Short Review

Fifteen Years of National Rural Health Mission, Himachal Pradesh, India: A Narrative Review

Running Title: NRHM/NHM in the state of Himachal Pradesh

Gopal Chauhan, Priyanka Suryavanshi

National Health Mission, Department of Health and Family Welfare, Himachal Pradesh

Corresponding author: Dr. Gopal Chauhan

Email: **drgopal7475@yahoo.co.in**

Abstract

The National Rural Health Mission (NRHM) was started in India in the year 2005 to provide accessible, affordable, and quality health care services to the rural population. The National Urban Health Mission (NUHM) was added in the year 2013 as a Sub-mission of an over-arching National Health Mission (NHM) to address the health issues of urban poor. NHM has completed 15 years in 2020. The objective of this study is to assess the impact of NRHM/NHM on key health indicators in the state of Himachal Pradesh, India, so as to guide future policies. The impact of NRHM/NHM was assessed based on the progress of the key health indicators in the state as per available surveys from the year 2005 to 2020. This study shows that NRHM/NHM has been able to make a good impact on majority of the key health indicators including IMR, full ANC, full immunization and institutional deliveries, however, there is a substantial rise in unmet need (family planning), anemia in pregnancy, and obesity. There is a need to review the functioning of NRHM/NHM in the state for better outcomes.

Key words: National Rural Health Mission, National Health Mission, NRHM/ NHM review

Background

Health is a state subject in India, therefore, the states are responsible for the good health of their people [1]. India with a huge population of about 1.3 billion is a federal structure of 28 states and 8 Union territories [2]. The major portion of the public sector expenditure on health is borne by the respective states. To increase the Central Government's role in achieving good health, the National Rural Health Mission (NRHM) was launched on 12th April 2005 to empower the vulnerable rural population to have an access to affordable and quality health care. The key role of the NRHM remained to abridge the financial and technical gaps for attaining the desired health goals. On 1st May 2013, the Government of India (GoI) decided to launch National Urban Health Mission (NUHM) as part of

ongoing National Health Mission (NHM) with National Rural Health Mission (NRHM) being the other Sub-division mission. The Mission not only handles the day to day administrative affairs but is also responsible for planning, implementing and monitoring the Mission activities. The program management and activities for policy support at the national level is earmarked at 0.5% of NHM financial outlay [3]. The apex body responsible for providing technical support to the Center and States is National Health Systems Resource Center (NHSRC) [3].

Aims and objectives of NRHM/NHM

NRHM aimed to achieve an infant mortality rate (IMR) of 30 per 1000 live births, maternal mortality 100 per 100 thousand live births, and total fertility rate of 2.1 by the year 2012, including substantial reduction in the disease burden in India [4]. The following extension from the year 2012 to 2017, NHM envisaged to reduce MMR to 1/1000 live births, IMR to 25/1000 live births, TFR to 2.1, and prevention and reduction of anemia in women aged 15–49.

Objectives of NRHM/NHM includes a raise in public spending on health; improvements in community financing and risk pooling; access to primary healthcare services for the rural poor; universal access for women and children; reduction in MMR/IMR/TFR; prevention and control of communicable and non-communicable diseases; and to revitalize local health traditions. The mission aims to achieve these goals by reconfiguring the public health system to facilitate decentralization and communitization, further promoting the intersectoral convergence in services which determine the outcomes such as - provision of adequate food and nutrition, water, and sanitation and hygiene. Attempts have been made on integration of vertical health programs at national, state, district, and block levels [4].

NRHM/NHM in Himachal Pradesh

Himachal Pradesh, a northern hilly state of India with a population of about 7 million has its separate Mission Directorate of National Health Mission (NHM) headed by the Mission Director. It has different Program Management Units headed by SPO (State Program Officer) and a Financial Management Unit headed by Joint Controller Finance. The Mission Director reports to the Secretary of Health in the state. The mission is operating up to sub-centre level through existing Health Department.

The State Health Mission is chaired by the Chief Minister. A District Health Mission is constituted at District Level with Chief Medical Officer (CMO) as Member Secretary and the Deputy Commissioner as Convener. The state government has constituted Rogi Kalyan Samitees (Patient Welfare Committees) up to primary health centre (PHC) level as a part of communitization process. Village Health Committees comprising the local representatives at village level are helping in better functioning of health institutions as per local needs [3].

