

RURAL HEALTH MISSION IN BIHAR: AN APPRAISAL

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INTRODUCTION

The National Rural Health Mission (NRHM) launched on 12th April 2005 in our Country. The Mission vision envisaged provision of effective healthcare to rural population as throughout the country, to begin with special focus on 18 states, which had weak public healthcare indicators and weak infrastructure including Bihar. There are 38 districts in the state of Bihar. It covers an area of 94163 sq. km. and a population of 10,29,04,637 in 2011 census. Bihar is one of the major states of the Indian Union. There are 9 Divisions, 101 Sub – Divisions, 534 Blocks, 8463 Panchayats and 45098 villages in Bihar. The Mission attempts to achieve goals through a set of core strategies including enhancement in Budgetary outlays for public health in decentralized village and district level health planning and management, appointment of Accredited Social Health Activist (ASHA) to facilitate access to health services, strengthening to the public health service delivery infrastructure, particularly at village primary and secondary levels, improved management capacity to organize health system and services in public health, promoting the non profit sector to increase social participation, and community empowerment, inter-sectoral convergence, up gradation of the public health facilities to Indian Public Health Standards (IPHS), reduction of infant and maternal mortality through Janani Suraksha Yojana (JSY) etc. The Mission aims at operationalising existing health facilities to meet Indian Public Health Standards in each Block of the country. Main streaming of Ayurveda, Yoga, Unani, Sidha and Homeopathy (AYUSH) is needed to facilitate comprehensive and integrated health care to rural population, especially undeserved groups in rural India. In these circumstances, the present study is justified, on the ground that the study makes an evaluation of the impact of NRHM in Rural Health Management in Bihar.

DEFINITION OF RURAL AREA

The term “Rural” can be defined in many ways such as by population density, by geographic location or other factors. Due to the large number of choices in the definition parties may often disagree with one another on which definition to use. The Bureau of the Census of the United States defines a rural community on the basis of the size and the density of population at a particular place. In India, on the other hand, the term ‘rural’ is defined in terms of revenue: the village means the ‘revenue village’. It might be one large village or a cluster of small villages. According to the Census Commission of India, a village is an entity identified by its name and a definite boundary.

DEFINITION OF RURAL HEALTH

Rural health is the study of health and healthcare delivery in the context of a rural environment or location. For the rural population, health care requirements are different than the urban due to various social reasons. Rural population is mainly engaged in agriculture labour activity and there are many challenges of agriculture sector. The environmental conditions and unfavourable financial situations leads to mental stress and depression in farmers and daily wage labourers working in the field. Rural population engaged in agricultural activities is exposed to many other health risks. There are many studies which reveal the exposure to pesticides, chemicals and other toxins in ground water and other airborne pollutants, exposure to disease and animal waste are some of the major threats to health status of rural population.

According to 2011 census, 68.64 per cent of Indians live in about 6,40,867 villages. In 1901, 89.2 per cent of Indians resided in villages and by 1961 this percentage had reduced to 82.03. Further, in 2011, 72.22 per cent of Indians resided in about 6,38,691 villages. It shows a declining trend which is bound to continue. There is, however, no doubt that even today a significant proportion of Indians live in and derives livelihood from villages. Thus, rural society assumes a considerable significance in any form of discussion on development.

In context of rural health services, the challenge of government health care system is that there are many gaps in primary health services and the and the healthcare facilities are mainly urban centric. The differences in health status in urban and rural areas are based on various factors such as: availability, accessibility and affordability of health services, literary and educatives status, poverty, employment and source of livelihood, income and family size, food intake and nutritional status, gender disparity, housing, access to clean water and sanitation facilities, information and knowledge for health etc. These factors have direct impact on health status of the rural population.

HEALTH STATUS IN INDIA

In India, accessibility and availability of health services reflect the reach and coverage of primary health care facilities. According to **National Family Health Survey (NFHS)**, private health facilities are favored for health care by a majority of the urban households (70%) as well as rural households (63%). However, the use of public health facilities by the lowest wealth quintile (39%) is comparatively more than the highest wealth quintile (34%). At the same time, a very negligible proportion of the sampled population (1.4%) access health care from the subcenter.

