

Chapter 2

Human Resources

Highlights

- The Government of Chhattisgarh (GoCG) had not formulated any human resource policy for the healthcare sector to ensure availability of Doctors, Nurses and Paramedics in healthcare institutions as per the IPHS norms. In the Public Health and Family Welfare Department, Chhattisgarh there was shortage of 25,793 (34 *per cent*) manpower against the sanctioned strength of 74,797.
- Though the doctor population ratio of State had improved during 2016-22 and was 1: 2,492 as of March 2022, it was still far behind the WHO benchmark of 1:1,000 and national ratio of 1:1,456. The post of doctors was not sanctioned uniformly on the basis of population in the State, resulting in uneven distribution of doctors across the districts ranging from one doctor for 2,181 persons to 10,969 persons.
- In the 23 District Hospitals, there was shortage in the sanctioned post of Specialist doctors (three *per cent*), Staff nurse (27 *per cent*) and paramedical staff (24 *per cent*) according to the criteria prescribed in the IPHS norms. Also, there was shortage in availability of specialist doctors (33 *per cent*), Medical officer (four *per cent*), and paramedics (13 *per cent*) against the sanctioned strength.
- In 172 CHCs in the State there was shortage of Specialist doctors (79 *per cent*), Staff Nurse (five *per cent*) and paramedics (three *per cent*) respectively against IPHS norms. In 776 PHCs in the State, there was shortage of Medical Officers (33 *per cent*), Staff nurse (42 *per cent*) and paramedics (50 *per cent*) against the IPHS norms.
- In 4,996 SHCs in the State, 17 *per cent* post of ANMs (Auxiliary Nurse and Midwife) were vacant against the sanctioned strength. In 502 SHCs, ANMs were not posted and thus maternity services in these SHCs could not be provided to the pregnant women as per IPHS norms.
- Against the total sanctioned strength of 915 posts in the cadre of doctors (256), staff nurse (528) and paramedical staff (131) in the State, total 694 persons in position in the cadre of Doctors (190), staff nurse (366) and paramedical staff (138) were deployed with shortage of 24.15 *per cent* in 23 MCHs. Post of Doctors, staff nurse and paramedical staff was not sanctioned in remaining seven MCH wings.
- Shortage of Specialist doctors, Staff nurse and paramedical staff ranged between 58 *per cent* and 30 *per cent*; 64 *per cent* and 15 *per cent*; 55 *per cent* and 24 *per cent* respectively in test checked five GMCs/ GMCHs.
- In DKSPGI super specialty Hospital, Raipur, only nine (3.21 *per cent*) posts of doctors (2), Staff nurse (5) and paramedical staff (2) was filled with regular

staff against the sanctioned strength of 280 and 208 posts were filled with contractual staff.

- Staff nurse to Bed ratio in ICU ranged upto 1:20 against the norms of 1:1 and in non-ICU wards this ratio ranged upto 1:39 against the norms of 1:3 in test checked GMCHs. Further, sanctioned strength of staff nurse was also less than the MCI norms and it was not fixed in accordance with the bed capacity.
- Though, four new GMCs and one private college was opened during 2016-22 and intake capacity (UG) has been increased to 1,370 from 1,100, none of the GMCs could attain maximum permissible intake capacity, as of March 2022.
- There was shortage of doctors (29 per cent), staff nurse (60 per cent) and paramedics (30 per cent) in AYUSH facilities and 29 per cent posts of teaching staff were lying vacant in Ayurveda Colleges.
- In selected districts, 130 out of 538 Ayurvedic dispensaries were functioning without doctor.

2.1 Introduction

Human Resources (HR) Management plays a significant role in healthcare delivery system and systematic management is critical. The delivery of adequate and quality healthcare services in hospitals largely depends on the adequate availability of doctors, staff nurses (SN), paramedical and other supporting staffs.

2.2 Policy/norms for Human Resources Management

National Health Policy 2017 duly acknowledges the roadmap of the 12th Five Year Plan for managing human resources for health. Framework for implementation of NRHM 2012-17 provides to fill the gaps in HR in line with IPHS norms but in proportion to caseload. The IPHS and NMC prescribe the minimum essential and desirable requirement of HR to be made available for different level of healthcare institutions. Audit observed that the Department had not prepared any human resources policy to fill the gaps in the availability of human resource (i.e. Doctors, SN, paramedical and other staff) to meet the requirement of the healthcare institutions according to the IPHS/ NMC norms.

DHS stated (January 2023) that HR policy, 2004 was formulated, however, the same was not implemented and assured to formulate a HR Policy by reviewing the present scenario.

2.3 Human resource availability against sanctioned strength

Audit collected data on availability of human resources against the sanctioned strength from the Directorates (Health Services, Medical Education, National Health Mission, AYUSH and Food and Drugs Control Administration). The combined position of sanctioned strength and persons-in-position for the public health sector in the State as on 31 March 2022 is presented in **Table - 2.1:**

Table - 2.1: Directorate wise position of human resource as of March 2022

Name of the Department/ Institution	Sanctioned strength healthcare workforce	Share in Total Workforce (per cent)	Actual Person-in-Position	Vacant Posts	Vacancy (in per cent)
Director Health Services (DHS)	38,369	51	26,868	11,501	30
Director Medical Education (DME)	13,359	18	4,976	8,383	63
National Health Mission (NHM)	17,183	23	13,253	3,930	23
AYUSH	5,189	7	3,648	1,541	30
Food and Drugs Control Administration (FDCA)	697	1	259	438	63
Total	74,797	100	49,004	25,793	34

(Source: Administrative report of the Department 2021-22 and information provided by HIs)

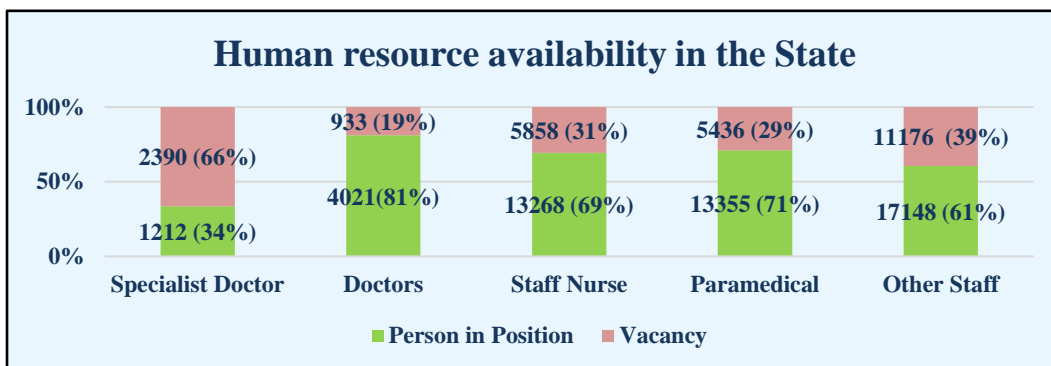
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No shortage	Shortage range		
	1-25 per cent	25-50 per cent	50-100 per cent

It could be seen from the above table that 49,004 manpower was deployed in various HIs in the State as against the total sanctioned posts of 74,797, as of March 2022, leaving vacancy of 34 per cent.

Manpower position in Health Department, as on 31 March 2022 has been depicted in *Chart - 2.1*. During the period 2019-22, the GoCG had made recruitment¹ of 789 Doctors, 844 Staff Nurse and 1043 Para medical staff in HIs of the State on regular basis against the recruitment published for 1794 Doctors, 1620 Staff Nurse and 3047 Para medical staff. Lack of efforts by the Department in filling of vacant post of Doctors, Staff Nurse and Para medical staff adversely affected the healthcare services in the State.

Chart - 2.1: Manpower position in public health sector in State (as on 31 March 2022)



(Source: Administrative report 2021-22 and information provided by HIs)

It could be seen from the above chart that the vacancy of Specialist doctors and Medical Officer was 66 per cent and 19 per cent respectively. Similarly, the

¹ Data compiled by Audit from the Vidhan Sabha question replies provided by DHS .

vacancy of Staff nurse, paramedical staff and other staff was 31 *per cent*, 29 *per cent* and 39 *per cent* respectively, as of March 2022.

The overall directorate wise position of human resources, as of March 2022 in the State is detailed in succeeding paragraphs:

2.4 Availability of staff in various posts under Director, Health Services (DHS)

In DHS, 11,501 posts (29.97 *per cent*) were vacant against the total sanctioned posts of 38,369. Category wise vacancy position is shown in *Table - 2.2*:

Table - 2.2: Availability of staff in various posts under DHS as of March 2022

Category	Sanctioned Post	Person in position	Vacant Posts	Vacancy (per cent)
Doctor	3,813	2,493	1,320	34.62
Nursing cadre	13,386	10,260	3,126	23.35
Paramedics	11,912	8,351	3,561	29.89
Others	9,258	5,764	3,494	37.74
Total	38,369	26,868	11,501	29.97

(Source: Administrative report of Department 2021-22)

From the above table, it could be seen that as on 31 March 2022, there were vacancies in the cadre of doctors (34.62 *per cent*), nurses (23.35 *per cent*), paramedics (29.89 *per cent*) and others (37.74 *per cent*). As on 31 March 2022, vacancy position in some of the important posts under DHS is shown in *Table - 2.3*:

Table - 2.3: Vacancy position in some important posts under DHS

Sr. No.	Post Name	Sanctioned Post	Working Strength	Vacant Posts	Vacancy (in per cent)
Doctors					
1	Specialist Doctor	1,586	310	1,276	80.45
2	Medical Officer/doctor	2,227	2,183	44	1.97
	Sub total (A)	3,813	2,493	1,320	34.62
Nursing cadre					
1	Rural Health Organiser (female)	6,191	5,209	982	15.86
2	Supervisor (female)	1,133	829	304	26.83
3	Staff nurse	5,698	4,080	1,618	28.40
4	Nursing sister and others	364	142	222	60.99
	Sub total (B)	13,386	10,260	3,126	23.35
Paramedics					
1	Supervisor (male)	974	819	155	15.91

Sr. No.	Post Name	Sanctioned Post	Working Strength	Vacant Posts	Vacancy (in per cent)
2	Male health worker	5,353	3,959	1,394	26.04
3	Ophthalmic Assistant Officer	842	515	327	38.84
4	Dental technician	25	0	25	100
5	O. T Technician	98	6	92	93.88
6	ECG Technician	26	0	26	100
7	Audiometrician	1	0	1	100
8	Dermatology technician	1	0	1	100
9	Pharmacist	1,329	981	348	26.19
10	Radiographer	271	206	65	23.99
11	Medical Lab Technologist	1,319	1,003	316	23.96
12	Lab Assistant	54	18	36	66.67
13	Dresser	1,225	522	703	57.39
14	Other paramedical staff	394	322	72	18.27
Sub total (C)		11,912	8,351	3,561	29.89
Other staff					
1	O.P.D attendant	120	18	102	85.00
2	O.T attendant	323	170	153	47.37
3	Accountant/Assist. Grade/ Cashier	1,682	1,200	482	28.66
4	Driver	560	394	166	29.64
5	Peon	640	487	153	23.91
6	Ward Boy	1,307	853	454	34.74
7	Ward Aaya	1,406	678	728	51.78
8	Sweeper	725	527	198	27.31
9	Washer	162	117	45	27.78
10	Guard	274	178	96	35.04
11	Others	2,059	1,142	917	44.54
Sub total (D)		9,258	5,764	3,494	37.74
Grand Total (A)+(B)+(C)+(D)		38,369	26,868	11,501	29.97

(Source: Administrative report of Department 2021-22)

Color code:

Excess/No shortage	Shortage range		
	1-25 per cent	25-50 per cent	50-100 per cent

It could be seen from the above table that there was 100 per cent shortage of manpower in the post of Dental Technician, ECG Technician, Audiometrician, Dermatology Technician besides acute shortage in other important post i.e. OT Technician (94 per cent) and OPD attendant (85 per cent).

2.4.1 Uneven distribution of sanctioned post of doctors in public HIs at District Level

Chhattisgarh has a total of 3,813 sanctioned posts of doctors² under DHS, i.e. one government doctor for 6,665 people³. It was observed that sanctioned posts of doctors have no correlation with population, as shown in the map *Chart - 2.2*.

Chart - 2.2: Uneven distribution of sanctioned post of doctors at district level



Color code: SS of one doctor for population range

Less than 4000	4000-6000	6000-8000	More than 8000

As evident from the map in *Chart - 2.2*, one doctor was sanctioned for 2,181 people in Dantewada district whereas one doctor was sanctioned for 10,969 people in Raipur district.

