



AN ANALYSIS OF HEALTHCARE INFRASTRUCTURE IN INDIA

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ABSTRACT This study examines the different aspects of healthcare service facilities and health infrastructure available in India. Adequate health infrastructure like hospitals, doctors and trained personal determines the major health indicators like life expectancy, infant mortality rate, maternal mortality rate etc. There is no denying in the fact that India has achieved a significant progress in providing health infrastructure but it is not evenly distributed in the pan country. The states like Bihar, Jharkhand, Madhya Pradesh and Uttar Pradesh are still lacking in providing the basic health service to the people and still below the international recommendations given by WHO, hence these states need a special focus to bridge the loopholes in the availability of proper healthcare facilities. So, this paper is an modest attempt to show the special distribution of health infrastructure and to identified the hotspots of poor healthcare facilities with the help of secondary data obtained from National Health Policy, 2018.

KEYWORDS : Healthcare infrastructure, World Health Organisation (WHO), National Health Policy.

INTRODUCTION:

According to WHO, "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Human health is important for economic growth and development. Importance of health for socio-economic development has gained recognition in recent time. There is a strong relation between the healthcare infrastructure and health index of any country. According to Banerjee, Duflo and Deaton (2004) better provision of health care is the key to improve health condition and also economic growth and development in poor countries like India. Health infrastructures are "the basic services or social capital of a country, or part of it, which make economic and social activities possible" structures that support public health, having both tangible and intangible aspects and existing inside and outside the government sector.

India's health challenges are not only huge in magnitude due to its large population but they are complex due to its diversity and the chronic poverty and inequality. However, India is one of the major countries where diseases are still not under control. India's healthcare sector, however, falls well below international benchmarks for physical infrastructure and manpower, and even falls below the standards existing in comparable developing countries. So, Health infrastructure is an important indicator for understanding the health care policy and welfare mechanism in a country and signifies the investment and priority accorded to creating the infrastructure in a region.

RESEARCH QUESTIONS

In last few decades, India has achieved considerable progress in providing access to health care services to the people. Recently, the health infrastructure of country has expanded manifold. Now, the question arises whether health infrastructure is sufficient and properly distributed in India. The present study aims to address the following two basic questions regarding the healthcare infrastructure in India.

1. How is it distributed across India?
2. Is this health infrastructure adequate in India?

DATASOURCES AND METHODOLOGY

The present study is exclusively based on secondary data. For the analysis of health infrastructural distribution twenty-nine major states have been studied for interstate comparisons. The report titled as "National Health Profile, 2018" published by Centre Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India have been used in the present paper. Analysis of the data is presented in form of tables and graphs by using simple statistics like percentage.

RESULTS AND DISCUSSION

Table: 1 State-wise No. of Doctors and Average Population served in India

S. No.	State	No. Of Government Doctors	Projected Population as on Reference period 2017	Average population served/govt. Doctor
1	Andhra Pradesh	5114	52105	10189

2	Arunachal Pradesh	549	1327	2417
3	Assam	6082	32810	5395
4	Bihar	3576	101526	28391
5	Chhattisgarh	1626	25879	15916
6	Goa	521	2023	3883
7	Gujarat	5475	62825	11475
8	Haryana	2618	26675	10189
9	Himachal Pradesh	1517	7037	4639
10	J& K	4058	12419	3060
11	Jharkhand	1793	33203	18518
12	Karnataka	5047	68415	13556
13	Kerala	5239	35677	6810
14	Madhya Pradesh	4593	78964	17192
15	Maharashtra	6981	118652	16996
16	Manipur	1099	2592	2359
17	Meghalaya	585	2803	4791
18	Mizoram	437	1074	2458
19	Nagaland	437	2354	5387
20	Odisha	3359	42808	12744
21	Punjab	2992	29372	9817
22	Rajasthan	7227	79324	10976
23	Sikkim	268	653	2437
24	Tamil Nadu	7233	69030	9544
25	Telangana	4123	38520	9343
26	Tripura	1273	3867	3038
27	Uttar Pradesh	10754	214671	19962
28	Uttarakhand	1344	10632	7911
29	West Bengal	8829	91920	10411
30	Total	104749	1249158	11925

Source: National Health Profile, 2018, Directorate of State Health Services, Ministry of Health and Family Welfare.

