PRIMARY HEALTH CARE IN INDIA

By: Gulnawaz Usmani , Prof. Nighat Ahmad
Dept. of Economics, Aligarh Muslim University, Aligarh
nawaz1717@gmail.com, nigahmad.edu@gmail.com

India is a big country, with a population of 1.21 billion and a huge burden of communicable and non-communicable diseases. Today, India shows a good economic growth and development in almost all the sectors of the country. Employment, education and health standard has been improved over the years. But these changes are not transformed into a uniform healthcare in the country; most of the population still depends on the traditional healthcare. Indian healthcare system shows a splash progress since after the independence. The number of sub-centres, primary healthcare centres and community health centres increased but still there is a long way to go. Country experiences huge shortfall in primary healthcare centre because of the inter-state diversity in primary healthcare centres. The present paper made an attempt to study the inequality in the primary health care access in India. Data were collected from the secondary sources.

Keywords: *Health; Healthcare system; Primary Healthcare; Sub-centres, Primary Health Centres; Community Health Centres; India*

Introduction:

Access to primary healthcare has been a major goal of almost all the countries of the world, in order to achieve the healthcare need of population. Improvement in access to primary health care boosts the health standard and quality of people's life. However, as a result of increasing population and socio-economic diversity, variation in the access to primary healthcare can be assumed to occur. The existing health care inequalities in the availability of India's healthcare system are supposed to be as large as India's own population. In order to provide better healthcare to all people, it is important to address such inequality in the access to primary healthcare. Accessibility to primary healthcare is influenced mainly by the availability of public healthcare centres to population.

India is a big country, with a population of 1.21 billion and a huge burden of communicable and non-communicable diseases. When we talk about population, the whole population is divided into 2 parts. The one is urban population and the second is rural population. The population lives in urban areas have somewhat better quality of life, access to healthcare facilities such as district and sub-district hospitals because they generally found nearby in the urban areas. However the majority of the population lives in rural areas under the below poverty line and have limited access to health care services and facilities. Today, India shows a good economic growth and development in almost all the sectors of the country. Employment, education and health standard has been improved over the years. But these changes are not transformed into a uniform healthcare in the country; most of the population still depends on the traditional healthcare. One of the bottlenecks in Indian healthcare system is that most of the population still relies on cultural remedies and traditional practices in healthcare.

Rural health is a state subject, and every state is trying to raise the standard of living of its people. To improve the health status of its people is one of the basic duties of a state. Almost 68 percent of total population lives in rural areas faces lack of better health care services. Today India faces maternal mortality on a large scale and most of them happened in rural areas. So thus, child health is also influenced in rural areas of the country. Healthcare is the right of every citizen, but lack of adequate infrastructure and unavailability of healthcare services and non-qualified health workers make Indian more vulnerable to health consequences.

Objective and Data source of the Study:

The paper seeks to examine the inequalities in the primary health care in India's major states. To study the inter-state inequality data were collected from various government sources such as census of India, rural health statistics, health and family welfare statistics etc.

Primary Health Care:

Indian public health care system consists of three types of health care namely: primary health care, secondary health care and tertiary health care. Indian healthcare system shows a splash progress since after the independence. The number of sub-centres, primary healthcare centres and community health centres increased but still there is a long way to go. Country experiences huge shortfall in primary healthcare centre because of the inter-state diversity in primary healthcare centres. Primary health care centres are governed and financed by the state governments out of the funds provided to state governments under the minimum needs programmes. Primary health care is the backbone for every healthcare system. It is the primary healthcare where the local people have their first contact with the healthcare personnel's. Primary health care is the first referral point, after that secondary and tertiary health care comes into the scene. Thus, with this importance of primary health care, it is being a very crucial element for health care system of any country. While secondary and tertiary health care serves in the urban areas, Primary health care serves in rural areas. Almost 70 percent of Indian population lives in rural areas, with a very low per capita income, disease burden is more in rural areas as compared to urban areas. Thus, primary health care works as a life line in the rural areas.

The healthcare system in rural India runs as a three tier system based on the following population norms: on plain areas every sub-centre covered a population of 5000 and in hilly or tribal areas it covered only a

population of 3000. Likewise, primary health centres and community health centres also covered a definite proportion of the population. A primary health centre covered 30,000 populations in plain areas against the 20,000 of the population in hilly or tribal areas. According to the area, community health centres (CHC's) also have a different population norm. In plain areas, a CHC covered a population of 1,20,000 while in hilly areas this proportion of the population in limited only to 80,000. Table 1 shows the population norms for primary health care centres in plain and hilly areas.