Non – usage of public health facilities varies greatly across states, ranging from 8% in Sikkim to 93% in Bihar. Poor quality of care is cited as the most common reason (58%) for not using government facilities followed by lack of nearby facility (47%), long waiting period (25%), inconvenient timings (13%), and provider absenteeism (9%).

The role of grassroots health workers such as ANM, Lady Health Visitors (LHV), AWW, Accredited Social Health Activist and Multi Purpose Workers (MPW) in providing health services at the community level is at the heart of the primary health care system employed by India. However, as per NFHS – 3 only 17% of the women reported any contact with health workers in the three months preceding the NFHS – 3 survey. Rural women reported higher contact (21%) with health workers compared to urban women (10%) and women from the

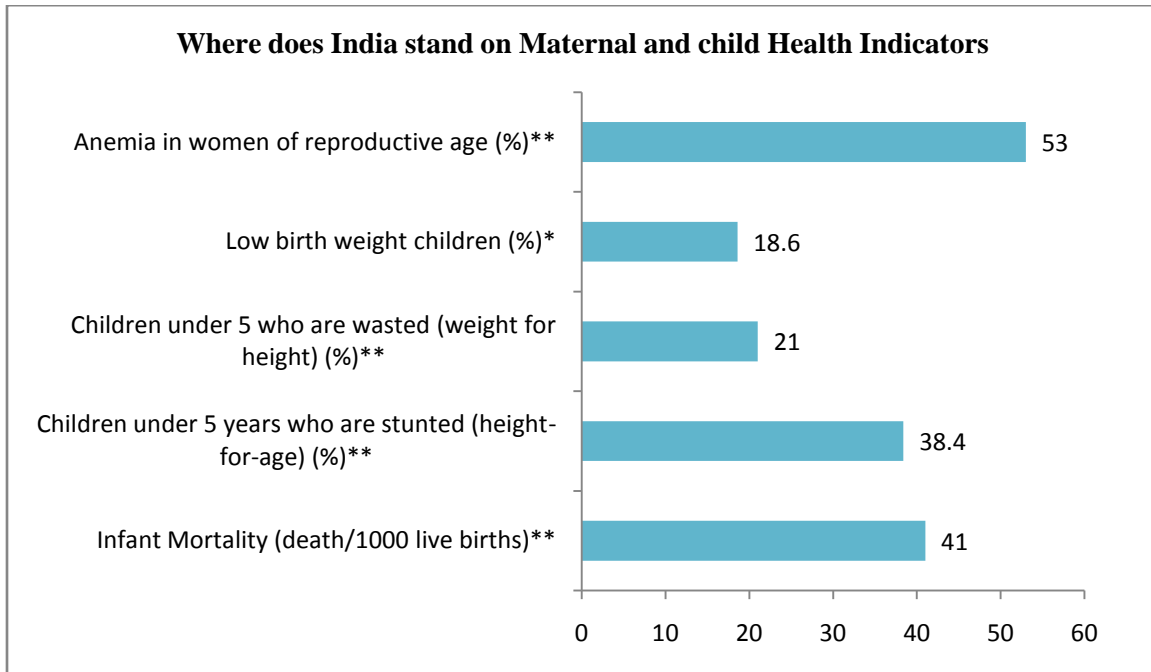
lowest wealth quintile had the maximum exposure to health workers (22%). Pervasive absenteeism by health providers contributes to the ineffectiveness in delivery of primary health care services.

A facility survey covering 370 district in 26 states of India conducted by the Department of Family Welfare in 2003, revealed that essential inputs and infrastructure were far from satisfactory in the government facilities 54% PHCs do not have a labour room and a laboratory, 80% and 77% PHCs do not have communication and transport facilities, only 58% PHCs conducted deliveries, 6% conducted Medical Termination or Pregnancy (MTP), and 22% provided neonatal care. Training needs of medical and paramedical staff is acute, and only 20% of the PHCs are adequately staffed with trained personnel.

