

BROOKINGS INDIA

QUALITY, INDEPENDENCE, IMPACT

Brookings India Health Monitor Democratizing Health in India

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New Delhi

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Common Platform

- Real Time Data
- Research - Papers, policy briefs, state reports
- Analytics - Interactive maps, Indexes (real time)

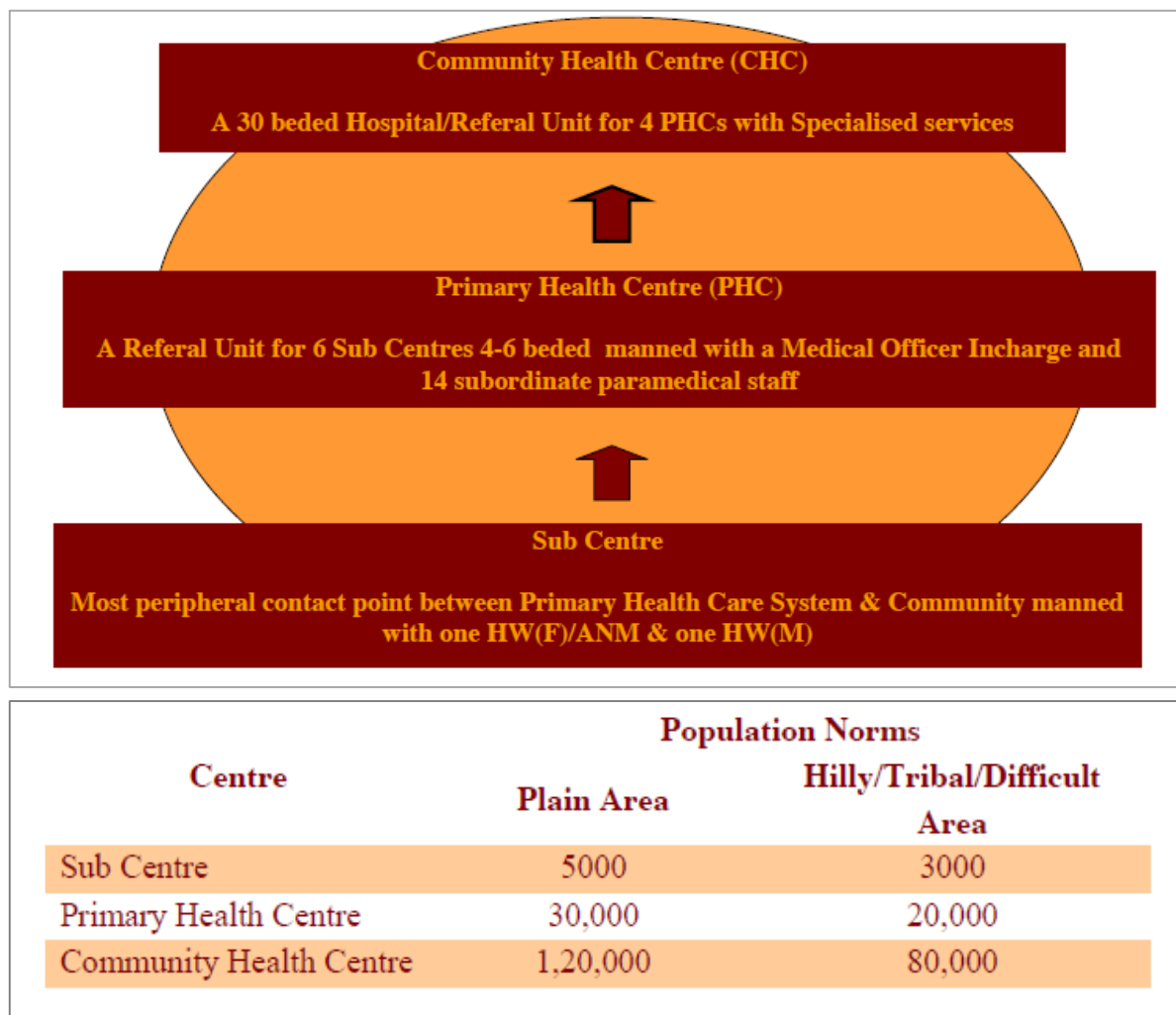
Public Data

- HMIS and RHS (MoHFW)
- SRS (Census of India)
- NFHS (IIPS)
- NSSO (CSO)