Table 1: Population norms for Health Infrastructure in Rural India (Public Sector)

Centre	Population Norms	
	Plain Area	Hilly/ Tribal Areas
Sub- Centres (SCs)	5000	3000
Primary Health Centres (PHCs)	30,000	20,000
Community Health Centres (CHCs)	1,20,000	80,000

Source: Health and Family Welfare Statistics in India, 2013

At the primary level or rural health care, we include Community Health Centres (CHC's), Primary Health Centres (PHC's) and Sub-centres (SC's). The number of primary health care centres has increased since after the independence, in 1990 there were only 130336 sub-centres served in the country against 18981 primary health centres and 1911 community health centres. These healthcare centres show a sustained increased over the years. In table 2 we calculate the compound annual growth rate (CAGR) of primary health care centres from 1990 to 2015. The percentage of annual growth rate of primary health care centres and provision of primary health care to the rural population was not so much satisfactory. Table 4, shows that sub-centres and primary health centres have 0.01 percent of annual growth rate while community health centres shows a growth rate of 0.04 percent over the years. Although, sub-centres and primary health centres play a major role in catering the rural people as they are located mostly in the rural areas at a nearby place, they show very low percentage of growth rate between the periods.

Table 2: Number of SCs, PHCs, CHCs Functioning in India from 1990 to 2015

Year	SCs	PHCs	CHCs
1990	130336	18981	1911
1991	130958	20450	2071
1992	131605	20716	2189
1993	131752	21051	2273
1994	131770	21225	2344
1995	131795	21768	2419
1996	132727	21853	2424
1999	138044	22928	3077
2001	137311	22842	3043
2004	142655	23109	3222
2005	146026	23236	3346
2007	145272	23370	4045
2010	147069	23673	4535
2011	148124	23887	4809
2012	148366	24049	4833
2013	151684	24448	5187
2014	152326	25020	5363
2015	153655	25308	5396
CAGR %	**0.01**	**0.01**	**0.04**
% Change	**117.9**	**133.3**	**282.4**
Mean	**140637.5**	**22661.89**	**3471.5**
Variance	**148910.29**	**23994.94**	**3675.70**
S.D.	**385.88**	**154.90**	**60.62**

Source: National Health Profiles, Ministry of Health and Family Welfare, Government of India

Sub-Centres (SC's):

The SC's is the first interaction point between the primary health care and local community. Currently there are 152326 Sub-centers are run in the country (as on 31st march 2015). Sub-centres provide the basic healthcare facilities to the people and provide services in relation to the mother and child care (MCH), safe delivery, universal immunization programme, family welfare services, primary medical care, and control of communicable and non-communicable diseases programmes. Each sub-centre is required to be manned by at least one ANM (Auxiliary Nurse Midwife), female health worker and one male health worker. The main function of health sub-centre is to deliver, preventive and primitive care together with the basic curative care. As the population density in the country is varying and not uniform, the application of population norms is not possible all over the country.

Table 3: Sub-centres functioning during five year plans.

States	1981-85	1985-90	1992-97	1997-02	2002-07	2007-12	2012-17
AP	6129	7894	10568	10568	12522	12522	12522
ASM	1711	5109	5109	5109	5109	4604	4621
BR	8299	14799	14799	14799	8909	9696	9729
GUJ	4869	6834	7274	7274	7274	7274	7274
HAR	1591	2299	2299	2299	2433	2520	2542
KAR	4964	7793	8143	8143	8143	8871	9264
KER	2270	5094	5094	5094	5094	4575	4575
MP	6615	11910	11938	11947	8834	8869	8764

MAH	6391	9248	9725	9725	10453	10580	10580
ORS	4127	5927	5927	5927	5927	6688	6688
PUJ	2602	2852	2852	2852	2858	2951	2951
RAJ	3790	8000	9400	9926	10612	11487	14407
TN	5860	8681	8681	8682	8683	8706	8706
UP	15653	20153	20153	20153	20521	20521	20521
WB	6100	7873	7873	8126	10356	10356	10356
INDIA	**84376**	**130165**	**136258**	**137311**	**145272**	**148366**	**152326**

Source: Rural Health Statistics, Ministry of Health and Family Welfare, Govt. of India

According to the population norms, there is one sub-centre established for every 5000 population in plain areas and it goes down to 3000 in hilly or tribal areas. A look at the progress of sub centres functioning over the years in the country. At the end of the sixth five year plan (1981-85), only 84376 sub centres were working, which increased to 130165 during 1985-90 and further increased to 148366 during the 11th five year plan (2007-12). Currently 153655 sub centres are working in the country. A similar progress in the number of sub centres is seen in the states of Gujarat, Karnataka, Odisha, Rajasthan, Andhra Pradesh, and Uttar Pradesh.