According to the recent **National Rural Health Mission Report**, nearly 8% of the country's 22,669 primary health centres don't have a doctor while nearly 39% were running without a lab technician and 17.7% without a pharmacist. The condition of the 3,910 community health centres, supposed to provide specialize medical care, is equally appalling. Out of the sanctioned strength, posts of 59.4% surgeons, 45% obstetricians and gynaecologists, 61.1% physicians and 53.8% paediatricians are vacant. India churns out 29,500 medical graduates annually, but most of them are reluctant to serve in villages and would rather join the private sector for better salaries and an urban posting. In effect, 67% of doctors enrolled for rural posting remain absent from duty. Also, there is only one allopathic doctor for 1,364 people. According to MCI, the total number of registered allopathic doctors in the country is 6,83,583.

India's public health spending is 1.1 per cent of its GDP, compared to 2.9 per cent and 4.1 per cent in China and Brazil respectively. It is not possible to maintain an adequate public health system with inadequate financing. Moreover, there is no existing health system model that can be applied to India. The health goals for the country demand the need for an alternative system, which encourages the private and non – state players to engage in partnerships with the state run public healthcare delivery institution. The current Health Care System of India also needs to be flexible and should be able to adapt to the changing health needs as well as respond to the risks and opportunities that may come in the future. A new mechanism in the form of public private partnerships (PPs) in the health care delivery is being encouraged by the Government. The SAP – LAP analysis of the Indian healthcare system shows that such PPPs can be successful if sustainable models are promoted. There is also a need for a clear guideline or policy in formulating PPPs as these models tend to be quite varied in nature, scope and delivery.

Fig. 1: Maternal and Child Health Indicators



Source: National Family Health Survey -4: www.rchiips.org

According to National Family Health Survey- 4 (NFHS-4), 31.5 percent of the currently married women aged 20-24 were married before 18 years of age and 24.4 per cent of men aged 25-29 years were married before 21 years of age in rural India. As per NFHS-4, 9.2 per cent of girls (15-19 years) from rural areas were either pregnant or have already given birth to a child. As per NFHS-4, 31 per cent of ever-married female in the age group of 15-19 years, reported having experienced physical, sexual or emotional violence perpetrated by their spouse. According to Global Tobacco Survey, 14.6 per cent of students in class 8th-10th used any form of tobacco; 4.4 per cent smoke cigarettes; 12.5 per cent currently used other forms of tobacco. In India, about 690,900 girls smole cigarettes each day. As per National Mental Health Survey, the prevalence of mental disorders in age group 13-17 years was 6.9 per cent in rural areas. Nearly 3 million young Indians aged between 13-17 years and residing in rural parts were in need of active mental health interventions.¹⁰

According to 2011 census data, there are 253 million adolescents in the age group 10-19 years, which comprise little more than one-fifth of India’s total population. This age group comprises of individuals in a transient phase of life requiring nutrition, education, counseling and guidance to ensure their development into healthy adults. Considering demographic potential of this group for high economic growth, it’s critical to invest in their education, health and development. Government of India has recognized the importance of influencing health-seeking behaviour of adolescents. The health situation of this age group is a key determinant of India’s overall health mortality, morbidity and population growth scenario. Therefore, investments in adolescent reproductive and sexual health will yield dividends in terms of delaying age at marriage, reducing incidence of teenage pregnancy, meeting unment contraception need, reducing the maternal mortality, reducing STI incidence and reducing HIV prevalence. It will also help India realize its demographic dividends, as healthy adolescents are an important resource for the economy.

HEALTH STATUS IN RURAL AREA

India has made phenomenal economic gains in the last three decades, but is still on the task to improve the health status of its population on similar terms. The public health challenges are enormous, highest number of maternal and infant deaths worldwide and accounts for one – fifth of all global maternal mortalities. Large inequalities exist in maternal and infant health status across Indian states, including significant gaps between wealthy and deprived groups and rural urban differentials.

