Innovative Rural Health Care Services and Its Social Impact - A State Wise Comparative Analysis

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Abstract

National Rural Health Mission (NRHM) was launched in 2005 with the main target focusing on prime public health indicators of 18 states of India.Greater emphasis was given on curative and preventive health care services with decentralization of health care delivery resources at community level. NRHM focused on prime necessities of the country's rural health needs and was oriented towards achievements of the outcomes rather impact analysis. Although after completion of 8 years of NRHM impact assessment at community level, it has become a key parameter for deciding the success or failure of NRHM as rural health policy. NRHM objective stress on rural women and children considering the most vulnerable group, thus mission grasp attention through acute programs like 'Janani Suraksha Yojana (JSY)', 'Rastriya Bal Swaath Karyakaram (RBSK)' and most popularized approach was selecting women activist form the community working towards maternal and child health care. This paper intends review major innovation and positive changes brought by NRHM in various states of India with changing governance. The present review paper provides exclusive comparative critical analysis of community base innovations of NRHM in rural India and its overall impact on the prime health care indicators. The paper highlights the achievements of NRHM as rural health policy involving the community and promoting the mission through communitization. The existence of NRHM and continuum of the mission werejudged with achievement of laid objectives in the defined time frame. The review paper has concise the major innovation inrural public health field and impact on target health indicators since 2005 till 2014. All the secondary of different states on physical infrastructure and health indicators were analysed and reported in tables and figure. Furthermore, comparative analysis of rural and urban variation achieved through execution of NRHM is also illustrated and discussed in this review paper.

Key Words: ***Innovative Health Care Services, Social and Health Indicators, Communitization.***

Background

India's rural mission was launched with the vision to achieve improvisation on crude health indicators within the time frame. It was the time for the country to work in targeted direction; led to the foundation of National Rural Health Mission with goal of "Health for All" in the rural India" (National Health Mission 2013a). It was apprehensive beginning for the new program targeting the major population and demography in the womb of country's dynamics. Nevertheless, it was successful in framing the indicators considering the needs of the community with projected outcomes. NRHM success totally depends on the fact, that instituted strategies are acceptable at the level of societal need and rural norms (Sharma 2009, 2014). Government of India (GOI) depicted a new picture of women empowerment and involvement at grass root level to reach every household in the village. Gram panchayat was actively involved in

decision making and role modelling for providing the basic need assessment in rural India. Conceptualizing the modernized approach of the community mobilization and initiation "Advisory Group on Community Action (AGCA)" was instituted under roof of National Rural Health Mission (NHM 2013b). AGCA comprises of public health workers and professional working in close relation with the NGOs and organised meetings to direct actions associated to community welfare needs.

In the year 2000, India became a signatory member of UN and committed to MDGs in 21st century. MDGs helped the government work in target oriented direction and led the formulation of "Nation Population Policy (NPP) 2000". The objectives of NPP were framed with more aggression keeping MDG in background (Ahmed 2009). The focus was transparent to mitigate prime concern which was poverty, IMR, MMR, combat HIV, TB Malaria and other communicable diseases. Thus, India was not only battling with communicable diseases but was also facing equal challenges of non-communicable (life-style diseases). This indeed was an awakening call for GOI to address the deleterious issue that; was hampering the strategies of NPP. This ongoing epidemiological transition in the growing population encouraged government to launch National Health Policy 2002 (*ibid*.:4). The policy emphasised on architectural correction of health, standardisation of health, equitable access health services and decentralisation of healthcare system.

India has been witnessing the inequitable distribution of healthcare infrastructure and human resources. 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 on target health indicators of the 18 high focus states to resolve the disparity in distribution of health care resources. Since, institution of NRHM at central level, there has been remarkable progression in government health infrastructure, health resource delivery, public total expenditure on health, though initiation innovative health care serviceby involvement and participation of community in every sphere. Evolution of NRHM has brought change in terms of tangible health outcome. The National Rural Health Mission is an important initiation towards upgrading the primary healthcare system which aims to provide affordable,accessible, accountable, reliable andeffective health care, especially to the poor and vulnerable section of the population (Gill, 2008). Gill (2009) emphasized through her evaluation study of the NRHM that; although there are problems with implementation, it is a positive governmental step towards improvising rural healthcare services. The study asserted that problems with the physical infrastructure, drugs, human resources and funding would resolve with time; however the problem of human resource which is gravely affecting the health care service delivery and structural complication needs urgent attention.

Aim: To study major rural public health innovation and its impact on health care indicators in the various states of India through institution of NRHM mission since 2005-2014 by involving the rural community.

