

**HEALTH CARE INFRASTRUCTURE FACILITIES IN INDIA****Dr. S. Sathiya Bama**

Assistant Professor

Mohamed Sathak College of Arts and Science, Sholinganallur, Chennai – 600119

**ABSTRACT**

*Health in human life is the extent of an individual's continuing physical, emotional, mental and social ability to cope with his (or) her environment. Good health care facilities and services are essential for creating healthy citizens and society that can effectively contribute to social and economic development. The population of India is 1.15 billion and growing at almost 18 million per year. India will be the most populated nation by 2030, with as many as 1.4 billion. The number of urban towns has grown from 1827 in 1901 to 5161 in 2001. With 340 million Indians living in our 5161 cities and forming 30 percent of the total population. In India infant mortality is higher for 58 than for 37 in Tamil Nadu per 100 live births. Availability of health care facilities is the major determinants of achieving the health care. The life expectancy in Indian states are positively related to the health care facilities.*

**HEALTH CARE INFRASTRUCTURE FACILITIES**

Good health care facilities and services are essential for creating healthy citizens and society that can effectively contribute to social and economic development. Economic development is the most important indicator is the human factor. The human factor is also known as the human Capital. Investments in human capital include the investments in human factor. The human capital and economic development are two concepts identified with each other. The investment in health fields would accelerate the economic development. As long as individuals of a country are healthy, their contribution to production and growth would determine. On the other hand, societies often becoming ill would decrease their productivity. Thus this would affect the economic development negatively. Unfortunately health infrastructure and health scenario in India is very poor. India will be the most population nation by 2030, with count of 1.4 billion. The number of urban towns has grown from 1827 in 1901 to 5161 in 2001 with 340 million Indian's living in our 5161 cities and forming 30 percent of the total population.

In India health care facilities are provided through the sub-centers (SC) Primary Health Centers (PHC) and Community Health Centers (CHC). Primary Health Centers and sub Centers are provided health care services in rural areas and community health centers are providing health care in urban areas.

Human health has improved significant in the last 50 years; the figure rose to 64 years by 2001 – 2005. Much of these gains occurred in Indian States due to improved nutrition and sanitation, medical innovation and improvements in public health infrastructure. But they have not sufficiently increased comparing with the population. So the infant mortality rate (IMR) and death rates has considerably. And thus, slowly decline throughout the country. Therefore, there is a need to study about the health care indicators and the significance of the health care infrastructure facilities is considered with the following objectives and hypotheses.

**OBJECTIVES**

1. To identify the community health centers, and how they determine the IMR and Death rates in India States.
2. To study the community health center, life expectancy and birth rate in major Indian States.
3. To suggest policy measures for promoting equitable distribution of health care services.

**Hypotheses**

1. Health care systems is influenced to a greater extent by health care indicators.
2. The life expectancy at birth depends upon the increasing health care systems.

**Table – 1**  
**Number of community Health centre and Infant Mortality Rate (%), Death Rate in Indian states**

S.No	States	Community Health Centre			Infant mortality Rate %			Death Rate %		
		2005	2015	Rise in CHCS	2005	2015	Fall in IMR	2005	2015	Fall in Death ratio
1.	Andhra Pradesh	164	179(10)	15	57	37(8)	-20	7.3	7.1(6.5)	-0.2
2.	Assam	100	151(12)	51	68	47(2)	-21	8.7	7.1(6.5)	-1.6
3.	Chhattisgarh	116	155(11)	39	63	41(7)	-22	8.1	7.5(2.5)	-0.6
4.	Gujarat	272	320(7)	48	54	33(11)	-21	7.1	6.1(14.5)	-1
5.	Haryana	72	109(14)	37	60	36(9)	-24	6.7	6.1(14.5)	-0.6
6.	Himachal Pradesh	66	78(16)	12	49	28(13)	-21	6.9	6.6(9.5)	-0.3
7.	Jammu & Kashmir	70	84(15)	14	50	26(14.5)	-24	5.5	4.9(19)	-0.6
8.	Jharkhand	47	188(9)	141	50	32(12)	-18	7.9	5.8(17)	-2.1
9.	Kerala	106	222(8)	116	14	12(19)	-2	6.4	6.6(9.5)	0.2
10.	Madhya Pradesh	229	334(6)	105	76	50(1)	-26	9.0	7.5(2.5)	-1.5
11.	Meghalaya	24	27(18)	3	49	42(6)	-7	7.5	7.4(4)	-0.1
12.	Odisha	231	377(4)	146	75	46(3.5)	-29	9.5	7.6(1)	-1.9
13.	Punjab	116	150(13)	34	44	23(16)	-21	6.7	6.2(13)	-0.5
14.	Rajasthan	326	568(2)	242	68	43(5)	-25	7.0	6.3(12)	-0.7
15.	Tamil Nadu	35	385(3)	350	37	19(18)	-18	7.4	6.7(8)	-0.7
16.	Tripura	10	20(19)	10	31	20(17)	-11	5.7	5.2(18)	-0.5
17.	Uttarkhand	44	59(17)	15	42	34(10)	-8	7.4	6.4(11)	-1
18.	Uttar Pradesh	386	773(1)	387	73	46(3.5)	-27	8.7	7.2(5)	-1.5
19.	West Bengal	95	347(5)	252	38	26(14.5)	-12	6.4	5.9(16)	-0.5

As observed in Table – 1 Uttar Pradesh has the highest number of sub – centers, PHC and CHC during 2005 to 2015. Whereas Lakshadweep has the lowest sub health centers Only 3 primary health centers are available in Daman & Diu. Therefore, there is no availability of Community health centers in Delhi.