The maternal mortality ratio (MMR) is defined as the number of maternal deaths during a given period per 100,000 live births during the same period. For 2010-12, India's MMR was estimated at 167 maternal deaths per 100,000 live births (RGI 2013). Similarly, infant mortality rate (IMR) remained disproportionately high (41/1000 live birth and Neonatal Mortality Rate (NMR) of 29 per 1,000 live births. About 70 per cent of infant deaths and more than half of under – five child deaths in the country fall in the neonatal period. Largest proportion of all these deaths are clustered in rural areas of 9 poor states (8 EAG states plus Assam). Those children who survive are often afflicted with multiple morbidities (Diarrhoea, Pneumonia etc.) and episodes of malnutrition. About 3 million young lives in a year are lost due to malnutrition and additional 165 million children remain stunted with compromised cognitive development and physical capabilities. Similarly, large proportion of reproductive women are suffering from poor nutritional status (Anaemia and low BMI) that results in poor maternal and birth outcomes. Maternal factors also have a significant bearing on the child health beyond pregnancy. It is therefore prudent to consider mother and child as a single unit rather than compartmentalizing them.

Poor nutrition compounded by inadequate care during pregnancy is the main cause of high maternal mortality. The predominant direct medical causes of deaths responsible for maternal deaths include haemorrhage after delivery, sepsis or infection, abortion and difficult labour conditions.

Limited causes are related to most of (70 per cent) deaths of children under five years of age. Complications during birth account for 52 per cent of under – five deaths and post neonatal causes contributes to 48 per cent of the total burdens. Two conditions, Pneumonia (16 per cent) and Diarrhoea (12 per cent) are the major causes of under- five deaths. These two conditions contribute to 56 per cent of the post neonatal deaths. It is important to note that under – nutrition is the underlying cause of a third of deaths under five children in India.

Maternal and child health is a health issue but it encompasses much more than biomedical aspects and goes beyond the health sector. It is affected by the broader context of people's lives, including their economic circumstances, education, employment, living conditions, family environment, social and gender relationships and the traditional and legal structures within which they live. The biggest burden of maternal and infant mortality falls on marginalized communities and the poor, and the rural populations. The status of girls and women in society, and how they are treated or mistreated, is a crucial determinant of their health status.

Health is an important component for ensuring better quality of life. Large masses of the Indian poor continue to fight and constantly losing the battle for survival and health. The war begins even before birth, as the malnourishment of the mother reduces life chances of the foetus (Mondal, 2016). Despite global progress, an increasing proportion of child deaths occur in sub – Saharan Africa and Southern Asia. Globally, the incidence of

major infectious diseases has declined since 2000, including HIV/AIDS, malaria, and TB, but the challenge of these and new pandemics remains in many regions of the world, one of them being India.

The key health issues related to Rural India are:

- **Lack of Primary Health Care Facilities:** Though, the existing infrastructural set up for providing health care in rural India is on the right track, yet the qualitative and quantitative availability of primary health care facilities is far less than the defined norms by the World Health Organisation. Union Ministry of Health and Family Welfare figure of 2005 suggests a shortfall of 12 per cent for sub centres (existing 146,026), 16 per cent of Primary Health Centres (PHCs) (existing 23,236) and 50 per cent of Community Health Centres (CHCs) (existing 3346) then prescribed norms with 49.7 per cent, 78 per cent and 91.5 per cent of sub centers, PHCs and CHCs respectively located in government buildings and rest in non – government buildings requiring a figure of 60,762, 2948 and 205 additional buildings for sub centers, PHCs and CHCs respectively.
- **Proximity of Health Facilities:** Nearly 86 per cent of all the medical visits in India are made by ruralites with majority still travelling more than 100 km to avail health care facility of which 70 – 80 per cent is born out of pocket, landing them in poverty.
- **Sanitation and Hygiene:** Women and Children are the most susceptible section of the society due to poor sanitation. In our tradition, women have to go in the open to defecate where they are vulnerable to various infections and diseases and in turn, this also poses a threat to other women, men and children. Children are often caught by Diarrhoea and insects carry harmful diseases with them. So, unfortunately they become both the victim and the carrier of the disease.
- **Water borne diseases:** Water – related diseases kill more than 5 million people each year. Cholera, Typhoid and Diarrhoea are transmitted by contaminated water. Most deaths are preventable with simple hygiene and water treatment. Diarrhoea disease causes 2.2 million deaths each year and this disease is the primary cause of child mortality in the world's cities. Intestinal worms infect about 10 per cent of the population of developing world and can lead to malnutrition, Anaemia and retarded growth. Malaria, Yellow Fever, Dengue Fever, Sleeping Sickness, Filariasis and other water – related vector – borne diseases are transmitted by mosquitoes, tse-tse flies and others. Over 1 million people die every year from Malaria, Dengue, Chickengunia which is endemic throughout much of the developing world.