Methodology: To formulate concise review report on NRHM as a major public health policy in India by collecting data and credible information from various authentic sources. NRHM related policy and programs updates where obtained from government resources and e-data available in various official state government online sites. Extensive review was done on e-resources published on critical analysis of NRHM. Selection criterion of journal article was mainly based on the all articles, review papers on national health policy focusing NRHM and related updates were collected. E-article on NRHM since 2005 till date were obtained from PubMed,JSTOR, Science Direct,Francis and Taylor,Springer Link, Scopus, Google scholar, and statistical data base was obtained from IndiaStat.com. Authentic information journal articles, book report, seminar/conference proceedings and e-data base was explore on health policy planning of India Government. Major sites from national data was extracted were Ministry of Health and Family Welfare (MoHFW), Central Bureau of Health Intelligence (CBHI), National

Health Profile (NHP) since 2004 till 2014, reports from state Ministry Health and Family Welfare were also analysed. Study duration was from November 2014 till March 2015. All the secondary data obtained from various national sites were analysed. The review paper is optimizedas per scientific and national data obtained since execution of mission in the country at central level. All the tables and figures are formulated by the researcher using secondary resources from National Health Profile data.

NRHM's Innovative Health Care Services

NRHM left no stone unturned in evaluating the gap causing under -utilization of funds and lack of utilization of healthcare services in rural masses. Under the umbrella of NRHM various need base programs and interventions have been developed for mainstreaming the service deliveries across the communities. Hence, the following innovative services that indicate the impacts of NRHM in various states resulted in change in the present public health scenario.

Innovative Ambulance Services and Helpline: Obstetrics and Medical Emergencies

Emergency ambulance services to render transportation of pregnant mothers for deliveries have gained much popularity. Lack of transportation and accessibility to health centres results in delay and pregnancy related mortality and morbidity. Ambulation services are augmented with call centre service for delivering 24 × 7 medical aids and heath care services. EMRI ambulance and free bus passes in Andhra Pradesh for BPL pregnant women and ST/SC, Janani Express Yojna in Madhya Pradesh for BPL women, Ambulance schemes West Bengal committed to provide round the clock transport for obstetric and other medical emergencies, Janani Suraksha Vahini and Aarogya Kavacha Scheme are JSY in Karnataka are few examples of ambulance schemes chattered with help of private organizations or NGOs (Planning Commission 2009). JSY or Obstetrics helpline in Rajasthan, Chhattisgarh and Jharkhand are functioning in district head quarter and interconnection to every CHC, PHC and partner NGOs to promote institutional deliveries, escort service for pregnant women, providing immediate medical attention along with assisted ambulance facility have proven great boon for poor women(MoHFW, 2006).

The challenges for successful running of these programs are management and organizational sustainability. Another shortcoming are knowledge and awareness among the locals for utilizing these services and well as building up of trust and hope ensuring quality services. On assessing these ambulance schemes across the states, it is necessary that this ambulance providing emergencies and obstetrics care are better equipped with well operating devices and trained staffs. For large scale success of the program also requires continuous monitoring and evaluation.

Mobile Health Units: Reaching to People in Rural India

Numerous innovative health care deliveries initiatives were started in the midst of NRHM flagship. Mobile health clinics or units where launched to mitigate the physical barriers in access to health care services. Various modes of transport vehicles– buses, trains, vans, boats and helicopters were used in rough and inaccessible terrains. Mobile Health Clinics (MHCs) in Uttarakhand provides RCH services in hilly villages, Doctor Tumachya Gaavi in Maharashtra renders preventive and curative services at village level through doctor's visits twice a month. Deen Dayal Chalit Aspatal Yojana in Madhya Pradesh provides basic health care services along with ANC, PNC, immunizations and routine investigation provision in remote areas. Mobile Helicopter Services in Tripura delivers special services in 12 remote inaccessible areas (Planning Commission 2009). Mobile health care service targeted people who are unserved due to geographical barriers and the unit also provide services during natural disasters and emergencies.

Managing, organizing and programing of mobile health units require commitment of medical and paramedical staffs, their willingness to travel in remote and rough terrain and mode of

communication with the locals. For instance Mobile Medical Units in Chhattisgarh provided services in tribal areas, mostly trained health professional encountered with language barrier as well as naxalite prone tribal zone. There is lack of acceptance by the tribal community due to social and cultural belief in traditional health practices over the modern medical practices. Therefore, for sustainability of the mobile health services technological up gradation along with operational skill development among the staffs becomes obligatory.

Floating Dispensaries –Kerala

Kerala "God's Own Country" – A small district of Ernakulam consists of 11 islands with total population is about 20,000. These islands are embedded with natural beauty but, also miserably affected with heavy rain, floods blocking all the channels of transportation. This eventual hinder the service delivery and these islands are prone to vector borne diseases. In the peak rainy season the island get detached from the nearby towns and city due to lack of bridges to interconnect the islands and the city makes people's access to medical services difficult. National Rural Health Mission Kerala with Kadamakudy Grama Panchayat took innovative step and launched Floating Dispensary. These mobile floating dispensaries provide basic health services as well as act as ambulance to reach nearby PHC and CHC during the emergency. The floating dispensaries have team of health profession, one medical doctor, staff nurse and pharmacist. This model is great success and concept is instituted in other district of Kerala.

