

National Rural Health Mission and its impact on Health care status in Karnataka

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Abstract: Recognizing the importance of Health in the process of socio-economic development and to improve the quality of life of the people, the Government of India launched National Rural Health Mission in April 2005 (since 2013 National Health Mission) with special focus on 18 states which have weak public health indicators and health infrastructure. The mission seeks to provide accessible, affordable and quality health care to the rural population, especially to the weaker sections of the society by strengthening the primary health care system. NRHM aims to improve the health care service in rural areas by decentralizing the health care management system with community participation. The paper intends to study the positive changes brought by NRHM in health care delivery system and its impact on prime health care indicators. The study is based on secondary data collected from various sources such as Sample Registration System, NRHM, Government of Karnataka and India, NITI Aayog etc. The paper finds out that since the implementation of NRHM there is an increase in the number of health care institutions in rural areas and has made positive impact on health care indicators.

Key Words: NRHM, Rural Health, IMR, MMR, Health infrastructure and Health Indicator

INTRODUCTION

Government of India launched National Rural Health Mission (Since 2013 National Health Mission) to strengthen rural health care system by seeking to provide accessible, affordable and quality health care to the rural population, especially the vulnerable sections.

The Mission carries out necessary architectural correction in the basic health care delivery system. (NHRM Report Mofhw GOI 2005). The National Rural Health Mission (NRHM) is basically a strategy to address the issues related to the determinants of health in the improvement of quality of life of the citizen and socio-economic development of the country (Nandan 2005). Since independence India has been witnessing the inequitable distribution of healthcare infrastructure and human resources between the rural and urban areas. There is stagnation of resources as well as unequal distribution and utilization of health care resources across the different states with urban and rural stratification (MoHFW, 2005). Hence, NRHM greatly focuses to resolve the disparity in distribution of health care resources.

NRHM has been working towards the progress of health in rural areas with the funding assistance and technical support from central government. NRHM had always focused on rural welfare since its initiation in 2005, however, in the year 2013, Sub-mission of National rural health Mission (NRHM) and National Urban Health mission (NHUM) were launched under the umbrella of National health mission (NHM 2013a). The major initiatives for implementation NRHM in Karnataka is reducing child and maternal mortality, stabilizing population along with gender and demographic balance have been taken. The key features of programme includes making public health delivery system fully functional and accountable to the community, through decentralized planning with the involvement of the community. In this concern it is necessary to study the performance of the programme in

improving the health care infrastructure and its impact on health care indicators.

Objective: To examine the performance of NRHM in improving health infrastructure and health indicators in Karnataka

Hypothesis: There is a significant improvement in the health infrastructure and health care indicators of Karnataka after the implementation of NRHM.

Methodology: The Study is based on Secondary data collected from Ministry of Health and Family Welfare, Statistical Report, NRHM Annual Reports, RHS, DLHS etc, census reports NITI Aayog etc.

Literature Review:

Ashtekar S (2008) observed the differences in access to health care facilities between rural-urban areas is an important factor for lower utilization of maternal health care services, particularly for institutional delivery and delivery assistance by health personnel in the rural areas.

Mavalankar et al(2009) observes maternal health situation faces several challenges including lack of the managerial capacity, shortage of skilled human resources, non availability of blood in rural areas, and infrastructural and supply bottlenecks.

Nandan (2010) observed the innovative approach of NRHM and found that the mission has succeeded in making resources available at all level of facilities, which were earlier starved of the needed resources. The huge increase in institutional deliveries under NRHM is attributed to ASHA at the grass root level.

Wani (2017) has observed the performance of National Rural Health Mission and identified that the regional variation is the major challenge to implement the programme across the country.

Patra et al (2013) observed the performance of NRHM on health care service and tried to analyze the influence of NRHM funding on strengthening the health care service by setting up primary and community health care service and its impact on health care indicators. Paucity of funds is the main obstacle in the successful operation of the program. The study concluded that NRHM has a positive impact on health care provision and health care indicators.