Focus areas

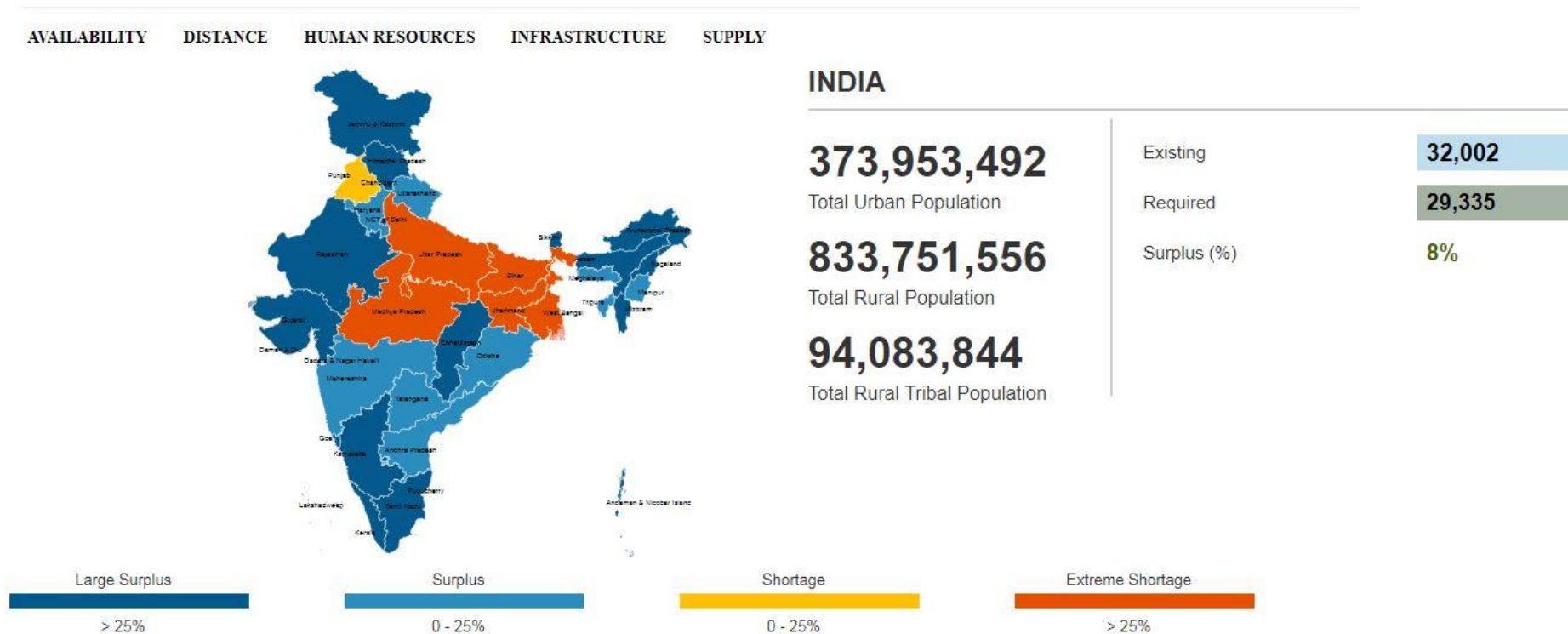
- Public Health Infrastructure
- Maternal Health
- Child Health
- Communicable Diseases
- Non-communicable Diseases
- Mental Health

