

**Chapter-V**  
**Healthcare**  
**Infrastructure**



## Chapter-V

### Healthcare Infrastructure

*There was shortage of healthcare infrastructure across the State with the shortage being most acute in the case of primary healthcare in the tribal and plain areas. The State Government did not have a plan to prioritise areas with shortfall for setting up of healthcare infrastructure.*

*There was uneven distribution of bed capacities among the District/Sub-district hospitals. A large number of government medical institutions lacked basic amenities, such as clean drinking water facility, separate toilets for males and females, etc.*

*The Primary and Secondary Care institutions were deficient in several key requirements, such as availability of Major Operation Theatre, Preparation Room, Pre-operative Rooms.*

*The Tertiary Care institutions were deficient in various aspects related to Wards, such as Clinical Demonstration Rooms, Examination and Treatment Rooms, Resident Doctors and Student Duty Rooms, etc. They were also deficient in facilities required in Operation Theatres, such as Post-operative Recovery Rooms.*

#### 5.1 Availability of Healthcare Infrastructure in the State

Indian Public Health Standards (IPHS) require that one Health Sub-Centre (HSC) should be established for every 5,000 population in plain areas and for every 3,000 population in hilly/tribal/desert areas. A Primary Health Centre (PHC) covers a population of 20,000 in hilly, tribal and desert areas and 30,000 population in plain areas, whereas each Community Health Centre (CHC) generally includes four PHCs and caters to approximately 80,000 population in tribal/hilly/desert areas and 1,20,000 population in plain areas.

##### *i. Availability of Healthcare Infrastructure*

The details of healthcare infrastructure facilities as per IPHS is shown in **Table 5.1** below:

**Table 5.1: Requirement and Availability of Health Infrastructure facilities as per IPHS**

Estimated population <sup>104</sup> in July 2021				826.05 lakh
Type of Area	Health Infrastructure Facilities	CHCs	PHCs	HSCs
Desert Area <sup>105</sup>	Requirement as per IPHS	171	681	4,540
	Availability <sup>106</sup>	167	609	3,922
	<b>Excess / Shortage (-)</b>	<b>-4</b>	<b>-72</b>	<b>-618</b>
	<i>Per cent</i>	2.33	10.57	13.61
Tribal Area <sup>107</sup>	Requirement as per IPHS	101	404	2,698
	Availability	70	229	1,527
	<b>Excess / Shortage (-)</b>	<b>-31</b>	<b>-175</b>	<b>-1,171</b>
	<i>Per cent</i>	30.69	43.32	43.40
Plain area (remaining area after Desert and Tribal areas of Rajasthan)	Requirement as per IPHS	507	2,032	12,180
	Availability	448	1,571	8,140
	<b>Excess / Shortage (-)</b>	<b>-59</b>	<b>-461</b>	<b>-4,040</b>
	<i>Per cent</i>	11.64	22.69	33.17
Overall Status of Rajasthan	Requirement as per IPHS	779	3,117	19,418
	Availability	685	2,409	13,589
	<b>Excess / Shortage (-)</b>	<b>-94</b>	<b>-708</b>	<b>-5,829</b>
	<i>Per cent</i>	<b>12.07</b>	<b>22.71</b>	<b>30.02</b>

Source: Information of Rural Health Statistics (RHS) 2021-22 by Ministry of Health and Family Welfare (MoHFW), GoI supplemented with information gathered by Audit during field study.

It can be seen from the above Table that there was shortage of healthcare infrastructure across the desert, tribal and plain areas of the State with the shortage being most acute in the case of primary healthcare in the tribal and plain areas.