² Doctors include specialist doctors and medical officers

³ Total population of 2.54 crore as per census 2011 has been considered

2.4.2 District wise availability of doctors in the State

In DHS, doctors have several designations like Specialist doctor, Medical Officer, Chief Medical and Health Officer, Civil Surgeon, etc. Overall, DHS has a total of 2,493 public doctors available against their total sanctioned strength of 3,813. Thus, 34.62 per cent posts of doctors were lying vacant in the State, as on 31 March 2022. District wise position of vacancy along with population of districts is shown in the **Table - 2.4:**

Table - 2.4: District wise availability of doctors under DHS, as of March 2022

S. N.	District Name	Population as per census (2011)	Sanctioned Post	Working Strength	Vacant Posts	Vacant posts (in per cent)
1	Raipur	21,60,876	197	212	-15	-
2	Durg	17,21,726	196	181	15	7.65
3	Bilaspur	16,25,502	185	140	45	24.32
4	Janjgir-Champa	16,19,707	189	89	100	52.91
5	Rajnandgaon	15,37,133	188	118	70	37.23
6	Raigarh	14,93,627	191	132	59	30.89
7	Baloda Bazar	13,05,343	129	77	52	40.31
8	Korba	12,06,563	133	118	15	11.28
9	Mahasamund	10,32,754	117	89	28	23.93
10	Jashpur	8,51,669	148	91	57	38.51
11	Surguja	8,40,352	150	115	35	23.33
12	Bastar	8,34,375	173	76	97	56.07
13	Balod	8,26,165	121	81	40	33.06
14	Kabirdham	8,22,526	116	56	60	51.72
15	Dhamtari	7,99,781	120	74	46	38.33
16	Bemetara	7,95,759	106	80	26	24.53
17	Surajpur	7,89,043	153	114	39	25.49
18	Kanker	7,48,941	159	94	65	40.88
19	Mungeli	7,01,707	112	85	27	24.11
20	Korea	6,58,917	110	84	26	23.64

S. N.	District Name	Population as per census (2011)	Sanctioned Post	Working Strength	Vacant Posts	Vacant posts (in per cent)
21	Balrampur	5,98,855	143	70	73	51.05
22	Gariyaband	5,97,653	114	79	35	30.70
23	Kondagaon	5,78,326	122	48	74	60.66
24	Gaurella-Pendra-Marwahi	3,36,420	96	38	58	60.42
25	Dantewada	2,83,479	130	62	68	52.31
26	Bijapur	2,55,230	88	28	60	68.18
27	Sukma	2,50,159	75	31	44	58.67
28	Narayanpur	1,39,820	52	31	21	40.38
Total		2,54,12,408	3813	2493	1320	34.62

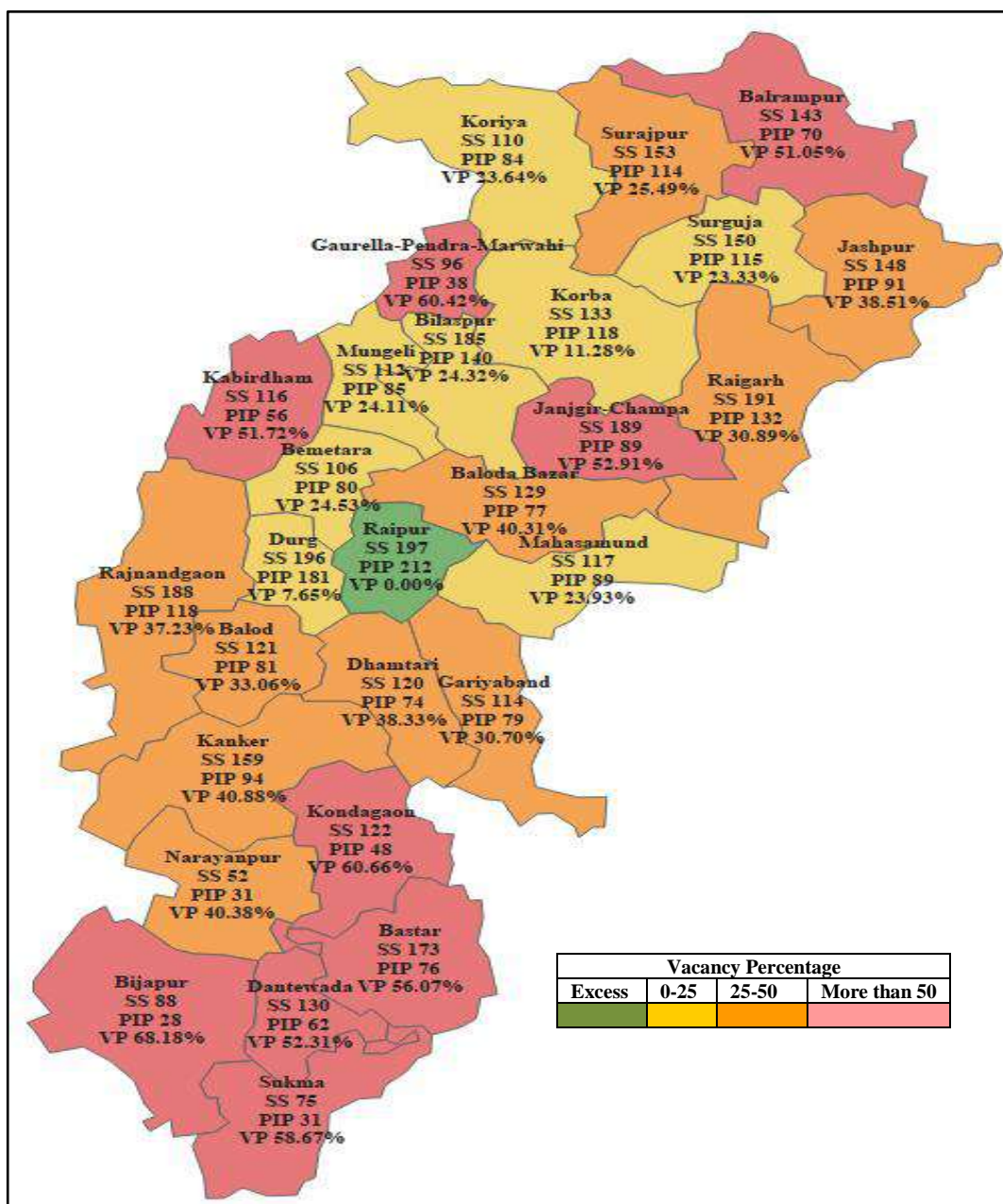
(Source: Administrative report of the Department 2021-22)

Color code:

Excess/No shortage	Shortage range		
	1-25 per cent	25-50 per cent	50-100 per cent

It can be seen from the above table that posts of Doctors were vacant in all the 28 districts except Raipur where 15 doctors were posted over and above the sanctioned strength. Vacancies in terms of number of posts at district level ranged from 15 in Durg (lowest) to (highest) 100 in Janjgir-Champa district. Vacancy percentage was more than 50 per cent in nine districts, 25 to 50 per cent in 10 districts and less than 25 per cent in eight districts. In terms of percentage, eight per cent to 68 per cent posts of doctors were vacant in the districts indicating skewed distribution of available doctors across the districts of Chhattisgarh, which was depicted in the following *Chart - 2.3*.

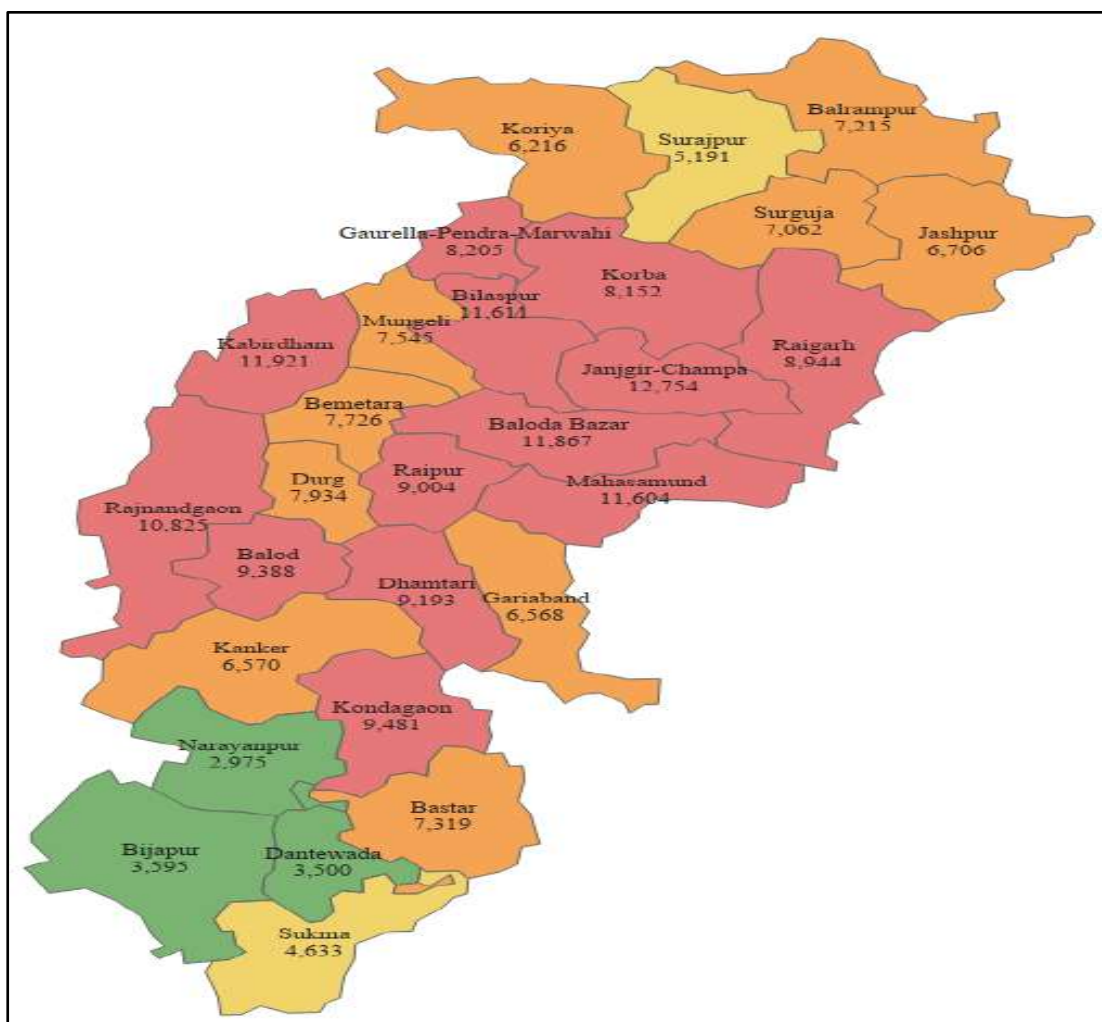
Chart - 2.3: Heatmap showing the district wise vacancy of Doctors in the State



2.4.3 Doctor to Population Ratio in the State

In the primary and secondary healthcare sector HIs functioning under DHS, 3,081 doctors (2,493 from DHS + 588 contractual from NHM/DMFT) are rendering services, as of March 2022. It makes availability of one public doctor for 8,248 people in Chhattisgarh. It was found that the availability of public doctors at district level is not uniform across the districts, and it varies from one public doctor for 2,975 people in Narayanpur district to as low as one doctor for 12,754 people in Janjgir-Champa district, as shown in *Chart - 2.4*.

Chart - 2.4: Doctor population ratio is uneven in the districts of Chhattisgarh



Color code: PIP of one doctor for population range

Less than 4000	4000-6000	6000-8000	More than 8000

2.4.4 Trend of doctor population ratio

As per census 2011, population of Chhattisgarh State was 2,54,12,408. World Health Organisation (WHO) had recommended one doctor for every 1,000 population. Accordingly, the State should have 25,412 doctors. As per records of Chhattisgarh Medical Council (CGMC), the State had a total of 11,975 registered doctors (public and private), as of March 2022. As per projected population of State (2021-22), one doctor was catering to population of 2,492 in Chhattisgarh which was less than the WHO recommendation.

Audit observed that year wise doctor to population ratio was not maintained by the Department. As the Department had not maintained any year wise ratio of doctor to population, Audit calculated it by taking into consideration the projected

population⁴ of State and number of doctors registered with CGMC, as detailed in **Table - 2.5**:

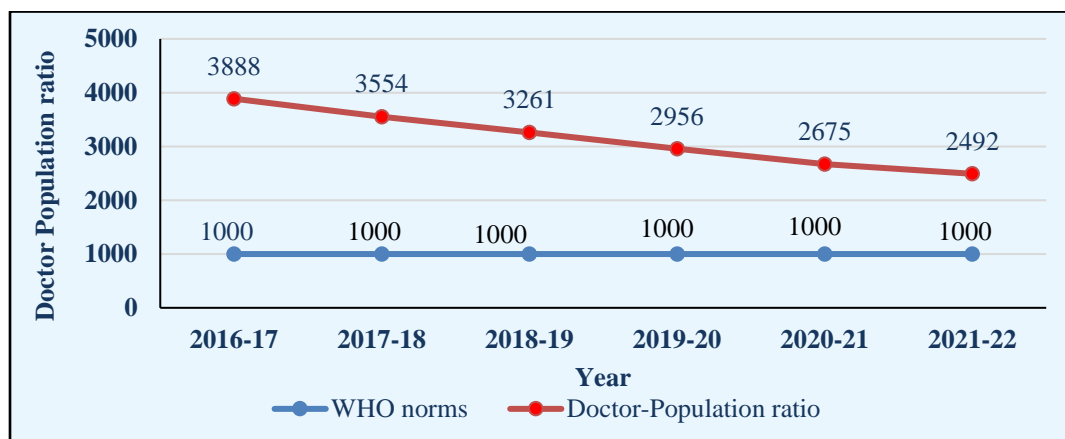
Table - 2.5: Statement showing year wise population, doctors registered and doctors population ratio

Year	Projected Population (in lakh) as per data published by GoI	Doctors registered in CGMC	Doctor population ratio in State
2016-17	279.56	7,190	1:3888
2017-18	283.40	7,975	1:3554
2018-19	287.24	8,808	1:3261
2019-20	291.09	9,847	1:2956
2020-21	294.93	11,024	1:2675
2021-22	298.36	11,975	1:2492

(Source: Information furnished by CGMC)

The trend of doctor population ratio against the WHO norms over the years 2016-22 is shown in following **Chart - 2.5**:

Chart - 2.5: Chart showing year wise Doctor-Population Ratio with respect to WHO norms



It could be seen from the **Chart - 2.5** that though the ratio of doctor to population has significantly improved during 2016-22 however, it was much lower than the national ratio (1:1456) and also WHO norms (1:1000).