To increase the utilization of health services up to the village level, about 8000 Accredited Social Health Activists (ASHA workers) are working in the state since 2015. The state has 12 Districts headed by a CMO and each district is divided in to Health Blocks. There are 75 Health Blocks which are headed by a senior doctor designated as Block Medical Officer (BMO). Each Health Block comprises the community health centers, PHCs having medical doctors, and sub-centers with health workers. The process of upgrading all the sub-centers as health & wellness centers has been started with appointment of a Community Health Officers in a progressive manner. The health institutions set up in Himachal Pradesh have 3 zonal hospitals, 9 district/regional hospitals, 6 teaching hospitals, 79 civil hospitals, 93

community health centers, 585 primary healthcare centers and 2085 health sub centers [5].

Funding Pattern of NRHM/NHM

The NRHM/NHM funding support was shared as 80:20 for Himachal Pradesh (80% from GoI and 20% from State Government) till the year 2015-16 and now as 90:10 between the GoI and the state Government [6] Release of the funds by GoI is based upon the state's Program Implementation Plans (PIPs). Till the year 2013-14, funds for NRHM were directly released by GoI to autonomous implementing bodies known as State Implementation Societies (SIS). In order to ensure better monitoring, a new fund flow mechanism was introduced in the year 2014-15. Under this system the GoI allocations are first released to the state treasury and the money is then routed by the state Health Department to State Implementation Societies (SIS). Preparation of District-level Health Action Plans and quarterly expenditure budgeting of NRHM had brought clarity regarding the budget head and the funds available under various programs [4]. GoI has allocated a total of Rs 33400 Crore to the various states in India and about Rs 500 Crore to Himachal Pradesh under NHM in 2020-21[6].

Rationale of this study

NRHM now expanded as NHM has completed 15 years in 2020. Government of India is providing substantial technical and financial support to the states for specific purposes such as reduction in maternal deaths, infant deaths, and diseases burden. It thus becomes important to assess the impact of NRHM/NHM on key health indicators in Himachal Pradesh to guide the future strategies. To assess the impact of NRHM/NHM in Himachal Pradesh, the progress of key health indicators was compared since the inception of NRHM in the year 2005. The data on progress of these indicators was retrieved from available survey reports such as - National Family Health Survey (NFHS), Sample Registration System (SRS) and District level Household survey (DLHS), etc.

Impact of NRHM/NHM on key health indicators in the state of Himachal Pradesh

Table 1 shows the progress of key health indicators of state of Himachal Pradesh from the year 2005 to 2020 [7-9]. The impact of NRHM/NHM on key health indicators in the state of Himachal Pradesh is as under:

1. **Maternal Mortality Ratio (MMR):** MMR is one of the most important health indicators to define the health status of a state [10]. The MMR in the state of Himachal Pradesh is not calculated due to inadequate denominator (<1 Lakh births per year). However, as per the Himachal Health Commission report 2015, the MMR in Himachal was estimated about 150 which is quite high and almost at par with the National average of 167 in 2015 (MDG report 2015) [11,12].
2. **Infant Mortality Rate (IMR):** Reduction in IMR is one of the key focuses of the NRHM/NHM. In the year 2005, as per the NFHS-3, IMR in the state was 36, while as per SRS it was 50. Now, as per the NFHS-5 the decline in IMR in Himachal Pradesh is 29.1% (36 to 25.5) and according to SRS 2020 it is 62% (50 to 19) in 15 years. If we compare a similar time-frame without NRHM/NHM (1992 to 2005) the decline in IMR was 35.48% as per NFHS and 24.24 % as per SRS in Himachal Pradesh. As per NFHS-5 Himachal ranks 19th out of 22 states (currently NFHS-5 data is available for 22 /28 states only) in IMR (Kerala with an IMR of 6 is the best and Uttar Pradesh with 64 is the worst), while as per SRS 2020, Himachal ranks 13th (Kerala with an IMR of 7 is the best

and Madhya Pradesh with 48 is poorest) in India.

