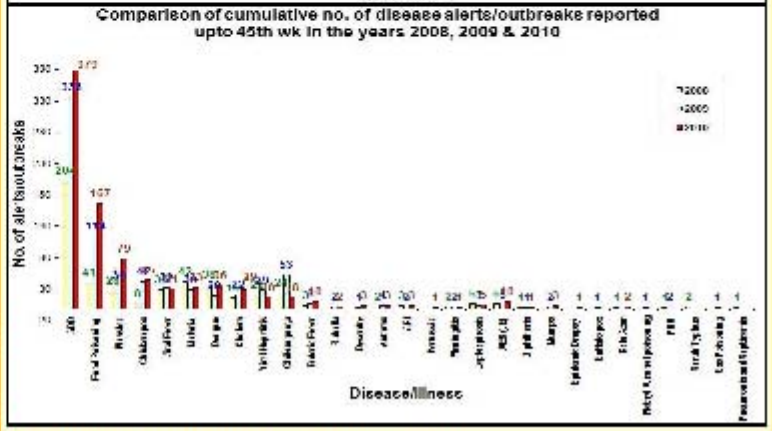


REPORTING STATUS OF STATES/UTs	
No. of States /UTs submitted outbreak report (including NIL report)	20
No. of States/ UTs submitted "NIL" outbreak report	12

Disease alerts/outbreaks reported during this week (n= 9)



Comparison of cumulative no. of disease alerts/outbreaks reported upto 45th wk in the years 2008, 2009 & 2010



INTEGRATED DISEASE SURVEILLANCE PROJECT, NATIONAL CENTRE FOR DISEASE CONTROL, DELHI
Tel No. 23913148, Fax No. 23922677; www.idsp.nic.in

- if there is no correct IRS,
- there are no nets,
- no surveillance and
- no appropriate medical care,
- and people are undernourished

- *we are bound to have a man-made epidemic of malaria in a situation where water harvesting structures are increasing*

Our learnings

- Complete breakdown of public health
- Public health system is a major culprit
- The Host needs to be considered
- Make severe malaria a notifiable illness