Source:NHM, 2011

Sneha Sparsha-literally meaning the **'touch of love'**, on 15 April 2013 NRHM, Assam launched unique health care initiative for children below 12 years of age with budget allocated ☐ 5 Crore for year 2013-14. Children belonging to families with annual income less than ☐ 2.50 lakhs will be considered under the scheme of Sneha Sparsha for treatment bearing high cost such as Thalassemia requiring Bone Marrow Transplant, Liver and Kidney transplant, and Cochlear Implant. Monetary support and treatment are provided to the families enrolled under this scheme (National Health Mission Assam 2008).

ASHA-Radio – In the year 2007, National Rural Health Mission, Assam in collaboration with All India Radio (AIR), Guwahati initiated a bi-weekly radio programme to promote ASHA leadership. This programme was further enlarged with UNICEF contribution for designing of the programme and broadcasting of ICE/BCC methods through NRHM**.** Musician, artist, vocalist and other programme organizers participate (National Health Mission Assam 2008).

Freeday –"Menstrual Hygiene Scheme"- Success Stories (NHM, 2013a)

Under NRHM, girl's education was given utmost importance thus some unique interventions were instituted under the umbrella of the mission to bridge the gap existing for adolescent's girls dropping out from schools. In Kathua district, Thakurpura, Banoti of Jammu and Kashmir block is hard to reach and one of the most difficult areas where AHSA works due to hilly terrains. School drop-out among the adolescent girls was high Kathua district. The reason was during menstrual days it was inconvenient to travel longer distance and hilly areas. Identifying this problem government started newer initiative of provision of sanitary napkins for school girls. Since 2012, pubescent girls are providing with at cheaper cost napkin pack by the AHSA working in the villages. Thus this concern of government has change the present scenario. Few verbatim of local residents and AHSA worker are listed below:-

"Freedays is a *'Sasta'* napkin from Government has made me approach my parents for purchasing. This is unlike my using cloth earlier as my parents did not support the idea of buying the expensive sanitary napkins from the market".

"We had never thought that, the Government could be so understanding to girl issues and especially, one which is so personal to all!"
"Going to school has become so much more convenient since I have started taking Freedays from ASHA didi"
ASHA say's that, "It is amazing that 43 of the 55 young girls in my village now come to me with their personal problems, and I know exactly when they would need the sanitary napkin packs".
"I also visit the schools regularly so that the packs are readily available with the girls."

India is fighting with one of the most grievous public health problem which is anaemia. It is the leading cause of maternal mortality rates in India. According to the report by MoHFW (2013), approximately 58 percent of pregnant females are anaemic in India. Furthermore, the report states that the iron deficiency is the primary reason to cause nutritional anaemia in India. Thus, under the Iron Plus Initiative, iron deficiency anaemia is targeted among pregnant women and adolescents with a revised form of iron folic acid (IFA) supplementation for infants and children. The success of this program relies on the influence of ASHA's on community participation which led to community mobilisation. Furthermore, the distribution of iron and folic acid supplements by ASHA's at home helped in reaching out the target population of all age groups. Along with IFA, micronutrients like vitamin A, iron and iodine, are also very essential which has been made available under GOI programs. Despite of the successes of these interventions, certain shortcomings of the program have been notified. In the study by Kotecha and Lehariya 2004, suggested that IFA coverage was very poor in the selected states of India. Furthermore, they also claimed that the iron and vitamin A supplementation did not reach the young children through the program. In accordance with this, Deitchler et al 2004, condemned the limitation of the programs to be due to lack of vitamin A supply, inadequate trained workers, lack of knowledge among health professionals and lack of community participation.
Hence, frequent audit of the programs will help to achieve the targets set by GOI and thereby bring about active community participation.

Impact on Prime Target: Infrastructure and Health Indicators - A Comparative Analysis

NRHM has been working towards the prosperity of health in rural areas with the funding assistance and technical support from central government. NRHM had always focussed on rural welfare for a considerable period of time; 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). NRHM committed its objectives towards maintenance of infrastructure and health care facilities at all health care levels. Table 1 illustrates the contribution of NRHM towards health infrastructure. It suggests that there has been a successive increase in number of sub-centres, PHC's and CHC's from 2005-2013. Since 2005, number of Sub-centres demonstrated a hike of 6696 till the year 2013. Likewise, since 2005 to 2013the number of PHC's increased from 22669 to 24448 and CHC's increased from 3910 to 5187.

Table 1: Improvisation of Basic Health Infrastructure under NRHM (2005-2013)

Infrastructures (Year Wise Data)	Sub-centres	PHC	CHC
2005- 2006	144988	22669	3910
2007	145272	22370	4045
2008	146036	23458	4276
2009-2010	145894	23391	4510
2011	148124	23887	4809
2012	148366	24049	4833
2013	151684	24448	5187

Source: National Health Profile (2005-2013a) Ministry of Health and Family Welfare

Table 2 illustrates the contribution of NRHM towards health infrastructure of 18 high focus states. Following the implementation of NRHM, there has been a successive increase in number of sub-centres, PHC's, CHC's, rural hospitals, AYUSH hospitals and dispensaries from 2005-2011. Form the table 3, it is suggested that there has been an overall increase of infrastructure from 2006 to 2011 in 18 high focus states and also in totality with India.

