

Introduction

Rajasthan is the largest state in India and houses about 5.6% of the nation's population. It has 33 districts and 7 revenue units. Almost 25% of its people live in cities, 17% are Scheduled Caste (SC) and 13.4% (more than 9 million people) are Scheduled Tribes (ST) (Census 2011). Rajasthan's social indicators are amongst the poorest in India (Table 1). The state has only 887 female children per 1000 males at birth, only 25% of women completing at least 10 years of education, and 26% of women (21-25 years) getting married before

the age of 18 years (National Family Health Survey [NFHS]-4). Although Rajasthan is part of the Empowered Action Group (EAG)¹ states, its health indicators have been improving steadily between 2005-06 and 2015-16. Its Maternal Mortality Ratio (MMR) and Infant Mortality Rate (IMR) improved from 288 to 199 per 100,000 live births and 65 to 41 per 100 live births, respectively. Despite its lower economic status, the state has set an example to others by provisioning free medicines and free diagnostics to its people.



State Indicators	Rajasthan	Odisha	Maharashtra	Tamil Nadu	Bihar	India
Rank of state by size*	1	9	3	11	13	-
Population proportion in India**	5.66	3.47	9.28	5.96	8.60	-
Rural population /urban population**	75:25	84:16	55:45	52:48	89:11	72:28
Literacy Rate (%)**	66.11	72.87	82.34	80.09	61.8	74.04
Sex ratio females/1000 males**	933	979	929	996	918	940
BPL population in state (%)***	14.71	32.59	17.35	11.28	33.74	21.92
ST population #	13.5	22.8	9.4	1.1	1.5	8.6
Infant Mortality Rate ##	41	40	24	20	48	41
Under 5 Mortality Rate ##	51	48	29	27	58	50
Institutional Births (%)##	84	85.3	90.3	98.9	63.8	78.9
Women age 20-24 years married before age 18 years (%) ##	35.4	21.3	26.3	16.3	42.5	26.8
Total fertility rate (children per woman)##	2.4	2.1	1.9	1.7	3.4	2.2

Source: * Rank of state by size https://web.archive.org/web/20131203163229/http://mospi.nic.in/mospi new/ upload/SYB2013/ch2.html, ** Census 2011, *** BPL population (2011): https://www.rbi.org.in/scripts/PublicationsView.aspx?id=16603 as on set 16th, 2015, #Expert Committee report on tribal health, ## State Fact sheets, National Family Health Survey-4, 2014-15.



The main objective of the study was to review expenditure patterns in health in order to understand Raiasthan's healthcare priorities. This policy brief is based on a public expenditure review of the health sector (2012-13 to 2017-18) of the state².

The study sought to answer the following specific questions with respect to Rajasthan:



Is the health expenditure in line with its health needs?



How do the changes introduced by the 14th Finance Commission (FC) translate to changes in policy and health expenditures?



What is the role/share of National Health Mission (NHM) in health expenditure?



How participatory and responsive is the development of the Gram Panchayat Development Plan (GPDP) at the Gram Panchayat (GP) level, particularly from the perspective of health?



The Challenges



Significant intrastate inequalities in Maternal and **Child indicators:**

The Maternal and Child Health Index (MCHI)³ shows wide intrastate differences between districts. The poorest indictors were seen in the districts belonging to the southern tribal belt (Banaswara, Dungarpur, Udaipur, Chittorgarh, Pratapgarh and Sirohi and the western Thar desert area, namely Jaisalmer and Barmer). While the Southern tribal belt is characterised by hilly regions that make access to health care difficult, the western region is characterised by large areas of arid desert that also makes this area difficult to reach.

Empowered Action Group (EAG) States are the eight socioeconomically backward states o India: Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttarakhand, and Uttar Pradesh, which lag behind in the demographic transition and have the highest infant

² The review included the analysis of Rajasthan state budget documents (2012-13 to 2017-18), National Health Mission (NHM) budget (2013-14 to 2017-18) and related documents, Gram Panchayat Development Plan (GPDP) budget documents accessed through a small fieldw Jaisalmer, Dungarpur and Tonk districts between April-June 2019, in addition to other relevant literature. A total of 204 key person interviews were conducted and 39 health facilities were visited. The National Health Accounts (NHA) Guidelines (National Health Accounts Technical Secretariat, 2016) were used for defining what is included within healthcare expenditure.

The state has 33 districts. To facilitate comparison between districts, the Maternal and Child Health (MCH) indicators from National Family Health Survey (NFHS)-4 (2015-16) and Health Management Information System HMIS (2015) have been used to construct a Maternal and Child Health Index (MCHI). Mothers who had at least four antenatal care visits (%), institution births (%), children aged 12-23 months who are fully immunised (BCG, measles, and three doses each of polio and DPT) (%), children under five years who are stunted (height-for-age) (%) children under five years who are wasted (weight-for-height) (%), non-pregnant women aged 15-49 years who are anaemic (<12.0 g/dl) (%), Infant Mortality Rate, under-five mortality rate, and Maternal Mortality Ratio (MMR) were the indicators used to construct the MCHI. This was used to rank the districts

Figure 1: District-wise Maternal and Child Health Index, Rajasthan, 2014-15 Dungarpu Udaipu Bharatou Chittorgarl Pratapgarh **Jhalawar** Jalor Bhilwara Alwa Rajsaman Churu Dhaulpu Barar Nagau Jodhpu Sawai Madhopui Hanumangarl Aime Bikane Jaipur Dausa Sika 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 Source: Maternal and Child Health Index calculated based on indicators obtained from National Family Health Survey [NFHS]-4 (2015-16) and Health Management Information System (2015) Note: The red bars indicate districts with tribal scheduled areas

Tribal concentrated areas have poorer health indicators:

Nearly 13.4% of the population in Rajasthan is tribal⁴. Six of the eight districts under the tribal scheduled areas⁵ have the poorest MCHI. Treatment seeking is influenced by poor literacy and ignorance as well as cultural and traditional beliefs, where-in traditional healers are often sought first for treatment. Lack of understanding of cultural context when providing health care, further compounds this situation and restricts access to public health facilities⁶.