Public transport for health


STOP
CG10ZD-0595
Comander
Comander


ग्रामीणस्वास्थ्य वाहन

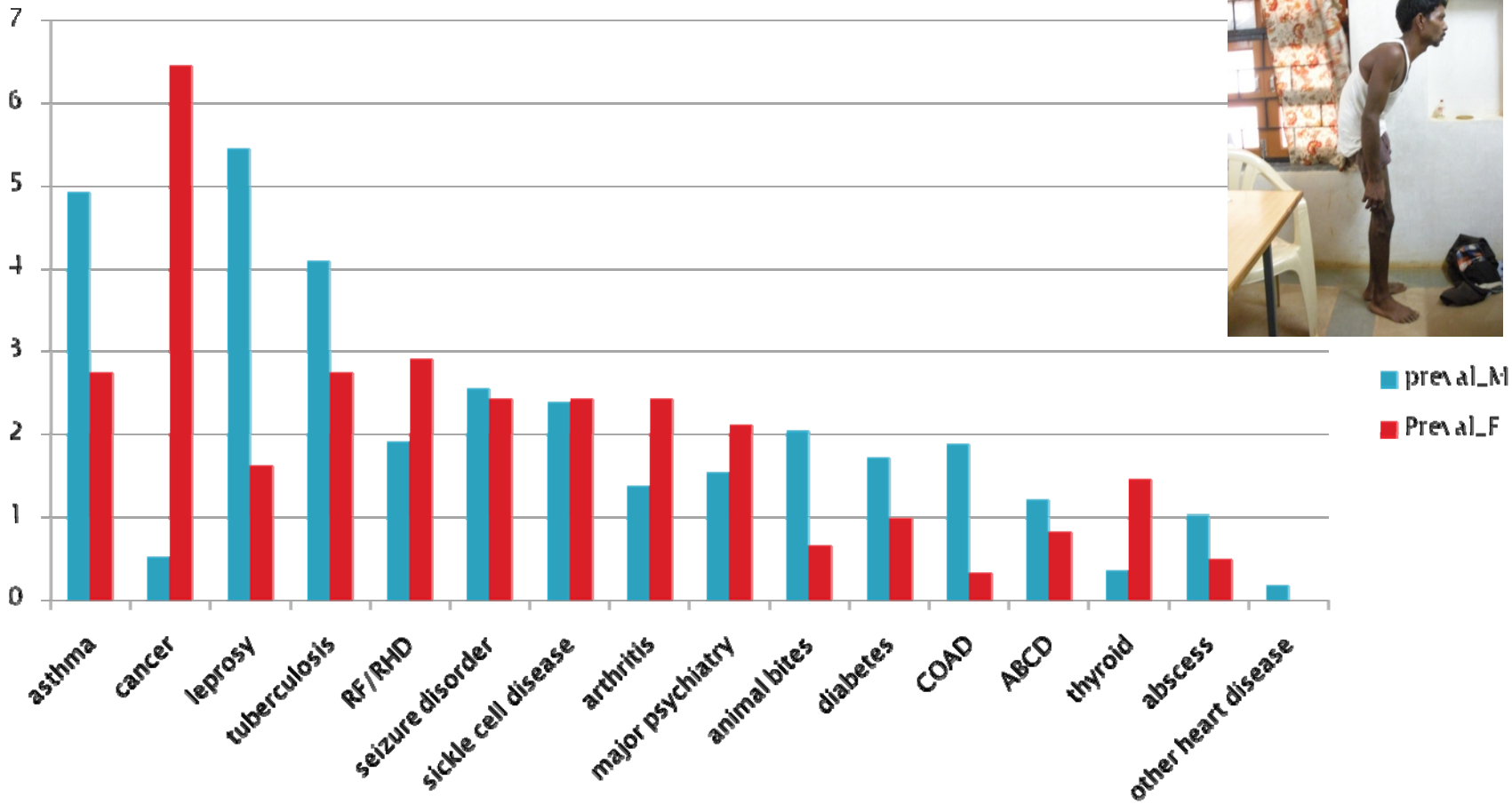
Public health systems

The rural urban divide

Huge burden of illnesses 2011

illness	New Patients
Tuberculosis	587
Leprosy	132
Hypertension	478
Rheumatic heart diseases	89
Cancers	400
surgery	1473
Sickle cell disease	99
diabetes	258