DME stated (July 2022) that the Department does not calculate doctor population ratio and the registration of doctors was maintained by CGMC.

Reply confirms that doctor population ratio was not maintained by the Department and no policy or plan was prepared to achieve standard doctor population ratio as per WHO norms.

⁴ Data published by National Commission on Population MoHFW

2.4.5 Availability of Nursing and Paramedical staff

Under DHS, in nursing cadre overall availability of nursing staff was 10,260 against the sanctioned post of 13,386 with 3,126 vacant posts. Similarly, under paramedical staff cadre, availability of staff was 8,351 against the sanctioned post of 11,912 with 3,561 vacant posts.

District wise shortage (in *per cent*) in availability against sanctioned post of nursing and paramedical staff indicate skewness in availability of manpower across the districts as depicted in the *Chart - 2.6 (a) and (b)*:

Chart - 2.6 (a): District wise Vacancy position (in *per cent*) in nursing staff

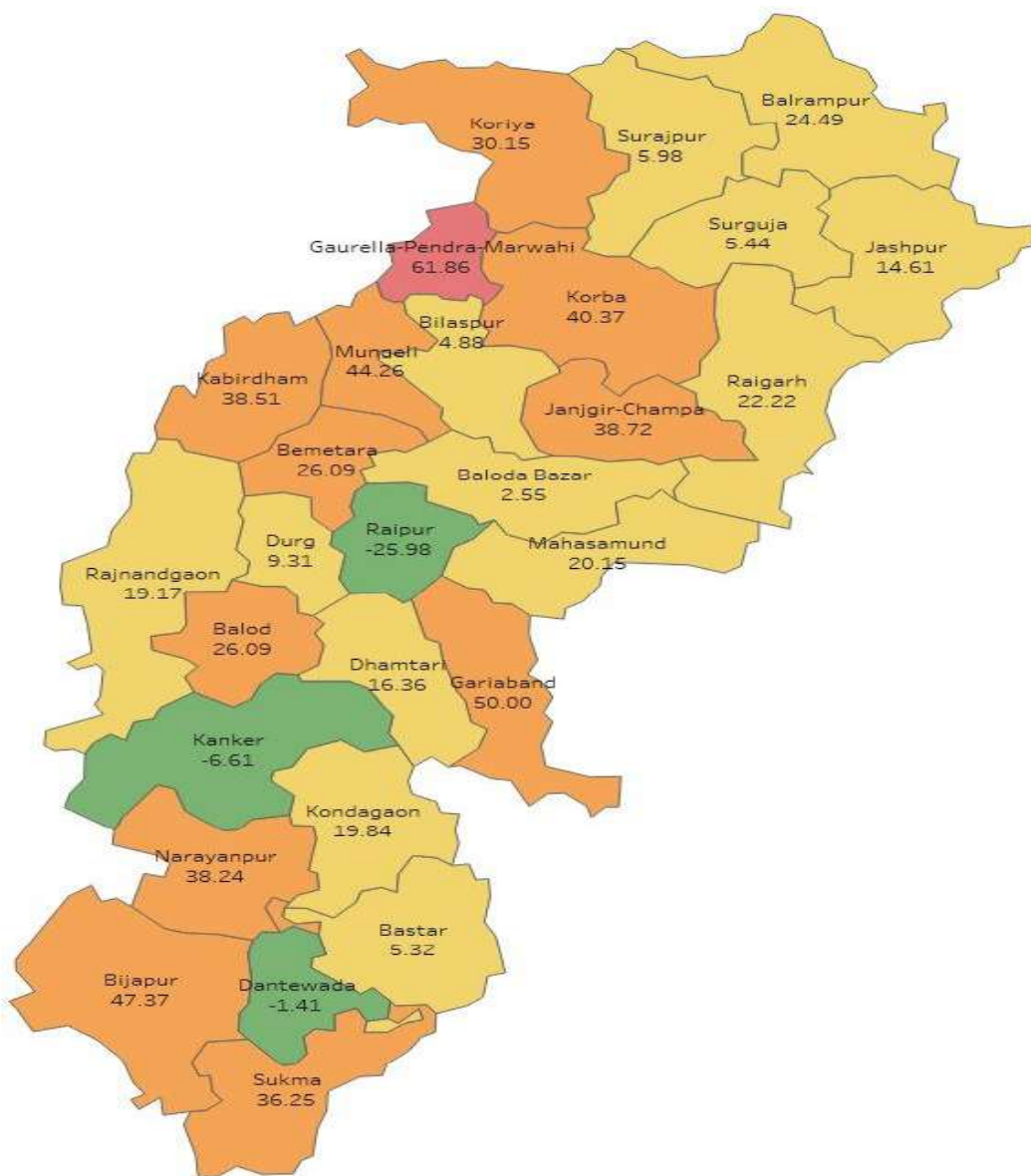


(Source: Analysis of data provided by CMHOs)

Color code:

Excess or nil vacancy	0-25 per cent	25-50 per cent	More than 50 per cent

Chart – 2.6 (b): District wise Vacancy position (in per cent) in Paramedical Staff



(Source: Analysis of data provided by CMHOs)

Color code:

Excess or nil vacancy	0-25 per cent	25-50 per cent	More than 50 per cent

It could be seen from the above map that there was shortage of staff nurse in 22 districts upto 57 per cent. Audit further observed that excess staff nurse was posted in six districts upto 36 per cent against the sanctioned strength. Similarly, posts of paramedical staff was vacant in 25 districts upto 62 per cent and was excess in three districts upto 26 per cent against sanctioned strength.

2.5 Human Resources in DHs/ MCHs/ CHCs/ PHCs/ SHCs in the State

The delivery of quality healthcare services in hospitals largely depends on the adequate availability of doctors, nurses, para-medical and other supporting staffs. Audit observed that the Department did not have any centralised database of the sanctioned strength and deployment of doctors, nurses and paramedical staff in the HIs for the overall State. In the absence of this information, overall shortage of staff in the State could not be ascertained.

IPHS norms envisage that doctors and nurses should be available round the clock in the IPDs to provide due medical care to the in-patients. These norms also prescribe the minimum number of doctors and nurses to be available in different hospitals upto the district level according to the number of sanctioned beds.

Audit observed that the GoCG had not laid down any norms for allocation of human resources to the various categories of HIs (DHs, CHCs, PHCs and SHCs) in the State since its formation (November 2000). The GoCG had notified from time to time sanctioned strength of various human resources to be deployed in the HIs.

2.5.1 Availability of manpower in District Hospitals

In the State, one 500 bedded DH, Durg, five 200 bedded DHs⁵ and 17 numbers of 100 bedded DHs⁶ were in operation, as of March 2022. The GoCG had sanctioned 2,672 posts of doctors, nurses and other paramedical staffs, as of March 2022 against which 1,936 (72.45 per cent) were posted on regular basis leaving 736 (27.55 per cent) vacancies in the DHs. The Department had engaged 836 manpower on contractual basis under various cadres. The details of HR against sanctioned setup and IPHS norms in all DHs are shown in the **Table - 2.6:**

Table - 2.6: Availability of human resources against the sanctioned set up and IPHS norms of all DHs in the State

Cadre	As per IPHS norms	Sanction strength	PIP			Vacancy against IPHS norms (in per cent)	Vacancy against SS (in per cent)
			Regular	Contractual	Total		
1	2	3	4	5	6 (4+5)	7 (7/2*100)	8(8/3*100)
Specialist Doctors							
Medicine	49	45	24	3	27	22 (44.90)	18 (40.00)
Surgery	48	44	19	5	24	24 (50)	20 (45.45)
Obstetric & Gynae	55	47	29	7	36	19 (34.55)	11 (23.40)
Paediatrics	54	46	29	6	35	19 (35.19)	11 (23.91)
Anaesthesia	48	43	16	6	22	26 (54.17)	21 (48.84)
Ophthalmology	24	25	17	5	22	2 (8.33)	3 (12)
Orthopaedics	24	26	20	5	25	-1 (-4.17)	1 (3.85)

⁵ DH: Bastar, Bilaspur, Dhamtari, Raipur and Rajnandgaon

⁶ DH: Balod, Balodabazar, Balrampur, Bemetara, Bijapur, Dantewada, Gariyaband, GPM, Janjgir-Champa, Jashpur, Kabirdham, Kondagaon, Korea, Mungeli, Narayanpur, Sukma and Surajpur

Cadre	As per IPHS norms	Sanction strength	PIP			Vacancy against IPHS norms (in per cent)	Vacancy against SS (in per cent)
			Regular	Contractual	Total		
1	2	3	4	5	6 (4+5)	7 (7/2*100)	8(8/3*100)
Radiology	24	27	16	2	18	6 (25)	9 (33.33)
Pathology	31	38	17	2	19	12 (38.71)	19 (50)
ENT	24	26	17	2	19	5 (20.83)	7 (26.92)
Dental	25	27	25	4	29	-4 (-16)	-2 (-7.41)
Psychiatry	23	22	2	0	2	21 (91.3)	20 (90.91)
Total specialist Doctors (A)	429	416	231	47	278	151(35.20)	138(33.17)
AYUSH Doctors (B)	24	11	12	0	12	12 (50)	-1 (-9.09)
Medical Officer (C)	275	450	350	81	431	-156 (-56.73)	19 (4.22)
Subtotal Medical officers	299	461	362	81	443	-144(-48.16)	18(3.90)
Staff Nurse (D)	1440	1057	854	308	1162	278 (19.31)	-105 (-9.93)
Paramedical Staff (E)	785	598	390	130	520	265 (33.76)	78 (13.04)
Others (F)	262	140	99	270	369	-107 (-40.84)	-229 (-163.57)
Grand Total A+B+C+D+E+F	3215	2672	1936	836	2772	443 (13.78)	-100 (-0.04)

(Source: Compiled from information provided by DHs)

Color code:

Excess/No shortage	Shortage range		
	1-25 per cent	25-50 per cent	50-100 per cent

From the above table Audit observed the following:

- There was shortage of sanctioned set-up of Specialist Doctors in various vital departments like general medicine, general surgery, obstetrics and gynaecology, paediatrics, anesthetic services and SN and paramedics etc., as compared to IPHS norms for DH.
- Against the requirement of 429 Specialist Doctors under IPHS norms, GoCG had sanctioned 416 posts. Vacancy of Specialist Doctors in all DHs of the State was 35.20 per cent and 33.17 per cent against IPHS norms and SS respectively.
- There was shortage of 18 (4 per cent) doctors (Medical Officers and AYUSH) in all DHs against the sanctioned strength of 461.
- Posts of SN were not sanctioned according to IPHS norms, in nine 100 bedded DHs⁷, 19 to 37 posts against 45; in five 200 bedded DHs⁸, 45 to 67 against 90 and in one 500 bedded DH, 121 posts against 225 was sanctioned. Overall vacancy in SN cadre was 19.31 per cent against IPHS norms.

⁷ Balod, Balodabazar, Balrampur, Bemetara, Bijapur, Gariyaband, Kondagaon, Sukma and Surajpur

⁸ Bastar, Bilaspur, Dhamtari, Raipur and Rajnandgaon

- Vacancy in paramedical cadre against IPHS norms and SS was 33.76 and 13.04 per cent respectively.