Table 3a: Sub-Centres Functioning in India.
Source: HMIS, Ministry of Health and Family Welfare, Govt. of India

Table 3a shows the number of SC's functioning in India and her major states.

National Rural Health Mission under the IPSC Guidelines sanctioned some minimum number of staff to cater to the local people at the sub-centre. The staff include health worker both female as well male, voluntary worker. The total number of post at the sub-centre is 03. Under the NRHM, there is a provision for an additional Auxiliary Nurse Midwife (ANM) on contract basis and one Lady Health Visitor (LHV) is also entrusted for the supervision of six sub-centres. Central government bears the salary of ANM while the salary of the MHW (Male Health Worker) bears by the state government.

Primary Health Centre (PHC):

Primary Health Centre (PHC) is the first interaction point between the medical officer and village community. Realizing its importance in rural health care delivery, the centre, state, and other government and non governmental agencies start establishing primary health centres and health manpower. There is an increase of 1784 PHC's in 2014 as compared to those existed in 2005. The primary health centres are established and maintained under the Minimum Needs Programme (MNP)/ Basic Minimum Services (BMS) by the state government. As per to the minimum norms there should be a medical officer supported by 14 paramedical and other staff to manage a PHC. Under the NRHM, there can be two additional staff nurses on contract basis at a PHC. PHC's provide an integrated curative and preventive healthcare to the rural people with primitive and family welfare services and schemes. There is 25,020 PHC's functioning in the country (as on 31st march 2015).

Number of PHCs has increased over the years in the country. During the sixth five year plan (1981-85) there were only 9115 PHCs, which increased almost to double at the end of 7th five year plan (1985-90). Number of PHCs further increased to 24049 in 11th five year plan. Today as on 31st march 2015, there were 25308 primary health centres serving the people. A significant increase is also seen in the number of PHCs in the states of Assam, Bihar, Karnataka, Rajasthan, Andhra Pradesh, and Uttar Pradesh. While these states observed an increase in the number of PHCs over the time, West Bengal is the only state which observed a reduction in the number of primary health centres between 6th five year plan to 12th five year plan. Primary health centre (PHC) is the first referral unit for six Sub-centres. All PHCs provide outpatients services, at least a majority of PHC has four to six beds for patients.

Table 4: Primary Health Centres during five year plans.

States	**1981-85**	**1985-90**	**1992-97**	**1997-02**	**2002-07**	**2007-12**	**2012-17**
AP	555	1283	1335	1386	1570	1624	1709
ASM	237	449	610	610	610	975	1014
BR	796	2001	2209	2209	1648	1863	1883
GUJ	310	842	960	1032	1073	1158	1158
HAR	163	366	399	403	411	447	454
KAR	365	1142	1601	1676	1679	2310	2233
KER	199	908	938	944	909	809	829
MP	680	1181	1690	1690	1149	1156	1157
MAH	1539	1671	1695	1768	1800	1811	1811
ORS	484	875	1102	1352	1279	1226	1305
PUJ	130	460	484	484	484	449	427
RAJ	448	1048	1616	1674	1499	1528	2082

TN	436	1386	1436	1436	1181	1227	1369
UP	1169	3000	3761	3808	3660	3692	3497
WB	1172	1250	1262	1262	922	909	909
INDIA	**9115**	**18671**	**22149**	**22875**	**22370**	**24049**	**25020**

Source: Rural Health Statistics, Ministry of Health and Family Welfare, Govt. of India

Community Health Centres (CHC's):

Community health centers (CHC's) are the first referral unit 4 PHCs, and are being established and maintained by the state government under the MNB/BMS programmes. A CHC is to be manned by four medical officer specialists in surgeon, physician, gynecologist, and pediatrician with 21 paramedical officers and other staff. As per to the IPHS norms a CHC should have at least 30 beds, x-ray machine, operation theater, delivery room and labs.