Health concerns of tribal population in Jaisalmer and Dungarpur

Doctors:

'Alcohol consumption is high in this area; they complain that medicines do not work.'

'The people here have faith in the traditional healers awareness is lacking."

Accredited Social Health Activists (ASHA) workers:

'High levels of anaemia and ignorance about health and hygiene among tribal women are common.'

'Snake and insect bites during summers, health repercussions due to heat, water supply issues, mosquito borne diseases are common conditions afflicting the Bhil tribe.'

> 'They don't get vaccinated and do not believe in medical treatment.'

Nagda, B. L. (2008). Socio-cultural issues of health seeking Behaviour and expenditure on health in tribes in Rajasthan.; Bhasin, V. (2007). Health Status of Tribals of Rajasthan. Studies on Ethn Medicine, 1(2), 91–125. https://doi.org/10.1080/09735070.2007.11886304.



Urban Poor:

The urban centres are more heterogeneous in nature and each city is very different. Rajasthan's slum population in the urban areas increased by 145% between 2001 and 2011 and reached 38.26 lakhs. The cities showed lack of health facilities that are expected to cater to the needs of the urban poor as opposed to the rural health system that was better developed. Multiplicity of agencies, which design, plan, deliver, and monitor progress of public health facilities, often becomes a major hindrance towards adequate delivery of services in poor urban informal settlements. The urban local bodies also lacked resources required to plan and carry out such changes7. Illegal and newer slums and settlements were not recognised by the local bodies, which led to unhygienic conditions of living and lack of basic facilities, resulting in poor health indicators8.



High rates of communicable diseases (CD) and doncommunicable diseases (NCD):

The top five causes of death in Rajasthan in 2016 were, Chronic Obstructive Pulmonary Disease (COPD), Ischaemic heart disease, lower respiratory diseases, diarrhoeal diseases, and tuberculosis9. Both COPD and Ischaemic heart Disease and its associated NCDs (diabetes, stroke, hypertension, etc.) are chronic illnesses and require significant expenditure on treatment. Diarrhoea, lower respiratory tract infections, and other infectious causes still claim the highest number of deaths in children aged 0-14 years old.



Inadequate human resources in public health care services

The state has systematically increased the number of primary and secondary public health facilities in rural areas in the past decade but Rural Health Statistics (2018)¹⁰ shows that human resources have not kept up with this expansion (Table 2).



Table 2: Shortage of Key Human Resources (Rural Health Statistics 2018, as on March 31, 2018)

Rajasthan			
Positions (Levels)	Sanctioned	Vacant	% vacancy
Pharmacists (PHCs & CHCs)	2666	1494	56
Lab Technicians (PHCs & CHCs)	2666	575	21.5
Specialists (CHCs) (physicians,	2352	1787	75.9
surgeons, OB & GY and paediatricians)			

Note: PHC stands for Primary Health Centre, CHC stands for Community Health Centre, and OB & GY stands for Obstetrics and Gynaecology doctors.



High demand for public health care but high Out-Of-Pocket Expenditure (OoPE) on medicines:

Nearly 47.6% of the people preferred public hospitals in the state as opposed to 34.2% in all-India (National Sample Survey [NSS], 2017-18). As per the NSS data from 2014, 26.6% population from the lowest quintile in urban Rajasthan and 33% of population from lowest quintile from rural Rajasthan were covered under a government health insurance¹¹; these are lower for higher quintiles in both rural and urban areas revealing that targeting has been

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⁴ Expert Committee on Tribal Health. (2018). Tribal health in India: Bridging the Gap and a Roadmap for the future, Source: Census 2011

⁵ In view of the special needs of tribal population, the concept of drawing up a TSP (Tribal Sub-Plan) accounting for all the flow of funds invested in the Integrated Tribal Development Project (ITDP) was started from 1975-76. In Rajasthan, areas having a tribal population of more than 50% is declared as Scheduled Area- it includes Banaswara, Dungarpur, Pratapgarh, Udaipur,

⁶ Sundararajan, R., Kalkonde, Y., Gokhale, C., Greenough, P. G., & Bang, A. (2013). Barriers to malaria control among marginalized tribal communities: A qualitative study. PLoS ONE, 8(12) https://doi.org/10.1371/journal.pone.0081966

 $^{^7}$ Agarwal, S., & Kirti, S. (2007). State of Urban Health in Rajasthan (Vol. 1, Issue 1). https://doi.org/10.13140/RG.2.1.1083.0320.

