Health Care System: A Changing Scenario in Rajasthan

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Abstract

Development is a crucial issue for developing countries. Government are adopting various strategies to provide necessities of life to the people. Investment in social and physical infrastructure is a way towards development. Physical infrastructures include transportation, water supply, electricity, sanitation etc. This form of development has direct effects, and the changes can be visualized in short time. Investment in social infrastructure has indirect and long run effects. This include education, health, social change, art, and culture etc. Rajasthan is a state with huge population, illiteracy, several health care problems, social issues, and poor infrastructure. This paper focus on health conditions in Rajasthan which is an important sector of development. This paper also explains about the basic living conditions in the state. This aspect of health is having indirect and important impact on the development. The health conditions in state are analyzed with the help of some health parameters like birth rate, death rate, total fertility rate, concentration of health workers, maternal mortality rate, public expenditure on health sector and subnational human development index for the state and country. Findings states that there is positive relation between health and economic development. Implementation of national and state level schemes are also an effective factor through them health of people and entire health system has been improved.

Introduction

A better health status of population can be maintained not only by a good healthcare system, but it also needs improved basic conditions of life. The fundamental requirements for a healthy life include proper water supply and quality monitoring, sanitation system, cleanliness in surrounding, primary health education, food supply and nutrition, clean cooking fuel etc. Here government efforts are needed to aware people for basic hygiene and health. But the state is having worse condition of these necessities. State has adopted water policy in 2010 and several schemes are running to provide clean and regular supply of water. According to the NSSO (76 round), access to the principal source of drinking water of household within dwelling is 36.4% for Rajasthan and 37.3% for India and outside dwelling but within premises it is 26.6% for Rajasthan and 28.6% for India. When it comes to quality,

access to treated drinking water is 50.1% for rural and 59.6% for urban area in Rajasthan. It means in rural area around 49.9% and in urban area 40.4% of population is not getting quality and treated drinking water. On the other hand, at India level, 27.2% of rural and 49.1% of urban population is having access to treated water. From sanitation point of view, access to bathroom by the household in rural area is 65.3% in Rajasthan and 56.6% in India. For urban area it is 94.1% and 91.2% for Rajasthan and India respectively. So still around 27% population in Rajasthan and 31.5% population in India do not have bathroom. Access to latrine by household in rural area is 65.8% and in urban area is 95.5% in Rajasthan while it is 71.3% in rural and 96.2% in urban area in India. So, condition in urban area is quite better and for Rajasthan it is almost equal to the national level. Household who do not have access to latrine is 26.3% in Rajasthan and 20.2% in India. Household who is having access to both bathroom and latrine in Rajasthan is only 66.5% and 61% in India. In the case of fuel used in cooking, only 48.1% household use LPG in Rajasthan and 61.4% use LPG in India. Around 50.3% and 36.8% household use firewood, drunk cake and other material in Rajasthan and India respectively.

This analysis provides us an idea about the living conditions in state and nation. There is definitely a link between health and quality of life and surrounded environment that include water, sanitation, cleanliness, cooking fuels, air etc. A large Population is not having access to basic needs like clean water, clear air, sanitation facilities, non-polluted cooking fuels etc. Apart from these necessities, in modern time blind development is also creating health problems. There is need of basic safeguards before establishing industries and plants, industrial areas, and economic zones, developing residential areas and institutions on forest land and for any kind of developing or industrial activity. Manufacturing sector is the backbone for economy, but environmental considerations are must. Avoiding all these factors have an important role for a healthy life and without them they may create several health problems and a heavy burden on health services. This environmental health is indeed a need for healthy life.

Mental health is also an important aspect of health system. Mental illness and other mental health related diseases are greater in developing nations. The required infrastructure for treating mental health problems is very poor. Practically in many cases due to prevalent superstitions it is not considered as disease itself. Central government has introduced National Mental Health Program (NMHP)) in 1982 to face this huge burden of mental illness and expert health workers. District Mental Health Program was added in 1996 and the whole program was restructured in 2003 to modernize the mental hospitals and improve the condition of psychiatric departments in hospitals.