## ii. Geographical distribution of DHs/CHCs/PHCs/HSCs in the State

Geographical distribution of DHs in the State is shown in **Chart 5.1** below:

104 According to Statistical Yearbook 2021 of Directorate of Economics & Statistics, Department of Planning, Rajasthan.

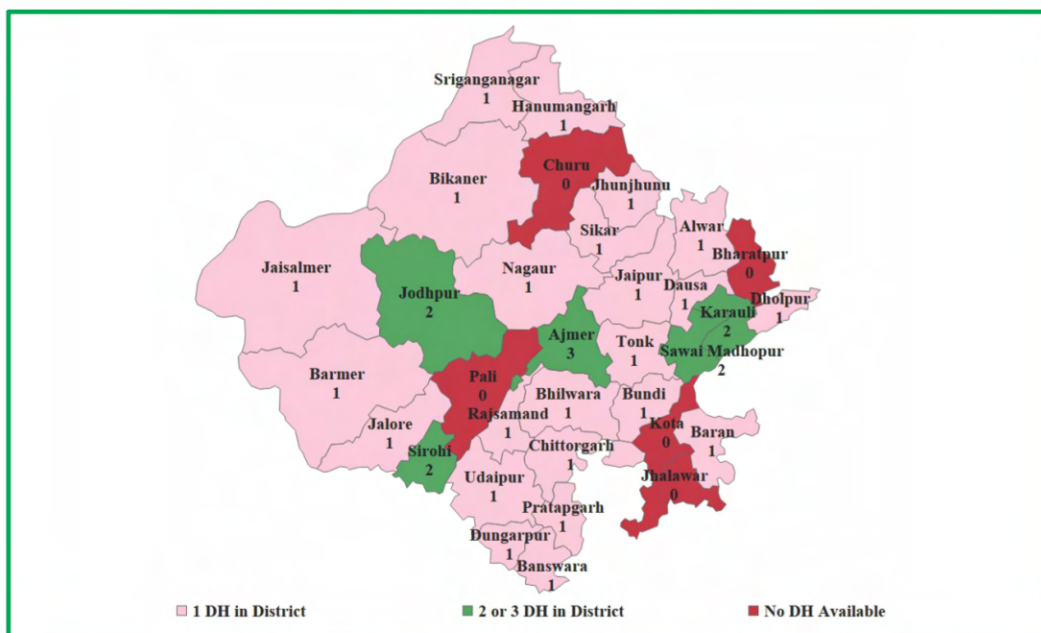
105 Total 48 Tehsil in 12 districts declared as desert area in Rajasthan as per information available on website of Ministry of Agriculture and Farmers Welfare (March 2023).

106 Data regarding availability of HSCs, PHCs and CHCs sourced from Rural Health Statistics 2021-22 published by Ministry of Health and Family Welfare, GoI and information provided by Department of Medical, Health and Family Welfare, GoR.

107 As notified in Tribal Area Development Department, GoR circular dated 17.01.2022, 47 blocks of five districts declared as tribal areas in Rajasthan.