Availability of Specialist Doctors, Medical Officers, SN and paramedical staff in 23 DHs is detailed in *Appendix - 2.1* and in the following *Charts - 2.7(a), (b), (c) and (d)*:

Chart - 2.7(a): Availability of Specialist Doctors in DHs (including contractual staff)

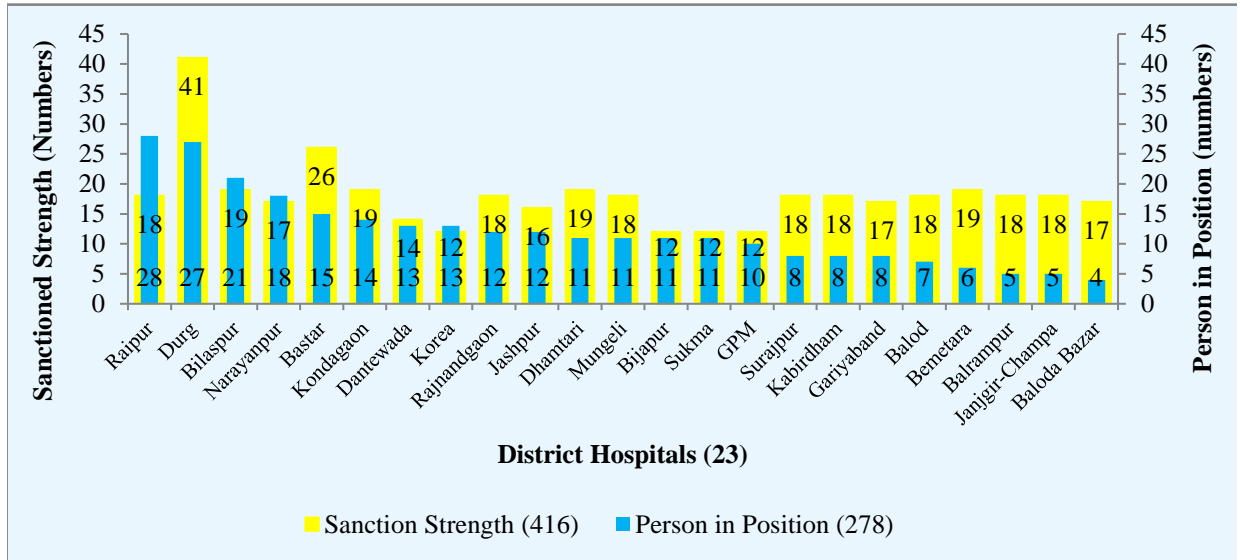


Chart - 2.7 (b): Availability of medical officers in DHs (including contractual staff)

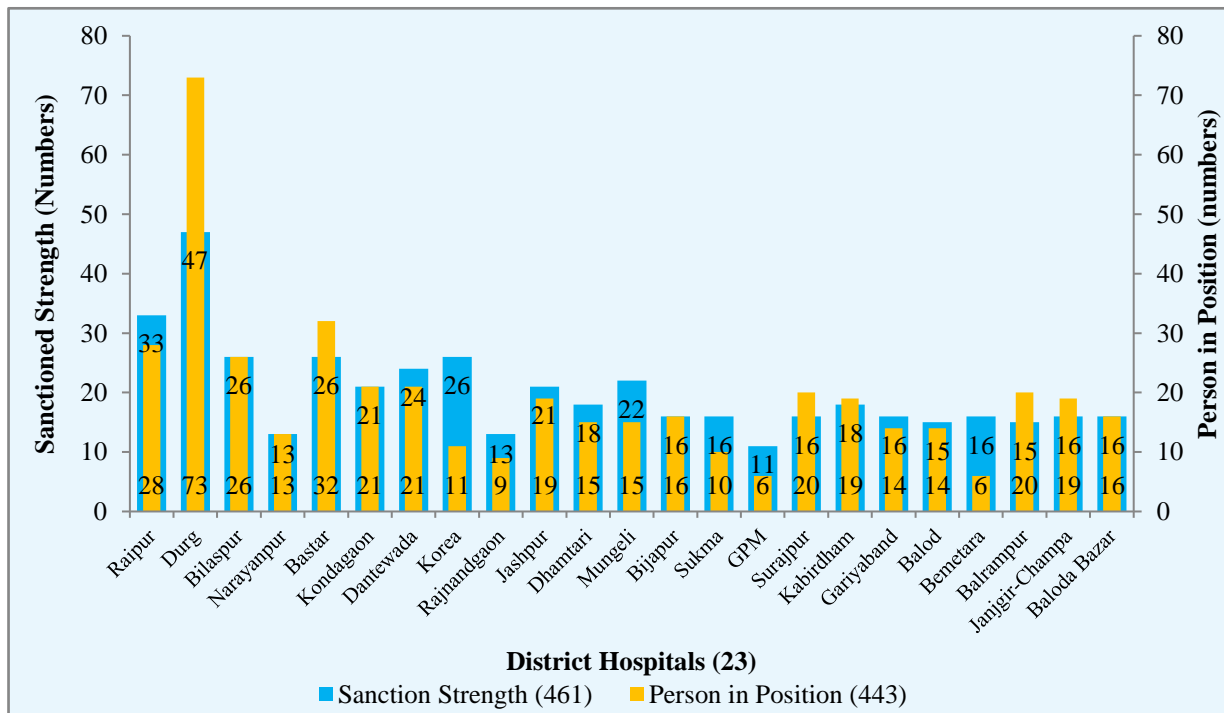


Chart - 2.7(c): Availability of Staff Nurse in DHs (including contractual staff)

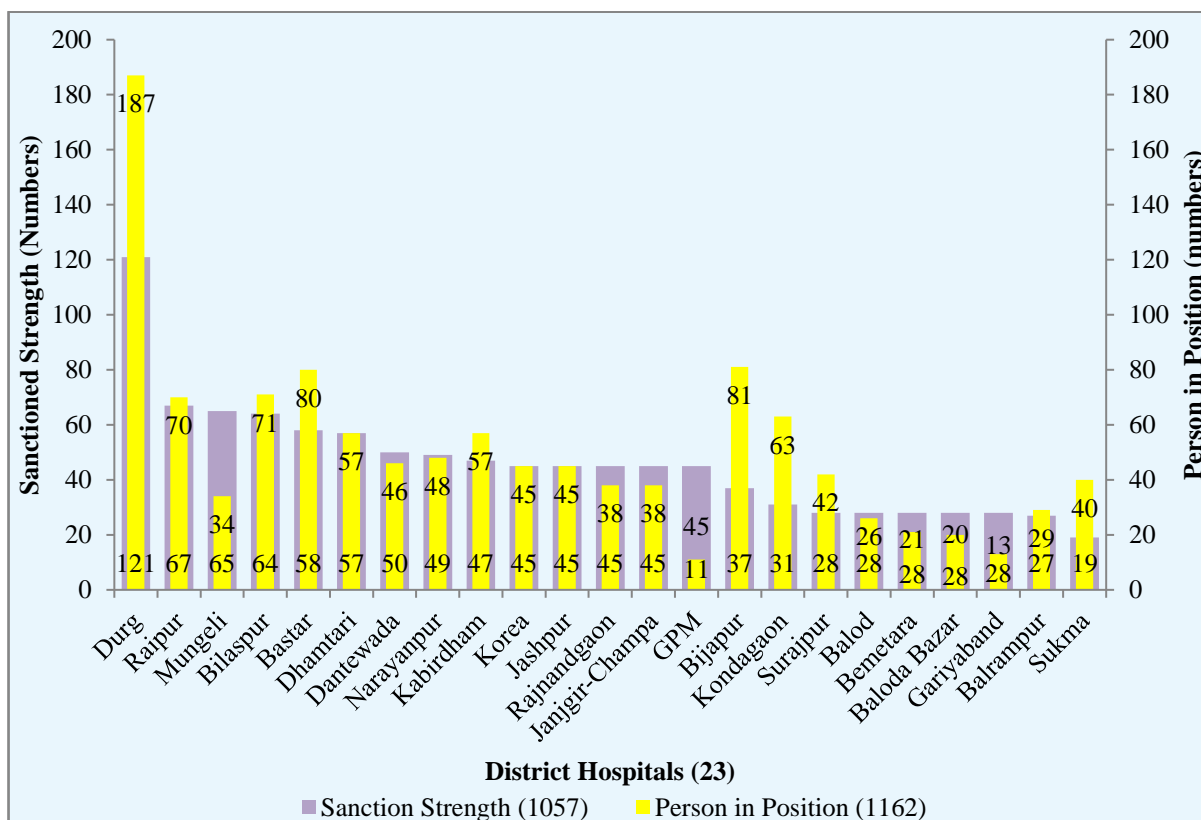
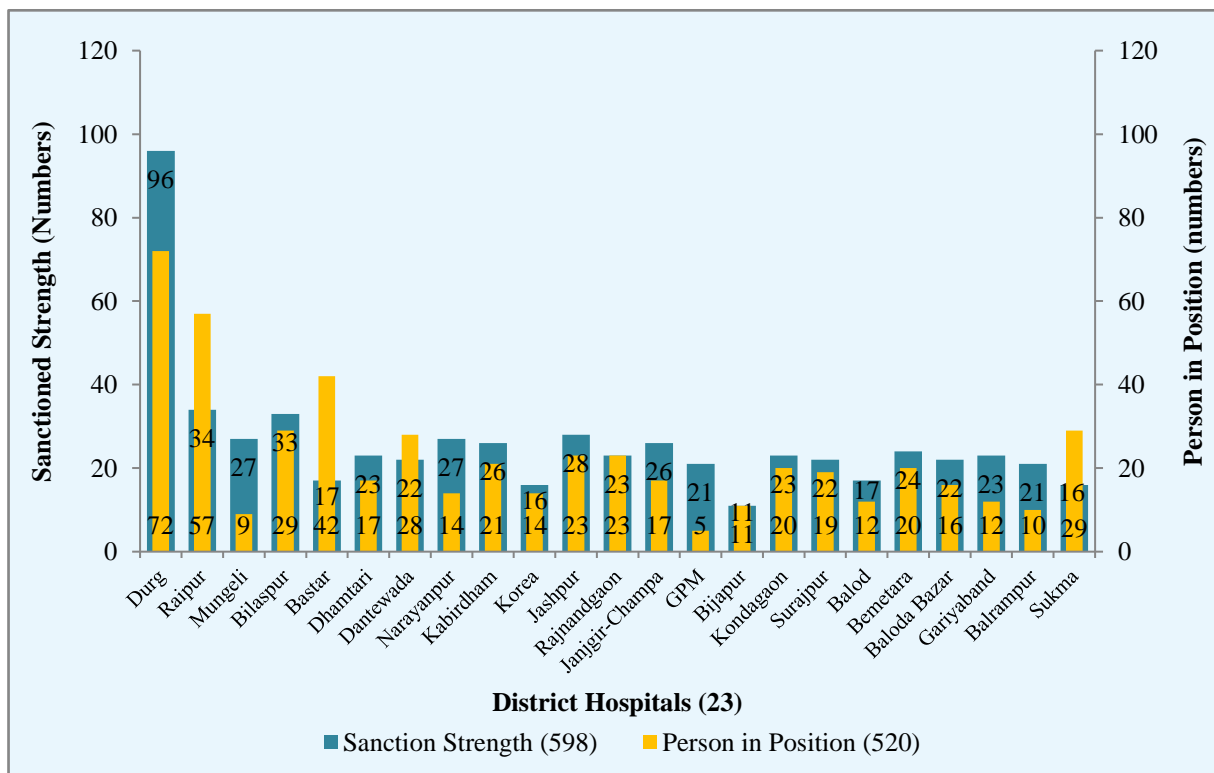


Chart - 2.7 (d): Availability of paramedical staff in DHs (including contractual staff)



2.5.2 Availability of manpower in Community Health Centres

The GoCG had sanctioned 4,720 posts of various cadres viz., Doctors (1,221), SNs (1,606), paramedical staff (1,014) and others (879) in 172 CHCs of the State. Out of 4,720 sanctioned posts, 4,657 persons were posted which includes doctors (1,032), SN (1,628), paramedical staff (1,163) and others (834), as of March 2022. Accordingly, there was 1.33 per cent vacancy in the State, as detailed in *Appendix - 2.2* and in the *Table - 2.7*:

Table - 2.7: Availability of Human Resources against the sanctioned set up and IPHS norms in all CHCs in the State

Cadre	Required as per IPHS norms	Sanction Strength	PIP		Total PIP	Shortage/ excess as per IPHS norms (in per cent)	Shortage/ excess as per SS (in per cent)
			Regular	Contractual			
General Surgeon	172	142	8	0	8	164 (95.35)	134 (94.37)
Physician	172	77	24	0	24	148 (86.05)	53 (68.83)
Obstetrician & Gynaecologist	172	163	22	0	22	150 (87.21)	141 (86.5)
Paediatrician	172	162	33	0	33	139 (80.81)	129 (79.63)
Anesthetist	172	146	3	0	3	169 (98.26)	143 (97.95)
Dental Surgeon	172	79	49	79	128	44 (25.58)	-49 (-62.03)
Sub total specialist doctor	1,032	769	139	79	218	814(78.88)	551 (71.65)
General Duty Medical Officer	344	432	424	74	498	-154 (-44.77)	-66 (-15.28)
Medical Officer (AYUSH)	172	20	9	307	316	-144 (-83.74)	-296 (-1480)
Total doctors	1,548	1,221	572	460	1,032	516 (33.33)	189(15.48)
Staff Nurse	1,720	1,606	1,246	382	1,628	92(5.35)	-22 (-1.37)
Paramedical Staff	1,204	1014	733	430	1,163	41 (3.41)	-149 (-14.69)
Others	2,752	879	526	308	834	1918 (69.69)	45 (5.12)
Total	7,224	4,720	3,077	1,580	4,657	2567 (35.53)	63 (1.33)

(Source: Information furnished by CHCs)

Color code:

Excess/No shortage	Shortage range		
	1-25 per cent	25-50 per cent	50-100 per cent

From the above table, Audit observed the following:

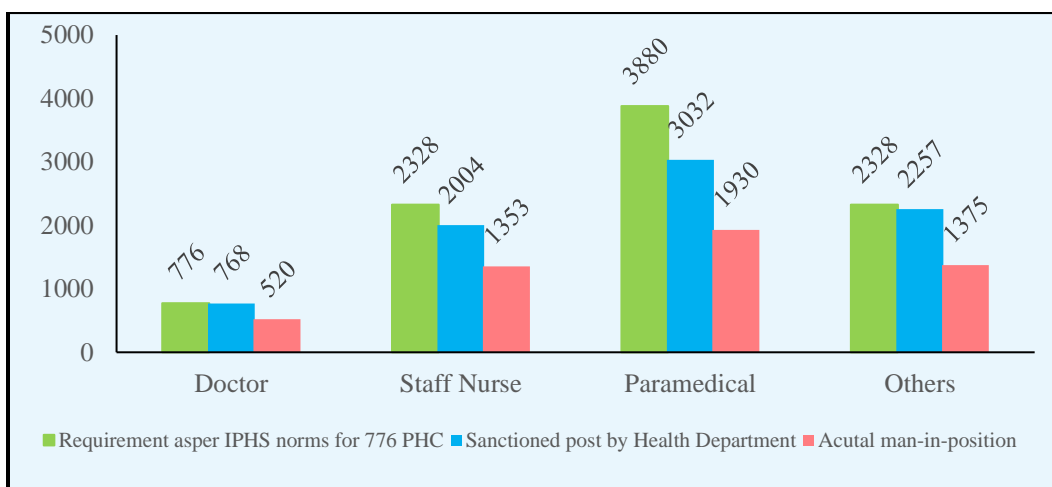
- Sanctioned strength was not according to the IPHS norms in various specialist cadres like General Surgery (83 per cent), Physician (45 per cent), Obstetrics and Gynaecology (95 per cent), Paediatrics (94 per cent), Anaesthesia (85 per cent), Dental Surgeon (46 per cent), Medical Officer (AYUSH) (12 per cent), Staff Nurse (93 per cent) and paramedics (84 per cent), whereas excess manpower over and above IPHS norms was sanctioned in General Duty Medical Officers (126 per cent) post.