A sound health system is needed for the good working of society and for the development of state. According to the WHO "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". A healthy person has high working efficiency, long run working capacity, high productivity for the society and less burden on state resources. Since Rajasthan is having huge population and mass poverty, an efficient health system is needed to provide good and required services to its people. Rajasthan is one among the highly focused states for the national rural health mission. The health policy primarily focuses on the weaker and needy

section of society. There are several initiatives and programmes have been started by the government to provide assistance to people. Some of the major schemes in recent past are Mukhya Mantri Nishulk Dava Yojna (2011), Mukhya Mantri Nishulk Janch Yojna(2013), Rajasthan Janni shishu Suraksha Yojna (2011), Rastriya Bal Swasthya Karykram (2013), Dhanvantari 108 Toll free Ambulance Yojna (2008), Bhamashah Swasthya Bima Yojna (2015), Ayushman Bharat-Mahatma Gandhi Rajasthan Swasthya Bima Yojana (2019) Janta Clinic (2019), Nirogi Rajasthan abhiyan(2019) etc. These recent changes played a very prominent role to enhance the health services not only in urban but also in rural and remote areas of the state. make the healthcare system more focused, efficient and reachable.

Both public and private sector have an important role in developing and providing health services to the people. Public sector hospitals definitely play most important role as they provide cost effective treatment and work on no profit motive. Their main aim is to provide healthcare to all the people in equal manner. The public healthcare system is a three structured system that include a network of Sub-centers and Primary Health Centers (PHC) at the primary level, Community Health Centers (CHC), sub-district hospitals and district hospitals at the secondary level, and teaching hospitals and healthcare institutions at the tertiary level. The hospitalization cases in government hospitals are 50.8% (rural) and 49.7% (urban) while for private hospitals, cases are 48% for rural and 48.5% for urban areas. Government also run all the programs, schemes, relief plans effectively through them. Public and private sectors are also working together in PPP (public private partnership) mode to make health services affordable, easy to reach. State government first started to operate PHC in PPP mode in June 2015. Initially around 90 PHC were given to run. After that, control of 30 PHCs and 153 Subcenters from 12 districts were given to the Wadhwani Initiative for Sustainable Healthcare (WISH) Foundation. The role of government in the partnership is to provide basic infrastructure, medicines, tools and surgical equipment and financing the cost of operating the clinic. Private sector arranges the doctors and other staff and regulate the clinic. They mainly provide radiological and diagnostic services, supply of medicines, laundry etc.

Objective

1. To study the current status of health indicators in Rajasthan.
2. To analyze the medical and health sector public expenditure.
3. To compare the concentration of health workers in different states.
4. To study the relation between health and development.

Methodology

This study is based on secondary data sources such as NSS surveys, working paper series, journals and different reports of state and central government etc. Related articles and research papers also helped in framing the concrete views regarding the topic.

Table-1
Public Expenditure in Rajasthan

Year	Provision for Medical and Health Sector (Including Ayurveda)
2011-12	Rs. 663.53 Cr
2012-13	Rs. 1008.24 Cr
2013-14	Rs. 1780.35 Cr
2014-15	NA
2015-16	Rs. 6063.04 Cr
2016-17	Rs. 6047.42 Cr
2017-18	Rs. 5843.20 Cr
2018-19	Rs. 7816.53 Cr
2019-20	Rs. 8445 Cr#
2020-21	Rs. 8769.51 Cr
Source: Budget at a Glance, Rajasthan. Directorate of Economics and Statistics. (various issues) #: Rajasthan Patrika	

Table-2
Maternal Mortality Rate

Year	Rajasthan	India
2001-03	445	301
2004-06	388	254
2007-09	318	212
2010-12	255	178
2011-13	244	167
2014-16	199	130
2015-17	186	122

Source: NITI Aayog (www.niti.gov.in)