**Chart 5.1: Geographical Distribution of DHs**

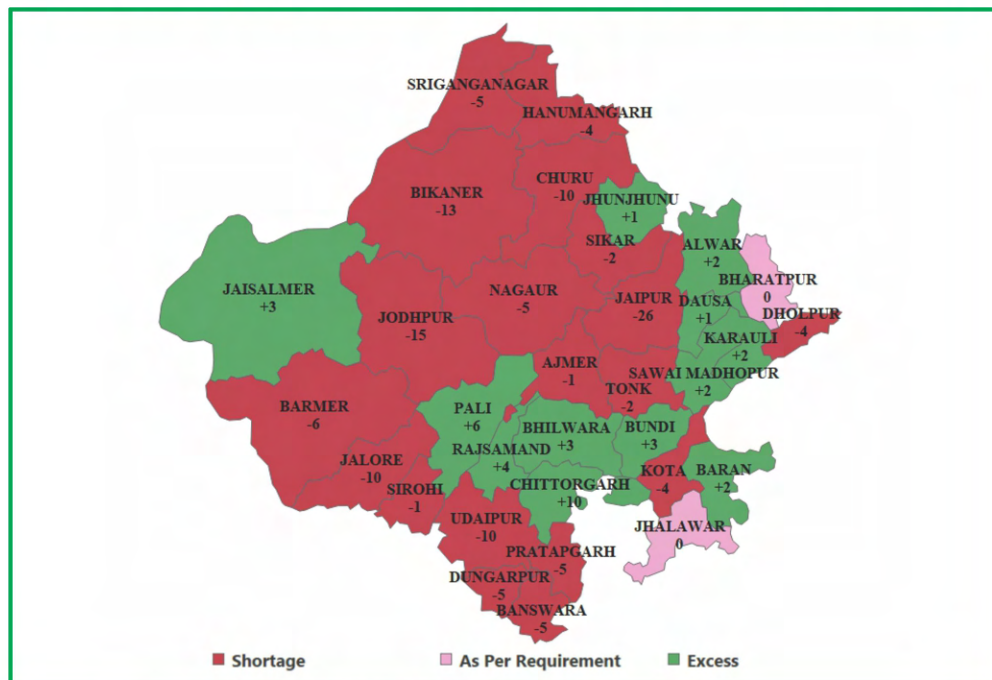


Source: Administrative Progress Report 2021-22 DMH&FW supplemented with information gathered by Audit during field study.

The above chart shows that DHs were not available in five districts<sup>108</sup> of the State. However, in these five districts, there are Medical College Attached Hospitals namely Government Rajbahadur Memorial Hospital, Bharatpur, DB Hospital, Churu, SRG Hospital, Jhalawar, MBS Hospital, Kota and Government Bangar Hospital, Pali.

Geographical distribution of the CHCs in the State is shown in **Chart 5.2** below:

**Chart 5.2: Geographical distribution of CHCs [Shortage (-)/Excess (+)]**



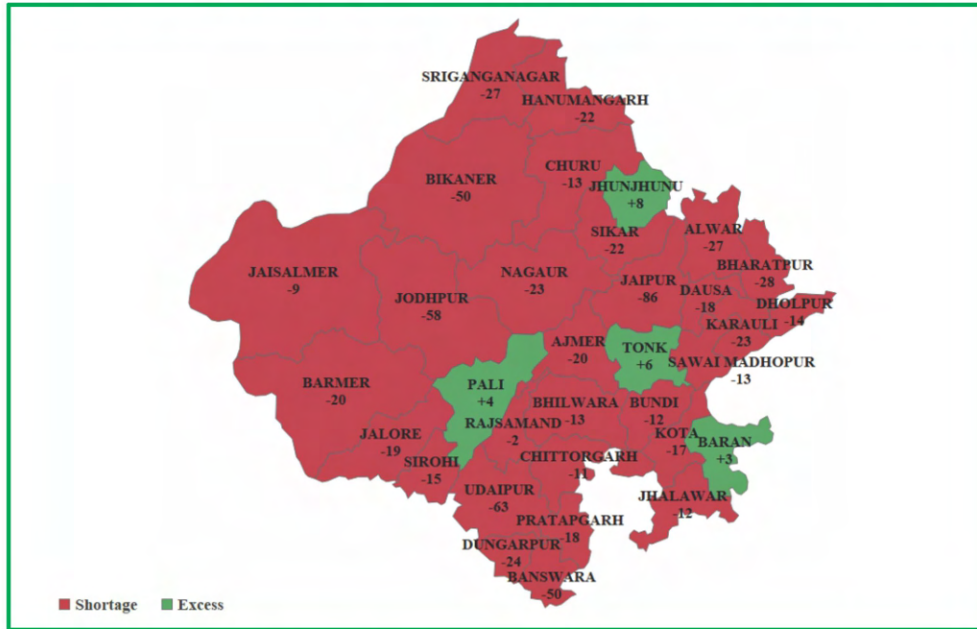
Source: Information of RHS 2021-22.

108 Bharatpur, Churu, Jhalawar, Kota and Pali.

The above chart shows that there was shortage of 133<sup>109</sup> CHCs (25 per cent) in 19 districts against IPHS.