Vidler et al (2016) The study recognized that exists significant barriers to timely maternity and postpartum care, particularly related to transport, perceived quality of facilities, the cost of care, and the lack of recognition that a large proportion of maternal morbidity and mortality occurs in the postpartum period.

2. Body of Paper

Table 1.1 Impact of NRHM on Rural health care Infrastructure in Karnataka

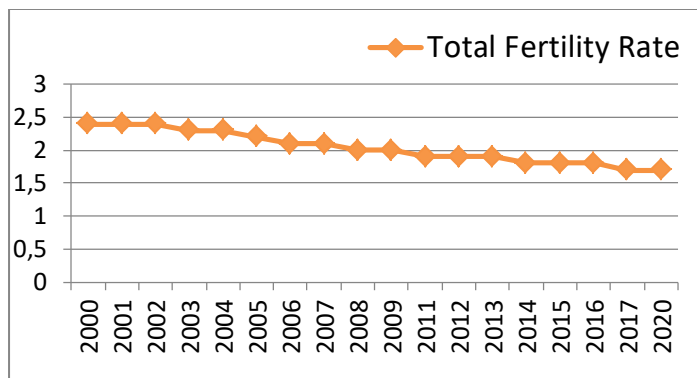
Infrastructure	SC	PHC	CHC
2003-2004	8143	1679	176
2004-05	8143	1685	176
2009-10	8143	2193	325
2011-12	8871	2310	180
2014-15	9264	2233	193
2017-18	9443	2359	206
2019-20	9435	2534	208

Source: Bulletin on Rural Health Statistics in India, 2020, National Health Mission, Ministry of Health and Family Welfare, Government of India.

Table 1.1 illustrates the contribution of NRHM towards health infrastructure in Karnataka. following the implementation of NRHM, there has been a successive increase in number of sub-centers, PHC's, CHC's, 2003-04-2019-20. From the table above, it is suggested that there has been an overall increase in rural healthcare infrastructure in Karnataka. In the table depicts that the number of sub centers has increased from 8143 in 2003-04 to 9435 in 2019-20. The number of primary

health centers has also increased from 1679 to 2534 during the same period.

Figure 1.1 Total Fertility Rate in Karnataka (2000-2020)



Source:Niti Aayog.

Total fertility rate represents the number of children that would be born to woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates (World Bank). In addition to the impact of NRHM since its implementation the TFR has recorded significant drop in its levels. Figure 1.1 provides detail information on trends of total fertility rate in Karnataka since 2000 and shows that the TFR stood at 2.4 in 2000 before and after the implementation of the programme in 2005 it declined considerably to 1.7 in 2020. A noteworthy declination in TFR is observed since 2004 to 2020.

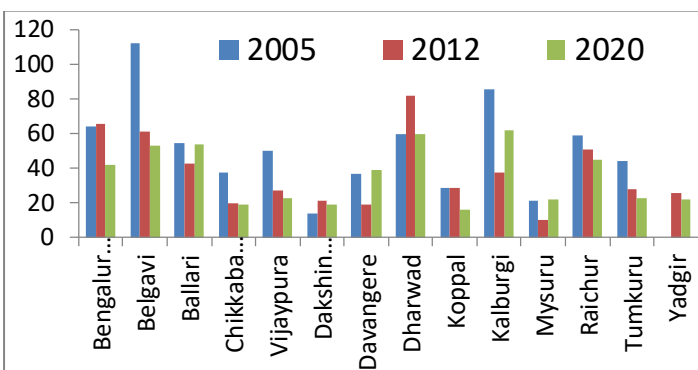
Table 1.3 Districtwise Maternal Mortality Ratio in Karnataka

Districts	2005	2012	2020
Bagalkot	41	25	18
Bengaluru(R)	17	7	2
Bengaluru(U)	64	66	42
Belgavi	112	61	53
Ballari	55	43	54
Bidar	47	21	13