- Against sanctioned strength of 4,720 posts in the 172 CHCs, 3,077 (65.19 per cent) posts were filled up on regular basis and 1,580 (33.47 per cent) on contractual basis and 1.33 per cent posts were lying vacant.
- Shortage of Specialist Doctors in all the CHCs in State was 78.88 per cent and 71.65 per cent against IPHS norms and sanctioned strength respectively.
- Shortage of Specialist Doctor in Anesthesia and General Surgery was 143 (97.95 per cent) and 134 (94.37 per cent) respectively against sanctioned strength, whereas dental surgeons were posted in excess of sanctioned strength.
- There was vacancy of 92 (5.35 per cent), 41 (3.41 per cent) posts and 1,918 (69.69 per cent) in the SN, Paramedics and other posts respectively against IPHS norms.

2.5.3 Availability of Manpower in Primary Health Centres

IPHS norms had prescribed the norms for the Medical Officers and other healthcare staff for PHC. The details of actual men-in-position against sanctioned strength and IPHS norms in all PHCs in State, as of March 2022 is given in *Appendix - 2.3* and in the *Chart - 2.8*:

Chart - 2.8: Details of doctors, nurses, paramedical and other staff in all PHCs in the State



(Source: information provided by CMHOs)

It could be seen from the above chart that:

- There was shortage of 256 (33 per cent) Doctors (Medical Officer) in PHCs as against the requirement of 776 as per IPHS norms. Further, there was acute shortage of 975 SNs (42 per cent) and 1,950 paramedical (50 per cent) against the IPHS norms.
- In the State, 633 Rural Medical Assistants⁹ were providing basic healthcare services in the PHCs due to shortage of Medical Officers.

⁹ Chhattisgarh started a novel three years medical course for medical assistants, to counteract physician shortage in rural areas.

- Against the sanctioned set up of 768 posts of Medical Officers, 520 (68 per cent) posts were filled up; 1,353 (68 per cent) SNs were positioned against sanctioned set up of 2,004; 1,930 (64 per cent) paramedical were engaged against the sanctioned set-up of 3,032.

2.5.4 Availability of Manpower in Sub health centres

IPHS norms provides for appointment of one Auxiliary Nurse Midwife (ANM) and one Rural Health Organiser (Male) (RHO - M) in each SHC.

In the 4,996 SHCs, against the sanctioned set-up of 6,505 ANMs and 4,891 RHO (M), 5,413 ANMs and 3,506 RHO (M) were posted and there were vacancies of 1,092 (16.79 per cent) and 1,385 (28.32 per cent) respectively in these posts, as of March 2022. In 502 SHCs, no ANMs were posted due to which essential care for pregnant women could not be provided as per IPHS norms.

2.5.5 Availability of Manpower in Maternal and Child Health (MCH)

The GoI sanctioned (2013-14) 30 MCH wings (50 bedded: 19, 100 bedded: 10, 300 bedded: one) for Chhattisgarh. Out of 30 MCH wings, five MCH¹⁰ wings were not functional due to lack of building infrastructure. The human resource set-up was approved for 23 MCH wings. However, for the remaining seven¹¹ MCH wings, proposal for HR were sent to GoCG for approval.

The availability of MCH wings in State vis-a-vis SS, PIP and vacant posts are shown in **Table - 2.8**:

Table - 2.8: Sanctioned strength, PIP in MCH wings in State as of March 2022

MCH wing	Post	SS	PIP	Vacant posts	Vacancy (per cent)
100 bedded (8)	Specialist doctor	96	40	56	58.33
	Medical officer	40	79	-39 (excess)	-
	SN	288	195	93	32.29
	Paramedics	56	68	-12	-
50 bedded (15)	Specialist doctor	75	14	61	81.33
	Medical officer	45	57	-12	-
	SN	240	171	69	28.75
	Paramedics	75	70	5	6.66
Total		915	694	221	24.15

(Source: Data provided by DHS/ HIs)

It could be seen from the table that against the SS of 915 posts in doctors, SN and paramedical staff cadre; 694 posts were filled with vacancy of 24.15 per cent.

In test checked 10 MCH¹² wings, Audit observed that in six MCH¹³ wings, against the total sanctioned strength of 267 manpower (Doctors, SN and paramedical staff),

¹⁰ Bijapur, Pakhanjur of Kanker district and Pithora of Mahasamund district, Korea and GMCH Raipur

¹¹ GMCH Raipur, DH Raipur, Bilaspur, Durg, Bijapur, Pakhanjur, and Korea.

¹² Balod, Bilaspur, Kondagaon, Raipur, Sukma, Surajpur, Bhaiyathan CHC, Bilha CHC, Korea and GMCH Raipur

¹³ DH Balod, DH Kondagaon, DH Sukma, DH Surajpur, CHC Bhaiyathan and CHC Bilha

242 (90.64 per cent) were posted. Two MCH wings¹⁴ were operating with existing manpower of DHs in the absence of sanctioned setup. Two MCHs wings¹⁵ were under construction.

The DHS stated (January 2023) that proposals for HR set up has been submitted to Government.

2.6 Shortage of human resources and its impact on delivery of health services in test-checked districts

The number of sanctioned/ filled posts of Doctors/ Staff Nurse/ Paramedical Staff in the seven selected districts is as given in *Table - 2.9*:

Table - 2.9: Shortage of staff in all HIs in selected districts

Name of District	Name of Unit (No)	Doctors			Staff Nurse			Paramedical Staff		
		SS	MIP	Shortfall (per cent)	SS	MIP	Shortfall (per cent)	SS	MIP	Shortfall (per cent)
Balod	DH Balod	33	21	36.36	28	26	7.14	17	12	29.41
	CHCs	43	33	23.26	60	64	-6.67	30	29	3.33
	PHCs	29	18	37.93	72	60	16.67	98	65	33.67
	SHC	NA ¹⁶	NA	NA	NA	NA	NA	616	458	25.65
Bilaspur	DH Bilaspur	45	47	-4.44	64	71	-10.94	33	29	12.12
	CHCs	42	25	40.48	52	46	11.54	29	35	-20.69
	PHCs	41	29	29.27	107	80	25.23	141	126	10.64
	SHCs	NA	NA	NA	NA	NA	NA	556	395	28.96
Kondagaon	DH Kondagaon	40	35	12.5	31	63	-103.23	23	20	13.04
	CHCs	46	27	41.3	62	68	-9.68	35	42	-20
	PHCs	17	13	23.53	58	41	29.31	74	48	35.14
	SHCs	NA	NA	NA	NA	NA	NA	626	457	27
Korea	DH Baikunthpur,	38	24	36.84	45	45	0	16	14	12.5
	CHCs	43	38	11.63	59	65	-10.17	38	28	26.32
	PHCs	29	7	75.86	77	44	42.86	105	73	30.48
	SHCs	NA	NA	NA	NA	NA	NA	604	425	29.64
Raipur	DH Raipur	51	56	-9.8	67	70	-4.48	34	57	-67.65
	CHCs	38	53	-39.47	58	78	-34.48	34	58	-70.59
	PHCs	19	15	21.05	36	34	5.56	72	65	9.72
	SHCs	NA	NA	NA	NA	NA	NA	525	381	27.43
Sukma	DH Sukma	28	21	25	19	40	-110.53	16	29	-81.25
	CHCs	22	12	45.45	30	33	-10	21	13	38.1
	PHCs	15	4	73.33	43	32	25.58	58	13	77.59

¹⁴ DH Raipur and DH Bilaspur

¹⁵ Korea and GMCH Raipur

¹⁶ NA- Not applicable

Name of District	Name of Unit (No)	Doctors			Staff Nurse			Paramedical Staff		
		SS	MIP	Shortfall (per cent)	SS	MIP	Shortfall (per cent)	SS	MIP	Shortfall (per cent)
	SHCs	NA	NA	NA	NA	NA	NA	308	190	38.31
Surajpur	DH Surajpur	34	28	17.65	28	42	-50	22	19	13.64
	CHCs	58	55	5.17	83	82	1.2	56	83	-48.21
	PHCs	36	29	19.44	78	35	55.13	141	100	29.08
	SHCs	NA	NA	NA	NA	NA	NA	717	544	24.13

(Source: Information furnished by test checked Districts)

Color code:

Excess/No shortage	Shortage range		
	1-25 per cent	25-50 per cent	50-100 per cent

It is evident from the above table that there were vacancies in all the categories in HIs in selected districts. Due to shortage of staff, the delivery of health services in the test-checked districts was affected adversely, as highlighted in *Chapter - 3* of this report.

2.7 Human Resources under National Health Mission

The National Health Mission (NHM) supplements human resources for health who are directly engaged in healthcare service delivery as well as the ones who are engaged in administering various programmes. Broadly, based on the nature of work, human resources for health under NHM may be categorised into the following two categories:

(i) Programme Management (PM): The NHM has Programme Management Units (PMUs) to facilitate planning and implementation of all programmes under it at National, State and District levels. All the HR placed at the PMUs and/or engaged in performing administrative or managerial functions at the health facilities or other associated institutions like training institute etc., constitute the PM Staff.

(ii) Service Delivery: This includes the staff who are directly involved in delivery of healthcare services and are placed at the HIs. For example: Medical Officers/Doctors, Staff Nurses, Auxiliary Nurse Midwives (ANMs)/ Multipurpose Health Workers (MPWs), Laboratory Technicians, Counsellors, etc. Service delivery staff also includes the staff providing healthcare services outside of the HIs such as the staff of Mobile Medical Units, *Rashtriya Bal Swasthya Karyakram* (RBSK) etc.

The category wise sanctioned posts vis-à-vis person in position and vacant posts are depicted in *Table - 2.10*:

Table - 2.10: Category wise sanctioned posts and person in position and vacant posts under NHM in State as of March 2022

NHM Programme Management (A)				
Name of the post	Sanctioned	Men in position	Vacant	Vacancy percentage
PM	2,646	2,359	287	11
Service Delivery (B)				
Specialist Doctors	235	112	123	52
Medical officers	460	349	111	24
Nursing Staff	2,900	1,969	931	32
Paramedical Staff	4,045	3,490	555	14
Other Staff	6,897	4,974	1,923	28
Total (B)	14,537	10,894	3,643	25
Total (A+B)	17,183	13,253	3,930	23

(Source: Information furnished by NHM)

Color code:

Excess/No shortage	Shortage range		
	1-25 per cent	25-50 per cent	50-100 per cent

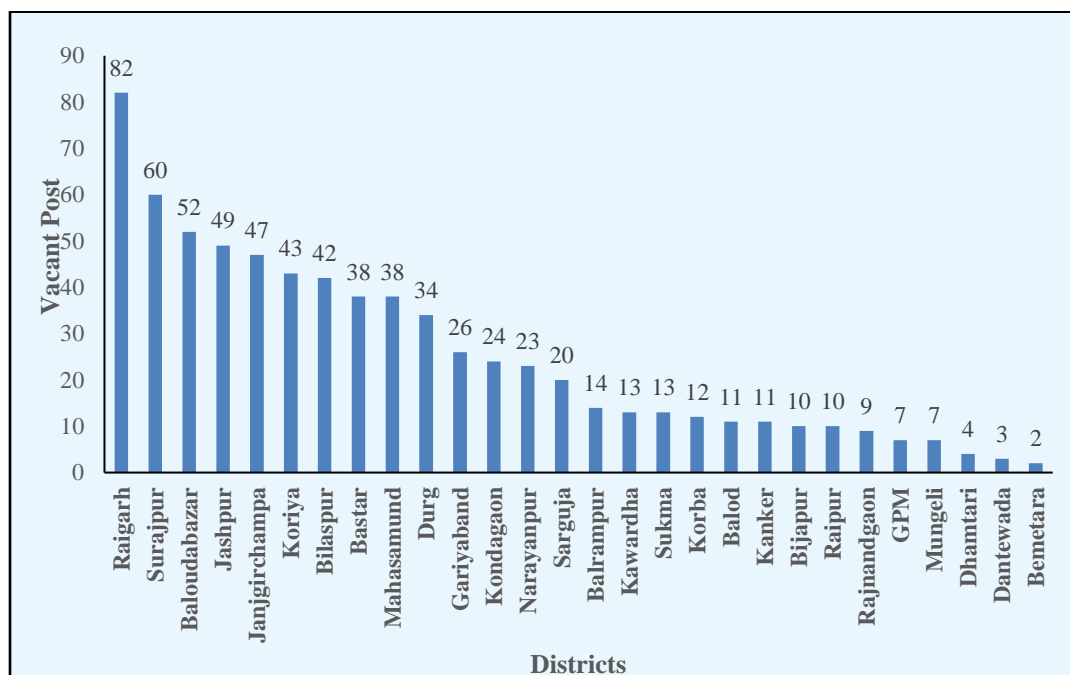
From the above table, it could be seen that out of 235 sanctioned posts of Specialist Doctors, only 112 (48 per cent) were posted. Vacancies in the post of Medical Officers, nursing staff, paramedical staff and other staff related to service delivery were 24 per cent, 32 per cent, 14 per cent and 28 per cent respectively. There was substantial vacancy of 11 per cent in the PM cadre also. Overall, 23 per cent posts were vacant in PM and SD categories under NHM in State.