HEALTH ISSUES RELATED TO WOMEN AND CHILDREN

Women in poor health are more likely to give birth to low weight infants. They also are less likely to provide food and adequate care for their children. This indirectly increases the chances of children being malnourished and pushed into vicious circle of illness. Finally, a woman's health affects the household economic well – being, as a woman in poor health will be less productive in the labor force. Women in India also face health concerns like reproductive health, inadequate nutrition, and HIV/AIDS.

- **Reproductive Health:** Lack of appropriate care during pregnancy and child health, inadequate services for detecting and managing complications are the main cause for maternal deaths (**Bhalla, 1995**).

- **Inadequate Nutrition:** Inadequate nutrition in the childhood affects women in their later life. More than fifty per cent of women and children in rural and tribal areas of the country are anaemic.
- **HIV/AIDS:** The Indian epidemic is concentrated among vulnerable populations at high risk for HIV. The Government of India estimates that about 2.40 million Indians are living with HIV. Of all HIV infections, 39 per cent (930,000) are among women.
- **High Infant & Child Mortality Rate:** The infant mortality rate (IMR) – probability of dying before one year of age expressed per 1000 live births and under – five mortality rate (U5MR) – probability of dying between birth and age 5 expressed per 1000 live – births have been used as measures of children’s well – being for many years. Infant and child mortality rates are considered as sensitive indicators of living and socio – economic conditions of a country (NIPCCD 2014).
- **Malnutrition:** World Bank data indicates that India has one of the world’s highest demographics of children suffering from malnutrition – said to be double that of sub – Saharan Africa with dire consequences.
- **Sanitation and Clean Drinking Water:** Its absence leads to high levels of malnutrition. Most children in rural areas are constantly exposed to germs from their neighbour’s faces. This makes them vulnerable to the kinds of chronic intestinal diseases that prevent bodies from making good use of nutrients in food, and they become malnourished.
- **Protein Energy Malnutrition (PEM):** This affects the child at the most crucial period of time of development, which can lead to permanent impairment in later life. Protein – Energy – Malnutrition takes different forms which include underweight, Kwashiorkor, Marasmus, Marasmic – Kwashiorkor, Stunting and Wasting.
- **Iodine Related Deficiencies:** Iodine deficiency in pregnant women limits foetal brain growth and, when severe, can lead to cretinism and the pervasive intellectual, psychomotor and sensory disabilities and congenital anomalies that accompany it. Parental iodine deficiency can cause maternal Goitre and Hypothyroidism. (WHO) iodine deficiency disorders (IDD) constitute the single largest cause of preventable brain damage worldwide.¹³

HEALTH CARE AND SERVICES

Rural India consists of over 68 per cent of India’s total population with half of it living below poverty line, struggling for better and easy access to health care and services. It has well recognized that there is a close relationship between poverty and health. It was always well recognized, even in the Bhore Committee Report and the Alma Ata declaration that investment in poverty elimination is essential for improving health which in turn would contribute to productivity and economic growth. It is now further recognized that investment in health care is one form of transfer of resources to the poor and therefore a form of poverty reduction.

Hence, expansion of rural public health services received priority since inception of five year plans. Based on population norms, the primary health care infrastructure has been developed in rural areas as a three tier – system sub – centre, primary Health centre and community Health centre, and the services of these three centres are also assisted by the presence of rural Family Welfare centres. The area of operation of health and family welfare programs have been divided between the union and the state Government. The seventh schedule of the constitution describes three lists of items viz, Union list, state list and concurrent list for their functioning.