Vijayapura	50	27	23
Chamrajanagara	13	4	8
Chikkabalapura	38	20	19
Chikamagaluru	13	15	6
Chitradurga	39	21	14
Dakshina Kannada	14	21	19
Davangere	37	19	39
Dharwad	60	82	60
Gadag	27	13	15
Kalburgi	86	38	62
Hassan	12	9	9
Haveri	32	19	15
Kodagu	7	4	5
Kolara	30	15	10
Koppal	29	29	16
Mandya	17	5	9
Mysuru	21	10	22
Raichur	59	51	45
Ramanagara	7	3	8
Shivamoga	33	23	17
Tumkuru	44	28	23
Udipi	5	5	7
Uttarkannada	24	12	5
Yadgir	--	26	22
State Total	1033	722	660

Source: Karnataka at Glance

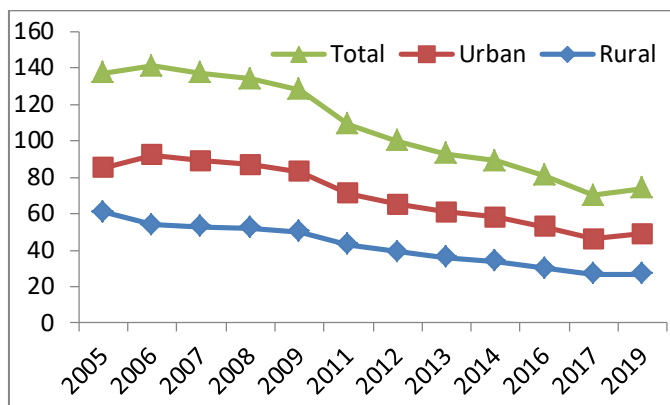
Figure 1.2 District-wise Maternal Mortality in Karnataka



Graph showing the Maternal Mortality ratio in Karnataka

The above table and chart indicates that the MMR level has come down from 1033 per 100,000 live births in 2005 to 660 in 2020 in the state.. In the year 2005 Belgaum district has the highest rate of MMR with 112 per 100,000 live births followed by, Kalburgi with 86, Bangalore Rural with 64, Dharwad with 60 and Raichur with 59 in the year 2005. After the implementation of NRHM, MMR has reduced in all most in all the districts of Karnataka except Dharwad with no change in its MMR ratio with 60 in 2005 and 2020. Whereas the State's MMR in 2005 was 1033 and has reduced to 772 and 660 in 2012 and 2020 respectively. Though the MMR has reduced to 53 in Belgaum followed by Gulbarga with 62, Bidar with 21 and Vijaypura with 23 in 2020, but in the year 2020 the MMR is still above 50 in some districts like Kalburgi, Dharwad and Ballari. The lowest MMR has recorded in Bengaluru(R) with 2 followed by Chickmagalur and Uttarkannada with 5 in 2020. There was decline in MMR in 2005 to 2020 in the following districts namely Belgaum, Gulbarga, Bidar and Bijapura. This reduction was possible due to the increase in the number of institutional deliveries in rural areas through social activist ASHAs an innovative approach by increasing the awareness about the programme.

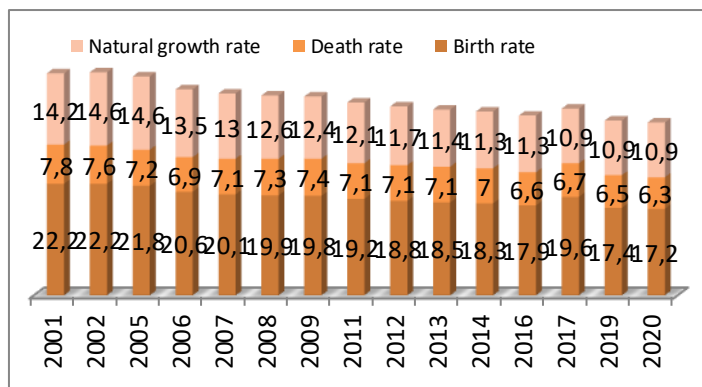
Figure 1.3 Infant Mortality Rate in Karnataka since 2005



Source: SRS Bulletin, Registrar General of India.