2.8 Availability of Accredited Social Health Activists (ASHAs)

One of the key components of the National Rural Health Mission is to provide every village in the country with a trained female community health activist, Accredited Social Health Activist (ASHA).

As per guidelines issued by the GoI on ASHA, one ASHA is required per thousand population. As per estimated population (2,98,36,000) of Chhattisgarh in 2022, there was requirement of 29,836 ASHAs against which there was availability of 71,344 (excess of 139 per cent over the actual requirement) ASHAs in the State which, however, was less than the sanctioned strength of 72,048 fixed by GoCG. In the State, one ASHA is rendering services to population of 418. District wise shortage (in numbers) in availability of ASHAs against the sanctioned set up, as of March 2022 is shown in *Chart - 2.9*.

Chart - 2.9: District wise vacancy of ASHAs as against the sanctioned setup as of March 2022



(Source: Information furnished by State Health Resource Center)

From the above chart, it was evident that the shortage of ASHAs was highest (82) in Raigarh district and lowest in Bemetara district (2).

Though number of ASHAs were more than the norms of GoI but as per NFHS 5 (2020-21), those percentage of mothers who had at least four antenatal care visits was only 60.1 per cent in Chhattisgarh. Pregnant women who consumed iron folic acid for 180 days or more were only 26.3 per cent.

2.9 Human resource under Directorate of Medical Education (DME)

Medical Council of India (now National Medical Commission) has prescribed minimum requirements of posts and other requirements such as infrastructure, equipment etc. in Medical Colleges and associated hospitals.

Audit observed that DME had not maintained HI wise data of sanctioned strength, person in position and vacant posts. In the absence of these data, DME could not ascertain the availability of doctors, paramedical staff and nursing staff in its HIs.

Status of Doctors, paramedical staff and staff nurse in GMCs/GMCHs under DME as of March 2022 is shown in *Table - 2.11:*

Table - 2.11: Category wise sanctioned strength, person in position and vacancies in GMCs/GMCHs and DKS PGI Raipur, as of March 2022

GMC/GMCH	Cadre/Post	Sanctioned strength	Person in position			Vacancy		Vacancy (per cent)	
			Regular	Contractual	Total	Against Regular	Against Total	Against Regular	Against Total
DKS PGI Raipur	Super specialist	38	2	30	32	36	6	94.74	15.79
	Medical Officers	46	0	23	23	46	23	100.00	50.00
	Staff Nurse	150	5	137	142	145	8	96.67	5.33
	Paramedical staff	46	2	18	20	44	26	95.65	56.52
Sub-Total		280	9	208	217	271	63	96.79	22.50
Ambikapur	Specialist	109	36	39	75	73	34	66.97	31.19
	Medical Officer	71	13	61	74	58	-3	81.69	-4.23
	Staff Nurse	176	149	0	149	27	27	15.34	15.34
	Paramedical staff	42	1	18	19	41	23	97.62	54.76
Sub-Total		398	199	118	317	199	81	50.00	20.35
Bilaspur	Specialist	263	60	56	116	203	147	77.19	55.89
	Medical Officer	124	16	85	101	108	23	87.10	18.55
	Staff Nurse	345	128	0	128	217	217	62.90	62.90
	Paramedical staff	377	260	28	288	117	89	31.03	23.61
Sub-Total		1,109	464	169	633	645	476	58.16	42.92
Jagdalpur	Specialist	168	25	46	71	143	97	85.12	57.74
	Medical Officer	140	11	85	96	129	44	92.14	31.43
	Staff Nurse	297	120	0	120	177	177	59.60	59.60
	Paramedical staff	99	38	15	53	61	46	61.62	46.46
Sub-Total		704	194	146	340	510	364	72.44	51.70
Raipur	Specialist	270	123	65	188	147	82	54.44	30.37
	Medical Officer	199	39	95	134	160	65	80.40	32.66
	Staff Nurse	708	227	28	255	481	453	67.94	63.98
	Paramedical staff	262	109	31	140	153	122	58.40	46.56
Sub-Total		1,439	498	219	717	941	722	65.39	50.17
Rajnandgaon	Specialist	149	29	43	72	120	77	80.54	51.68
	Medical Officer	97	12	67	79	85	18	87.63	18.56
	Staff Nurse	176	80	0	80	96	96	54.55	54.55
	Paramedical staff	60	15	14	29	45	31	75.00	51.67
Sub-Total		482	136	124	260	346	222	71.78	46.06
Kanker	Specialist	149	18	15	33	131	116	87.92	77.85
	Medical Officer	73	32	0	32	41	41	56.16	56.16
	Staff Nurse	177	6	0	6	171	171	96.61	96.61
	Paramedical staff	54	0	0	0	54	54	100.00	100.00
Sub-Total		453	56	15	71	397	382	87.64	84.33

GMC/GMCH	Cadre/Post	Sanctioned strength	Person in position			Vacancy		Vacancy (per cent)	
			Regular	Contractual	Total	Against Regular	Against Total	Against Regular	Against Total
Korba	Specialist	150	30	8	38	120	112	80.00	74.67
	Medical Officer	82	1	2	3	81	79	98.78	96.34
	Staff Nurse	176	0	0	0	176	176	85.85	85.85
	Paramedical staff	223	3	0	3	220	220	98.76	98.76
Sub-Total		631	34	10	44	597	587	94.61	93.03
Mahasamund	Specialist	147	43	24	67	104	80	70.75	54.42
	Medical Officer	69	43	7	50	26	19	37.68	27.54
	Staff Nurse	176	0	0	0	176	176	100.00	100.00
	Paramedical staff	57	0	0	0	57	57	100.00	100.00
Sub-Total		449	86	31	117	363	332	80.85	73.94
Raigarh	Specialist	131	21	43	64	110	67	83.97	51.15
	Medical Officer	87	6	50	56	81	31	93.10	35.63
	Staff Nurse	198	125	0	125	73	73	36.87	36.87
	Paramedical staff	154	61	26	87	93	67	60.39	43.51
Sub-Total		570	213	119	332	357	238	62.63	41.75
Durg	Specialist	164	0	1	01	164	163	100.00	99.39
	Medical Officer	83	0	0	00	83	83	100.00	100.00
	Staff Nurse	176	0	0	00	176	176	100.00	100.00
	Paramedical staff	54	0	0	0	54	54	100.00	100.00
Sub-Total		477	0	1	01	477	476	100.00	99.79
Grand Total		6,992	1,889	1,160	3,049	5103	3943	72.98	56.39

(Source: Information furnished by GMCs/ GMCHs and DKSPGI)

Color code:

Excess/No shortage	Shortage range		
		1-25 per cent	25-50 per cent

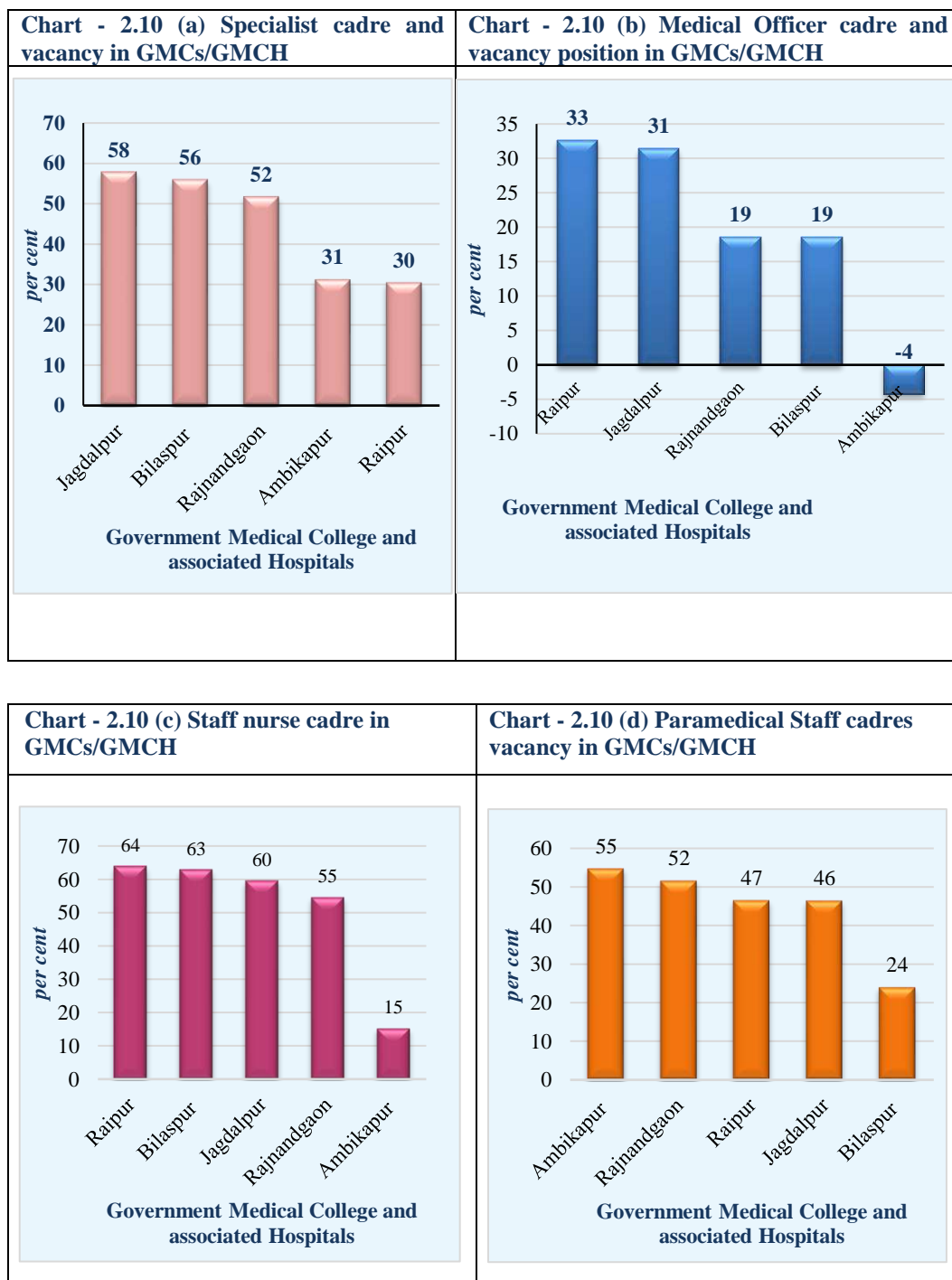
It could be seen from the **Table-2.11** that as against the total 280 sanctioned posts with the posts of doctors (84), SNs (150), paramedical staff (46) in super specialty Hospital Raipur only total nine (3.21 per cent) posts, that of doctors (2), staff nurse (5) and paramedical staff (2) were filled on regular basis and percentage of vacancy was 22.50 including contractual staff.

Further, against the total sanctioned strength of 6,992 in all GMCs/GMCHs including DKSPGI, there was vacancy of 72.98 per cent of regular manpower and by including the contractual staff, there was overall vacancy of 56.39 per cent. While the highest vacancy was observed in GMC/ GMCH Durg (99.79 per cent), the vacancy ranged from 20.35 per cent (Ambikapur) to 93.03 per cent (Korba) in other GMC/GMCHs.

Against the sanctioned strength of Specialist doctors, SN and paramedical staff in all GMC/GMCHs in the State, there was vacancy of 54.44 per cent (Raipur) to 100 per cent (Durg) in the posts of Specialist doctors, 15.34 (Ambikapur) to

100 per cent (Durg and Mahasamund) in the posts of SN and 31.03 (Bilaspur) to 100 per cent in the posts of paramedical staff (Kanker, Durg and Mahasamund) against regular posts.

