

HEALTH, MEDICAL EDUCATION AND FAMILY WELFARE DEPARTMENT

2.1 Performance Audit on “Medical Education in Jharkhand”

Executive summary

Health care in the State faces acute shortage of doctors and para-medical personnel. To address this problem, initiatives taken by the Government to augment the medical institutions for producing trained medical personnel available for health services in the state prompted conduct of a performance audit on the Status of Medical Education System under the Allopath stream in Jharkhand covering the period of 2010-15. Some of the major audit findings are discussed below:

- Establishment of three new Medical Colleges each in the Government Sector as well as under Public Private Partnership mode/private sector could not be achieved and even the meagre allotments of plan expenditure were surrendered which resulted in not achieving the annual target of 900 Under Graduate (UG) seats set by the Government in medical colleges in the State.

{Paragraph 2.1.7.1(i)}

- Not providing adequate funds in the budget resulted in not fulfilling the target of opening three paramedical courses as was envisaged in Annual Plan of 2011-12. So capacity augmentation of Para Medical Personnel for delivering better healthcare services could not be achieved.

{Paragraph 2.1.7.1(ii)}

- Utilization of UG seats in Medical College was 1,279 against 1,390 sanctioned seats but in Post Graduate it was 708 against 959 sanctioned seats leaving 251 (26 *per cent*) vacant seats. This resulted in failure of the objective of State Government to increase the numbers of doctors/specialist doctors for induction into the health services. This could affect the provision of health services adversely in the State in the future.

(Paragraph 2.1.7.3)

- In PMCH, Dhanbad admissions were made for additional seats during 2014-15 without approval of MCI due to which future prospects of students admitted to these additional seats remain uncertain. Further, PG courses in PMCH, Dhanbad could not be started due to acute shortage of faculty ranging between 53 *per cent* in 2010-11 to 60 *per cent* in 2014-15. The prospective students were denied the benefit of higher medical education.

(Paragraphs 2.1.7.4 and 2.1.7.5)

- Shortage of medical equipment in different departments of PMCH, Dhanbad ranged between 22 and 80 *per cent*. This could affect practical training of medical students and their education.

(Paragraph 2.1.8.2)

- Medical equipment purchased using State plan and Centrally Sponsored Scheme fund worth ₹ three crore and ₹ 1.25 crore respectively were not put to

use for want of reagents/technicians which led them being damaged or disused.

(Paragraph 2.1.8.3)

- Due to shortage of faculty, actual teaching hours fell short of the prescribed minimum norms of MCI by 14 to 48 *per cent* in PMCH, Dhanbad which might have an adverse impact on quality of education.

(Paragraph 2.1.9.1)

- Shortage of medical equipment ranged between 40 and 63 *per cent* in ANMTCs and GNMTC and was 72 *per cent* in the College of Nursing, Ranchi. Similarly, these were under staffed by 68, 72 and 89 *per cent* which might affect the quality of education imparted in the colleges.

(Paragraphs 2.1.13, 2.1.15 and 2.1.16)

- Monitoring in PMCH, Dhanbad was deficient as only four meetings of the college council against the MCI requirement of 20 meetings were held during 2010-15. No inspection was done by higher authorities of the paramedical institutions. Inadequate monitoring may lead to shortage/irregularities being undetected and remedial measures not taken in time.

(Paragraphs 2.1.11 and 2.1.17)

2.1.1 Introduction

Health care in the State faces an acute shortage of Medical Officers (MOs) i.e. doctors and para-medical personnel (PMP or nurses, technician etc) posted in sadar/sub-divisional hospitals, Community Health Centres (CHCs), Primary Health Centres (PHCs) etc under Allopath and AYUSH¹ Streams. Against the sanctioned posts of 3,236 MOs (2731 under Allopathy and 505 under AYUSH) in the State, there were vacancies in 1,483 posts (1,069 in Allopathy and 414 in AYUSH) i.e. 46 *per cent* and for PMPs against the sanction of 1,646 posts there were 774 vacancies which amounts to 47 *per cent* vacancy. The Annual Plans of the State reiterated the need for Medical Colleges, Auxiliary Nurse and Midwives training centres (ANMTC)/General Nurse and Midwives training centres (GNMTC) under Allopath stream. The regulatory bodies for medical course are the Medical Council of India (MCI) while the Indian Nursing Council (INC) regulate ANMTCs, GNMTCs, and College of Nursing.

The Government of Jharkhand (GoJ) planned to increase the capacity of the existing medical colleges and to open three new medical colleges under Government sector and three more medical colleges under Public Private Partnership (PPP).

Initiatives taken by the Government to augment the medical institutions in the State for producing trained medical personnel prompted this Performance Audit (PA) on the status of medical education system under Allopath stream during the period of 2010-15. In this performance audit we assessed the

¹ Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy

capacity and operations of the medical teaching institutions of the GoJ and recommended corrective measures.

Presently, there are only three Government Medical Colleges and no private medical college in the State. These are Rajendra Institute of Medical Sciences (RIMS), Ranchi with an annual intake capacity of 150 students in Under Graduate (UG) courses and it also offers Post Graduate (PG) courses in 19 disciplines. It is a teaching hospital with 991 beds. Mahatma Gandhi Medical College Hospital (MGMCH), Jamshedpur and Patliputra Medical College & Hospital (PMCH), Dhanbad each have an annual intake capacity of 50 students (increased to 100 students which was under dispute with MCI) for UG courses and were teaching hospitals with 500 beds.