1. Public Health Infrastructure



Infrastructure Quantity: E.g. Availability of PHCs

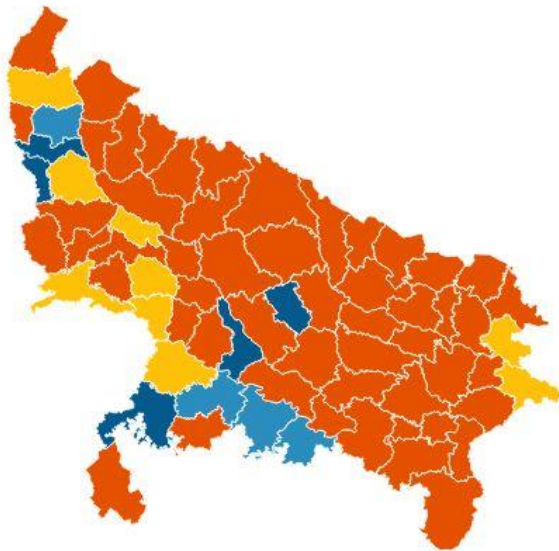
Availability of Primary Health Centres



Infrastructure Quantity: E.g. Availability of PHCs

Availability of Primary Health Centres

AVAILABILITY DISTANCE HUMAN RESOURCES INFRASTRUCTURE SUPPLY



UTTAR PRADESH

44,495,063

Total Urban Population

155,317,285

Total Rural Population

1,031,076

Total Rural Tribal Population

Existing

3,382

Required

5,193

Shortage (%)