Post wise manpower position in selected GMCs/GMCHs is given in **Chart - 2.10 (a), (b), (c) and (d)**:



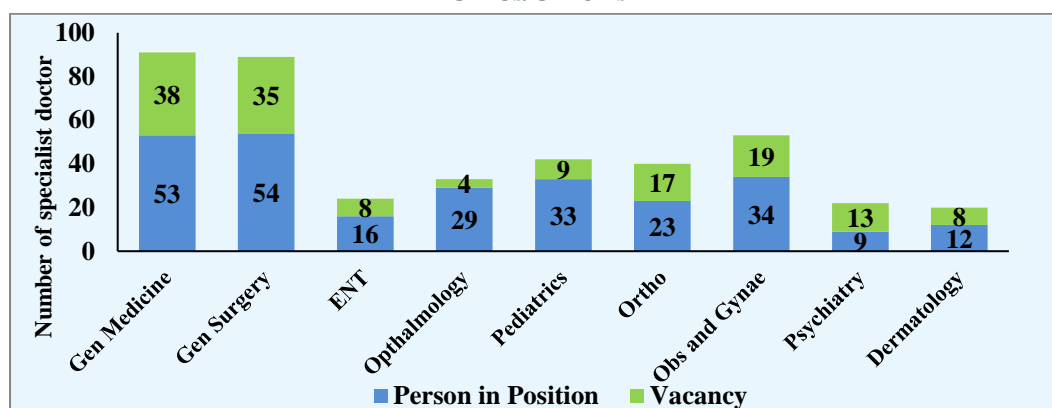
(Source: Information furnished by test-checked GMCs/ GMCH)

It was further observed that as on 31 March 2022, vacancy in specialist cadre ranged between 58 and 30 *per cent* among all five test checked GMCs/ GMCHs. Vacancy in SN cadre was alarming and more than 50 *per cent* posts were vacant in all test checked GMCHs except GMCH Ambikapur. Similarly, 24 to 55 *per cent* posts of paramedical staff was vacant in selected GMCHs.

2.9.1 Specialty wise availability of doctors in GMCHs

Specialty wise sanctioned strength and person in position of doctors in selected five GMCHs is shown in the *Chart - 2.11*:

Chart - 2.11: Specialty wise person in position and vacancy in five test checked GMCs/GMCHs



(Source: information provided by GMC/GMCHs)

It could be seen from the above chart that sanctioned strength of Specialty doctors was highest in general medicines (91) and general surgery (89) department. Vacancy percentage was highest in psychiatry (59.10 *per cent*) whereas it was lowest in ophthalmology (12.12 *per cent*) department.

Audit further observed shortage of manpower and rendering of services without sanctioned set up in technical posts in the selected GMCs/ GMCHs under DME which are discussed in following paragraphs:

- Post of Dialysis Technician and CT Scan Technician was not sanctioned at GMCH Jagdalpur though four dialysis machines and a CT scan machine were installed, which were operated by temporary staff recruited by the District Collector, Jagdalpur under District Mining Fund Trust (DMFT). Six ambulances in the hospital were being operated by engaging drivers on daily wages. Joint Director cum Superintendent had requested (22 August 2016 and 22 June 2019) DME for sanction of Dialysis Technician and CT Scan Technician, six posts of Ambulance Technician and Driver each. However, the same had not been sanctioned (December 2022).
- Four posts of Casualty Medical Officer were vacant since 2016 in GMCH Rajnandgaon and these services were provided by the other doctors.

The Government stated (April 2023) that walk-in-interviews are being organised from time to time for filling the posts on contractual basis and proposal is being

sent to the Government for regular posting through Chhattisgarh Public Service Commission.

Fact remains that the despite substantial vacancies, Department failed to engage regular staff and were operating the services on contractual basis.

2.9.2 *Sanctioned strength was not according to MCI norms in Staff Nurse cadre*

As per norms of Nursing Council of India (as adopted in MCI norms for GMCHs), Staff Nurse (SN) to bed ratio in GMCHs should be 1:1 in ICU and 1:3 in non-ICU wards.

Audit observed that bed to SN ratio was not assessed either at DME level or GMCH level as per MCI norms. In absence of any assessment, DME as well as GMCHs could not revise sanctioned strength of SN in the GMCHs. As a result, due to failure to fix the sanctioned strength of SN in accordance with the bed capacity it was less than the MCI norms. Even if, the Department fills all the sanctioned posts, there will still be shortage of SN.

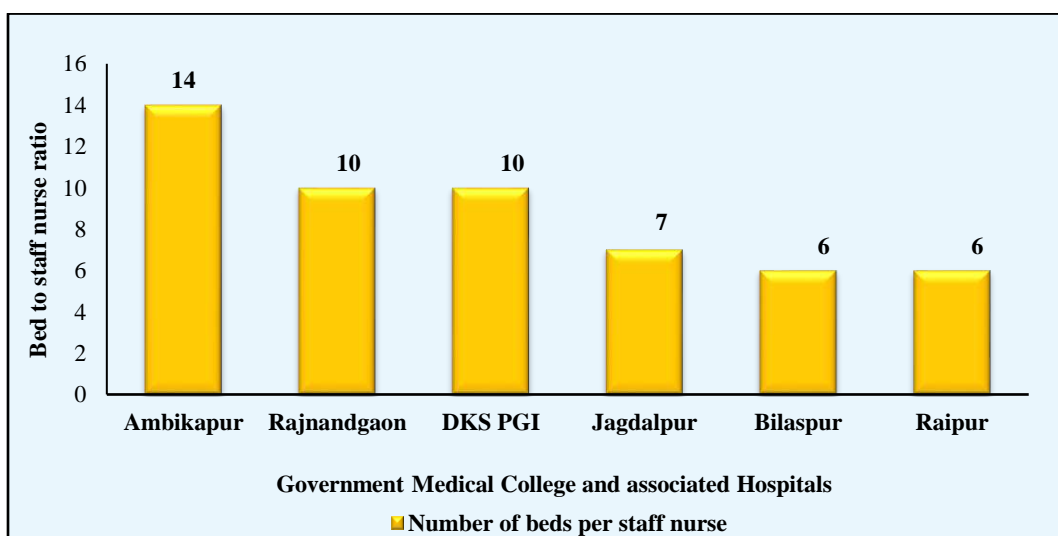
Bed capacity, sanctioned strength of SN in selected GMC/GMCHs is shown in *Table - 2.12* and *Chart - 2.12*.

Table - 2.12: Bed capacity and sanctioned strength of SN as of March 2022

GMCH	Bed capacity	SS of Staff Nurse	Staff Nurse to Bed ratio
Ambikapur	835	176	1:14
Bilaspur	710	345	1:6
Jagdalpur	650	297	1:7
Raipur	1,440	708	1:6
Rajnandgaon	607	176	1:10
DKS PGI	501	150	1:10

(Source: information furnished by GMCHs)

Chart - 2.12: Chart showing number of beds per staff nurse



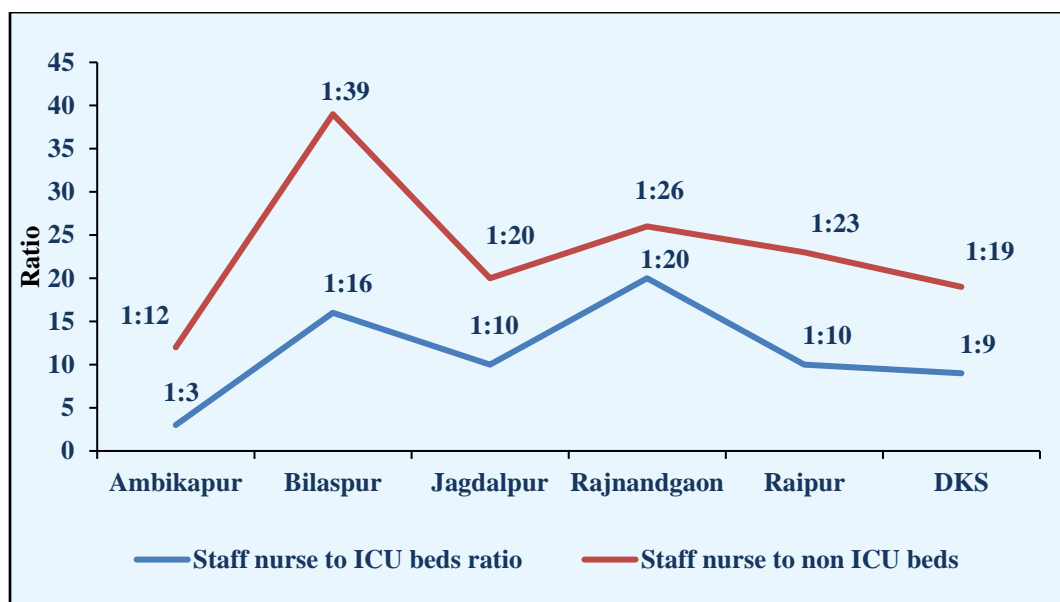
(Source: Compiled from information furnished by GMCHs)

Thus, it could be seen that ratio of sanctioned post of SN to beds ranged between 1:6 and 1:14 and there was no uniformity in the bed staff nurse ratio in the GMCHs.

2.9.2.1 Staff nurse to Bed ratio

Audit observed that there was acute shortage of SN in the selected GMCHs and the SN to bed ratio in ICU ranged between 1:3 and 1:20 against the norms of 1:1. Similarly, in non-ICU wards, this ratio ranged between 1:12 and 1:39 against the norms of 1:3. This indicates significant shortfall in the requisite level of care in ICU and other wards, as mentioned in the *Chart - 2.13*:

Chart - 2.13: Details of Staff Nurse to bed ratio in ICU/ non-ICU wards



(Source: Compiled from information furnished by GMCHs)

Government stated (April 2023) that after obtaining proposals from GMCs/ GMCHs, it would be sent to the Government.

2.9.2.2 Intake capacity in State

The availability of GMCs in State and there intake capacity, during 2016-22 is mentioned in *Table - 2.13*:

Table - 2.13: Year wise intake capacity of GMCs/private Medical Colleges in State during 2016-22

A. Government Medical College (Intake Capacity)					
Sl.	Name of Medical College	2016-17		2021-22	
		UG	PG	UG	PG
1	GMC, Raipur	150	92	180	142
2	GMC, Bilaspur	150	3	180	36
3	GMC, Jagdalpur	100	0	125	10
4	GMC, Rajnandgaon	100	0	125	11
5	GMC, Raigarh	50	0	60	6

Sl.	Name of Medical College	2016-17		2021-22	
		UG	PG	UG	PG
6	GMC, Ambikapur	100	0	125	0
7	GMC, Kanker	0	0	125	0
8	GMC, Durg	0	0	Entrance process could not be initiated during 2021-22 due to non-recognition by NMC	
9	GMC, Korba	0	0		
10	GMC, Mahasamund	0	0		
	Total number of seats in GMCs	650	95	920	205
B. Private Medical College					
Sl.	Name of Medical College	2016-17		2021-22	
		UG	PG	UG	PG
1	Chandulal Chandrakar Memorial Medical College, Durg	150	0	Acquired by GoCG in 2021-22	
2	Shri Shankaracharya Institute of Medical Sciences, Bhilai	150	0	150	57
3	Raipur Institute of Medical Sciences, Raipur	150	0	150	47
4	Balaji Institute of Medical Sciences, Raipur	0	0	150	0
	Total number of seats in private colleges	450	0	450	104
	Grand total (A+B)	1,100	95	1,370	309
DKS Post graduate Institute and research centre (super speciality courses)					
Sl	Course name	2016-17		2021-22	
1.	M.Ch.	NA		06 ¹⁷	

(Source: information furnished by DME)

It could be seen from *Table – 2.13* that during 2016-22, four new GMCs and one private college¹⁸ were opened and intake capacity (UG) has been increased to 1,370 from 1,100 during the same period. Though the State had achieved significant progress during 2016-22, however, the same was not sufficient in view of adverse doctor population ratio. Audit also observed that GoCG had not prepared any comprehensive plan to bridge the gaps to achieve the required doctor population ratio. It was further observed that:

- As of March 2022, out of 10 GMCs in the State, none of the GMC could attain the maximum permissible intake capacity of 250. Moreover, the GoCG did not plan and also no proposal was sent to GoI for increasing the intake capacity during 2016-22. GMC, Raipur though established in 1963, could extend the annual intake capacity to 180 (includes 30 additional seats for

¹⁷ Two seats in M. Ch. in neuro surgery, three seats in M. Ch. pediatric surgery and one seat in M. Ch. plastic and reconstructive Surgery

¹⁸ One private college Chandulal Chandrakar Medical College was acquired by State Government in 2021-22 and a new private Medical college (Balaji medical college) was opened in 2021-22.

EWS category). Similarly, GMC Bilaspur, established in the year 2001 has annual intake capacity of 180 students. The intake capacity of five test checked GMCs remained unchanged during 2016-22, except increase of 135 seats due to creation of additional seats for EWS.

- Post Graduate seats were increased from 95 (2016-17) to 205 (2021-22) in five¹⁹ GMCs during 2016-22.
- DKSPGI, Raipur was providing (2019) three super-specialty courses with intake capacity of six whereas other GMCs were not providing super-specialty course in any of the subject. This indicated that the medical aspirants of the State had limited opportunity for specialised courses in GMCs.

The Government stated (April 2023) that no separate policy has been prepared for opening of new colleges. However, efforts are being made to open new Medical Colleges. Regarding super specialty courses it was stated that application for courses in neuro anesthesia and neurology would be submitted by DKSPGI in coming years.

2.10 Human Resource under Food and Drug Administration Department

As on 31 March 2022, there were 27 District Offices of Food and Drug Controller Administration (FDCA) in the State. Availability of adequate technical and non-technical staff is essential to perform the duty of FDCA, for complete and timely analysis of the samples of drugs. The Controller, FDCA is responsible for issuing licenses to drug manufacturing units, blood banks and medicine shops assisted by the Joint Drug Controller, Deputy Drug Controller, Assistant Drug Controller at the district level supported by the Drug Inspector, Food Safety Officer and Sample Assistant.