Table 6: Community Health Centres during Five Year Plan (FYP).

States	**1981-85**	**1985-90**	**1992-97**	**1997-02**	**2002-07**	**2007-12**	**2012-17**
AP	27	46	207	219	167	281	292
ASM	12	60	100	100	100	109	151
BR	52	147	148	148	70	70	70
GUJ	22	143	185	252	273	318	300
HAR	2	41	63	65	86	109	109
KAR	98	156	242	249	254	180	193
KER	4	54	80	105	107	217	224
MP	58	172	198	342	270	333	334
MAH	147	290	300	351	407	363	360
ORS	59	92	157	157	231	377	377
PUJ	10	70	105	105	126	132	150
RAJ	76	185	261	263	337	382	567
TN	30	72	72	72	236	385	385
UP	74	177	262	310	386	515	773
WB	23	87	89	99	346	348	347
INDIA	**761**	**1910**	**2633**	**3054**	**4045**	**4833**	**5363**

Source: Rural Health Statistics, Ministry of Health and Family Welfare, Govt. of India

The number of CHCs increased to 4833 in 11th five year plan (2007-12) from 761 in 1981-85. Currently there are 5,396 CHCs working in the country (as on 31st march 2015). The states of Gujarat, Kerala, Madhya Pradesh, Odisha, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal observed an increase in the number of community health centres during the period.

The number of public healthcare institution has been increasing over the last six decades in all the major states. However, these numbers are not adequate to ensure universal coverage and access to the public healthcare institutions. Constitutionally, health is a state subject. States have the responsibility for implementation of healthcare intervention, with the help of central government providing policy directions and the financing of national healthcare programmes.

Figure 1: Number of SCs, PHCs and CHCs during 2012-17 (as on 31st March 2014)

Source: Based on table 4, 5, 6

Figure 1 clearly shows that there is a great inter-state diversity in the primary health care centres in terms of sub-centres (SCs), primary health centres (PHCs) and community health centres (CHCs).

Manpower:

Manpower is the other most important facet of the healthcare system besides infrastructural facilities. The efficiency of healthcare system is largely depending on the human resource (manpower) for healthcare. Their role to the healthcare sector is fully recognized. Thus, the challenge for any healthcare system is to ensure equitable distribution of healthcare personnel's. Manpower determines the level of healthcare in any state. In rural areas, the lack of qualified doctors is one of the main problems. The status of healthcare manpower is however not satisfactory. While some states show a shortage of manpower resources, other states show a surplus of manpower. Out of the total sanctioned posts, a large percentage of posts are vacant at the national and state levels in the country. For example, 10.5 per cent of the sanctioned posts of Female Health Worker HW (Female)/ ANM are vacant against the 40.7 percent of the sanctioned posts of Male Health Worker HW (Male) in 2015. At the level of primary health care, if we talking, there are 41.9% of Female Health Assistance/ LHV, 46.9% of Male Health Assistance and 27.0% of doctor's sanctioned posts are vacant in the country as on 31st march 2015. The efficiency of functioning of the sub centres can be seen by the level of extent of the existing manpower. 5.3 per cent of the sub centres functioning without a HW (female)/ ANM and 46.5 per cent are functioning without the HW (Male). 3.3 percent are those sub centres which functioning without HW (female)/ ANM as well as HW (male) as on 31st march 2015.

Table 5: Number of Female Health Worker/ ANMs and shortfall at Sub Centres and Primary Health Centres in India.

States	**2005**					**2015**				
	Req	**Sanc**	**In Po**	**Vac**	**S.F.**	**Req**	**Sanc**	**In Po**	**Vac**	**S.F.**
AP	14092	14077	13740	337	352	8728	14111	11701	2410	*

