

AN ANALYSIS OF PERFORMANCE OF HEALTH INDICATORS IN TAMIL NADU AND INDIA

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Abstract: In this study, the health variables namely birth rate, death rate and infant mortality rate are utilized for estimating the status of healthcare indicators in India and Tamil Nadu. Human health has come to be viewed as a pre-imperative for ideal financial advancement. In human asset improvement, health is a significant perspective, which has been instrumental in quickening economic advancement. The health of the general population is extremely the establishment whereupon all their joy and every one of their forces as a state depend. Low pay, destitution and ignorance avoid numerous individuals in creating nations disregard giving due significance to the promotive and preventive parts of human services. The watched presentation and accomplishments in health status in Tamil Nadu uncovers that still there is the degree for further enhancements in health indicators. The present accomplishments made conceivable because of the health foundation and its use and what's more with other incorporated determinants of health markers. The present study has picked macro factors like birth rate, death rate, IMR, the neonatal and post-natal death rate of the period of 2001 to 2011 for understanding the pattern of health indicators in India and Tamil Nadu.

Index Terms: Health indicators, Human development, Determinants, Tamil Nadu.

INTRODUCTION

India is the second most populated nation on the planet with almost a fifth of the total population. As indicated by the 2017 report of the World Population Prospects the population remained at 1,324,171,354. The development of population has been raising the cognizance on the availability of social insurance administrations to all. Health is a significant marker just as a part of HR advancement with expanded acknowledgement of the job of human capital in the improvement of an economy (Bleakley, 2010). Interest in human capital has expanded in numerous nations today.

Health is significant asset and great health augments the capacities of the poor as well as improves the efficiency of the general population (Braveman and Gottlieb, 2014). In this manner, great health raised the pay levels and utilization measures and in this way decreasing neediness of the general population (World Bank Group, 2005). At the worldwide dimension, the number of doctors per 1000 population for the world is 1.5 and the figure for India is 1.0 which is at standard with the normal of low-pay nations. The quantity of emergency hospital beds per 1000 population for India is 0.7 which is much lower than the world normal of 3.3 and the normal of 1.5 in low income nations. Per capita annual inpatients affirmation for India is 1.7 per cent when contrasted with 9.0 per cent for the world and 5.0 per cent in low income nations. Despite the fact that the extent of the population beneath neediness line has decreased from 36.0 per cent in 1993-94 to 26.1 per cent in 1999-2000, the general pictures demonstrate that the social foundation in India has remained moderately not improved much (Sreenivas, 2006).

Tamil Nadu is one of the states in India with tasteful advancement in social infrastructure. Improvement of the social infrastructure is both an essential and adequate condition for quickening financial development. Human capital aides in increment in general efficiency and profit capability of the individual; other than improving the personal satisfaction. The social foundation is seen as being integral to the improvement of the physical framework (World Bank Group, 2012-15). The social insurance framework in the state has gotten the consideration of every single other state to pursue as a model.

OBJECTIVES OF THE STUDY

1. To study the performance of health indicators of Tamil Nadu.
2. To identify the factors influence the health care indicators in Tamil Nadu during the period of 2001- 2011.

METHODOLOGY

The present study has chosen Tamil Nadu and India for the analysis. The data variables like birth rate, death rate, IMR, and neonatal mortality rate during the period of 2001 to 2011 was used for analysis. The on secondary data were obtained from the website of Directorate of Family Welfare, Government of Tamil Nadu. In addition, the studies related to health status in Tamil Nadu and India are used largely for the study. .

ANALYSIS AND INTERPRETATIONS

The present study mainly focused on the performance of selected health indicators like birth rate, death rate, IMR, neonatal mortality rate and post-natal mortality rate in Tamil Nadu and India during the period of 2001 to 2011. The study intends to analyse the trend of these health indicators for forming the conclusion, whether the health sector in the state is progressing? The study has numerous scopes in making the policies of healthcare and infrastructure development in the state as well as in the country.

Table 1: Crude Birth Rate in India and Tamil Nadu

India				Tamil Nadu		
Year	Rural	Urban	Total	Rural	Urban	Total
2001	35.5	27.6	33.8	29.2	24.9	27.7
2002	35.3	28.3	33.7	29.0	25.9	27.9
2003	35.3	29.4	33.9	28.4	27.2	28.0
2004	34.3	28.1	32.9	25.2	23.8	24.7
2005	34.2	27.1	32.6	24.1	23.1	23.8
2006	33.7	29.4	32.2	24.1	23.7	24.0
2007	33.1	26.3	31.5	23.4	21.4	22.7
2008	32.2	25.2	30.6	23.5	22.4	23.1
2009	31.7	24.7	30.2	21.8	21.1	21.6
2010	30.9	24.3	29.5	20.8	20.8	20.8
2011	30.9	23.1	29.2	21.1	20.0	20.7

Source: Directorate of Family Welfare, Chennai.