Table 2: State Wise Comparison of Infrastructure in 18 High Focus State (2006 & 2011)

Year	2006						2011					
18 High Focused States under NRHM	Sub-centres	PHC	CHC	Rural Hospitals	AYUSH Hospitals	AYUSH dispensaries	Sub Centres	PHC	CHC	Rural Hospitals	AYUSH Hospitals	AYUSH Dispensaries
Arunachal Pradesh	379	85	31	36	2	47	286	97	54	52	12	63
Assam	5109	610	100	100	5	496	4609	978	110	1088	4	486
Bihar	8858	1641	70	101	26	634	9729	1883	70	1325	8	2175
Chhattisgarh	4692	518	118	116	13	691	5161	783	157	416	14	1093
Himachal Pradesh	2069	439	66	86	29	1122	2065	474	78	98	31	1129
Jammu & Kashmir	1888	374	80	61	5	500	2265	637	84	1402	2	417
Jharkhand	3958	330	195	47	3	206	3958	330	188	545	5	333
Manipur	420	72	16	41	1	9	421	85	17	23	21	265
Meghalaya	401	101	25	26	2	11	422	108	27	28	10	12
Mizoram	366	57	9	10	6	1	370	57	9	29	8	17
Nagaland	397	84	21	123	2	0	396	126	21	21	2	203
Madhya Pradesh	8874	1192	229	229	58	1623	8869	1156	333	1659	14	1301
Orissa	5927	1279	231	329	43	1301	6688	1305	377	334	23	1773
Rajasthan	10512	1713	325	337	107	3739	14221	1610	431	2649	126	3876
Sikkim	147	24	4	5	8	2	147	24	2	24	-	12
Tripura	539	73	10	14	10	106	828	83	18	21	2	111
Uttarakhand	1631	222	49	24	17	5033	1848	257	55	666	10	533
Uttar Pradesh	20521	3660	386	397	1973	1871	20521	3496	773	515	1983	2014
India	144988	22669	3910	4256	3153	20799	151684	24448	5187	15398	3169	25967

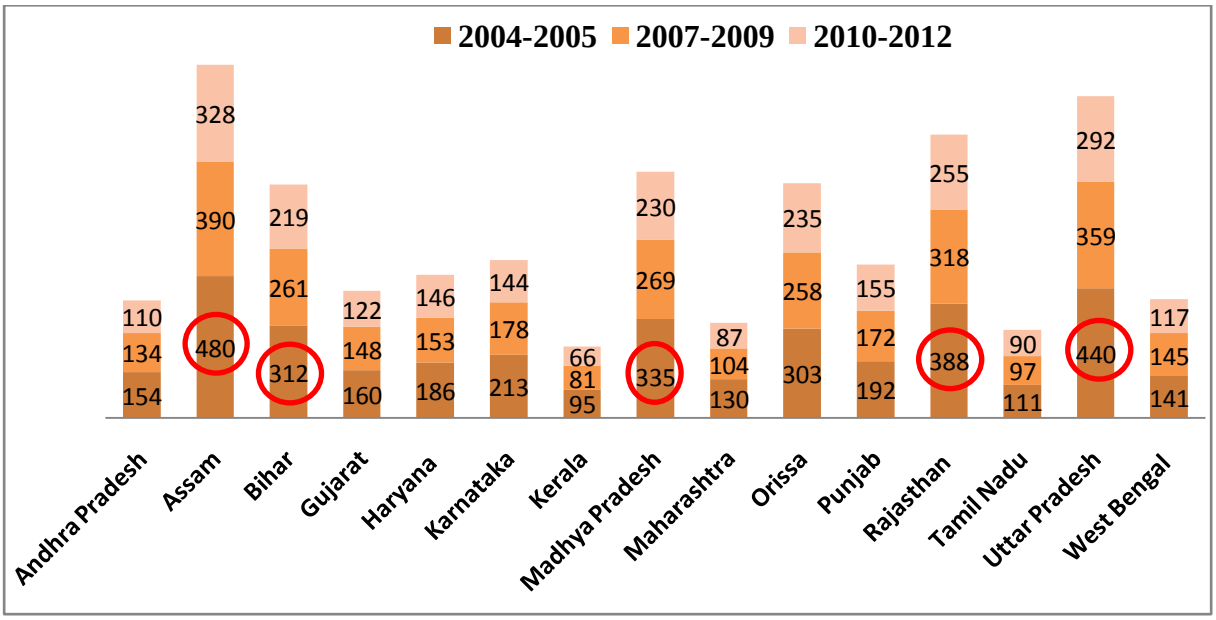
Source: National Health Profile (2013, a), Ministry of Health and Family Welfare

NRHM- Health Outcome Indicator- Comparative Analysis

At the national level, slightly less than half of the deliveries (47 percent) took place in health institutions. Seventy percent of the deliveries in urban areas took place in health institutions whereas it is only 38 percent in rural areas. The extent of institutional deliveries in India varies considerably across the states/union territories, from the lowest of 18 to 28 percent in