Geographical distribution of the PHCs in the State is shown in **Chart 5.3** below:

**Chart 5.3: Geographical distribution of PHCs [Shortage (-)/Excess (+)]**

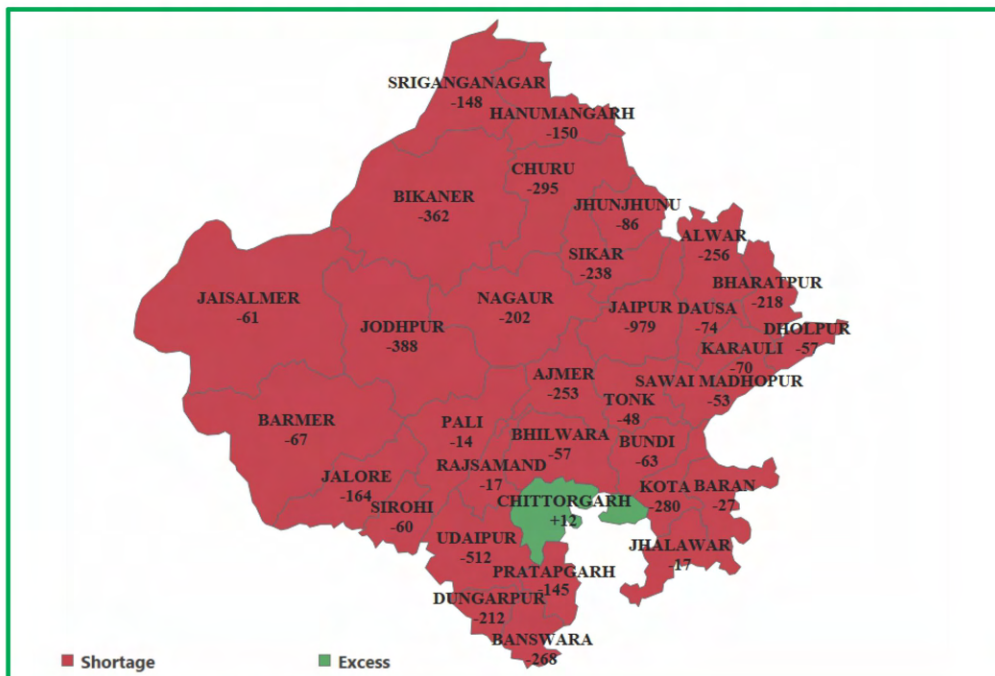


Source: Information of RHS 2021-22.

The above chart shows that there was shortage of 729<sup>110</sup> PHCs (26 per cent) in 29 districts against IPHS.

Geographical distribution of the HSCs in the State is shown in **Chart 5.4**:

**Chart 5.4: Geographical distribution of HSCs [Shortage (-)/Excess (+)]**



Source: Information of RHS 2021-22.

109 In addition to this shortage, there were 39 excess CHCs in 12 districts due to which the net overall shortage in the state was of 94 CHCs as shown in Table 5.1.

110 In addition to this shortage, there were 21 excess PHCs in four districts due to which the net overall shortage in the State was of 708 PHCs, as shown in Table 5.1.



The above chart shows that there was shortage of 5,841<sup>111</sup> HSCs (31 per cent) in 32 districts against IPHS.

### **iii. Plan for establishment of new PHCs and HSCs**

In the budget announcement for the year 2019-20, the State Government proposed the establishment of 200 new HSCs and 100 new PHCs in the State.

Out of these, approval for 118 new HSCs (belonging to 24 districts<sup>112</sup>) were given, however, funds were released for 73 HSCs only (till May 2023).

Similarly, 37 PHCs (in 19 districts<sup>113</sup>) were proposed and funds were released for 26 PHCs (till May 2023).

Details are given in *Appendix 5.1*.

The State Government stated (January 2024) that healthcare facilities are opened and upgraded in the State as per norms determined by GoI. It was further stated that the opening of healthcare facilities is considered according to the availability of financial resources, requirement and after approval of competent authority in districts having shortage of HSCs/PHCs/CHCs. It was also stated that District Hospital in Bharatpur, Jhalawar and Pali will be opened and in Churu and Kota district, SRJ Hospital, Ratangarh (Churu) and Government District Hospital, Kota are designated as DH.

This indicates that State Government did not have a concrete plan to address the shortage and prioritise areas with shortfall for setting up of healthcare infrastructure.