Although some items like public health, education, sanitation etc fall in the state list, items having wider ramification at the national level like population stabilization have been included in the concurrent or the union list.

HEALTH CARE INFRASTRUCTURE

Since Independence, the Government of India choose to have maximum coverage and network of public health care system in order to have preventive, promotive, Curative and Specialized services. The most important and first contact point for immediate health care is SCs, it is also important as it is connecting the rural population with primary Health Care Programmes and schemes. The PHCs works as referral point for specialized services and CHCs suppose to serve as specialized health care centre.

The country's majority of population lives in rural areas and at present, the biggest challenge is shortfall of public health care infrastructure in rural area. The status of health infrastructure as per 2011 (Census) population in India shows that there is a shortfall of buildings 20 per cent for SCs, 22 per cent of PHCs and 30 per cent CHCs.

Another important area of concern is the availability of manpower/health staff. For public health service, the manpower in rural areas, as per the data shows that against the required number 1,55,069 of health workers (Female) ANM at sub centres, there are 24,194 vacant positions and there is a shortfall of 4679 positions. Even at PHCs level, Female Assistance, 1013 number of positions are vacant and there is a shortfall of 11,299 positions.

For the Doctors, 8774 positions are vacant at the PHCs which is the primary unit for health care need. The CHCs which were established with the aim to provide referral and specialist services for the rural population are also having the gaps in terms of required manpower. The data shows that at CHCs, there is shortfall in various positions. For the surgeons, 1811 positions are vacant, another important position is of Obstetricians & Gynecologists in which, 1859 positions are vacant. For the physicians 1989, Pediatricians 1758 and for Radiographers 1955 positions are vacant.

QUALITY OF HEALTH CARE

The Quality of care depends on the various factors such as transportation, availability of doctors, water supply, electricity, diagnostic facility and availability and distribution of drugs. To assess the standards of public health services, the government developed Indian Public Health Standards (IPHS).

Ministry of Health and Family Welfare (2016) data shows that at SCs level, there are 1,55,069 functional units and out of that, 2155 are as per IPSH norms. In case of PHCs, there are 25354 functional units and out of it, only 5280 are as per IPHS norms, similarly there are deficiencies in CHCs, there are 5510 CHCs, and out of it, 1470 are as per IPHS norms. In case of water and electricity supply at SCs, there are 28.5 per cent without regular water supply and 25.6 per cent are without proper electricity supply and 10.5 per cent are without all – weather motorable approach road. Similarly at PHCs, 4.6 per cent are functioning without electricity and 6.6 per cent are without regular water supply and 5.9 per cent are without all – weather motorable approach road. Moreover, at present, the treatment standards and attitude of health care staff are not measurable in absence of any uniform treatment standards and accountability of system.

In such a situation of shortfall in infrastructure, particularly minimum facilities and manpower, low level of budgetary allocation, the goals set by NHP 2017 to achieve by 2020 and 2025 seems to be tough and there is a need of specific plans and targets to fill these gaps in a time bound manner.

HEALTH EQUITY AND RURAL – URBAN DIVIDE

In rural India, health infrastructural facilities are still inadequate. All the above mentioned deficiencies and gaps resulted into vulnerable health state of rural population. The NFHS – 4 data clearly reflects the urban and rural divide in terms of health outcome. As of now, NFHS – 4 shows a better picture in comparison to NFHS – 3 (Table – 1.1) but that needs to be critically analyzed in terms of equal distribution of resources and services in urban and rural areas and among all social categories. NFHS – 4 data shows that, infant Mortality Rate is 29 for urban areas and 46 for rural areas. Under five Mortality rate is 29 for urban areas and 46 for rural areas.