Table-3
Health Indicators

Year	Total Fertility Rate (TFR)		Crude Death Rate (CDR)*		Crude Birth Rate (CBR)*		Infant Mortality Rate (IMR)	
	Raj	India	Raj	India	Raj	India	Raj	India
2005	3.7	2.9	7.6	8	30.3	24.3	67	57
2006	3.5	2.8	7	7.6	28.6	26.8	65	55
2007	3.4	2.7	6.9	7.5	28.3	23.5	63	53
2008	3.3	2.6	6.8	7.4	27.9	23.1	59	50
2009	3.3	2.6	6.8	7.4	27.5	22.8	55	47
2010	-	-	6.7	7.2	26.7	22.1	52	44
2011	3.0	2.4	6.7	7.1	26.2	21.8	49	42
2012	2.9	2.4	6.6	7	25.9	21.6	47	40
2013	2.8	2.3	6.5	7	25.6	21.4	46	39
2014	2.8	2.3	6.4	6.7	25	21	43	37
2015	2.7	2.3	6.3	6.7	24.8	20.8	41	34

Source: NITI Aayog (www.niti.gov.in)
*Rajasthan at a glance (SIHFW)

Table-4
Concentration of Health Worker (% as Fraction of National Total)

State	Rajasthan	Gujarat	Karnataka	Madhya Pradesh
Population (Lakhs)	565.1	506.7	528.5	603.5
Population Share (%)	5.49	4.93	5.14	5.87
Allopathy Doctor	3.67	3.50	5.98	4.83
Ayurveda Doctor	6.27	6.82	4.56	6.57
Homeopathy Doctor	1.12	3.56	1.44	1.99
Unani Doctor	2.91	0.97	2.56	2.01
Dental Practitioner	4.75	4.49	8.24	2.69
Nurses and Midwifes	4.38	4.02	5.25	2.69
Pharmacists	6.24	6.71	2.90	5.87
Ancillary Health professional	1.74	3.59	6.53	5.11
Traditional and Faith Healer	5.84	13.86	1.16	1.04

Source: The Health Workforce in India,
Human Resources for Health Observation Series 16 (WHO)

Table-5
Subnational Development Index

	1990		2017	
States	**Index**	**Rank**	**Index**	**Rank**
Kerala	0.54	2	0.77	1
Goa	0.55	1	0.75	2
Punjab	0.49	6	0.72	3
Rajasthan	0.40	22	0.62	20
Madhya Pradesh	0.40	21	0.60	23
Uttar Pradesh	0.39	24	0.59	24
Bihar	0.38	25	0.57	25
India	0.43	-	0.64	-

Source: SBI, Ecowrap, March 08, 2019

Analysis

Table 1 shows the trends in public expenditure in Rajasthan for the medical and health sector (including Ayurveda). The table shows the time period of 10 years from 2011-12 to 2020-21. There is continuous increase in the expenditure of medical sector in these years. Health is one among top priority for the government and so more spending on health facilities and to make them available to each and every citizen. During 2011-12 the public expenditure was Rs. 663.52 cr and during 2015-16, it was Rs. 6063.04 cr. This shows a tremendous rise of around RS. 6000 cr in the duration of only 5 years. For year 2020-21, it was 8769.51 cr. It was a hike of around 2700 cr from year 2015-16.

Table 2 points out about the maternal condition in Rajasthan and India between the time period from 2001 to 2016. Maternal Mortality Rate (MMR) shows number of maternal deaths per 100000 live births. During 2001-03, MMR was 445 for Rajasthan and 301for India. This shows a wide gap between state and nation. Table shows continuous decline in MMR throughout the period. For 2010-12, it was 255 for Rajasthan and 178 for India. Still there is quite large difference in both the region. During the period 2015-17, MMR was 186 for state and 122for nation. Across the country, Kerala have lowest MMR (42) followed by Maharashtra (55) for 2015-17. According to United Nations, globally MMR is targeted to reduce lower than 30 per lakh live birth up to 2030. But for India it is like impossible goal to achieve a lot more need to be done to reach near to this. There is a decreasing trend in MMR and the gap is also continuously reducing.

Table 3 presents a study of basic health indicators that include TFR, CBR, CDR, and IMR. These are the parameters through health status can be easily analyzed. The table shows measured value of these

indicators for 10 years from 2005 to 2015. All of them show a decreasing trend which reflect improvement in health services, living conditions, basic health knowledge, awareness etc. The study points out that Rajasthan is having slightly higher measurement than national average. TFR in Rajasthan in 2017-18 is also 2.7 and it did not show any change from last year. According to NITI Aayog report, Rajasthan is still in the category of states having highest TFR.