**Recommendation 10:** *The State Government may ensure availability of healthcare institutions as per Indian Public Health Standards in the State and their equitable distribution to make healthcare accessible for all.*

## **5.2 Availability of Infrastructure Facilities in Government Hospitals/ Health Centres**

### **(i) Availability of Beds against Norms in DHs**

IPHS prescribes that the total beds required for a district hospital should be based on a district's population, bed days per year and bed occupancy rate.

111 In addition to this shortage, there were 12 excess HSCs in one district due to which the net overall shortage in the State was of 5,829 HSCs, as shown in Table 5.1.

112 118 HSCs in 24 districts: Ajmer (5), Alwar (12), Baran (5), Barmer (3), Bharatpur (4), Bhilwara (4), Chittorgarh (3), Pratapgarh (1), Churu (1), Dausa (8), Dholpur (4), Sriganganagar (6), Hanumangarh (2), Jaipur (11), Jhunjhunu (11), Jodhpur (3), Karauli (2), Kota (4), Nagaur (2), Pali (1), Rajsamand (4), Sawai Madhopur (6), Sikar (10) and Tonk (6).

113 37 PHCs in 19 Districts: Ajmer (3), Alwar (2), Baran (1), Churu (2), Bharatpur (3), Bhilwara (1), Chittorgarh (3), Hanumangarh (1), Jaipur (6), Jhunjhunu (4), Jodhpur (1), Karauli (1), Kota (1), Pali (1), Rajsamand (1), Sawai Madhopur (1), Sikar (2), Tonk (2), Udaipur (1).

Examination of availability of beds in the District Hospitals<sup>114</sup> of the State revealed that out of 34 test-checked DHs, in ten DHs (Alwar, Barmer, Bhilwara, Bikaner, Jaipur, Jalore, Jodhpur, Nagaur, Sikar and Udaipur), the deficiency of beds was more than 40 *per cent*.

Details are given in *Appendix 5.2*.

### **(ii) Availability of Beds against Norms in test-checked CHCs and PHCs**

IPHS prescribed minimum availability of four-six and 30 beds for a Primary Health Centre (PHC) and Community Health Centre (CHC) respectively.

Examination of availability of beds in the test-checked eight CHCs and 16 PHCs revealed that there was a shortage of beds in two PHCs (Baldara and Bhasawata Kalan) and in four CHCs (Jobner, Singhana, Asop and Sarada). Details are given in *Appendix 5.3*.

The State Government stated (January 2024) that sanction for increase in bed capacity has been issued on case-to-case basis and as per utility of beds requirement at competent level.

### **(iii) Availability of basic amenities in healthcare facilities**

IPHS require that Primary Health Centres and Health Sub-Centres should have their own buildings. If that is not possible, premises with adequate space should be rented in a central location with easy access to the population. The PHC/HSC should have facilities for electricity, all weather road, communication and separate toilets for males and females in addition to adequate availability of potable water.

As per the information provided by the State Government, out of 4,640 GMIs in eight test-checked districts, 1,021 GMIs<sup>115</sup> (22 *per cent*) did not comply with the above norms. Further, the following deficiencies were also brought out:

- Buildings of 21 *per cent* GMIs were in dilapidated condition and required repairs,
- 50 *per cent* GMIs had common toilets for males and females,
- 812 GMIs (17 *per cent*), including one CHC, 15 PHCs and 796 HSCs, had no electricity connection and 22 *per cent* GMIs<sup>116</sup> had no water connection. Details are given in *Appendix 5.4*.

Non-availability of electricity in the GMIs makes them incapable of proper storage of vaccines and many medicines, thus depriving the patients of the same.

Audit noticed that the utilisation under the ‘Community Sanitary Complexes’ component of *Swachh Bharat Mission-Gramin* in the State was 36 *per cent*

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114 In five districts, viz. Bharatpur, Churu, Kota, Jhalawar and Pali, district hospitals were not available as per Administrative Report 2021 of DMH&FW and information provided by the Department.

115 DH-Four, Urban CHC- Four, CHC-52, PHC-113, HSC-848.

116 CHC-01, PHC-31, HSC-990.



during the period 2017-22. Audit is of the opinion that the State Government could improve the availability of toilet facilities in Government Medical Institutions of the State through better utilisation of the funds of *Swachh Bharat Mission*.