54%

Large Surplus

> 25%

Surplus

0 - 25%

Shortage

0 - 25%

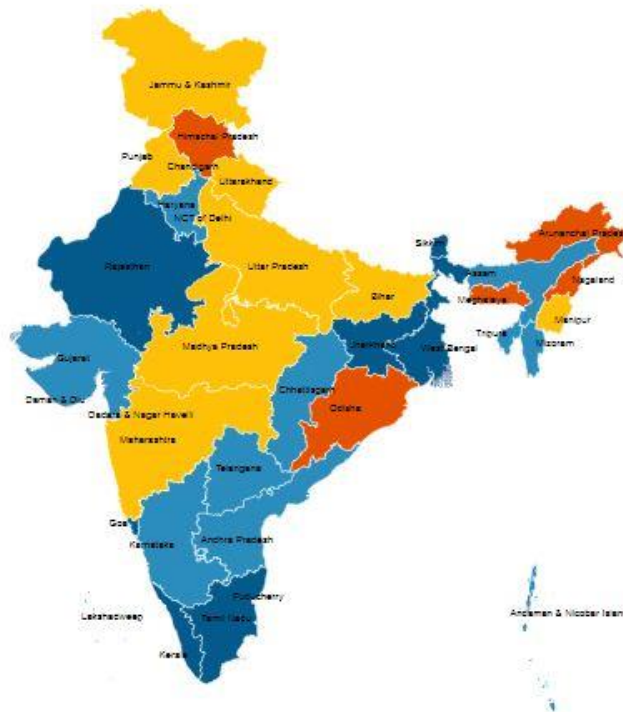
Extreme Shortage

> 25%

Infrastructure Quantity: E.g. Distance to Sub Centre

Villages with Access to Sub Centre within 5 km : INDIA

AVAILABILITY DISTANCE HUMAN RESOURCES INFRASTRUCTURE SUPPLY



INDIA

640,948

Total Number Of Villages

302,752

Villages With Access

High

> 71%

Above average

53% - 71%

Below average

40% - 52%

Low

< 40%

Infrastructure Quantity: E.g. Distance to Sub Centre

Villages with Access to Sub Centre within 5 km

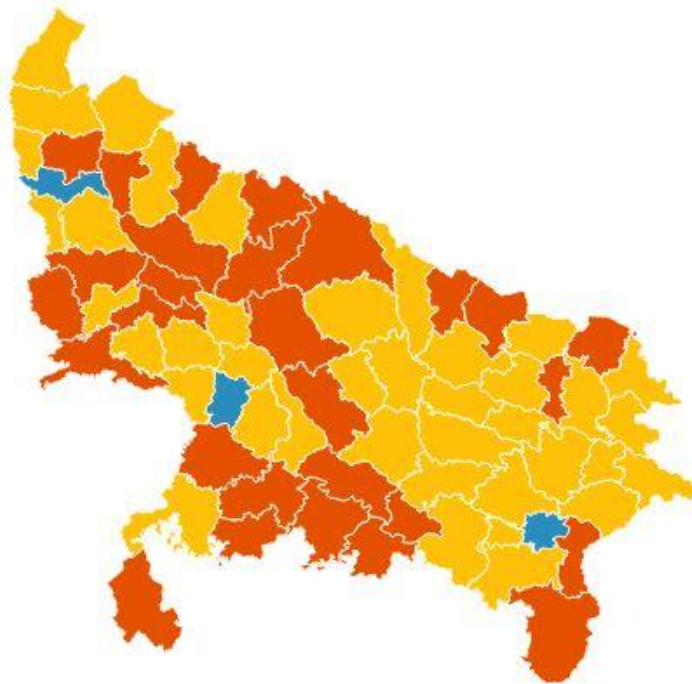
AVAILABILITY

DISTANCE

HUMAN RESOURCES

INFRASTRUCTURE

SUPPLY



UTTAR PRADESH

106,774

Total Number Of Villages

32,888

Villages With Access

High

> 71%

Above average

53% - 71%

Below average

40% - 52%

Low

< 40%

Infrastructure Quality: E.g. Infrastructure of CHC

Public Health Infrastructure Quality for Community Health Centre : Madhya Pradesh

AVAILABILITY DISTANCE HUMAN RESOURCES INFRASTRUCTURE SUPPLY



Infrastructure

Shortage in Community Health Centre

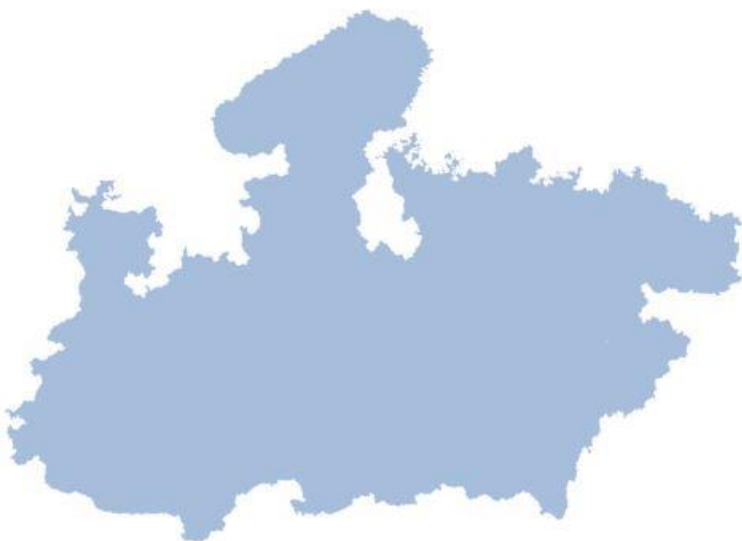
Functioning X-Ray Machines	80.5%
Quarters for Specialits Doctors	34.4%
Specialist Doctors Living in Quarters	63.8%
Referral Transport Available	0.0%
Functioning Labour Rooms	0.0%
New Born Care Corners	3.3%
at least 30 Beds	0.0%
Functional Operational Theatres	6.3%
Functional Labs	3.3%

 Surplus  Shortage

Infrastructure Quality: E.g. Human Resources in CHCs

Public Health Infrastructure Quality for Community Health Centre : Madhya Pradesh

AVAILABILITY DISTANCE HUMAN RESOURCES INFRASTRUCTURE SUPPLY



Human Resources

Shortage in Community Health Centre

All Specialists	80.3%
General Duty Medical Officer	22.1%
Pharmacists in PHC & CHC	32.0%
Lab Technicians in PHC & CHC	40.7%
Nursing Staff in PHC & CHC	3.4%
Shortage of Radiographers	49.4%

Surplus Shortage

Infrastructure Quality: E.g. Supplies at CHCs

Public Health Infrastructure Quality for Community Health Centre : Madhya Pradesh