Table 4 reveals the concentration of health workers in Rajasthan and few other states like Karnataka, Gujrat, and Madhya Pradesh. These states have approximate equal share of population, so it is convenient to compare them. Karnataka is having highest Percentage share of Allopathy doctors but lowest in Ayurveda doctors. Gujrat have highest share of Ayurveda doctors and then Rajasthan follow. So, for both these categories Rajasthan is in between among given states. In case of Homeopathy, Gujrat is on the top and Rajasthan is on lowest place, but both the other states are also nearly equal to Rajasthan. Unani doctors is the only category in which Rajasthan has highest share and Gujrat is having lowest. For dental practitioner, Rajasthan is on second position and Karnataka is having highest share and much higher than other states. In case of both Nurses &Midwifes and Ancillary health services, Gujrat is on the top. For Ancillary health service Rajasthan is at lowest position and this shows that state is having very poor diagnostic and support services to help health workers. For Pharma and Traditional Healers Rajasthan is in the middle and doing well yet there should be more focus on traditional ones.

Table 5 indicates the position of different states for subnational Human development Index in year 1990 and 2017. The Index is having education, health and standard of living as basic parameters. The table shows a hike in index for the states but it does not show much change in rank. Kerala and Goa are having top two positions in 2017 same as 1990. Punjab is showing an improvement this time from 6th rank to 3rd rank. Bihar and U.P. are having least Positions as before. For M.P. there is worse condition and for Rajasthan a slight upliftment but not satisfactory. Rajasthan is still one among lowest ranking states and even after more than 25 years, state is not in good position for human development.

Conclusion and Recommendations

The relation between health and development is the positive and prominent. Good health leads to high productivity, increased working efficiency, greater income, high demand etc. A healthy person is not only free from any kind of physical illness but he should be mentally fit. Rajasthan is working hard to improve its health care system. Expenditure on health in continuously rising and central government is also providing funds to state governments and related agencies. Both the governments have started different programs for neonatal, child, maternal and reproductive health, nutritional programs, programs for the prevention from communicable and non-communicable diseases and schemes to improve health structure and management.

Rajasthan has improved a lot in the field of health care system. There is gradual fall in DR, BR, TFR, MMR and IMR. Women health has shown a positiveness and government has focused to provide

better hospital and health services to them. This reflects the improved health services for pregnant women, proper checkups and nutrition during pregnancy period, vaccination, identification of high-risk pregnancies, encouraging the child birth in hospitals etc. women and child health is the most important pillar of a state health scenario and the analysis shows that the health policies and schemes are definitely working in that direction. The availability of medical professionals and health workers is also showing a comparativeness with other states. State has lack of doctors, health workers, hospitals, number of beds, infrastructure, equipment and other required facilities and state is quite behind as per WHO norms and developed regions. The basic living conditions are also not favorable and there is a lot to change. According to UNDP's human development index ranking, India was at 130th place among 189 countries. It's index has been increased from 0.427 to 0.640 but still country has poor indicators of life. The other health measures like sanitation, clean water, nutritious food, good living conditions, health education etc. are also having a projecting impact on the health and so on development. State has many schemes like Swachh Bharat Abhiyan for sanitation, AMRUT Mission for better living conditions, Mid-Day Meal and Akshaya Patra for food etc. But these efforts are not sufficient and need more attention.

Both state and central government need to work on improving basic health conditions. The rural areas need more emphasis as these areas are facing challenges at most. Maternal and child health should be primarily focused as it directly effects the future of economy. Rajasthan is having high mortality rate for both mother and child despite its long-time efforts and several launched schemes. Infant mortality rate in different age group is also a matter of concern. Apart from providing health services to the diseases, state should also create awareness, implementation of concrete master plan for better living conditions, spread of health education in the society, attracting the medical professionals in rural areas etc. Improving the basic health in the state is indeed a long-term need but in the current scenario where new kind of diseases are continuously coming on regular basis, the focus should be on research and development. More fund and attention should be for health and allied sectors.

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