Community burden (per 1000) of selected illnesses in adults



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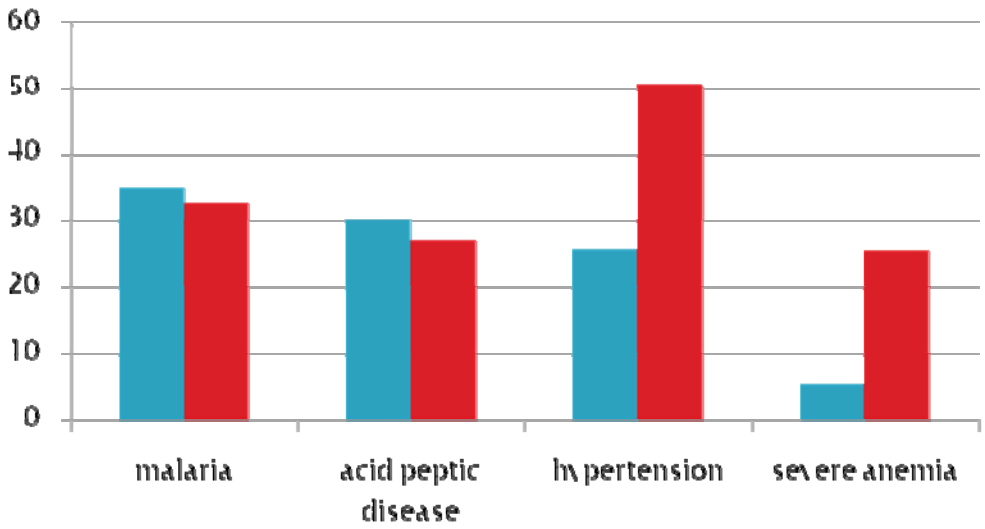
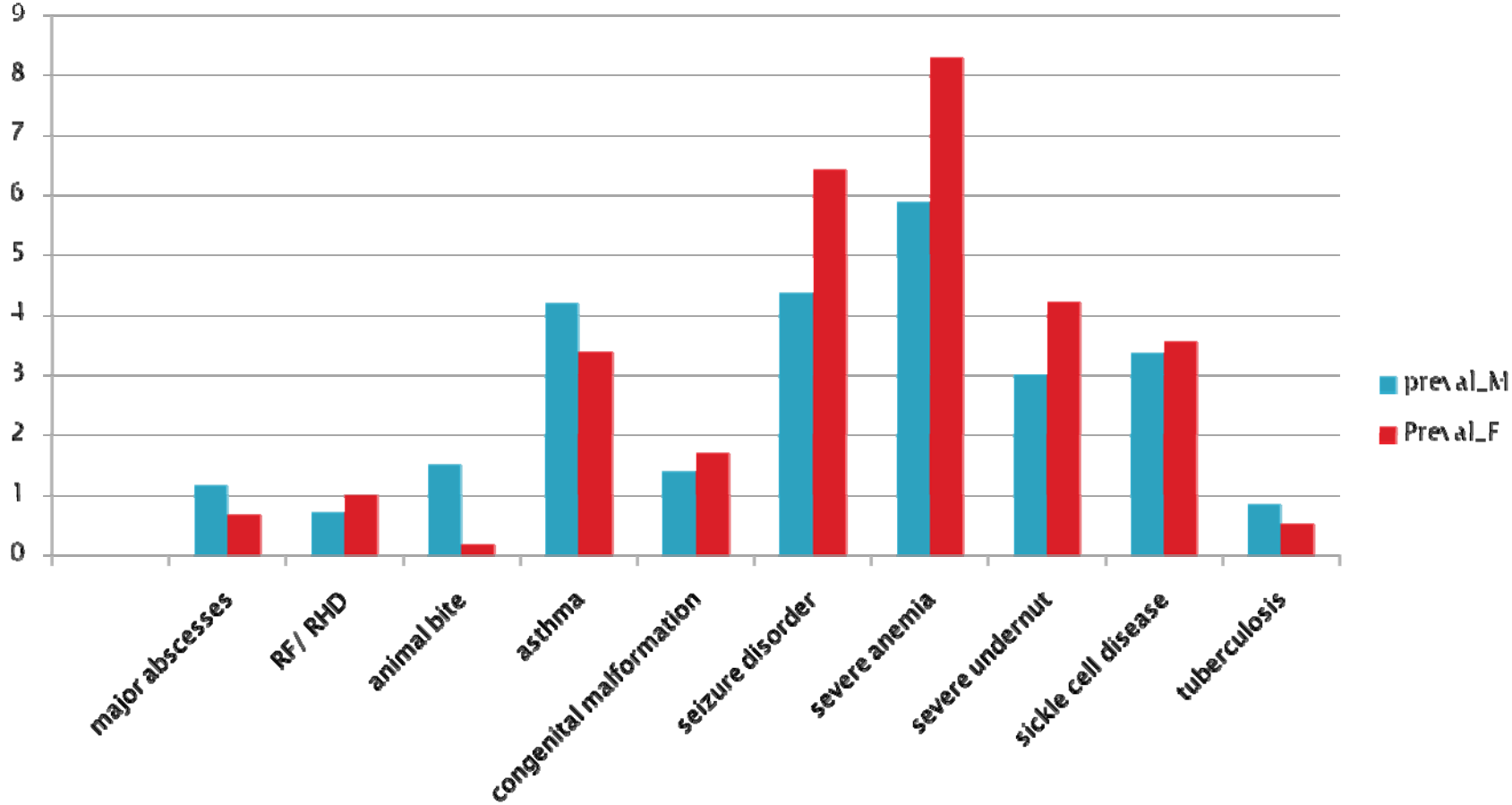
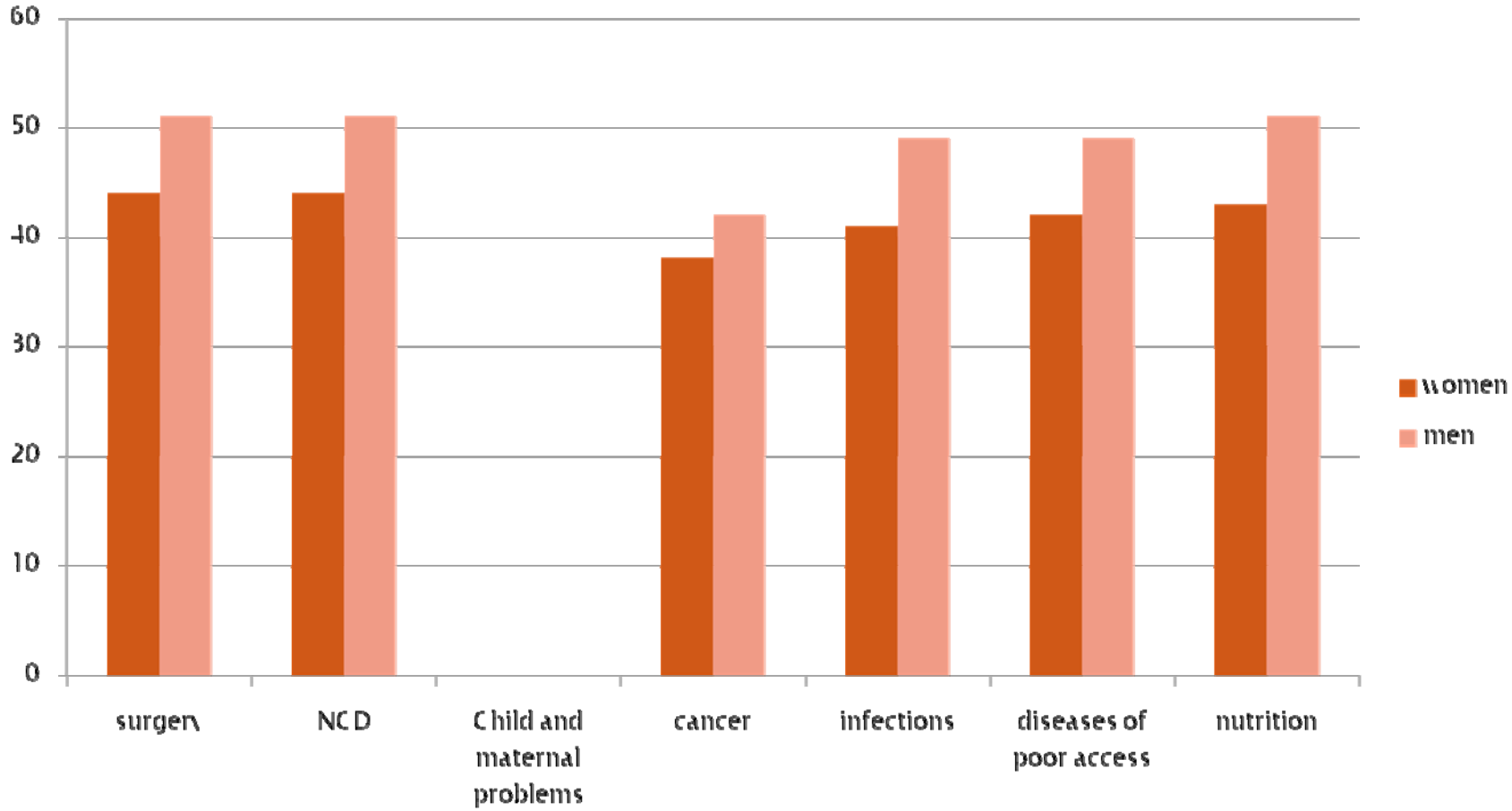