ASM	5719	5719	5719	0	0	5635	5962	9220	*	*
BR	11985	NA	NA	NA	NA	11612	NA	19499	NA	*
GUJ	8344	7274	6508	766	1836	9310	7274	6938	336	2372
HAR	2841	2841	2818	23	23	3030	4810	4922	*	*
KAR	9824	8756	8544	212	12800	11617	9264	8977	287	2640
KER	6005	5675	5565	110	440	5402	7929	7950	*	*
MP	10066	10027	9345	682	721	10363	10473	12412	*	*
MAH	12233	11032	10699	333	15334	12391	18636	16922	17114	*
ORS	7209	7121	6768	353	441	7993	NA	8245	NA	*
PUJ	3342	2704	2602	102	740	3378	4675	4347	328	*
RAJ	12225	11425	11425	0	*	171	219	298	*	*
TN	10062	10366	10112	254	*	10078	9993	8477	15116	16011
UP	24181	18577	18146	431	6035	24018	27334	23731	36033	287
WB	11529	10356	9070	1286	2459	11266	20500	18723	1777	*
INDIA	**1692 62**	**1397 98**	**1331 94**	**6640**	**19311**	**1789 63**	**1956 72**	**2121 85**	**20492**	**9326**

Source: Rural Health Statistics, 2005, 2015, govt. of India

When we compared the female health worker availability in 2015 with that in 2005, as presented in table 5, it is observed that there is an increase in the number of ANMs at SCs and PHCs at national level. The number of In Position ANMs increased from 133194 in 2005 to 212185 in 2015 which increased almost by 59.3%. Looking at the picture of state level it has been observed that only some states have shown increased number of ANMs at their SCs and PHCs in 2005 to 2015. The percentage of increase in the number of ANMs in the states of Assam is (0.61), Gujarat (0.07), Haryana (0.75), Karnataka (0.05), Kerala (0.43), Madhya Pradesh (0.33), Maharashtra 0.58), Odisha 0.22), Punjab 0.67), Uttar Pradesh (0.31), and West Bengal (1.06). Table 5; show a reduction in the number of ANMs in 2015 when compared with in the year 2005. The reduction is observed in the states of Rajasthan, Tamil Nadu, and Andhra Pradesh.

Community Health Centres (CHCs) provide highly specialized health care of highly qualified doctors of medical professionals such as, surgeons, obstetricians and gynaecologists, physicians and pediatricians. The current position of total specialist's health care personnel at CHCs in 2015 is shown in the table 7. Table shows that out of the total (11661) sanctioned posts against the required (21584) posts of total specialists at CHCs in the country during the year 2015, 2881 posts are vacant. The percentage of vacant posts against the sanctioned posts in India is 67.6 per cent. Moreover, as compared to requirement for existing health care infrastructure, country experiences a shortfall of 17525 numbers of posts of total specialists in the year 2015.

The shortfall of total specialists is comparatively high in most of the states. In 2015, the highest shortfall of total specialists is recorded in the states of Kerala, out of the total 888 required total specialists only 39 are in position and state experiences a shortfall of 849 total specialist's posts at CHCs. The percentage shortfall of total specialists in Kerala is 95.6, followed by Gujarat with a shortfall of 94.2 percent in the required total specialists at the CHCs, other states like Haryana has a shortfall of 93.1 percent, West Bengal has 91.8 percent. The lowest shortfall is recorded in the states of Karnataka with 39.1 percent and Maharashtra with 59.9 percent of shortfall in the required total specialists posts at CHCs in 2015.

Table 7: Total Health Specialists at Community Health Centres (CHCs) in India and States

Surgeons, OB & GY, Physicians & Paediatricians															
States	**2005**					**2012**					**2015**				
	Req	**Sanc**	**I.P.**	**Vac**	**S.F.**	**Req**	**Sanc**	**I.P.**	**Vac**	**S.F.**	**Req**	**Sanc**	**I.P.**	**Vac**	**S.F.**
AP	656	406	224	182	432	11	668	346	322	778	716	384	159	225	557

						24									
ASM	400	NA	NA	NA	NA	436	NA	122	NA	314	604	NA	121	NA	483
BR	404	NA	NA	NA	NA	280	280	151	129	129	280	NA	63	NA	217
GUJ	1088	321	92	229	996	1272	346	76	270	1196	1280	NA	74	NA	1206
HAR	288	288	49	239	239	436	137	29	108	407	436	153	30	123	406
KAR	1016	843	691	152	325	720	694	495	199	225	824	824	502	322	322
KER	424	424	82	342	342	868	640	774	*	94	888	30	39	*	849
MP	916	253	49	204	867	1332	835	267	568	1065	1336	897	263	634	1073
MAH	1528	1987	1099	888	429	1452	649	514	135	938	1440	823	578	245	862
ORS	924	496	NA	NA	NA	1508	908	317	591	1191	1508	908	356	552	1152
PUJ	464	393	226	167	238	528	492	279	213	249	600	563	173	390	427
RAJ	1304	811	581	230	723	1528	298	148	150	1380	2272	1566	526	1040	1746
TN	140	48	48	0	92	1540	0	0	0	1540	1540	0	0	0	1540
UP	1544	NA	NA	NA	NA	2060	2060	1740	320	320	3092	2099	484	1615	2608
WB	380	310	133	177	247	1392	542	175	367	1217	1388	1792	114	1678	1274
IND	133	75	35	35	61	193	99	58	43	134	215	116	40	78	175
IA	84	82	50	38	10	32	14	58	28	77	84	61	78	81	25