⁸ Subbaraman, R., Shitole, T., Shitole, S., Sawant, K., Bloom, D. E., & Patil-deshmukh, A. (2012) Off the map: the health and social implications of being a non-notified slum in India. 24(2), 643-663. https://doi.org/10.1177/0956247812456356

⁹ Indian Council for Medical Research (ICMR), Public health Foundation of India (PHFI), & The Institute for Health Metrics and Evaluation (IHME). (2017). India: Health of the Nation's States files/policy report/2017/India Health of the Nation%27s States Report 2017.pdf

¹⁰ Rural health Statistics 2018 MoHEW accessed on October 25, 2020. https://nrhm-mis.nic.in/Pages/RHS2018.aspx?RootFolder=%2FRURAL%20 HEALTH%20STATISTICS%2E%28A%29%20BHS%20-%20 2018&FolderCTID=0x01200057278FD1EC909F429B03E86C7A7C3F31&View=%7B09DDD7F4 RNDN-42F3-8969-2307C0D97DDB%7D.2018&FolderCTID=0x01200057278FD1EC909F429B03

¹¹ The state's first attempt at universal coverage was with Mukhya Mantri Jan Rakshak Kosh (MMJRK) was introduced in 2009, which provided free outpatient as well as inpatient care at all public health faculties in the state to Below Poverty Line (BPL) card holders. The scheme has been discontinued from 2018-19 onwards with the introduction of Bhamashah Swasthya Bima Yoiana, a health insurance scheme in 2015, as well as introdu and free diagnostic schemes (2014). The Bhamashah Swasthya Bima Yojana provided health insurance cover to the beneficiaries under the National Food Security Act (NFSA) as well as those BPL for secondary and tertiary care. Currently, the Avushman Bharat-Mahatma Gandh Rajasthan Swasthya Bima Yojana (AB-MGRSBY) is the health insurance scheme run by the Government of Rajasthan. It combined the centre's AB-MGRSBY and the state's Bhamas Health insurance scheme in 2019

in the right direction. However, the OoPE was also high in Rajasthan: in 2017-18, the average OoPE in public hospitals was Rs. 7174 per case of hospitalisation, which was the higher than Maharashtra (Rs 6,177), Odisha (Rs 5,283), Kerala (Rs 4,469), Tamil Nadu (Rs 433) and the all-India average (Rs 4,452)¹². The expenditures on medicines still constituted the highest proportion of expenditure in hospitalisation in the state despite the state's free medicines scheme (61.2% of rural and 42.4% of urban inpatient expenditure).



The Findings



Major Trends and Patterns in State Health Expenditure

Increase in health expenditure but still not adequate: The Total Expenditure on Health (THE) coming from all relevant departments¹³ increased from Rs 3,951 crores in 2012-13 to Rs 10,883 crores in 2017-18 registering an Annual Average Growth Rate (AAGR) of 22.9% in nominal terms. The real expenditure (2011-12 prices) also increased from Rs 3,639 crores to Rs 8,252 crores during the same period. The health expenditure as a percentage of Gross State Domestic Product (GSDP) increased from 0.8 % to 1.3 % for the same period. Total expenditure on health as a percentage of total state expenditure increased from 4.9% in 2012-13 to 5.7% in 2017-18, which is still lower than the recommended 8% of total state expenditure as prescribed by the national health policy, 2017¹⁴. The per-capita expenditure (nominal terms) increased from Rs 553 in the year 2012-13 to Rs 1,370 in the year 2017-18 while in real terms (at 2011-12 prices), it increased from Rs 509 to Rs 1,039 for the same period.

Lower prioritisation of other related social sectors: The health expenditure as a proportion of Social Services Expenditure (SSE) increased over the years from 14% in 2012-13 to 17% in 2017-18. Social services expenditure as a proportion of total expenditure decreased from 38% in 2013-14 to 34% in 2017-18, reflecting a more than proportionate increase of health sector within the social sector expenditure portfolio. This is important as many components within the social sector

are interlinked with health, like, water and sanitation, and nutrition. which could still affect health outcomes despite higher spending for health, especially during the COVID-19 pandemic when nutrition for children and Water, Sanitation and Hygiene (WASH) have become very important to mitigate the potential spread of the pandemic.

The proportion of expenditure on wages to total health sector spending has decreased: The proportion decreased from 65% in 2012-13 to 55% in 2017-18, while the wage expenditure in absolute terms increased from Rs 3,951 crores to Rs 6,008 crores during the same period. The wage component grew 15% annually while the non-wage component grew at 24% for the same period in nominal terms. This, to some extent, explains the human resource shortage discussed earlier.

National Health Mission (NHM) Expenditure includes social welfare expenditure not directly related to health: On an average, NHM accounts for a significant 20.43% of THE (2014-15 to 2017-18) in the state. Although the share of NHM in THE has increased, the proportion of expenditure on the National Rural Health Mission-Reproductive Child Health-Flexipool (NRHM-RCH-FP) component decreased from 62.6% to 60.6%. Similarly, the share of Infrastructure Maintenance (IM) has also decreased from 31.1% to 17.5%; this includes expenditure on sub centres and salaries of sub centre staff and components of the family welfare centres. In the same period, the expenditure on Additional State Share (ASS) has increased from 3.3% to 14.9%. This includes the Rajshree and Shubhlaxmi Yojana¹⁵ (social welfare expenditure) that together comprise of an average of 8% of NHM expenditure. Although these have linkages with health awareness and promoting gender equality, they are not necessarily a part of the health expenditure as per national health accounting framework¹⁶.

Non-comparability of NHM totals: It is difficult to extract total expenditure on NHM from the year 2014-15 from the state budget though the entire funds for NHM including that of the central share is being routed through the state budget. Additionally, the IM component of NHM is not easily discernible within the state budget. The budgetary releases and actual expenditures for NHM in Raiasthan as reported by Health Management Information System (HMIS), Comptroller Auditor General (CAG) Finance Accounts and Financial Management Report (FMR) do not match. For e.g., in both

tables the central share amounts given by HMIS, Lok Sabha Questions as well as CAG financial reports all differ. The FMR is the only document that shows the total allocation, however, it does not segregate the central and state share, making it difficult to ascertain which of the other three sources are accurate. Tables 3 and 4 show the budgetary allocations and expenditures on NHM from 2014-15 to 2017-18 for Rajasthan from four different sources do not match with no two single sources showing similar figures for a given year.