Illnesses in the community in the young



Median weights at the clinic




PERSON WEIGHER

What is the burden of the illnesses in rural india?

Trivialising rural health care

The volunteer ASHA…Or Durga

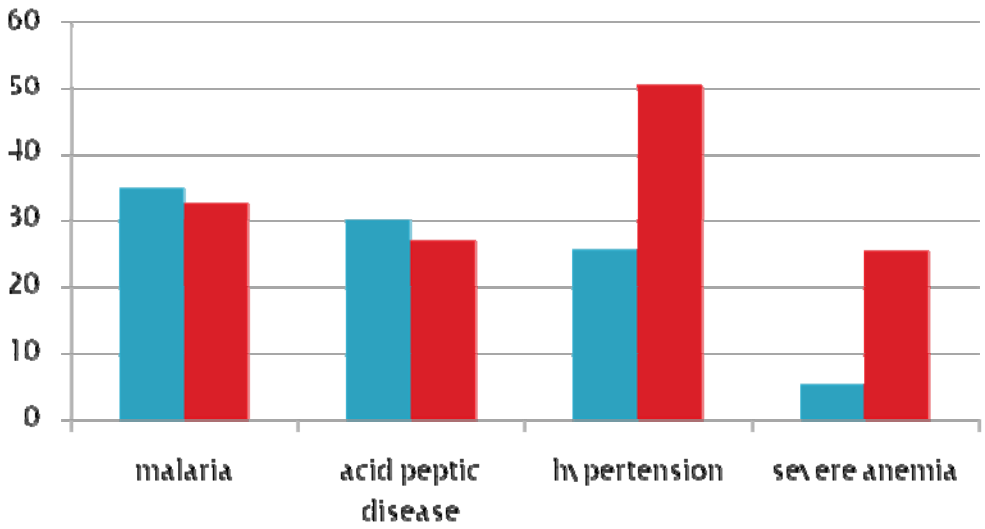
Non Communicable diseases (NCDs)

The new global epidemic

NCDs

- Nutrition transition leading to epidemiological transition
- Screening and preventive programmes
- Eat less, exercise more and stop tobacco

Community burden (per 1000) of selected illnesses in adults



The enigma of diabetes in a rural area as seen by JSS.

- 80% are low in body weight or normal.
- LOW BODY TYPE 2 Diabetes Mellitus and Malnutrition modulated diabetes mellitus.
- Majority occurring in hard-working, poor people.
- Peripheral neuropathy, infectious complications common.
- Very often require insulin

Weights of diabetes patients (n=113) (2009)

	N	Mean (SD)	Minimum	Maximum	P25	P50 (Median)	P75
Men	77	45 (9)	30	75	38	43	50
Women	36	44 (12)	24	72	36	40	52

Waist circum: 73 and 79 in men / women

Heights of patients with diabetes

	N	Mean (SD)	Minimum	Maximum	P25	P50 (Median)	P75
Men	71	160 (6)	146	177	155	159	163
Women	34	150 (5)	137	163	147	151	154

Cancer Cervix

- Over 500 cases of ca cervix have been diagnosed at JSS, almost 3 new patients every week
- Over 80% of them are in stage 2 b or beyond
- Commonest cancer among women

Pulse polio immunization

Polio campaign: the insanity

- Inflated overestimate
- Changing the definition
- Sharp increase in number of acute paralysis
- Pushing and thrusting on people
- Harming other programmes
- Consuming massive amounts of money

Bringing back equity centrestage

- Universal health systems and programmes
- Planners to plan as it they are doing for themselves

Getting Equity amidst structural violence

- Resources can be found
- Inequity can't be managed with the latest tools from economists or technocrats

Making choices

And taking sides with the people