Source: Rural Health Statistics, 2005, 2012, 2015, Government of India

Average Rural Population Covered by Primary Healthcare:

In spite of a vast network of primary health care in rural areas of the country, there exists a wide gap of accessibility of healthcare infrastructure across the states. Moreover, health is a state subject; there are imbalances and variations in the availability of primary health care centres in rural areas between the states.

Table 8: Average Rural Population Covered by a SC, PHC, and CHC.

States	Total Population	SC	covered population	PHC	covered population	CHC	covered population
AP	49,386,799	4501	0.91%	32979	6.68%	193020	39.08%
ASM	31,169,272	5801	1.86%	26437	8.48%	177530	56.96%
BR	103,854,637	9491	0.91%	49040	4.72%	1319163	127.02%
GUJ	60,383,628	4770	0.79%	29961	4.96%	115649	19.15%
HAR	25,353,081	6495	2.56%	36364	14.34%	151462	59.74%
KAR	61,130,704	4045	0.66%	16780	2.74%	194142	31.76%
KER	33,387,677	3819	1.14%	210075	6.31%	77996	23.36%
MP	72,597,565	5997	0.83%	45426	6.26%	157357	21.68%
MAH	112,372,972	5818	0.52%	33990	3.02%	170989	15.22%

ORS	41,947,358	52299	1.25%	26797	6.39%	92760	22.11%
PUJ	27,704,236	58777	2.12%	40619	14.66%	115628	41.74%
RAJ	68,621,012	35575	0.52%	24736	3.60%	90830	13.24%
TN	72,138,958	42766	0.59%	27195	3.77%	96700	13.40%
UP	199,281,477	75669	0.38%	4441414	2.23%	200928	10.08%
WB	91,347,736	60005	0.66%	68408	7.49%	179202	19.62%
IND	**1,210,193,422**	**54437**	**0.04%**	**3332323**	**0.28%**	**155463**	**1.28%**

Source: Rural Health Statistics, 2005, 2012, 2015, Government of India

The states of Assam, Haryana, Kerala, Orissa, Punjab, Andhra Pradesh, and West Bengal have more average rural population covered by a Sub-Centre as compared to other states. The states of Punjab, Haryana, Assam, Andhra Pradesh, and West Bengal have the best coverage of rural population by a primary health centre. Likewise the states of Bihar, Assam, Punjab, Andhra Pradesh, Haryana, Kerala, and West Bengal have more average of rural population covered by a community health centre.

The states with high population like Uttar Pradesh, Maharashtra, and Bihar have a low percentage of population converge among all the states. Bihar has more than 10 crore of population, out of this only 0.19 percent of population is covered by the sub-centres. States where average population covered by healthcare centres is more show good health condition as compared to the states where there is low coverage of population.

Availability of Primary health Care in rural areas (SC/ PHC/ CHC):

Large part of our population lives in rural areas and still experiences a decisive improvement in their living standard. The percentage of below poverty line (BPL) population is declining continuously, but only at a modest speed. Many people still lack access to health care services because of unavailability of healthcare infrastructure without which rural people can not avail better health care services. There is a wide gap in the availability of primary health care in rural areas. Table 9 shows the average rural area covered by primary health care in India and in her states.

Table 9: Average Rural Area (Sq. Km.) - Covered by Primary Health care Centres (as on 31st march 2014).