Table 3: Budgetary Allocations (Centre, State and Total) for National Health Mission (NHM) in Rajasthan (Rs in Crore)

Year	HMIS	Lok Sabha Questions	CAG Finance Accounts	Audited FMR	
	(Centre Share only) releases	(Centre Share only) releases	(Centre Share only) releases	(Centre and State Share)	
2014-15	1,115.96	1115.96	1,088.87	2181.63	
2015-16	1,244.97	1287.84	1,275.66	2493.18	
2016-17	1,183.49	1204.84	1,190.58	2537.53	
2017-18	1,440.99	1615.29	1,428.94	2673.3	

Source: Health Management Information System (HMIS): https://nhm.gov.in/New_Updates_2018/Quarterly_MIS/dec-2019/High-Focus-States-Other-than-NE.pdf

Comptroller Auditor General (CAG): Finance Accounts for various years https://cag.gov.in/state-accounts/ raiasthan

Financial Management Report (FMR): Sourced through NHM Finance Office, Government of Rajasthan.

Table 4: Actual Expenditure (Centre, State and Total) for National Health Mission (NHM) in Rajasthan (Rs in Crore)

Year	HMIS	Lok Sabha Questions	CAG Finance Accounts	FMR
2014-15	1,722.69	1722.69	1,324.03	1968.49
2015-16	1,714.46	1799.10	1,779.70	2031.92
2016-17	1,759.17	1856.77	1,577.98	2205.50
2017-18	1,564.52	1885.55	2,141.67	1975.82

Source: Health Management Information System (HMIS): https://nhm.gov.in/New_Updates_2018/Quarterly_MIS/dec-2019/High-Focus-States-Other-than-NE.pdf

Comptroller Auditor General (CAG): Finance Accounts for various years https://cag.gov.in/state-accounts/ raiasthan

Financial Management Report (FMR): Sourced through NHM Finance Office, Government of Rajasthan.

¹² National Sample Survey (NSS), 75th round report, 2017-18.

¹³ Public Health Department, Medical Education and Drugs Department, Tribal Development Department, Public Works, Districts and Other Departments

¹⁴ National Health Policy, 2017, Ministry of Health and Family Welfare, Gol, http://cdsco.nic.in/

Shubhlaxmi Yojana was introduced in the state with an aim of stopping female foeticide. Rajshree Yojana was introduced in the state in 2016 for the overall development of girls with an intention to improve their health and educational status and to prevent female foeticide and child marriage. Both are cash transfer schemes that transfer money for girl children in the state upon

¹⁶ National Health Accounts Technical Secretariat. (2016). National Health Accounts Guidelines for India. MoHFW. https://doi.org/10.1787/9789264116016-en.

Gram Panchayat Development Plans (GPDP)¹⁷ 'Aapni Yojana Aapno Vikas': Non-transparent process and fragmented priorities. The lack of transparency is reflected by the fact that although the research team visited 30 panchayats, they could access hard copies of only a few plans and no expenditure details were available. The GPDP was being developed as per the guidelines provided by the department, but in most cases, public participation was poor, and the ward members and sarpanches often had different priorities. Many panchayat members were unaware of stipulated allocations towards social sector. An analysis of the issues taken up in the GPDP, where the plans were made available, revealed improving infrastructure as the main priority. This included construction of the connecting roads, building water tanks, boundary walls, burial and cremation sites (community specific) cleaning of drains, toilets, ensuring regular water supply, electrification of areas without power supply, and removing encroachments. The plans do not include direct interventions/ priorities for women and children as other schemes exist for them and they are seen to be indirect beneficiaries of the overall development of the village. For instance, the schemes like The Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) and the Self-Help Groups (SHGs) under Ajeevika benefit women directly as they get employment and loans from banks; the infrastructure works taken up by the GP like repairing Anganwadi centres, building toilets in schools, ensuring space for playgrounds also benefitted women and children were seen to be benefitting women and children.



Sub-sector specific Tales and Trends

Decreasing Maternal Health (MH) expenditure within RCH and low urban uptake of Janani Suraksha Yojana (JSY). Maternal and Child health expenditures come under the largest pool under NHM, i.e., NRHM-RCH-Flexipool (FP) (60% of NHM). The RCH¹⁸ component expenditure constituted an average of 40% within this FP. Proportion of maternal health expenditures decreased from 73.6% in 2012-13 to 61.4% in 2017-18 although in absolute terms it has increased from Rs 259 crores in 2012-13 to Rs 313 crores in 2017-18, and in

real terms it has remained stagnant. Maternal health expenditure consisted of mainly Janani Suraksha Yojana (JSY) (60.1%), Janani Sishu Suraksha Karyakram (JSSK) (35.7%) and procurement of equipment (2.6%). Other components like Information Education Communication (IEC)/Behaviour Change Communication (BCC) activities, training, maternal death review, etc., each occupied less than 1% of expenditures.

Janani Suraksha Yojana (JSY) comprised of 62% of MH expenditure in 2012-13 and decreased to 51% in 2017-18, driving the proportional decrease in MH expenditure. However, its utilization was high and averaged at 87.5% for six years. JSY is available to all women in the state owing to the state's EAG status which is the reason for high expenditure. For e.g., The number of JSY beneficiaries in Maharashtra was about 1.3 lakhs in 2017-18 as opposed to 10.2 lakhs in Rajasthan during the same year¹⁹. In addition, incentives are also higher in EAG states as compared to non EAG states. Hence, Rajasthan's JSY expenditure averaged at Rs 175 crores as against Rs 45.30 crores in Maharashtra. However, the number of beneficiaries of this scheme have remained almost same in the six years of the study. i.e., 10.72 lakh in 2012-13 and 10.67 lakh in 2017-18, indicating a stagnancy in number of women opting for JSY. Within JSY, an average 81% of expenditure goes towards incentives for institutional deliveries followed by 15% for Accredited Social Health Activists (ASHA) incentives. Within institutional deliveries 85% goes towards rural deliveries, suggesting a need for focusing on improving JSY uptake in urban areas.