Reduction of IMR and MMR has a major component of National Rural Health Mission. Hence the programme has thus emphasized on maternal and child health through maternity benefit schemes to promote institutional deliveries with care and protection of both mother and the infant. (Singh et al 2012). IMR in rural Karnataka was comparatively higher than urban area. The above graph depicts that the rural IMR was 61 in comparison with 24 in the urban area which shows the huge difference in rural and urban areas. With the implementation of the mission through social activist ASHA and 24x7 PHC for maternal health care in rural areas under NRHM a drop fall was observed between the rural and urban with 27 in rural areas and 22 in the urban area by 2019. There is a considerable reduction of total IMR in the state from 2005 with 52/1000 to 25/1000 in 2019.

Figure 1.4 Birth rate, Death rate and Natural growth in Karnataka 2001-2020



Source: SRS Bulletin, Ministry of health and family welfare. Karnataka.

Figure 1. 4 depicts birth rate, death rate and growth rate from the year 2001 to 2020. Since 2000, demographic indicators have shown significant decline in India. In the year 2001, before NRHM, birth rate, death rate and growth rate was 22.2, 7.8 and 14.2 respectively which gradually declined to 21.8, 7.2 and 14.6 respectively in the launching year of NRHM. During the end-phase of mission, birth rate, death rate and growth rate further declined to 17.2, 6.3 and 10.9 respectively. Thus it is assumed that the decline in the above mentioned demographic indicators could be due to improvement health care infrastructure and in multiple factors associated with socioeconomic and demographic indicators.

Discussion and findings:

- In 2003-04 when NRHM was launched, there were 8143 sub centers, 1696 PHCs and 176 CHCs operating in Karnataka. In the year 2019-20 the number of SCs and PHCs increased from 8143 to 9435 and 1679 to 2534 respectively. The number of CHCs increased from 176 in 2003-04 to 208 in 2019-20 in the state.
- The fertility rates has also shown gradual decline from 2.4 in 2000 to 1.7 in 2020. with low pace in the state.
- MMR dropped from 1033 deaths per 100,000 live births in 2005 to 660 in 2020. District wise MMR has also reduced during the NRHM period especially Belagavi district has the highest rate of MMR with 112 per 100,000 live births in 2005 has reduced to in 53 in the year 2020.
- The IMR is very high in rural areas 61 per 1000 live births when compared to urban areas 24. Before the implementation of NRHM, IMR was 52 per 1000 live births in 2005 but after the implementation of NRHM it reduced 25 per

1000 live births in 2012. Rural IMR has shown rapid decline during the phase of the programme than the Urban area from 61 in 2005 to 27 in 2019. While urban IMR also has declined from 24 to 22 in the same period. After the introduction of NRHM there is greater reduction in IMR in rural areas when compared to urban areas.

In Karnataka, improvements in the health statistics has been observed between 2001 and 2020, particularly with respect to Infant Mortality Rate and Maternal Mortality Rate. The performance of the state with regard to health statistics is better when compared to national average.

Conclusion: The National Rural Health Mission (NHM since 2013) was launched to strengthen the rural health care system and to improve the rural health indicators in the country. The NHM envisages achievement of universal access to equitable, affordable and quality health care services that are accountable and responsive to the people's needs. The main focus of the programme is to empower the rural health community by the process of decentralization. The NRHM played a significant role in improving the health care infrastructure and health care indicators through innovative health care services. Planning under NRHM for community health and welfare required active participation of the local people and hence Asha's were introduced to create awareness about health care to the local people. Thus the community empowerment and community participation has led to the successful achievement of improving the prime health indicators in rural areas. NRHM was the first rural health care policy which has been introduced throughout the country with the intervention and innovation as per the local needs. The programme has bridge the gap of lack of health care access and institutional deliveries among rural women. (NRHM 2009). The shortcomings of this program can be assumed that due to financial constraints for health

infrastructure and human resources and with various disparities within health systems state and local system, could be the drawback in achieving the goals of NRHM. Further the health indicators discussed under this paper have shown gradual decline, with low pace. Thus the NRHM was one of the most promising programs instituted in rural India to fulfill the shortcomings of the rural health infrastructure pertaining to healthcare services and deliveries.

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