Jharkhand, Chhattisgarh, Meghalaya, Uttar Pradesh and Bihar to the highest of 94 to 99 percent in Tamil Nadu, Goa and Kerala (IIPS 2010). In Punjab, Maharashtra, Karnataka, Delhi and Andhra Pradesh, 60 percent or more deliveries took place in institutions. From the figure 1, since 2004-2005, there has been a gradual reduction in MMR in the states. Among these states, the states with high MMR displayed decline in maternal deaths. MMR in Assam, Uttar Pradesh, Rajasthan, Madhya Pradesh and Bihar was significantly high (480,440,388,335 and 312 respectively) as compared to peer and neighbouring states. Through combine central and state initiatives, that promoted institutional deliveries, early identification of pregnancy related complication, better surgical intervention with supporting skilled human resources at basic level has helped the country in mitigating MMR in the states. Implementation of various MCH schemes like JSY, Chiranjeevi Yojna and maternal care programs in states, influenced significantly on reducing MMR.

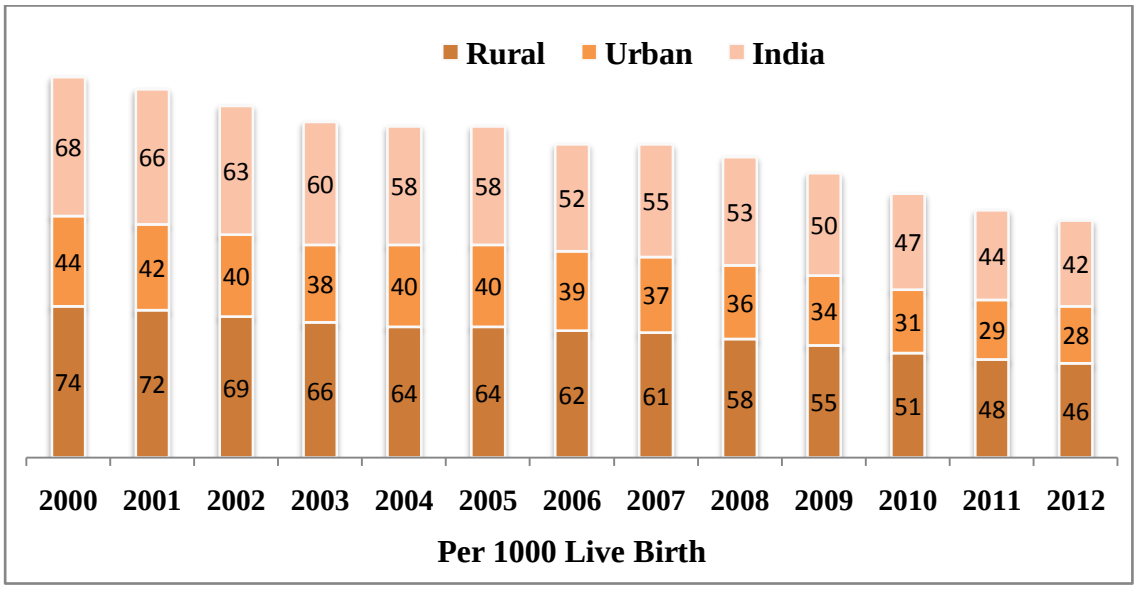
Figure 1: State wise Maternal Mortality Rate (2004-2012)



Source: National Health Profile (2013, b), Ministry of Health and Family Welfare

Safe motherhood and child health is a key concern of NRHM. The policy stressed on national reduction of IMR and MMR as major tangible outcome indicator. The mission has greatly emphasized on maternity security schemes and institutional deliveries with infant care and protection (Singh et al 2012). IMR in rural India was comparatively higher than urban area. Figure 2 suggests that, in the year 2000 and 2005 IMR in the rural area was 74 and 64 respectively which is considerably higher as compared to IMR in urban area and overall IMR in India. Noble initiation of mission with the help of AHSA and 24×7 PHC for institutional deliveries under NRHM, a drop fall was observed in rural and urban IMR by the end of year 2012. During the end phase (2012) rural IMR was 46/1000 live birth and overall country's IMR was dropped to 42/1000 live birth as shown in figure. However, expected projected IMR was 30/1000 live birth.