Janani Sishu Suraksha Karyakram (JSSK) expenditure comprised the second largest expenditure and averaged at 36% of MH at Rs 104 Crores (2012-13 to 2017-18). By contrast

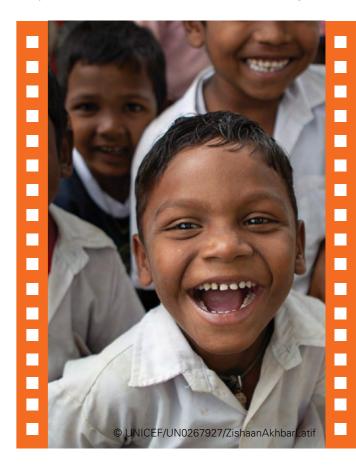
in Maharashtra, the average JSSK expenditure was Rs 45.30 crores from (2013-14 to 2017-18). Within JSSK, 43% of the expenditure went towards provision of free referral transport, and 30% goes towards provision of drugs and consumables—this 30% needs to be further investigated as it could be integrated with the free drugs scheme. Since JSSK expenditure is not segregated by area, it was not possible to comment on its uptake in urban areas.

Poor utilization of immunisation allocations for children and low prioritisation of adolescent health. The proportion of Child Health (CH) expenditure increased from 14.4% of total RCH in 2012-13 to 23% in 2017-18. The expenditure on CH has increased from Rs 50.52 crores to Rs 117.43 crores in this period, with an average of only 55% utilization ratios over the six years. Immunisation consisted of 36% of total CH expenditure, followed by incentives to ASHA at 21% and JSSK (on infants) at 9.8%. However, priority of expenditures is skewed towards children under 6 years of age.

Rashtriya Kishori Swasthya Karyakram (RKSK) expenditure is only about 3.1% of total CH and has been declining consistently since 2015-16 from Rs 5.97 crores to Rs 1.50 crores in 2017-18. Its average utilization for six years was only 36%. The expenditure is mainly on IEC/ BCC) activities for adolescents; however, these are not supported by allocations/expenditures on other components of the programme, namely facility based and community-based services and menstrual health schemes, which show poor utilization.

The only significant allocation for those in the age group 10-19 years is under the Weekly Iron and Folic Acid Supplementation (WIFS), which provides IFA through schools.

Tribal Health expenditure disproportionately lower as compared to the percentage of tribal population. The share of the Tribal Sub Plan (TSP) in total state health expenditure consistently increased from 6.7% in 2014-15 to about 8% in 2017-18 of the total health expenditures of the state at Rs 875 crores. The expert committee on tribal recommends that at



least Rs 1,624 crores should be allocated under TSP for tribal health in 2015-16 in Rajasthan based on proportion of its tribal population²⁰ which is much higher than the current expenditure.

The issue of TSP substituting state expense on tribal health is also important. The TSP guidelines explicitly states that TSP funds should be used as an addition to regular expenditure in tribal areas. As seen in Figure 2, an average of 36% of TSP funds was spent on NHM (2012-13 to 2017-18), followed by expenditure on hospitals and dispensaries (33%). Interestingly, a lot of this expenditure was on alternate forms of medicine, namely Ayurveda, homeopathy, and unani. The free drug scheme, free testing, and the insurance accounted for about 18.4% of the TSP spending over the years. Expenditure under these three schemes alone within TSP saw a 75% jump from 2014-15 to 2017-18 (Table 5). Therefore, more than 50% of the TSP was spent on central and state led health schemes, with little evidence of expenditure on tribal specific schemes. For e.g., 0.2% of TSP was spent on tribal welfare scheme for tribal area.

As per article 243G, Gram Panchayat Development Plans (GPDPs) are mandatory for econon development and social justice of panchayats. The Government of Rajasthan (GOR) has prepared state specific guidelines for preparation of GPDP under the catchy name 'Aapni Yojana Aapno due approval of the Gram Sabha. The GOR has also passed instructions for compulsory inclusi of work on human and social development such as education, health, nutrition, sanitation, and social justice in preparation of the GPDP. https://www.panchayatgyan.gov.in/docume

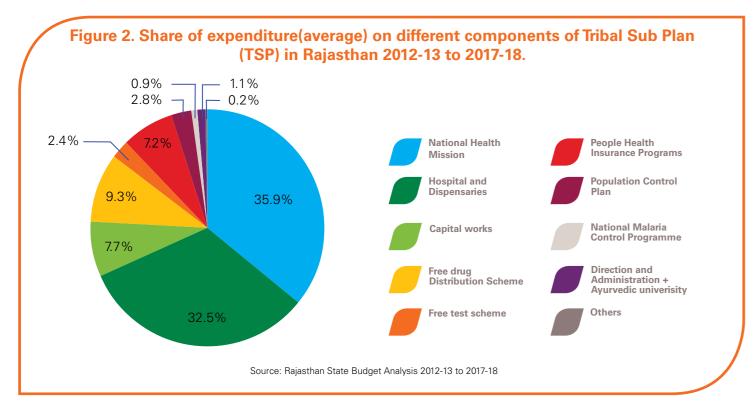
¹⁸ Reproductive and Child Health (RCH) expenditure includes that on Maternal Health, Child Health, Family Planning, Pre-Natal Diagnostic Testing (PNDT) and Tribal RCH within the National Rural Health Mission–Reproductive Child Health–Flexipool (NRHM-RCH-FP) flexipool. Human resources (HR) other than Accredited Social Health Activist (ASHA) incentives under this pool cluded under RCH expenditure as HR is shared across many programmes and not only RCH, ASHA incentives on other hand could be split by their programme and, hence, they were included in RCH analysis. RCH expenditures under National Urban Health Mission also