3. **Total Fertility Rate (TFR):** As per NFHS-5 the TFR (Total Fertility Rate) in Himachal Pradesh is 1.7 and there is a 10.7 % decrease after introduction of NRHM/NHM. According to SRS 2016, the TFR of Himachal Pradesh was 1.7 which was quite below the replacement levels.
4. **Unmet Need (Family Planning):** Family planning methods especially spacing have two important functions; first, for family planning, and second, for prevention of sexually transmitted infections. As stated in NFHS-5, there is an increase in total unmet need of 2.6% from 2005-06 to 2019-20 in Himachal Pradesh. Although, there was 48.32% decline in the unmet need in the comparable period without NRHM/NHM (1992 to 2005 as per NFHS) in Himachal Pradesh. DLHS-4 also showed a high unmet need of 12.4% in the state [13].
5. **Full Antenatal Care (ANC):** The most improved indicator for Himachal Pradesh after introduction of NRHM/NHM is the full ANC (15.8% to 70.3%) as per NFHS-5. As a benchmark, Goa and Kerala have more than 93% and Lakshadweep has 88.3% full ANC coverage. The target is to achieve 100% ANC coverage.
6. **Anemia in Pregnancy:** There is an increase of anemia in pregnancy by 7.6% (39.2 to 42.2%) from 2005-2020 as per NFHS-5, in Himachal Pradesh. According to NFHS-5, the prevalence of anemia is highest in Bihar (63.1%), and lowest in Nagaland (22.2 %). Anemia in pregnancy is attributable to the high maternal and infant mortality. As per the DLHS-4 the prevalence of anemia in pregnancy was 34.6% in Kerala, and 43% in Himachal Pradesh [13].
7. **Full Immunization:** NFHS-5 data shows an increase in full immunization coverage by 20.3% (74.2% to 89.3%) in Himachal Pradesh. However, there was an improvement of 18% (63 to 74 %) in full immunization in Himachal Pradesh in almost similar period without NRHM/NHM also. As per the District Level Household survey 2012-13 (DLHS-4), full immunization coverage in the state is only 63% [13]. The state ranks 3rd best out of 22 states as per NFHS-5 in full immunization coverage. Full immunization coverage in the UTs of Ladakh and Dadar Nagar Haveli is as high as 88.2%, and 94.9%, respectively.
8. **Institutional Deliveries:** This indicator shows a remarkable increase of 104% (43.10% to 88.2%) from NFHS-3 to NFHS-5 in Himachal Pradesh. Himachal ranks 17th best out of 22 states in India in institutional deliveries and 14 states and UTs have achieved above 90% institutional deliveries as per NFHS-5 in India.
9. **Non-Communicable Diseases (NCDs) Risk Factors:** The NCDs related programs were not included in NRHM/NHM until the year 2014. As per NFHS-5, adult tobacco use has reduced from 20.6 % to 17%; while obesity in men and women has increased by 126% and 125%, respectively in the state from the year 2005 to 2020.

Summary and Conclusions

Currently, most of the national health programs are covered under the NHM umbrella. There are multiple studies from India on evaluation of the NRHM/NHM from different states. A study conducted on evaluation of NRHM in Orissa published in 2014 by Patra et al. shows that the health status of study area was gradually increasing because of the implementation of NRHM. However, low income, illiteracy, shortage of doctors, unwillingness of doctors to go to remote areas and lack of appropriate health care facilities, slowed the progress [14].

According to the Millennium Development Goals country report 2015 (India) the progress in health so far has been mixed. The nation has already achieved the target of halving the poverty head count ratio, eliminated gender inequality in primary and secondary education, and achieved the required trend reversal in the fight against HIV/AIDS.

The country is moderately on track, when considering the targets of achieving universal education and reducing child mortality. Trend reversal has also been achieved in the fight against Malaria and TB [12]. Reproductive, child and maternal health remained the key focus area of NRHM including communicable diseases but high unspent amounts are an area of concern especially in high focus states [15].

The state of Himachal Pradesh has a high utilization of public health facilities so far [16]. However, the decline in the ranking of the state from 5th to 6th position as per the NITI Health Index report 2019, and slow incremental progress is a matter of concern [17]. Improvement in health indicators depends on multiple factors and requires adequate capacity building measures. NRHM/NHM aimed to improve the health indicators through technical and financial support to the states. This study shows that there is good progress among majority of key health indicators in Himachal Pradesh after introduction of NRHM/NHM, however, few indicators have shown deterioration also. While comparing with other better performing states and a similar period without NRMH/NHM it is found that Himachal is lagging behind many better performing states in India and there is a huge scope for improvement in the area of maternal health, child health, family planning and NCDs related programs.

The low progress can be attributed to a variety of reasons such as late introduction of ASHA workers and low recruitment of workforce under NRHM/NHM. Other reasons may be the vertical functioning of NRHM/NHM and lack of coordination with the existing Directorate of Health Services. To achieve better health outcomes integration of vertical approaches, optimal coordination and strict monitoring is required. Although the state has constituted the Health Commission comprising of Public Health experts in 2014 to guide the state, the implementation of the recommendations of the commission are however rarely visible.

Recommendations

There is a need for detailed review of the functioning of NRHM/NHM in Himachal Pradesh so as to guide the future strategies

Capacity building measures need to be strengthened and NHM should function in close coordination with the existing Directorate of Health Services.