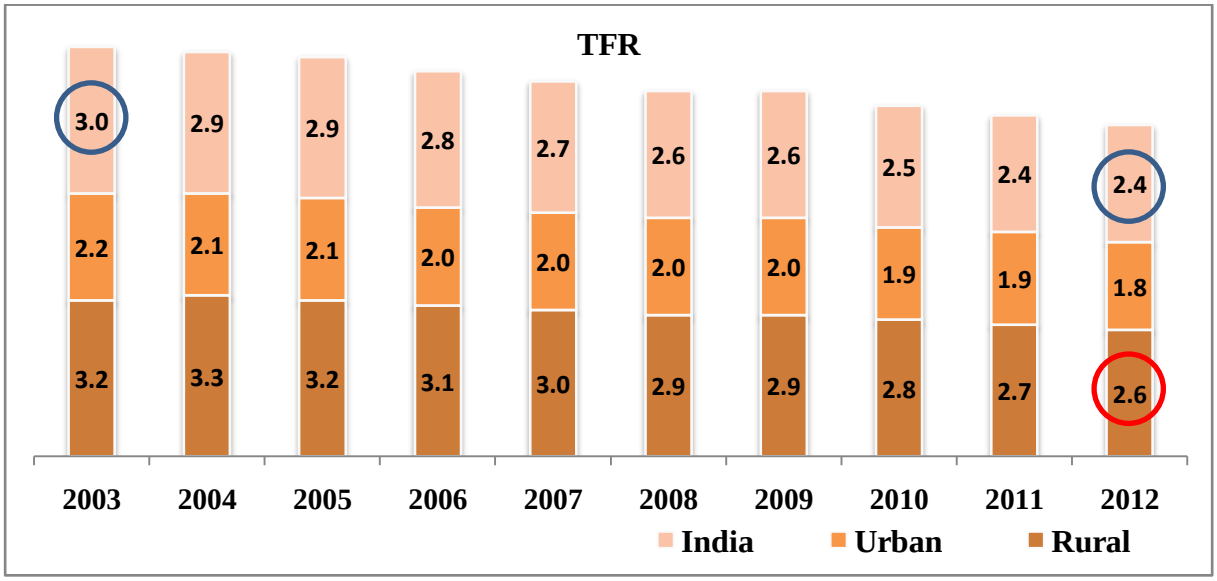
Figure 2: Infant Mortality Rate in Rural and Urban (2000-2012)



Source: National Health Profile (2013, b), Ministry of Health and Family Welfare

In addition, NRHM's impact on TFR indicated significant drop in the levels. Figure 3 display the total fertility rates in rural and urban areas. Graph 13 suggests that in India, TFR declined from 3.0 to 2.4 from 2003 to 2012. In addition, a noteworthy declination in TFR in rural and urban is observed since 2003 to 2012. However, in comparison to TFR in urban area (1.8), TFR in rural area remain 2.6 in the year 2012. Thus, one can estimate that the gap of socioeconomic differences and inequality persists between rural and urban areas.

Figure 3: Total Fertility Rate Rural and Urban (2003-2012)

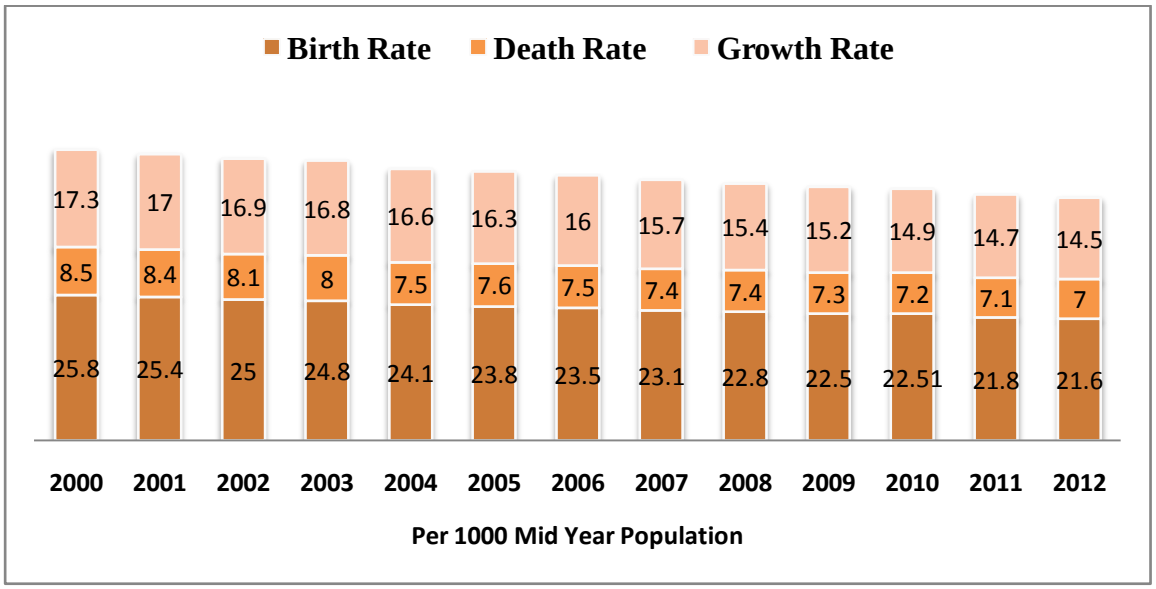


Source: National Health Profile (2005-2013b), Ministry of Health and Family Welfare

Figure 4 depicts birth rate, death rate and growth rate from the year 2000 to 2012. Since 2000, demographic indicators have shown significant decline in India. In the year 200, before NRHM, birth rate, death rate and growth rate was 25.8, 8.5 and 17.3 respectively which gradually declined to 23.8, 7.6 and 16.3 respectively in the lunching year of NRHM. During the end-phase of mission, birth rate, death rate and growth rate further declined to 21.6, 7.0 and 14.5

respectively. Thus it is assumed that the decline in the above mentioned demographic indicators could be due to improvement in multiple factors like socioeconomic and demographic indicators.