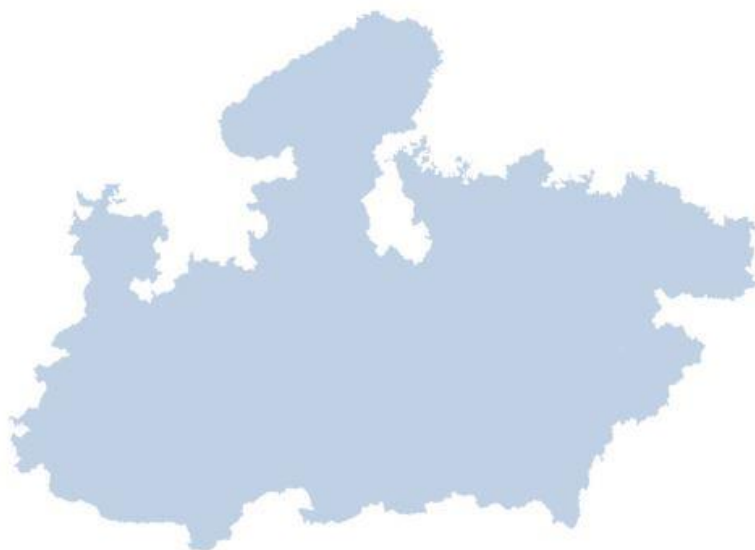
AVAILABILITY

DISTANCE

HUMAN RESOURCES

INFRASTRUCTURE

SUPPLY



Supply

Shortage in Community Health Centre

Allopathic Drugs for Common Ailments	0.0%
AYUSH Drugs for Common Ailments	33.2%

 Surplus  Shortage

Health Infrastructure Index : Big States

	Quantity Index	Quality Index	Infrastructure Index	Ranking
Jammu & Kashmir	4.28	2.10	8.99	1
Chhattisgarh	3.86	2.09	8.08	2
Gujarat	3.04	2.29	6.95	3
Karnataka	2.98	2.31	6.88	4
Rajasthan	3.23	1.89	6.08	5
Uttarakhand	3.38	1.78	6.02	6
Kerala	3.10	1.91	5.94	7
Delhi	4.14	1.41	5.84	8
Assam	3.04	1.88	5.70	9
Tamil Nadu	2.41	2.34	5.62	10
Punjab	2.22	2.38	5.29	11
Andhra Pradesh	2.29	2.30	5.27	12
Maharashtra	1.93	2.55	4.92	13
Telangana	2.06	2.37	4.87	14
Madhya Pradesh	2.29	2.13	4.87	15
Haryana	2.03	2.18	4.41	16
Odisha	2.32	1.84	4.28	17
West Bengal	1.96	1.86	3.65	18
Uttar Pradesh	1.92	1.79	3.44	19
Jharkhand	2.15	1.51	3.25	20
Bihar	1.62	1.59	2.58	21

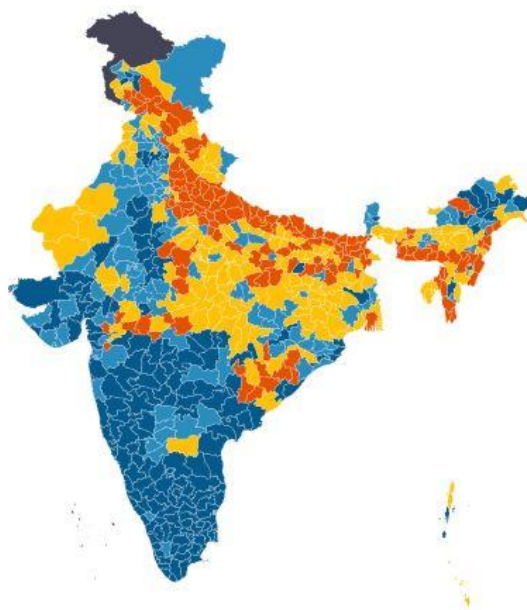
*Public Health Infrastructure Index = Quantity Index * Quality Index*

Health Infrastructure Index: Small States

	Quantity Index	Quality Index	Infrastructure Index	Ranking
Mizoram	6.41	2.61	16.73	1
Sikkim	5.12	2.35	12.03	2
Himachal Pradesh	5.80	1.89	10.96	3
Arunachal Pradesh	6.96	1.34	9.33	4
Nagaland	4.26	1.96	8.34	5
Meghalaya	3.77	2.00	7.54	6
Tripura	3.90	1.85	7.21	7
Manipur	3.10	2.05	6.37	8
Goa	2.34	2.23	5.23	9