Table 5. Share of Insurance, Free drug, and Free test scheme under Tribal Sub Plan (TSP) (Rs in

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Bhamashah/RSBY/ AB-MGRSBY ²¹	0	0	6	28	61	121
Free drug	45	28	34	48	40	78
Free test	3	11	16	12	14	16
Total	48	39	56	87	115	215
Share (%) of TSP	20.23	18.55	12.93	15.30	18.97	24.53

Source: Analysis of Rajasthan State budget documents 2012-13 to 2017-18.

AB-MGRSBY stands for Ayushman Bharat-Mahatma Gandhi Rajasthan Swasthya Bima Yojana.



This was also evident in the analysis of the NHM FMRs, which showed only tribal RCH as tribal specific expenditure with an average expenditure of Rs 4 crore. Although tribal population benefits due to the universality

of these schemes, these are not tailored for tribal health care (de-addiction programmes, basing health services on cultural and traditional contexts of the area).

Tribal Sub-Plan (TSP) and Health Care Delivery in Tribal Areas: Feedback from The Field

Sub-District-level tribal expenditures are invisible.

- It was not possible to discern TSP expenditure by district and subdistrict levels from the state budget or National Health Mission (NHM). Field visits in Dungarpur showed that block level (block level chief medical officer) and panchayat level (Medical Officer in Charge [MOIC]) health officials were unaware of TSP funds.
- District level health officials had successfully raised demands of Rs 40 lakhs by writing to the Tribal Area Development Agency (TADA) in 2018-19 for the district hospital. This fund was used for purchase of an X-ray machine, and other equipment for the hospital. Hence, expenditure of TSP is largely decided at the level of state and very minimally at district level.

Health care delivery less than ideal

- Ten Primary Health Centres (PHCs) were visited in Sagwara and Bicchwara blocks in the tribal district of Dungarpur. Of the ten PHCs visited, three did not undertake deliveries (including an Adarsh PHC). Even the PHCs that conducted deliveries, faced problems of inadequate facilities in labour rooms, like rusted delivery tables. Many of the MOIC cited the need for renovation the labour rooms, especially labour tables, and requirement of air-conditioners in the labour rooms. All PHCs cited lack of staff as a major challenge faced by them. This was also seen in Adarsh clinics (6/10).
- Only one PHC had a pharmacist, while three of the ten did not have a lab technician. Pharmacists and laboratory technicians are part of essential staff of the PHC, without whom implementation of schemes like Mukhyamantri Nishulk Dava Yojana (MNDY) and Mukhyamantri Nishulk Jaanch Yojana (MNJY) are affected, especially considering the increased footfalls.
- None of the PHCs had an accountant, due to which the doctors were saddled with administration work. One of the MOICs said, 'Using the funds is a headache; we have to float tenders, complete paperwork, get signatures, and prepare utilization Certificates—it is too cumbersome'.
- Untied funds were used for a variety of purposes including minor repair works around the PHC and purchase of equipment and furniture. Some PHCs even used it to pay electricity bills or salaries. Most MOICs felt that untied funds were sufficient to meet the needs of the PHCs; however, most cited problems in utilizing the funds due to irregularities in Rajasthan Medicaid Relief Society (RMRS) meetings and absence of accountants. Despite these constraints, the recent free medicine and diagnostics schemes have increased the number of patients utilizing PHCs.

Delivery of Public Health Services. This has benefitted from increased capital expenditure but needs to address other issues related to human resources, untied funds, and freemedicine distribution.

Understaffing affecting provision of health

care: The expenditure on Human Resource (HR) or wages as a percentage of THE in the state budget has reduced over the years from 65% to 54%. This expenditure has increased in absolute terms but not in proportion to total state health expenditure.; it means that the number of personnel has not increased or rather decreased over the study period. As 75% of the wage expenditure goes towards providing health care services, this may mean

decrease in the staff directly serving at health facilities. Under NHM, the NRHM-RCH-FP, consists of 95% of HR expenditure (does not include infrastructure maintenance). The expenditure on HR has also seen a decline from 10.4% to 9.3% within NRHM-RCH. Fifty-three per cent of this expenditure, on an average, was made on ASHA, which has seen an increase over the six-year period, while contractual services (all other contractual employees) expenditure has seen a decrease from 76% to 46%. This further strengthens the notion that the number of employees at health facilities have decreased over the years. Our field team visited 30 PHCs spread across Jaisalmer, Tonk and Dungarpur districts, of which 17 were Adarsh PHCs. All PHCs.



including Adarsh PHCs, were understaffed. In Jaisalmer district, the shortage of staff was more acute as compared to the other districts that were visited.

Capital expenditure: Under the state budget, capital expenditure has remained consistent at 25% of THE from 2012-13 to 2017-18. However, under NHM, expenditures under capital showed a consistent increase until 2015-16 (14%) following which it decreased. The state government under NHM initially focused on strengthening of hospitals, which made up the bulk of expenditures until 2015-16 and then drastically reduced. However, expenditure on construction of new structures consistently increased in the six years that the study covered such that in 2017-18 expenditure on renovations and new constructions were almost the same.