As against the sanctioned strength of 697 posts, 438 (63 *per cent*) posts were vacant, as of March 2022. Drug Inspectors (DIs) and Food Safety Officers (FSO) were required for discharging functions of the FDCA. However, only 78 (70 *per cent*) DIs were available against the sanctioned set up of 112 DIs. Similarly, only 59 (53 *per cent*) FSOs are posted as against the sanctioned strength of 112. There is one State Food Testing Laboratory and one State Drug Testing Laboratory functioning in the State at Raipur, with skeleton staff.

The details of men-in-position vis-à-vis sanctioned strength of the technical persons of the laboratory, as of November 2022 is as shown in *Table - 2.14*.

¹⁹ GMC Raipur, Bilaspur, Rajnandgaon, Jagdalpur and Raigarh.

Table - 2.14: Post wise sanctioned strength vis-à-vis men in position in the laboratories

Name of Post	Sanctioned strength	Men-in-position	No of vacant posts	Percentage of vacancy
State Food Testing Laboratory				
Coordinator	01	0	01	100
Public Analyst	02	0	02	100
Technical Officer	03	0	03	100
Micro biologist	03	0	03	100
Scientific Officer	02	0	02	100
Asst. Public Analyst	03	01	02	67
Lab. Technician	05	02	03	60
Lab Assistant	05	01	04	80
Lab. Attendant	04	0	04	100
Office Attendant	04	0	04	100
Total	32	4	28	88
State Drug Testing Laboratory				
Director	01	0	01	100
Sr. Scientific Officer	02	0	02	100
Micro biologist	02	0	02	100
Sr. Scientific Assistant	03	01	02	67
Jr. Scientific Assistant	15	0	15	100
Asst. Accounts Officer	01	0	01	100
Lab Assistant	05	0	05	100
Lab Attendant	02	0	02	100
Total	31	01	30	97

(Source: Data furnished by the State Food Testing Laboratory & Drug Testing Laboratory)

Color code:

Excess/No shortage	Shortage range		
	1-25 per cent	25-50 per cent	50-100 per cent

It could be seen from above table, there was acute shortage of staff in the FDCA. Overall shortage of technical manpower in food laboratory was 88 per cent and in drug laboratory was 97 per cent.

2.11 Availability and management of human resource in AYUSH

2.11.1 Non-availability of key medical and non-medical staff

For the proper functioning of any organisation, availability of sufficient manpower is an important factor. GoCG had sanctioned the setup of AYUSH consisting of doctors, pharmacists, nurses and other supporting staff in the State.

Against the sanctioned strength of 5189 posts, the Men-in-Position (MIP) was 3648 and 1541 posts remained vacant. Further, against the sanctioned strength of 1239 posts of doctors, the MIP was only 874 (71 *per cent*) and against the sanctioned strength of 2293 posts of supporting staff, MIP was only 1582 (69 *per cent*), as of March 2022 in the State. The status of vacancies of key posts for the entire State is shown in **Table - 2.15**:

Table - 2.15: Statement showing sanctioned strength vis-à-vis MIP as on March 2022

Sl. No.	Name of Post	Sanctioned Post	MIP (Permanent)	MIP (Contractual)	Total MIP	Vacancy (<i>per cent</i>)
1	Ayurvedic Medical Officer	1034	359	379	738	296 (28.62)
2	Homeopathic Medical Officer	124	72	16	88	36 (29.03)
3	Unani Medical Officer	38	15	0	15	23 (60.52)
4	Specialist Doctor	37	29	0	29	8 (21.62)
5	Ayurveda Specialist	6	4	0	4	2 (33.33)
Total		1239	479	395	874	365 (29.46)
1	Staff Nurse	85	34	0	34	51 (60.00)
2	Pharmacist– Ayurveda	1068	730	5	735	333 (31.17)
3	Pharmacist– Homeopathy	124	21	3	24	100 (80.64)
4	Pharmacist– Unani	38	0	1	1	37 (97.37)
5	Panchakarma Asst (Male)	74	64	0	64	10 (13.51)
6	Panchakarma Asst (Female)	74	48	0	48	26 (35.13)
7	Female Health Worker (Dai)	77	51	2	53	24 (31.16)
8	Dispensary Servant	753	599	24	623	130 (17.26)
Total		2293	1547	35	1582	711 (31.01)

(Source: Data provided by Directorate, AYUSH and compiled by Audit)

Audit observed that there was shortage of human resources in the AYUSH healthcare facilities ranging between 22 and 33 *per cent* in the post of specialist doctor, 29 and 61 *per cent* in the post of Medical Officer, 60 *per cent* in the post of staff nurse, 14 and 35 *per cent* in the post of panchakarma assistant and 31 and 97 *per cent* in the post of pharmacist, as on March 2022.

Further, the status of vacancies in teaching posts in two Government Ayurveda colleges located at Raipur and Bilaspur are detailed in **Table - 2.16**:

Table - 2.16: Manpower position of teaching posts in two Colleges

Name of College	Name of Post	Sanctioned Post	Total MIP	Vacant Post	Vacancy (per cent)
GAC&H Bilaspur	Principal	1	1	0	0
	Professor	7	3	4	57
	Reader	13	11	2	15
	Lecturer	18	13	5	28
	Lab Technician	9	5	4	44
GAC Raipur	Principal	1	1	0	0
	Professor	14	11	3	21
	Reader	23	17	6	26
	Lecturer	36	26	10	28
	Lab Technician	21	13	8	38
Total		143	101	42	29

(Source: Data provided by Directorate, AYUSH and compiled by Audit)

As observed in **Table - 2.16**, there was shortage of teaching staff in two colleges ranging between 21 and 57 per cent in the post of professor, 15 and 26 per cent in the post of reader, 28 per cent in the post of lecturers and 38 and 44 per cent in the post of lab technician, as on March 2022.

Further, in selected districts, there was shortage of essential manpower in different posts, as shown in **Table - 2.17**

Table - 2.17: Availability of manpower in selected districts

Name of Post		Doctors	Pharmacist	Staff Nurse	Panchkarma Asst.	Others
DAO Raipur	Sanction Post	60	53	0	8	59
	MIP	59	38	0	8	39
	Vacant (per cent)	1 (2)	15 (28)	0 (0)	0 (0)	20 (34)
DAO Bilaspur	Sanction Post	51	43	0	4	53
	MIP	44	38	0	4	53
	Vacant (per cent)	7 (14)	5 (12)	0 (0)	0 (0)	0 (0)
DAO Dantewada	Sanction Post	35	34	3	4	18
	MIP	25	14	0	2	15
	Vacant (per cent)	10 (29)	20 (59)	3 (100)	2 (50)	3 (17)
DAO Surguja	Sanction Post	52	50	2	4	18
	MIP	49	45	0	3	18
	Vacant (per cent)	3 (6)	5 (10)	2 (100)	1 (25)	0 (0)
DAO Korea	Sanction Post	52	51	3	8	19
	MIP	37	24	0	5	10
	Vacant (per cent)	15 (29)	27 (53)	3 (100)	3 (38)	9 (47)
DAO Balod	Sanction Post	53	53	2	4	52
	MIP	25	45	0	3	27
	Vacant (per cent)	28 (53)	8 (15)	2 (100)	1 (25)	25 (48)
DAO Jagdalpur	Sanction Post	77	75	2	4	37
	MIP	67	39	0	3	24
	Vacant (per cent)	10 (13)	36 (48)	2 (100)	1 (25)	13 (35)

(Source: Data provided by DAOs and compiled by Audit)

Color code:

Excess/No shortage	Shortage range		
	1-25 per cent	25-50 per cent	50-100 per cent

In 130 out of 538 healthcare facilities in the selected districts, the appointment of regular doctors had not been done. Non availability of doctors in selected districts is shown in **Table - 2.18**:

Table - 2.18: DAOs vis-à-vis number of facilities without regular doctors

Sl. No.	Name of DAO	Total Number of Dispensaries	Number of Dispensaries without regular Doctor
1.	DAO Dantewada	58	8
2.	DAO Raipur	53	5
3.	DAO Surguja	135	22
4.	DAO Bilaspur	82	34
5.	DAO Korea	49	13
6.	DAO Bastar	110	18
7.	DAO Balod	51	30
Total		538	130

(Source: Data provided by Directorate, AYUSH and compiled by Audit)

The dispensaries shown in **Table - 2.18** were being managed by giving additional charge to doctors in alternate days from other dispensaries. As a result the dispensaries functioned without doctors for at least three days in a week and drugs were distributed by the other staff posted in the dispensary. Further, three²⁰ facilities under DAO, Korea, and eight²¹ facilities under DAO, Bastar was not operational since its inception due to non-availability of doctors.

GoCG (December 2022) replied that the joining orders of Specialist Doctors (4), Unani Medical Officer (1), Homeopathic Medical Officer (15) and Pharmacist Ayurveda (156) have been issued by the Department between March 2022 and January 2023. It further stated that the recruitment of Ayurveda Medical Officer (132) is under process and the recruitment process for class III and class IV employees was pending at Government level.

Conclusion

The Government of Chhattisgarh (GoCG) had not formulated any human resource policy for the healthcare sector to ensure availability of doctors, nurses, and paramedics in healthcare institutions as per the IPHS norms. In the Public Health and Family Welfare Department, Chhattisgarh, there was shortage of 25,793 (34 *per cent*) manpower against the sanctioned strength of 74,797.

Though the doctor population ratio of State had improved during 2016-22 and was 1:2492 as of March 2022, still it was far behind the WHO benchmark of 1:1000 and national ratio of 1:1456. The post of doctors was not sanctioned uniformly on

²⁰ PHC Budhar, PHC Chirmiri, PHC Madisarai

²¹ PHC Aasna, PHC Belar, PHC Mawibhata, PHC Kukanar, PHC (Unani) Lajoda, Adenga, PHC (Homeo) Dhanora, CHC (Unani) Keshkal.

the basis of population in the State, resulting in uneven distribution of doctors across the districts ranging from one doctor for 2,181 persons to 10,969 persons.

In the 23 District Hospitals, there was shortage in the sanctioned post of Specialist doctors (three *per cent*), staff nurse (27 *per cent*) and paramedical staff (24 *per cent*) according to the criteria prescribed in the IPHS norms. There was shortage in availability of specialist doctors (33 *per cent*), Medical officer (four *per cent*), and paramedic (13 *per cent*) against the sanctioned strength.

In 172 CHCs in the State, there was shortage of Specialist doctors (79 *per cent*), Staff nurse (five *per cent*) and paramedics (three *per cent*) against IPHS norms. In 776 PHCs in State, there was shortage of Medical Officers (33 *per cent*), Staff nurse (42 *per cent*) and paramedics (50 *per cent*) against IPHS norms.

In 4,996 SHCs in State, 17 *per cent* post of ANMs were vacant against sanctioned strength. In 502 SHCs, ANMs were not posted and thus maternity services in these SHCs could not be provided to the pregnant women as per IPHS norms.

Against the total sanctioned strength of 915 posts in the cadre of doctors (256), staff nurse (528) and paramedical staff (131) in the State, total persons in position was 694 including the cadre of doctors (190), staff nurse (366) and paramedical staff (138) with shortage of 24.15 *per cent* in 23 MCHs. Post of doctors, staff nurse and paramedical staff was not sanctioned in remaining seven MCH wings.

Shortage in *per cent* of Specialist doctors, staff nurse and paramedical staff ranged between 58 and 30; 64 and 15; 55 and 24 respectively in test checked five GMCs/GMCHs. In DKSPGI super specialty Hospital Raipur only nine (3.21 *per cent*) posts of doctors (2), staff nurse (5) and paramedical staff (2) was filled with regular staff against the sanctioned strength of 280 and 208 posts were filled with contractual staff.

Staff nurse to bed ratio in ICU ranged upto 1:20 against the norms of 1:1 and in non-ICU wards this ratio ranged between 1:12 and 1:39 against the norms of 1:3 in test checked GMCHs. Further, sanctioned strength of staff nurse was also less than the Medical Council of India norms and it was not fixed in accordance with the bed capacity.

Though, four new GMCs and one private college was opened during 2016-22 and intake capacity (UG) has been increased to 1,370 from 1,100; none of the GMCs could attain maximum permissible intake capacity, as of March 2022.

There was shortage of doctors (29 *per cent*), paramedics (31 *per cent*) in AYUSH facilities and teaching staff (29 *per cent*) in Government Ayurveda Colleges. In selected districts, 130 out of 538 dispensaries were functioning without doctor.

Recommendations

- 1. The GoCG may formulate a human resource policy for the healthcare sector to make available required number of qualified manpower for public health;***
- 2. The GoCG may increase sanctioned strength of doctors, staff nurse and paramedical staff according to the IPHS norms in all HIs. Post of doctors***

- may be sanctioned uniformly across all DHs to mitigate regional imbalance;*
- 3. The GoCG should ensure availability of specialist doctors, staff nurse and paramedical staff against the sanctioned strength;*
 - 4. Specialist doctor for each department may be posted to all DHs and CHCs to facilitate specialist services to the patients;*
 - 5. The GoCG should post more staff nurse in the GMCHs to improve staff nurse to bed ratio in ICU and non ICU wards for proper nursing care; and*
 - 6. The GoCG should take action for posting doctors in 130 AYUSH healthcare institutions that were operating without regular doctors.*