2. Maternal Health : E.g. safe deliveries

Safe deliveries to total reported deliveries : INDIA



INDIA

1,310,819,149

Total Population

20,575,053

Total Reported Deliveries

18,952,228

Total Safe Deliveries

Percent

92%

High

> 99%

Above average

98% - 99%

Below average

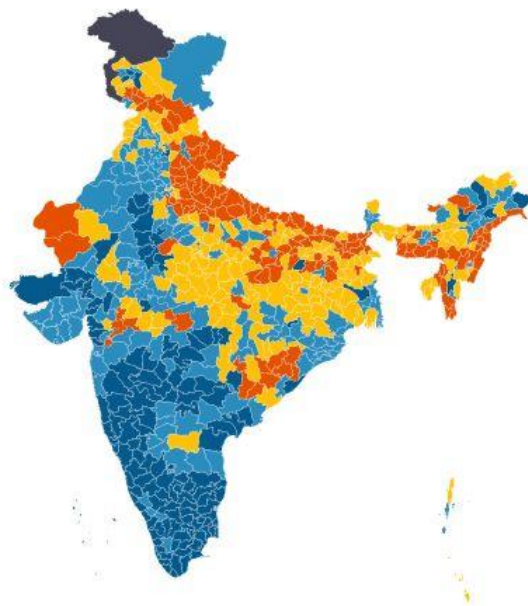
89% - 97%

Low

< 89%

Maternal Health : E.g. institutional deliveries

Institutional deliveries to total reported deliveries



INDIA

1,310,819,149

Total Population

20,575,053

Total Reported Deliveries

18,540,529

Institutional Deliveries

Percent

90%

High

> 99%

Above average

96% - 99%

Below average

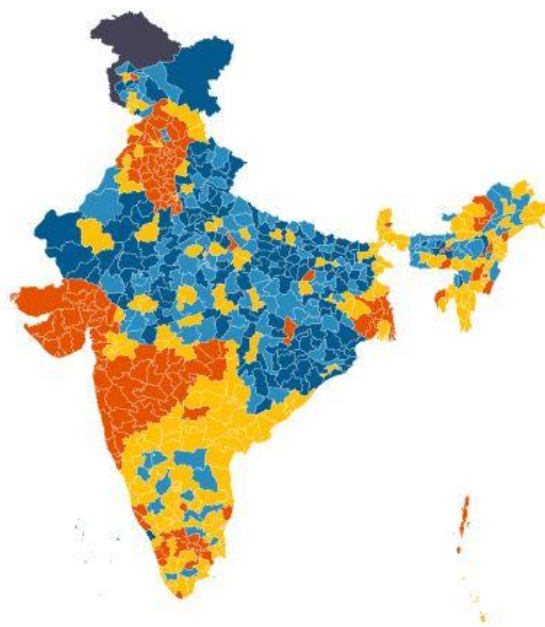
85% - 95%

Low

< 85%

Maternal Health : E.g. JSY cases

JSY to total ANC registrations



INDIA

1,310,819,149

Total Population

28,938,803

Total ANC Registrations

20,952,680

Total JSY Registrations

Percent

72%

High

> 99%

Above average

92% - 99%

Below average

55% - 91%

Low

< 55%

*JSY : Janani Suraksha Yojana

3. Causes of Death in India

Region	Cause of Mortality (Male)	(%)	Cause of Mortality (Female)	(%)
All-India	Cardiovascular diseases	23.9	Cardiovascular diseases	20
	Ill-defined	8.6	Ill-defined	13.3
	Respiratory diseases	8.1	Respiratory diseases	7.6
Uttar Pradesh	Cardiovascular diseases	12.3	Ill-defined	14.4
	Ill-defined	11.3	Diarrhoeal diseases	9.1
	Respiratory diseases	11.3	Cardiovascular diseases	8.6
Uttarakhand	Cardiovascular diseases	20.4	Respiratory diseases	15.4
	Respiratory diseases	16	Cardiovascular diseases	14.6
	Tuberculosis	6.6	Ill-defined	7.4
Kerala	Cardiovascular diseases	35.4	Cardiovascular diseases	34.9
	Malignant & other Neoplasms	12	Ill-defined	17.3
	Respiratory diseases	9	Malignant & other Neoplasms	11.1

*Ill-defined/ All other symptoms, signs and abnormal clinical and laboratory findings

Research papers

- **“Missing Female Patients: An Analysis of Gender Ratios from Tertiary Care in India”**

Deepak Agarwal, Randeep Guleria, Mudit Kapoor, Shamika Ravi and Ambuj Roy (using AIIMS Data)

- **“Restructuring MCI and Medical Education in India”**

Shamika Ravi and Jaclyn Williams

- **“Health and Morbidity in India: 2004-2014”**

Shamika Ravi, Rahul Ahluwalia and Sofi Bergkvist

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