Improving the use of untied grants: The highest expenditure of the untied funds goes to PHCs (35.8%) followed by CHCs (25.7%). A functional RKS (Rogi Kalyan Samiti known as Rajasthan Medicaid Relief society [RMRS] in Rajasthan) is pertinent for the use of the funds available at the PHC level. It was found from the PHC level interviews that irregularity of MRS meetings delayed completion of tasks,

MRS membership was often politicised and a lack of an accountant to manage MRS funds impacted usage of funds and timely preparation of Utilization Certificates. Most VHSNCs (Village Health, Sanitation and Nutrition committees) visited, did not receive Rs 10,000, untied funds due to the lack of interest by the sarpanch, non-submission of utilization certificates and other related issues. Some VHSNCs guoted last receiving Rs 5,000 as part of Yoga Day in 2012.

Improving efficiency in free drug and diagnostics provision: Expenditure on the free drug and free diagnostics has increased from 2012-13 to 2017-18, with the share of free drugs scheme being larger. The share of the free drug/diagnostic services as a proportion of total health expenditure had decreased from 5.19% in 2012-13 to 2.33% in 2016-17 before increasing to 3.32% in 2017-18 (Revised Estimated). Within NHM, it is the expenditure on drugs and supplies that drive procurement expenses. In this, expenditure on free drug scheme is the highest. The formation of Rajasthan Medical Supplies Corporation on the lines of Tamil Nadu Medical Supplies Corporation has streamlined the procurement of medicines and other supplies for the health department. However, interviews showed that health gains due to these schemes are offset by the lack of necessary personnel especially lab technicians and other necessary facilities like delays in medicine delivery due to lack of transport.

Improving hospital network for better **insurance performance:** The people's insurance scheme has also shown increased expenditure over the years and insurance (including Employee's State Insurance Scheme [ESIS]) formed 13.19 % of total health expenditure in 2017-18. There are only 15 district hospitals in a state with 33 districts, and field interviews show that the benefits are primarily accrued by private hospitals due to lack of better facilities in public hospitals. However, according to officials, the poor have benefited from this scheme but there is

room for improvement.

Low prioritisation on urban health services and National Urban Health Mission (NUHM):

Expenditure on urban health care services increased from Rs 1,343 crores in 2012-13 to Rs 2,633 crores in 2017-18. However, its share in the total health expenditure has consistently decreased over years from 34% to 24.2%. Forty-three per cent of this expenditure goes towards capital expenses.

Disconnected urban health services:

Hospitals and dispensaries took up 60% of all expenditure under urban health. National Urban Health Mission (NUHM) is still in its infancy and forms a miniscule part (1.67% in 2017-18) of total urban expenditure and 3.5% of NHM. It implies that the urban expenditure on health is geared mainly towards infrastructure and maintenance of health facilities. However, our field data showed, there were only three urban PHCs in Tonk, one in Jaisalmer and one in Dungarpur, pointing to the lack of urban primary care infrastructure. In addition, no urban specific schemes were discernible from the analysis. All health programmes in the state are developed with rural landscape in mind; however, schemes like JSY need to be reenvisaged to fit the urban context.

Underestimating urban expenditures: Priority expenditures such as NRHM-RCH were given in detail, but this was not the case with NUHM or non-communicable diseases. Currently, urban RCH expenditures are put under NRHM making it difficult to segregate urban specific expenditures. Municipal corporation expenditures on health²² are also not included in the state budget. Another factor in urban expenditure is that spending on hospitals and dispensaries are mainly for state-run tertiary care centres and medical colleges that do not necessarily cater to urban population, but to the poor from other districts as well. All these factors give an incomplete picture of urban expenditure.

Low priority towards Non-Communicable Disease (NCD) expenditure: The share of total health expenditure on diseases decreased from 2.68% in 2012-13 to 2.07% in 2017-18 as seen from state budget documents. The share of expenditure on CDS averaged at 85.3% as compared to NCDs. Within NHM,

CD expenditure occupies on an average 1.6% and NCD occupies 1.3% of total NHM expenditure. Revised National Tuberculosis Control Programme (RNTCP) consists of 59% of the expenditure under CD. It is the only programme under CD that has seen an increase in expenditures from 2012-13 to 2017-18 and drives CD expenditures. National Vector Borne Disease Control Programme (NVBDCP) accounts for 21.9% of the expenditure and reduced drastically by a year-on-year average of 15% from 48.3% in 2012-13 to 12.7% in 2017-18. Malaria, dengue, chikungunya are the only diseases with expenditures in NVBDCP with malaria being allocated 56% funds. IDSP (Integrated Disease Surveillance Programme) also saw an increase in expenditures with most of it going towards remuneration of staff. The National Programme for Prevention & Control of Cancer, Diabetes,

Cardiovascular Diseases & Stroke (NPCDCS) and National Programme for Control of Blindness (NPCB) together account for 70% average expenditure from 2015-16 to 2017-18.

There is no programme focusing on prevention of COPD, which is the highest cause of death in the state. At the national level too, the number of cases of COPD in India increased from 28.1 million (27.0 -29.2) in 1990 to 55.3 million (53.1–57.6) in 2016, an increase in prevalence from 3.3% (3.1–3.4) to 4.2% (4.0–4.4)²³. The smoking cessation, and control of indoor and outdoor air pollutants are some of the ways to control this disease. The National Tobacco Control Programme receives about 6.5% of the total NCD expenditure under NHM.