State/UT	Sub Centre	Primary Health Centre	Community Health Centre
Andhra Pradesh	2.62	7.09	17.16
Assam	2.31	4.93	12.78
Bihar	1.74	3.95	20.49
Gujarat	2.89	7.24	14.23
Haryana	2.32	5.49	11.19
Karnataka	2.53	5.16	17.54
Kerala	1.57	3.7	7.11
Madhya Pradesh	3.31	9.1	16.94
Maharashtra	3.01	7.26	16.29
Odisha	2.7	6.11	11.36
Punjab	2.28	6	10.12
Rajasthan	2.73	7.17	13.75
Tamil Nadu	2.07	5.23	9.86
Uttar Pradesh	1.91	4.62	9.82
West Bengal	1.62	5.47	8.85
All India	**2.55**	**6.3**	**13.6**

Source: Rural Health Statistics, Ministry of Health and Family Welfare, Govt. of India.

Kerala is the only state, where the average areas covered (sq. km.) by the SCs, PHCs, CHCs has the least distance. A sub-centre covered only 1.57 sq.km.; primary health centre covered a area of 3.7 sq.km. and community health center covered only 7.11 sq.km.

Inequalities in access to primary healthcare are pervasive in the availability of public healthcare institutions across the states. Inequalities are best pronounced in terms of public healthcare institutions, manpower in healthcare, population covered and average area covered by health institutions. The interstate variations are best examined by comparing all the major states. States, especially southern states have better functioning of healthcare institutions, thus having more access to primary healthcare.

Conclusion:

Over the last six decades, Indian healthcare system undergoes several changes. The public health service institutions SCs, PHCs, CHCs has been shown an expansion. However, by and large, the expansion has been unsatisfactory or inadequate to ensure uniform access to primary healthcare. Indian healthcare system

needs some more strong recommendation in healthcare sector, because country has a huge burden of population especially in rural areas. The population norms have to be changed especially for the sub-centres. Instead of per 5000 population, there should be a sub-centre in each and every village with well qualified healthcare personnel so people can get better healthcare on time whenever they need. Rural people has not so much of money to travel to a long distance for seeking healthcare, thus they denied to go for public healthcare centre and prefer to go for local traditional healthcare. Primary Health Care centres are distributed unequally in the country. Inter-state diversity in primary healthcare can be seen by the availability and population covered by the three tier of the primary health care system. Population covered by sub-centres is very low in almost all the major states. There is a large gap in the availability of primary healthcare centres in Indian states. The availability of Healthcare has to be increased by increasing the number of primary health care centres (SCs, PHCs, CHCs).

References:

1. Aday, L. (1972): The utilization of health services: indices and correlates. DHEW publication no. HSM 73-3003. US Govt. Printing Office, Washington DC.
2. Annis, S. (1981): Physical access and utilization of health services in rural Guatemala. Social Science and Medicine 15: 515-523.
3. Bossert T. 1997. Decentralization of health systems: decision space, innovation and performance. Department of Population and International Health, Data for Decision Making Project. Boston: Harvard School of Public Health.
4. Chuttani, C. S. (1976): Factors responsible for under utilization of primary health centres – A community survey in three states of India. NIHAE Bulletin 9: 229-237.
5. Collins C, Green A. (1994): Decentralization and Primary Health Care: some negative implications in developing countries. International Journal of Health Services 24: 459-475.
6. Ghosh, B. N. and A. B. Mukherjee (1989): An analysis of public health services coverage of primary health care in West Bengal. Journal of Public Health XXXIII (1) 26-30.
7. Government of India. (1983): National Health Policy. Government of India, New Delhi.
8. Krishnan TN. (1994): Access and the burden of treatment: An inter-state comparison. UNDP Research project, Studies on Human Development in India, Discussion Paper No. 2. Thiruvananthapuram: Centre foe Development Studies.
9. Majumdar, A. (1999): Rural Health Care Infrastructure in India: A study of fifteen Major States in 1992, 1997. Unpublished Minor Project. IIT Delhi.
10. Ministry of Health and Family Welfare, MOHFW. (1997): Reproductive and Child Health Programme. Department of Family Welfare, MOHFW, New Delhi.
11. Ministry of Health and Family Welfare. (1997): Bulletin on Rural Health Statistics.
12. Sharief A. (1999): India: Human Development report – A profile of Indian States in the 1990s. New Delhi: Oxford University Press for NCAER, p. 132-51.
13. Stafford, M. and O. Duke-Williams, et al. (2008): Small area inequalities in Health: Are we underestimating them? Social Science and Medicine 67(6): 891-899.
14. Yesudian, C. A. K. (1989): Health Services Utilization in Urban India. Mittal Publication, Delhi.
15. Wagstaff, A. (2002): Poverty and health sector inequalities. Bulletin on the World Health Organization 80: 97-105.