The crude birth rate refers to the number of live birth per 1000 population. It is evident from the table I that the Crude birth rate in India has been declining since 2001 and the trend continued till 2011. The crude birth rate in 2001 was 33.8 people which fall down to 31.5 people in 2011. Similarly, the crude birth rate is declining in rural and urban parts of the country. In Tamil Nadu, the crude birth rate has declined from 27.7 people in 2001 to 22.7 people in 2007 and finally reached to 20.7 people in 2011. It is therefore evident that the birth rate in India and Tamil Nadu is declining during 2001-2011. The changes in the socio-economic setup, the impact of family planning and the changing attitude of society are the major factor responsible for the declining birth rate in the country.

Table 2: Crude Death Rate in India and Tamil Nadu

INDIA				TAMIL NADU		
Year	Rural	Urban	Total	Rural	Urban	Total
2001	9.1	6.3	8.4	8.4	6.0	7.6
2002	8.7	6.1	8.1	8.6	5.9	7.7
2003	8.7	6.0	8.0	8.5	5.6	7.6
2004	8.2	5.8	7.5	8.1	6.7	7.5
2005	8.1	6.0	7.6	8.2	6.2	7.4
2006	8.1	6.0	7.5	8.3	6.4	7.5
2007	8.0	6.0	7.4	8.0	6.3	7.2
2008	8.0	5.9	7.4	8.2	6.3	7.4
2009	7.8	5.8	7.3	8.5	6.6	7.6
2010	7.7	5.8	7.2	8.2	6.9	7.6
2011	7.6	5.7	7.1	8.1	6.4	7.4

Source: Directorate of Family Welfare, Chennai.

Crude death rate refers to the total number of death per 1000 people in a year. The crude death rate in the country has declined drastically from 8.4 people in 2001 to 7.1 in 2011. In rural areas of India, the declining crude death rate was continued during 2001-2011 but constant in many years. Likewise, the trend of crude death rate is similar in urban areas. The declining of crude death rate is not much higher in Tamil Nadu as compared to all India data. In 2001, the crude death rate was recorded as 7.6 in 2010. In 2011, the crude death rate was 7.4 people. It is to say that the crude death rate of the state is fluctuating during 2001-2011 and touching the highest crude death rate in many years. This shows the disadvantages of the health care system in the state.

Table 3: Infant Mortality Rate in India

India				Tamil Nadu		
Year	Rural	Urban	Total	Rural	Urban	Total
2001	72	42	66	54	35	49
2002	69	40	64	50	32	44
2003	66	38	60	48	31	43
2004	64	40	58	45	35	41
2005	64	40	58	39	34	37
2006	62	39	57	39	33	37
2007	61	37	55	38	31	35
2008	58	36	53	34	28	31
2009	55	34	50	30	26	28
2010	51	31	47	25	22	24
2011	48	29	44	24	19	22

Source: Directorate of Family Welfare, Chennai.

Infant mortality rate (IMR) indicates the number of deaths per 1000 live births of children one year of age. It is interesting to note that the IMR in India is declining continuously from 2001 to 2011. In 2001, the IMR was 66 children per 1000 live birth, which declined to 55 children in 2007 and 44 children in 2011. The child death is higher in a rural area as compared to rural but the death rate is declining in birth areas. The IMR in Tamil Nadu is below the average of the national figure. The IMR in Tamil Nadu has declined from 49 children in 2001 to 35 children in 2007. In 2011, 22 child deaths have recorded per 1000 live birth. It is evident that the childcare and maternal assistance programmes in the state have derived positive impact on IMR.

Table 4: Neo-Natal Mortality Rate in India & Tamil Nadu

India				Tamil Nadu		
Year	Rural	Urban	Total	Rural	Urban	Total
2001	44.0	25.0	40.0	35.0	25.0	32.0
2002	44.0	22.0	37.0	33.0	21.0	30.0
2003	41.0	22.0	37.0	33.0	21.0	30.0
2004	41.0	24.0	37.0	35.0	20.0	29.0
2005	41.0	23.0	37.0	31.0	19.0	26.0
2006	41.0	23.0	37.0	29.0	17.0	24.0
2007	40.0	22.0	36.0	29.0	16.0	23.0
2008	39.0	21.0	35.0	24.0	16.0	21.0
2009	38.0	21.0	34.0	21.0	14.0	18.0
2010	36.0	19.0	33.0	18.0	13.0	16.0
2011	34.0	17.0	31.0	18.0	12.0	15.0

Source: Directorate of Family Welfare, Chennai.