In India, on an average, a govt. doctor attends 11925 people more than 10 times than what the WHO recommends 1:1000. In Bihar its ratio is 1:28391 means a doctor serves more than 2800 people. Followed by Uttar Pradesh where 19,962 patients per doctor. The states which are closet to meet the WHO standards are Arunachal Pradesh, Manipur and Sikkim. The figure shows the widespread regional disparity in the population served by a government doctor.

Table: 2 State-wise Health Human Resources in Rural areas

S. No.	State	No. Of Doctors at PHC's	Total Specialities at CHC's	Health Assistants		Health Workers	
				Male	Female	Male	Female
1	Andhra Pradesh	1644	348	0	1143	2964	12073
2	Arunachal Pradesh	122	4	81	6	92	481
3	Assam	1048	139	106	308	2783	9056
4	Bihar	1786	82	212	95	1244	23390
5	Chhattisgarh	341	59	425	640	3856	6834
6	Goa	56	4	0	9	86	195
7	Gujarat	1229	92	933	1218	7888	8859

8	Haryana	429	16	153	273	1217	4432
9	Himachal Pradesh	492	12	46	0	829	1786
10	J& K	704	191	26	99	672	4737
11	Jharkhand	331	75	33	16	1654	7933
12	Karnataka	2136	498	3252	1089	3252	7152
13	Kerala	1169	40	2186	13	3401	7950
14	Madhya Pradesh	954	180	543	963	3707	11546
15	Maharashtra	2929	508	1620	1801	4570	12135
16	Manipur	194	3	65	59	374	923
17	Meghalaya	112	13	83	72	192	1075
18	Mizoram	56	0	22	19	366	640
19	Nagaland	122	8	53	24	N/A	569
20	Odisha	940	318	0	559	3617	8084
21	Punjab	568	203	268	502	1424	4893
22	Rajasthan	2382	497	34	1106	1159	16211
23	Sikkim	30	1	0	12	86	196
24	Tamil Nadu	2759	78	1036	991	2109	7957

25	Telangana	966	125	0	944	1769	7848
26	Tripura	156	0	23	33	735	720
27	Uttar Pradesh	2209	484	13	1916	3835	31716
28	Uttarakhand	215	41	954	155	67	2083
29	West Bengal	918	117	73	157	2174	18449

Source: National Health Profile, 2018, Directorate of State Health Services, Ministry of Health and Family Welfare

The table 2 shows that the country has a shortfall of 10,112 female health workers at primary health centres, 11,712 female health assistants, 15,592 male health assistants and more than 61,000 female health workers. Shortage of medical staff is a crucial issue in India. Every year almost 462 medical colleges prepares 56,748 doctors, similarly, 3123 institutions churn out 125,764 nurses each year which is too little in proportion to the country's population because each year 26 million peoples are adding to the existing number.