The State Government stated (January 2024) that sanction for ₹ 4.95 crore and ₹ 4.98 crore were issued during 2022-23 and 2023-24 respectively for repair and maintenance of healthcare institutions. It was further stated that provisions are being made in drawings for creation of separate male and female toilets, potable drinking water and electricity facilities etc. in establishment of new health sub-centres and Primary Health Centres.

**Recommendation 11:** *The State Government should ensure availability of basic amenities like separate toilet facilities, electricity and potable drinking water in all the Government Medical Institutions of the State.*

**(iv) Insufficient infrastructure in Wards and Operation Theatres**

**(a) Primary and Secondary Care institutions**

**Operation Theatre (OT)**

IPHS provides that DHs should have a minimum of three OTs<sup>117</sup>, SDHs should have a minimum of two OTs<sup>118</sup> and CHCs should have minimum one OT<sup>119</sup> equipped with all instruments and facilities like Preparation Room, Pre-operative and Post-operative Resting Rooms, etc.

Status of availability of OTs and facilities in 20 test-checked GMIs<sup>120</sup> (April-July 2022) is shown in **Table 5.2** below:

**Table 5.2: Status of availability of OTs and facilities in OTs**

Name of Operation Theatre	DHs		SDHs/SHs		CHCs		Total number of GMIs without OTs
	Available	Not Available	Available	Not Available	Available	Not Available	
Elective OT/OT*	8	-	3	1	2	6	7
Emergency OT/ Family Welfare OT	8	-	1	3	Not Applicable	Not Applicable	3
Ophthalmology/ ENT OT	6	2	Not Applicable	Not Applicable	Not Applicable	Not Applicable	2
Preparation Room, Pre-operative Room and Post-operative Resting Rooms	6	2	4	-	3	5	7

Source: Information provided by test-checked GMIs.

\* For CHCs.

117 Three OTs in DH: Elective OT-Major, Emergency OT/Family Welfare (FW) OT and Ophthalmology/ENT OT.

118 Two OTs in SDH: Elective OT and Emergency OT/Family Welfare (FW) OT.

119 One OT in CHCs: Operation Theatre.

120 20 GMIs: Eight DHs, Four SDHs and Eight CHCs.

It can be seen from the Table that the required Operation Theatres and facilities in the Operation Theatres were deficient in most of the test-checked GMIs. Details are provided in *Appendix 5.5*.

The State Government stated (January 2024) that provisions for establishment of Operation Theatre and facilities in newly created DHs/SDHs/CHCs are being taken. It was also stated that Operation Theatre will be established in already working healthcare institutions after receipt of proposals and sanctions.

The fact remains that due to non-availability of Operation Theatres in test checked GMIs, beneficiaries could not get the facility and referred to GMIs situated at other places.

### (b) Tertiary Care institutions

#### Wards

National Medical Commission (erstwhile MCI) norms, 1999 applicable on Medical Colleges and Medical College attached Hospitals prescribe that Hospital Wards should have Clinical Demonstration Room, Examination and Treatment Room, Residential Doctors and Student Duty Room, Staff Room and Ward Pantry.

Audit test-checked 94 wards<sup>121</sup> in five Medical College Attached Hospitals and observed that facilities were often not provided as per norms of National Medical Commission, as depicted in **Table 5.3** below:

**Table 5.3: Availability of facilities in wards**

Name of Hospitals	Clinical Demonstration room		Examination and Treatment room		Resident Doctors and students Duty Room		Doctor's Room		Staff room		Ward Pantry	
	Number of Wards		Number of Wards		Number of Wards		Number of Wards		Number of Wards		Number of Wards	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Sir Padampat Institute of Neonatology and Pediatric Health, Jaipur	12	4	10	6	14	2	13	3	14	2	7	9
Rajkiya Mahila Chikitsalya, Ajmer	3	3	5	1	4	2	6	0	6	0	0	6
JLN Hospital, Ajmer	15	12	9	18	20	7	15	12	18	9	13	14
MB Government Hospital, Udaipur	12	27	12	27	21	18	25	14	14	25	14	25
Shree Khemraj Katara Government Satellite Hospital, Udaipur	0	6	1	5	0	6	0	6	1	5	0	6
<b>Total (94)</b>	<b>42</b>	<b>52</b>	<b>37</b>	<b>57</b>	<b>59</b>	<b>35</b>	<b>59</b>	<b>35</b>	<b>53</b>	<b>41</b>	<b>34</b>	<b>60</b>
<b>Percentage</b>	<b>45</b>	<b>55</b>	<b>39</b>	<b>61</b>	<b>63</b>	<b>37</b>	<b>63</b>	<b>37</b>	<b>56</b>	<b>44</b>	<b>36</b>	<b>64</b>

Source: Information provided by MCHs.

121 94 Wards: MB Government Hospital, Udaipur-39 wards, JLN Hospital, Ajmer-27 wards, Sir Padampat Institute of Neonatology and Pediatric Health, Jaipur-16, *Rajkiya Mahila Chikitsalya*, Ajmer- 6 wards and Shree Khemraj Katara Government Satellite Hospital, Udaipur-6.



It can be seen from the Table that there were significant shortcomings in Ward facilities in the test-checked Medical College Attached Hospitals, with the shortfall being most acute in case of MB Government Hospital, Udaipur.

The State Government informed (December 2023) that arrangements for Clinical Demonstration Room, Examination and Treatment Room and Staff Room have been made in all 39 wards at MB Government Hospital, Udaipur. However, supporting document was not provided with reply and irregularity noticed during Audit.

### **Infrastructure associated with Operation Theatres in Medical College Attached Hospitals**

Norms prescribed by Medical Council of India (MCI)<sup>122</sup> require each Operation Theatre (OT) to have at least a Post-operative Recovery Room (with at least 20 beds), Students Washing up and Dressing Room, Assistant room, Soiled Linen Room, Observation Gallery for students, etc.

The details regarding availability of these infrastructure in 19 OTs<sup>123</sup> provided by three Medical College Attached Hospitals are shown in **Table 5.4** below:

**Table 5.4: Availability of infrastructure in OTs at test-checked MCHs**

S. No.	Name of Hospital	Post-operative recovery room (minimum of 20 beds)			Students Washing up and dressing up room		Assistant's room		Soiled Linen room		Observation gallery for students	
		Yes	No	No. of OT Rooms (where beds are less than 20)	Yes	No	Yes	No	Yes	No	Yes	No
1	MB Government Hospital, Udaipur	3	7	2	5	7	4	8	6	6	3	9
2	JLN Hospital, Ajmer	1	1	4	2	4	4	2	3	3	0	6
3	Sir Padampat Institute of Neonatology and Pediatric Health, Jaipur	Not Applicable <sup>124</sup>	Not Applicable	1	1	0	1	0	1	0	0	1
<b>Total</b>		<b>4</b>	<b>8</b>	<b>7</b>	<b>8</b>	<b>11</b>	<b>9</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>3</b>	<b>16</b>
<b>Percentage</b>		<b>21</b>	<b>42</b>	<b>37</b>	<b>42</b>	<b>58</b>	<b>47</b>	<b>53</b>	<b>53</b>	<b>47</b>	<b>16</b>	<b>84</b>

Source: Information provided by GMIs.

It can be seen from the Table that the facilities in the Operation Theatres of the test-checked tertiary care institutions were severely deficient in several key aspects required as per norms.

The State Government stated (December 2023) that Post-operative recovery room, Students Washing up and dressing up room and Soiled Linen room have been provided in MB Government Hospital, Udaipur. However, irregularities were noticed during Audit and supporting document was not provided with reply.

122 Norms revised from November 2010.

123 19 OTs: MB Government Hospital, Udaipur-12 OTs, JLN Hospital, Ajmer-six OTs and Sir Padampat Institute of Neonatology and Pediatric Health, Jaipur- one OT.

124 Not Applicable: Less than 20 beds hence, post-operative recovery room not required.