Mothers who had full antenatal care were 31.1 per cent for urban areas and only 17 per cent in rural areas. Mothers who received postnatal care were 72 per cent in urban and 58 per cent in rural areas. Children under 5 years who are underweight 29 per cent in urban and 38 per cent in rural areas, men and women who have comprehensive knowledge of HIV/AIDS is 37 per cent in urban and 28 per cent in urban and 17 per cent in rural areas respectively. Households using improved sanitation facility is 70.03 per cent in urban areas in comparison to 36.7 per cent in rural areas. A very important factor for good health is clean fuel for cooking, data shows households using it is 80.6 per cent in urban areas and only 24 per cent in rural areas.

MANAGEMENT OF HEALTH SERVICES

Many major health initiative from the time of the Bhore committee report onwards have been related to changes in political understanding and political will. In a democracy like ours political will is essential to drive change. India being signatory to Alma Ata Declaration is Committed to attain Health for all through the primary health care approach. Primary health care is the foundation of all rural health care programmes and Rural health care forms an integral part of the National Health Care System. For developing vast public health infrastructure and human resources of the country, accelerating the socio economic development and attaining improved quality of life, the primary health care is accepted as one of the main instruments of action. Thus, recognizing the importance of health in the process of economic and social development and improving the quality of life of our citizens, the National Rural Health Mission (NRHM) has shaped by the political context of its creation. The NRHM was first announced in September 2004. But it was launched in April 2005 by the Government of India. This is a flagship programme of the Government of India and seeks to provide effective healthcare to the rural population throughout the country with special focus on 18 state which have poor public health indicators and infrastructure including Bihar. The Mission aims to raise public spending on the health sector to 2-3% of the Gross Domestic Product (GDP), by undertaking architectural correction of the health system and promote policies that strengthen then public health management and service delivery in the country. To monitor the performance and quality of the health services being provided under the NRHM, the ministry of Health and family welfare, Government of India, is putting in place several mechanism that would strengthen the monitoring and evaluation system through performance statistics survey, community monitoring, quality assurance etc.

RESEARCH METHODOLOGY

The objective of this study is evaluation and assessment of the availability, adequacy and utilization of health services in the rural area. The study to identify the constraints and catalysts in the implementation of the NRHM programmes. Along with promotion for utilization of healthcare system in rural areas of Bihar State have been brought under the pruvew of the present study. The study makes evaluation of performance of NRHM in Bihar state. For this purpose among 38 Districts, three Districts namely Darbhanga, Nalanda and Patna have been selected.

The study is analytical and critical supplemented by surveys and empirical studies. The collected data has been tabulated and presented in both the numbers and percentages. To make this study more meaningful and realistic interviews of different strata of stakeholders have been made.

Database of the present study comprises of both – primary and secondary data. Secondary data have been collected from different

- Books,
- Journals and Magazines,
- Discussion Papers,
- Reference Annuals,
- Annual Reports of Ministry of Health and Family Welfare, Government of India,
- Other Reports – Governmental and Non – Governmental,
- Economic Surveys - Bihar and India,
- Newspapers,
- Websites etc.

The primary source data have been collected by administering of Questionnaire specially designed to gather information about different aspects of National Rural Health Mission. The questionnaire was divided into two parts – Part A and Part B. Part A contains general information about the respondent and Part B consists of twenty items related to the Mission (NRHM). The questionnaire was administered upon 300 ruralites of Darbhanga, Nalanda and Patna districts of Bihar. From each one of these districts 100 ruralites were contacted, which finally comes to 300 comprising all of them.

With the help of collected data, analysis was made and results were interpreted. In analysis of data, as per requirement and suitability statistical and mathematical tools and techniques were used. They include:

- Ratio and Proportion,
- Percentage,
- Average,
- Trend Analysis etc.

The findings of the study have been placed at suitable places in different chapters. We have also taken help of pictorial presentation in the study. For, the present study, secondary data for the period of ten years ranging from 2005 to 2014 have been taken into consideration. It is noticeable that the NRHM was introduced in the year 2005 and so we made analytical study of early ten years of implementation of the programme. On the other hand, Primary data collection have been made in the year 2016. However, as per suitability and availability, we have provided recent secondary data i.e. upto year 2016 also.

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