The State wise IMR and Death Rate in India compared to 2005 and 2015 data. The IMR is decreasing in all Indian states from 2005 to 2015. In Odisha and Uttar Pradesh IMR has decreased to a greater extent as compared to other states, due to significant rise in community health centers. But the infant mortality rate (IMR) unacceptably high in India. The (IMR) which was 81 in 1990, according to World Health Organization (WHO), declined to 41.4 per 1000 live births in 2013. However it still is much higher than global average for the same period of 33.3 per 1000 live births (World Health Statistics 2015) The mortality rates are declining but the rate of decline remains relatively slow, compared to that being achieved by other South Asian Neighbors, with exception of Pakistan. There are leading cause of women in urban areas are slightly less unlikely to be anemic (51%) than those in rural areas (54 %). So most of the children's are affected the nutritional deficiency it leads to slowly decline the IMR.

The Death rate is also decreasing in All Indian States from 2005 to 2015. In Jharkhand and Odisha death rate has decreased to a greater extent as compared to other states due to significant rise in community health centers. But now a days the 60% of the non – communicable diseases contributing of deaths (4.5). There are four diseases namely Heart disease, Cancer, Diabetes and chronic pulmonary diseases contribute nearly 80% of all deaths due

## *International Journal of Applied Engineering & Technology*

to the share of four common risk factors namely tobacco use, harmful use of alcohol, unhealthy diet and lack of physical activities. Hence, there is slowly decline the IMR and death rate.

**Table – 2**  
**Number of community Health center and life expectancy in Indian states**

S.no	States	Community Health Centre			Life expectancy		Rise in L.E.
		2005	2015	Rise in CHCS	2001-2005	2011-2015	
1.	Andhra Pradesh	164	179(9)	15	65.0	69.0(9)	4
2.	Assam	100	151(10)	51	59.2	64.7(13)	5.5
3.	Gujarat	272	320(7)	48	65.7	69.1(7.5)	3.4
4.	Haryana	72	109(12)	37	66.5	69.1(7.5)	2.6
5.	Himachal Pradesh	66	78(14)	12	69.5	72.0(4)	2.5
6.	Jammu & Kashmir	70	84(13)	14	68.4	73.2(2)	4.8
7.	Kerala	106	222(8)	116	73.6	75.2(1)	1.6
8.	Madhya Pradesh	229	334(6)	105	59.7	64.8(12)	5.1
9.	Odisha	231	377(4)	146	60.8	66.9(11)	6.1
10.	Punjab	116	150(11)	34	68.8	72.1(3)	3.3
11.	Rajasthan	326	568(2)	242	64.5	67.9(10)	3.4
12.	Tamil Nadu	35	385(3)	350	67.2	71.0(5)	3.8
13.	Uttar Pradesh	386	773(1)	387	60.8	64.5(14)	3.7
14.	West Bengal	95	347(5)	252	67.2	70.5(6)	3.3

As observed in Table – 2 Kerala has the highest life expectancy at birth compared to other Indian States due to significant rise in community health centers.

**Table – 3**  
**Rank correlation Matrix for Community Health centers**

Community Health Centers	Life Expectancy at Birth	IMR (%)	Death Rate (%)
R Value	- 0.50	0.24	0.28

**Source:** Computed

Table – 3 denotes that correlation Co- efficient of IMR, death rates and Community Health Centers. There is direct relation with Infant Mortality and death rates. Other Variable life expectancy have highly significance of community health centers, i.e. health care infrastructure has not sufficiently increased compared to the population. Presently, India has one of the lowest allocations to health among all countries of the world as percentage of GDP.

### CONCLUSION

- In Odisha and Uttar Pradesh IMR has decreased to a greater extent as compared to other states, due to significant rise in community health centers.
- In Jharkhand and Odisha death rate has decreased to a greater extent as compared to other states due to significant rise in community health centers.
- Kerala has the highest life expectancy at birth compared to other Indian States.

### SUGGESTIONS

- Increasing the number of sub-centers, Primary and community health centers in rural and urban areas.

---

*International Journal of Applied Engineering & Technology*

---

- Allocate more resources to programs that combat the conditions of the unfinished agenda namely, diseases of childhood and maternity, Malnutrition, Tuberculosis is malaria and Covid-19, improvement of public health care systems and partnerships with the private sector.
- We should try to save either the maximum number of people (or) people with maximum life years.
- In both rich and poor nations, public resources for health care are inadequate to meet the demand. Policy makers and health care providers must determine how to provide the most effective health care to citizens using the limited resources that are available.

**REFERENCES**

1. Abubakar Muhammed Yahaya and Ankara Haci Bayram vel (2018): "The importance of healthy Human Life on Economic Development", *Social Sciences*; 7(2):63-67.
2. <http://www.health infrastructure in india, boloji.com>
3. Sathiyabama Sand N.Malathi (2012), *Health care systems*, New Delhi, New Research Publications.
4. United nations population division (1996). *Demographic Indicators, 1950 – 2050 (The 1996 Revision)*, united Nations, Newyork.
5. World Bank (2001), *Life expectancy learning module*, world Bank. Development education program web, <http://www.world bank.org/depweb/English/modules/social/life/accesses> February 12 ,2003.
6. Sample Registration system (20).
7. *Health & family welfare statistics in India*, MOH & FW, 2015.
8. *Rural Health Statistics 2014 -2015*.
9. Sathyabama.S (2009-2010 & 2010-2011) "Health care Achievements in India", *Annamalai Economic Papers*, 6:99-103.
10. <https://researchacademy.elsevier.com>.
11. Ramachandran.M 2010, India's drimming city lights *Economic Times* 2 October 12 March 2011.