A Neo-natal death is defined as the death of a child during the first 28 days of life. The Neo-natal mortality rate of India has been declining during 2001-2011. The Neo-natal death in 2001 was 40 which remains stable at 37 till 2006 and declined to 31 in 2011. The neonatal mortality rate is very high in rural India. In both rural and urban parts of India, the neonatal mortality rate is falling during 2001-2011. It is also inferred from the table that the neonatal mortality rate in Tamil Nadu has declined from 32 in 2001 to 23 in 2001 and further declined to 15 in 2011. Tamil Nadu has recorded a drastic decline in neonatal mortality rate.

Table 5: Post-Natal Mortality Rate in India & Tamil Nadu

Year	India			Tamil Nadu		
	Rural	Urban	Total	Rural	Urban	Total
2001	28.0	17.0	26.0	19.0	10.0	17.0
2002	26.0	16.0	24.0	14.0	15.0	14.0
2003	25.0	16.0	23.0	14.0	10.0	13.0
2004	23.0	16.0	21.0	10.0	15.0	13.0
2005	23.0	17.0	22.0	8.0	15.0	13.0
2006	22.0	16.0	20.0	10.0	16.0	13.0
2007	20.0	16.0	19.0	9.0	15.0	12.0
2008	19.0	15.0	18.0	9.0	12.0	11.0
2009	17.0	13.0	16.0	8.0	12.0	10.0
2010	15.0	12.0	14.0	8.0	8.0	8.0
2011	14.0	12.0	14.0	6.0	7.0	6.0

Source: Directorate of Family Welfare, Chennai.

Post-natal death refers to the number of deaths of live born babies weighing 500 grams or more between 28 and 364 days after birth per 1000 live births. In India, the post-natal mortality rate is declining during 2001-2011. In 2001, the post-natal mortality rate stood at 26, which fall down to 19 in 2007 and further declined to 14 in 2011. The post-natal mortality in rural India is higher than in urban India. In Tamil Nadu, the post-natal mortality rate marked a continues fall off. In 2001, the post-natal mortality rate recorded as 17, which come down to 12 in 2007 and the lowest figure of 6 in 2011. The trend of declining of post-natal mortality rate is very higher in rural Tamil Nadu. It is controversial that rural India marked higher post-natal mortality but rural Tamil Nadu marked cover post-natal mortality rate.

CONCLUSION

Health is an important factor in the formation of human resource development which plays a vital role in improving the qualities of human beings. Health status is multidimensional in nature and it is difficult to measure it precisely. It is captured through a number of indicators like life birth rate, death rate and infant mortality rate. The overall study mainly focused on the performance of health indicators in India and Tamil Nadu. The Crude birth rate in India has been declining. The crude birth rate in 2001 was 33.8 people which fall down to 31.5 people in 2011. Similarly, the crude birth rate is declining in rural and urban parts of the country. The crude birth rate of Tamil Nadu has declined from 27.7 people in 2001 to 22.7 people in 2007 and 20.7 people in 2011. The birth rate in India and Tamil Nadu is declining during 2001-2011. The crude death rate in the country has declined drastically from 8.4 people in 2001 to 7.1 in 2011. The declining of crude death rate is not much higher in Tamil Nadu as compared to all India data. In 2001, the crude death rate was recorded as 7.6 in 2010. In 2011, the crude death rate was 7.4 people. The highest crude death rate in many years shows the disadvantages of the health care system in the state. The Infant mortality rate in India is declining continuously from 2001 to 2011. In 2001, the IMR was 66 children per 1000 live birth, which declined to 55 children in 2007 and 44 children in 2011. The IMR in Tamil Nadu is below the average of the national figure. The IMR in Tamil Nadu has declined from 49 children in 2001 to 35 children in 2007. In 2011, 22 child deaths have recorded per 1000 live birth. The child care and maternal assistance programmes in the state have derived positive impact on IMR. The study shows that the health care indicators in India and Tamil Nadu have shown a progressive trend. The policies of the state and central government have gained fruitful result in this regard. In order to achieve attractive development in health indicators, the collaborative effort of the central and state government is very essential.

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