Table 1: Comparative Progress of Key Health Indicators in the state of Himachal Pradesh, India from the year 2005 to 2020

S. No	Key Indicator of Himachal Pradesh	NFHS-3 2005-06	NFHS-5 2019-20	% change	SRS 2006	SRS 2020	% change
1	MMR	Could not be calculated due to less number of denominator					
2	IMR	36	25.6	29.1 ↓	50	19	62 ↓
3	TFR	1.9	1.7	10.5 ↓	2	1.7	15 ↓
4	Unmet need under family planning (%)	7.7	7.9	2.6 ↑	NA	NA	NA
5	Full ANC	15.8	70.3	345 ↑	NA	NA	NA
6	Anaemia in pregnancy	39.2	42.2	7.6 ↑	NA	NA	NA
7	Full Immunization (%)	74.2	89.3	20.3 ↑	NA	NA	NA
8	Institutional deliveries (%)	43.1	88.2	104 ↑	NA	NA	NA
9	Obesity in men (%)	10.6	30.6	126 ↑	NA	NA	NA
10	Obesity in women (%)	13.5	30.4	126 ↑	NA	NA	NA
11	Tobacco use in men (%)	40	32.3	19.2 ↓	NA	NA	NA

(Only key health indicators has been selected to compare the progress) NFHS -National Family Health Survey, SRS 2006 -Sample Registration System (report October 2007), SRS 2016 –Sample Registration System (report December 2016), NA- Data not available.

References

1. Indiankanoon.org. Article 47 in The Constitution Of India 1949. [online] Available from: https://indiankanoon.org/doc/1551554/ [Accessed 24 Dec. 2020].
2. India.gov.in. Profile | National Portal of India. [online] Available from: https://www.india.gov.in/india-glance/profile [Last Accessed 26 Dec. 2020].
3. Ministry of Health and Family Welfare Government of India; National Health Mission. Nhm.gov.in. [online] Available from: https://nhm.gov.in/New_Updates_2018/NHM/Institutional_Mechanisms.pdf [Accessed 12 Jan. 2021].
4. Nhm.gov.in. [online] Available from: https://nhm.gov.in/images/pdf/NHM/NHM_more_information.pdf [Accessed 12 Jan. 2021].
5. Department of Health and family Welfare, Himachal Pradesh .Annual Health report 2017.
6. Cprindia.org. National Health Mission (NHM) GOI, 2015-16 | Centre for Policy Research. [online pdf] Available from: https://www.cprindia.org/system/tdf/policy-briefs/ NHM-2020-21 [Accessed 17 Jan. 2021].
7. Government of India. National Family Health Survey 2005-06 and 2015-16.Available from: http://rchiips.org/nfhs/ (last accessed on 20 March. 2021)
8. NFHS-5 factsheet pdf. Available from http://rchiips.org/nfhs/factsheet_NFHS-5.shtml (last accessed on 17 April 2021)
9. Census of India. Sample Registration System Report. Available from:http://censusindia.gov.in/vital_statistics/SRS_Bulletins/Bulletins.html
10. WHO | The lifetime risk of maternal mortality: concept and measurement. Retrieved 27 January 2020, from https://www.who.int/bulletin/volumes/87/4/07-048280/en/
11. Department of Health and family Welfare, Himachal Pradesh. Report of the State health Commission Himachal Pradesh. October 2015.
12. Ministry of Statistics and Program Implementation. Millennium Development Goals, India Country Report; 2015.
13. District level household & facility survey (DLHS-4) [Internet]. Mumbai: International Institute for Population Sciences. Available from: http://www.rchiips.org/DLHS-4.html [Assessed on 15 Feb.2021].
14. Patra, S., Murthy, D. and Rath, S. (2013). An Evaluation of the National Rural Health Mission (NRHM) in Odisha. Journal of Health Management, 15(3), pp.471-480.
15. Ministry of Health and Family Welfare Government of India; National Health Mission. Evaluation study of NHM in 7 States.
16. Niti Aayog. Himachal Pradesh State Development Report. Retrieved from https://niti.gov.in/planningcommission.gov.in/docs/plans/stateplan/sdr_hp/sdr_hpch8.pdf (Last assessed on 15 Feb. 2021)
17. NITI Aayog (2019). Healthy states, progressive India. New Delhi. Retrieved from http://social.niti.gov.in/uploads/sample/health_index_report.pdf (Assessed on 30 March2021)

-----*-----