Figure 4: Birth Rate, Death Rate & Growth Rate (2000-2012)



Source: National Health Profile (2013b), Ministry of Health and Family Welfare

NRHM: Strengthening the Rural Communities through Social and Health Insurance

NRHM has been successful in delivering people with health insurance policies, free health scheme, impeccable human resources and excellent physical resources in health. Insurance schemes are a pool of funds which is invested by people so that they can utilise when they fall ill. Insurance health policy has been utilised by people from BPL and vulnerable rural populations. Under NRHM, health insurance policies have benefitted people in rural areas and yield a notifiable change in their lives. "Yeshasvini Cooperative Farmers Health Care Scheme" (Yeshasvini Scheme) was operationalised in the year 2003 in the state of Karnataka. Furthermore, it is self-funded health scheme and thus Karnataka became a role model. The beneficiaries are farmers and his family members, who avail the cashless treatment (Government of Karnataka, 2014). Furthermore, the amount reimbursed in the hospitals under the scheme has increased from ☐10.65 Cr in 2003-2004 to ☐58.88 Cr in 2013-2014. However, the report by Public health foundation of India 2011, states that there has been poor enrolment under this scheme. Furthermore, only 35% of target population is enrolled under this scheme. Other health policies also register certain drawbacks. However, (Ravindran, 2011) claims that the accessibility of health care for people in rural areas was challenging as the most of the hospitals were located in urban areas. SEWA rural's approach in Gujarat adopted CY to contribute towards reducing MMR. SEWA provides delivery facilities and new born care at home. They monitor pregnancy outcomes and each pregnant woman (UNICEF, 2008). In addition, they assist women with the utilisation of benefits of JSY and CY. Thus, the same report indicates the decrease in MMR in one of the state of Gujarat, from 594 in the year 2002 to 196 in the year 2007-2008, following the performance of SEWA rural project and reinforced government schemes. Likewise, the **Janani Shishu Shuraksha Krayakram** initiative was in implemented in the across the states of the country in the year 2011**.** The approach of this scheme works on the line of JSY and Cheeranjeevi Yojna. JSSK provides women with cashless schemes and thus attempts to reduce out-of pocket expenditures. Jacob cited in Sharma (2014: 294) condemned that firstly, the insurance policy will divert the funding from the health care deliveries in rural areas, eventually weakening the government. Secondly, due to lack of basic

facilities and services at health centres in rural areas, it is difficult to deploy trained doctors in remote rural regions. Thus, rigorous monitoring of the schemes/insurance and resource mobilisation at rural areas must be incorporated under NRHM agendas.

Conclusion:

NRHM was launched by former prime ministry Dr Manmohan Singh to strengthen the rural public health indicators in India. The main themes of NRHM focus on empowering rural community at local, state and central level. NRHM objectives on community empowerment played a significant role in improving the health care indicators and success of all innovative health care services. Various innovative health care services were launched under umbrella of NRHM as per state health needs were accepted and utilized by the rural people. Planning the major action for community health and welfare required active participation and involvement of locals. Furthermore, empowerment creates individuals and community actions focus on capacity building and controls decisions and resources. The introduction of communitization, community empowerment and community engagement led to successful achievement of many programs instituted through NRHM. NRHM has greatly changed the existing care scenario of rural India. It is the first rural health care policy which has promoted intervention and innovation as per local needs. NRHM has opened the door among the policy maker to plan different health care policy and programme engaging the community. According to NRHM (2009), this scheme has bridge the gap of lack of health care access and institutional deliveries among rural women. Hence, the above discussion divulges information on various achievements under NRHM program. Although certain pros and cons are elaborated under this program, yet NRHM proved to be a successful model of India. One shortcoming under this program can be assumed that due to financial constraints for health infrastructure and human resources and with various disparities within health systems at central, state and district system, could be the hindrancein accomplishing the goals of NRHM. Furthermore, the health indicators discussed under this paper have shown gradual decline, nevertheless, with low pace.Indeed the shortfalls of the program address the harsh reality of India like social inequities and inequalities, socioeconomic differences, the weakened caste system, and gender inequality. On the contrary, aNational Rural Health Mission (NRHM) was one of the most promising programs instituted in rural India to fulfil the shortcomings of the rural health infrastructure pertaining to healthcare services and deliveries.

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References

Ahmed, F.U. (2009). NRHM-The blue print for India's Goal of "Health for All". Available at: http://www.iphaonline.org/academy/concept-papers/pdf/nrhm.pdf. Accessed 20 April 2015.

Gill, K. (2009).A Primary Evaluation of Service Delivery under the National Rural HealthMission (NRHM): Findings from a Study in AP, UP, Bihar and Rajasthan. Working Paper1/2009 – PEO Planning Commission of India, Available at:http://planningcommission.nic.in/reports/wrkpapers/wrkp_1_09.pdf.Accessed 23 April 2015.