Gender Concerns

Schemes not geared towards substantive gender equality: The most popular scheme, for maternal care is the JSY, which is a cash transfer scheme. Welfare schemes like Shubhlaxmi and Rajshree are meant to prevent

²² Municipal corporations usually undertake the maintenance and running of PHCs and secondary level hospitals in their wards. Their role in current urban health scenario is largely

²³ Salvi, S., Kumar, G. A., Dhaliwal, R. S., Paulson, K., Agrawal, A., Koul, P. A., Mahesh, P. A., Nair, S., Singh, V., Aggarwal, A. N., Christopher, D. J., Guleria, R., Mohan, B. V. M., Tripathi, S. K., Ghoshal, A. G., Kumar, R. V., Mehrotra, R., Shukla, D. K., Dutta, E., ... Dandona, L. (2018). The burden of chronic respiratory diseases and their heterogeneity across the states of India: The Global Burden of Disease Study 1990–2016. The Lancet Global Health, 6(12), e1363–e1374. https://doi.org/10.1016/S2214-109X(18)30409-1.

female foeticide as well as child marriage, but these schemes still encourage the notion that cash can reverse the attitude towards the girl child despite the fact that gender-related biases are present in all economic quintiles. Most schemes highly utilized by women are cash transfer schemes, which do not work on bringing about behavioural change. This is especially seen in low priorities accorded to adolescent health as well as other health considerations like, early diagnosis of mental illnesses, mainly depression, cervical and breast cancer, etc. Although gender responsive budgeting is mandatory in state governments, and funds are allocated for women specific schemes, little has been done in terms of longterm planning to reduce gender bias in health access to women.

The proportion of expenditure on family planning increased from 11.7% in 2012-13 to 15.4% in 2017-18. Seventy-two per cent of this expenditure goes towards incentives for compensation for sterilisation, followed by expenditure on ASHA incentives (13%). Within terminal methods, 97% expenditure is towards female sterilisation. Expenditure on spacing methods is less than 2% of family planning. All these point towards lack of attention to the broader and deeper issues of gender equality—a state that was the first to have a women's empowerment programme such as Women's Development Programme (WDP) in the country at one point is capable of bringing more substantive measures in the health sector as well.



Recommendation 1: Fix gaps in human resource by rationalisation of HR. This is especially important in case of pharmacists, lab technicians, and accountants. These are muchneeded support staff who will ease the burden on doctors and other health staff, improving service on the way.

Recommendation 2: Devise innovative strategies for education and communication in tribal areas leading to improved community acceptance of immunisation to enhance the utilization of allocations within immunisation, especially in terms of ASHA services.

Recommendation 3: Prioritise adolescent health and awareness by projecting it as the start of cycle for the improvement of RCH indicators in the state. Start by prioritising IEC/ BCC for adolescents.

Recommendation 4: Tribal health expenditure should be commensurate to the population in the state which is 13.5%, while expenditure is only at 8%. Although strengthening of public health services is a sure way to improve tribal health indicators as well, care must be exercised to make investments in specific health concerns in tribal areas. For example, prioritising health education in view of tribal cultural beliefs is important.

Recommendation 5: Focusing on tribal health problems, mainly alcohol and tobacco deaddiction programmes, sickle cell disease, etc., for inclusive health care.

Recommendation 6: Increased prioritisation of urban health concerns beginning with increasing the stake of municipal corporations in health expenditures.

Recommendation 7: Separating urban expenditures from NRHM expenditures to improve NUHM efficiency and accountability.

Recommendation 8: Improving co-ordination between the health department and Panchayati Raj Institutions (PRI) through institutionalised mechanisms, especially in lieu of the 14th FC grants to ensure improved utilization and prioritisation of women and child health in villages.

Recommendation 9: Institutionalising a gender review of health initiatives to make the health care provisions and uptake more gender responsive.

Sr no	Activity	Baseline (as on 1 January 2016)	SDG Target by 2030	Gaps in expenditure		
1	Maternal Mortality Ratio per 100,000 live births.	244	70	Stagnant maternal Health expenditures. Improving utilization of Maternal Health (MH) services for tribal areas and urban poor areas.		
2	Births assisted by health personnel.	86.6%	95%	Improving infrastructure in rural areas and providing adequate		
3	Neonatal mortality rate per 1,000 live births.	30	12	specialists in Primary Health Centres (PHCs) and Community		
4	Institutional Births	84%	95%	Health Centres (CHCs). Increasing		
5	Mothers who had at least four antenatal care visits.	38.50%	70%	allocations under adolescent programmes.		
6	Under-five mortality rate per 1,000 live births.	45	25	Improve utilization of allocations under immunisation under the National Health Mission (NHM).		
7	Children aged 12-23 months who receive 3 doses of pentavalent vaccine before their first birthday.	81.34%	92%	Increase the pace of Rashtriya Bal Swasthya Karyakram (RBSK) implementation.		
8	Tuberculosis incidence per 100,000 population	143	44 (in 2025)	Expenditure on expenditure. Revised National Tuberculosis Control Programme (RNTCP) has increased from Rs 10.26 crores (2012-13) to Rs 21.69 (2017-18) crores.		
9	Mortality rate attributed to cardiovascular disease, cancer, diabetes, or chronic respiratory disease	Cardiovascular disease (CVD) at26%, cancer at 7%, DM (Diabetes Mellitus)-2%, and Chronic Obstructive Pulmonary Disease (COPD) at 13%	28% Reduction of death due to Non- Communicable Diseases (NCDs)	Increasing the share of expenditure on non-communicable diseases vs communicable diseases. Investing in COPD programme		
10	Achieving Universal Health coverage	Free drugs and diagnostics scheme. Publicly funded insurance scheme covering secondary and tertiary care.	CDC Status Box	Increase state's health expenditure to 8% of total expenditure as per National Health Policy (NHP), 2017. Fill gaps in human resource (especially pharmacists, lab technicians, specialists, etc.) and health infrastructure. Focus on providing primary and preventive care.		

Source: Sustainable Development and Rajasthan SDG Status Report 2020, Government of Rajasthan state budgets, and Rajasthan NHM FMR Analysis.



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