Table: 3 State-wise No. of Govt. Hospitals and Bed and Average Population served

S. No.	State	Rural Hospitals (Govt.)		Urban Hospitals (Govt.)		Total Hospitals (Govt.)		Projected Population as on Reference period 2017	Average Population served per Govt. Hospital	Average Population served per Govt. Hospital Bed
		No.	Beds	No.	Beds	No.	Beds			
1	Andhra Pradesh	193	6480	65	16658	258	23138	88361	342484	3819
2	Arunachal Pradesh	208	2136	10	268	218	2404	1327	6087	552
3	Assam	1176	10944	50	6198	1226	17142	32810	26762	1914
4	Bihar	930	6083	103	5936	1033	12019	101526	98283	8447
5	Chhattisgarh	169	5070	45	4342	214	9412	25879	120930	2750
6	Goa	17	1405	25	1608	42	3013	2023	48167	671
7	Gujarat	364	11715	122	20565	486	32280	62825	129270	1946
8	Haryana	609	6690	59	4550	668	11240	26675	39933	2373
9	Himachal Pradesh	705	5665	96	6734	801	12399	7037	8785	568
10	J& K	56	7234	76	4417	132	11651	12419	94083	1066
11	Jharkhand	519	5842	36	4942	555	10784	33203	59825	3079
12	Karnataka	2471	21072	374	49093	2845	70165	68415	24047	975
13	Kerala	981	16865	299	21139	1280	38004	35677	27873	939
14	Madhya Pradesh	334	10020	117	18819	451	28839	78964	175086	2738
15	Maharashtra	273	12398	438	39048	711	51446	118652	166880	2306
16	Manipur	23	730	7	697	30	1427	2592	86400	1816
17	Meghalaya	143	1970	14	2487	157	4457	2803	17854	629
18	Mizoram	56	604	34	1393	90	1997	1074	11933	538
19	Nagaland	21	630	15	1250	36	1880	2354	65389	1252
20	Odisha	1655	6339	149	12180	1804	18519	42808	23729	2312
21	Punjab	510	5805	172	12128	682	17933	29372	43067	1638
22	Rajasthan	602	21088	150	10760	752	31848	79324	105484	2491
23	Sikkim	24	260	9	1300	33	1560	653	19788	419
24	Tamil Nadu	692	40179	525	37353	1217	77532	69030	56721	890
25	Telangana	802	7668	61	13315	863	20983	38520	44635	1836
26	Tripura	99	1140	56	3277	155	4417	3867	24948	875
27	Uttar Pradesh	4442	39104	193	37156	4635	76260	214671	46315	2815
28	Uttarakhand	410	3284	50	5228	460	8512	10632	23113	1249
29	West Bengal	1272	19684	294	58882	1566	78566	91920	58697	1170
30	Total	19756	278104	3644	401723	23400	679827	1285413	54932	1891

Source: National Health Profile, 2018, Directorate of State Health Services, Ministry of Health and Family Welfare

The data also points towards inadequate hospital infrastructure, and a huge disparity between urban and rural healthcare. In India, there are over 23,000 hospitals with around 7 lakh beds. Almost 20,000 hospitals are in the rural area with close to 3 lakh beds. Urban areas have fewer hospitals, around 3,700, but the majority of the beds totaling above 4.3 lakh. The data also shows that in some states, government hospital beds are being shared by patients. In Uttar Pradesh, an average population served by a government hospital bed rose to 2,904 in 2017 from 181 in 2013 – reflecting a phenomenal increase in the demand for healthcare infrastructure and the failure of the government to match it.

CONCLUSION

India has achieved a considerable progress in providing health infrastructure and its access to health care services to the mass population. In last two decades, in India, the health infrastructure has increased and improved in manifolds. Basic Health Care is necessary for all and India has achieved it too some extend. However, distribution of health infrastructure is not proper. Especially, Uttar Pradesh and Bihar are under developed compared to rest of India and they need

more attention to improve health infrastructure and distribution of health facilities. The NHP report reflects the consistent indifferent approach of the government in terms of public health spending, with the government sparing just 1.3 per cent of the GDP for public healthcare, way less than the global average of 6 per cent. It also says that the per capita public expenditure by the government on health stands at Rs 1,112 that comes to Rs 3 per day. The fiscal constraints on the government make it obligatory for the private healthcare providers to take over part of the responsibility. New ways for establishing, strengthening and sustaining the private- public co-operation are essential for rejuvenating the system. With the increasing population and the growth of middle income group, the access of medical services has gained prime importance. With several initiatives taken by government to address the infrastructure requirements the need for technology solutions have grown rapidly. In the absence of technology solutions the healthcare sector cannot achieve its full potential.

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