Gill K.(2009). The National Rural Health Mission: A View from the Stands*. InternalSecondary Evaluation of NRHM undertaken for the Planning Commission of India.*Available at, http://planningcommission.nic.in/reports/wrkpapers/wrkp_1_09.pdf.

Government of Karnataka.(2014) *.About the Scheme*. Available at: http://www.yeshasvini.kar.nic.in/about.htm.

International Institute for Population Sciences. (IIPS). (2010). *District Level Household and* Facility Survey (DLHS-3), 2007-08, India. Mumbai:IIPS. Available at http://www.rchiips.org/pdf/india_report_dlhs-3.pdf.
Ministry of Health and Family Welfare (MoHFW). (2005). *National Rural Health Mission:Meeting People's Health Needs in Rural Areas - Framework for Implementation 2005-2012*. GOI, New Delhi, India. Available at http://jknrhm.com/Guideline/Frame_Work.pdf.
Ministry of Health and Family Welfare (MoHFW).(2006). Janani Suraksya Yojna. Available at: http://mohfw.nic.in/WriteReadData/l892s/file28-99526408.pdf.
Ministry of Health and Family Welfare.(MoHFW). (2013). *Guidelines for Control of Iron Deficiency Anaemia National Iron plus initiative*. Available at http://www.unicef.org/india/10._National_Iron_Plus_Initiative_Guidelines_for_Control_of_IDA.pdf.
National Health Profile .(2005). Health Infrastructure Indicators. Available athttp://cbhidghs.nic.in/CBHI%20Book/chapter6.pdf.
National Health Profile.(2006).Health Infrastructure Indicators.Available athttp://cbhidghs.nic.in/cbhi%20book_ch_6.pdf.
National Health Profile.(2007).Health Infrastructure Indicators.Available athttp://cbhidghs.nic.in/writereaddata/linkimages/Health%20Infrastructure2769828712.pdf.
National Health Profile.(2008).Health Infrastructure Indicators.Available at http://cbhidghs.nic.in/writereaddata/mainlinkFile/Health%20Infrastructurs.pdf.
National Health Profile.(2009).Health Infrastructure Indicators.Available at http://cbhidghs.nic.in/writereaddata/linkimages/11%20Health%20Infrastructure8356493923.pdf.
National Health Profile.(2010).Health Infrastructure Indicators.Available athttp://cbhidghs.nic.in/writereaddata/mainlinkFile/Health%20Infrastructure.pdf.
National Health Profile.(2011). *Health Infrastructure Indicators* Available athttp://cbhidghs.nic.in/writereaddata/mainlinkFile/11%20%20Health%20Infrastructure%202011.pdf.
National Health Profile.(2012). *Health Infrastructure Indicators* Available athttp://cbhidghs.nic.in/writereaddata/mainlinkFile/Health%20Infrastructure-2012.pdf.
National Health Profile (2013,a). *Health Infrastructure Indicators.* Available at: http://cbhidghs.nic.in/writereaddata/mainlinkFile/Health%20Infrastructure-2013.pdf.
National Health profile. (2013,b). *Demographic Indicators*. Available at: http://cbhidghs.nic.in/writereaddata/mainlinkFile/Demographic%20Indicators-2013.pdf.
National Health Mission. (2011). *Floating Dispensaries*. Available at: http://www.arogyakeralam.gov.in/index.php/special-initiaves/floating-dispensary.
NRHM (2009).*NRHM newsletter*. Available at http://nrhm.gov.in/pdf/newsletters/feb09.pdf.
National Health Mission, Assam. (2008). *Sneha Sparsh*. Available at http://www.nrhmassam.in/sathya.php
National Health Mission (NHM). (2013a). *About NHM*. Available athttp://nrhm.gov.in/nhm/about-nhm.html.
National Health Mission (NHM). (2013b).Community Action for Health. Available at http://www.nrhmcommunityaction.org/rolemandate.html.
Planning Commission. (2009*).* Directory of Innovations Implemented in the Health Sector.Available at http://planningcommission.nic.in/reports/genrep/health/Directory_of_innovations_march.pdf
Ravindran,T. K.(2011).Public-Private Partnerships in Maternal Health Services*Economic & Political Weekly* 46 (48). Available athttp://www.indiaenvironmentportal.org.in/files/file/Maternal%20Health%20Services.pdf.
Sharma, K. A. (2014). The National Rural Health Mission: A Critique.Journal of the Indian Sociological Society*,* 63 (2), pp. 287-301.
Sharma, K. A. (2009). National Rural Health Mission: Time to Take Stock, Indian Journal Community Medicine; 34(3): 175–182.

Singh, K. S., Kaur, R., Gupta, M. and Kumar, R. (2012). Impact of National Rural Health Mission on perinatal mortality in rural India. Indian Paediatrics; 49(2) 136-138. Available at http://medind.nic.in/ibv/t12/i2/ibvt12i2p136.pdf
United Nations Children's Fund (UNICEF). (2008). Promoting Safe Deliveries among Below Poverty Line Women: The process of social inclusion in Gujarat. Available at http://www.akmrs.com/uploads/7/9/7/0/7970223/09_gujarat_institutional_deliveries.pdf