The State Government in each of its annual plans envisaged that in the existing Medical Colleges, UG seats need to be enhanced to cope with the deficiency of trained medical personnel.

In the Government sector, there were ten² ANMTCs having total annual intake capacity of 600 students and three³ GNMTCs with total intake capacity of 120 students annually. Each GNMTC is attached with one of the three existing Medical Colleges. In addition, there is one College of Nursing having intake capacity of 80 students annually, attached with RIMS, Ranchi. For the purpose of this PA all these colleges and training centres are collectively referred to as institutions.

2.1.2 Organisational set up

The Health, Medical Education and Family Welfare Department (HME&FWD) is the administrative department responsible for running these institutions and is headed by a Principal Secretary, who is assisted by four Deputy Secretaries and one Director-in-chief (HME&FW and Finance). At the institution level, Principals are overall in-charge of the Medical Colleges and Nursing Institutions. Besides, Superintendents are overall in-charge of teaching hospitals attached to the Medical Colleges.

2.1.3 Audit objectives

The objectives of the performance audit were to assess whether:

- planning for medical education in the State was effective and was in conformance with MCI/INC guidelines;
- infrastructure and manpower in medical and para medical institutions were adequate to provide quality education in consonance with MCI/INC guidelines;
- academic and Research activities were carried as per MCI guidelines; and
- monitoring mechanism was adequate and effective.

² Chaibasa, Dhanbad, Deoghar, Dumka, Giridih, Hazaribag, Jamshedpur, Palamu, Ranchi and Simdega

³ Dhanbad, Jamshedpur and Ranchi

2.1.4 Audit criteria

The audit criteria have been derived from the following sources:

- Plan documents of the State Government for 2010-15;
- Academic guidelines of MCI and INC;
- Vision 2015 documents of MCI;
- Financial Rules, Jharkhand Treasury Codes (JTC);
- 12th Five Year Plan (2012-17) for Social Sector (Health) Vol-III; and
- Reports and returns submitted/maintained in the department as well as in institutions audited.

2.1.5 Audit scope and methodology

Out of three Medical Colleges in the State, RIMS is an autonomous organisation and its performance audit appeared in the C&AG's Civil Audit Report for the year ended March 2010. Of the remaining two Medical colleges PMCH, Dhanbad was selected for PA. Among the three GNMTCs, the GNMTC attached with PMCH, Dhanbad was selected. The College of Nursing at Ranchi is the only institute in the State that offers UG courses in nursing and so it was selected. Out of ten ANMTCs, three ANMTCs namely at Chaibasa, Deoghar and Jamshedpur were selected by Simple Random Sampling Without Replacement (SRSWOR) method. Audit was conducted during May 2015 and July 2015 covering the period 2010-15.

An entry conference was held with the Special Secretary, HME&FWD on 30 April 2015 in which audit objectives, scope and criteria were discussed. The audit findings and recommendations were discussed with the Joint Secretary HME&FWD in the exit conference held on 1 December 2015. The recommendations made in the performance audit report were accepted during exit conference. The reply of the department was received in November 2015 and has been suitably incorporated in the report.

Audit findings

2.1.6 Financial Management

Allotment and Expenditure

State Government provided funds for medical education under Plan and Non-plan heads to the institutions for their functioning. Apart from this, GoI also provided funds for opening of PG courses in PMCH, Dhanbad and MGMMCH, Jamshedpur on cost sharing basis (75 *per cent* Central and 25 *per cent* State share) during 2011-12. The allotment of fund and plan/non-plan expenditure incurred there against at State level for medical education is given in **Table-2.1.1**:

Table-2.1.1: Statement showing allotment and expenditure under State plan and non-plan of medical education

(₹ in crore)

Year	Head	Allotment	Expenditure	Savings (per cent)
2010-11	Plan	22.02	20.55	1.47(7)
	Non-plan	111.38	101.75	9.63(9)
2011-12	Plan	56.82	56.20	0.62(1)
	Non-plan	123.27	111.67	11.60(9)
2012-13	Plan	20.12	19.75	0.37(2)
	Non-plan	138.53	113.70	24.83(18)
2013-14	Plan	26.96	24.88	2.08(8)
	Non-plan	160.45	128.71	31.74(20)
2014-15	Plan	58.26	56.70	1.56(3)
	Non-plan	194.81	147.11	47.70(24)

(Source: Data provided by the department)

From the **Table-2.1.1** it is evident that savings under non-plan heads ranged between nine and 24 *per cent* during 2012-15. No reason for savings under non-plan head was found on record.

Similar analysis for the test checked unit for the period 2010-15 is given below:

Table-2.1.2: Statement showing allotment and expenditure under plan and non-plan head of test checked unit i.e. PMCH, Dhanbad

(₹ in crore)

Year	Head	Allotment	Expenditure	Savings (per cent)
2010-11	Plan	2.51	1.92	0.59(24)
	Non-plan	9.33	9.32	0.01(0)
2011-12	Plan	6.01	5.52	0.49(8)
	Non-plan	11.63	11.31	0.32(3)
2012-13	Plan	2.44	2.39	0.05(2)
	Non-plan	10.49	10.47	0.02(0)
2013-14	Plan	3.55	3.40	0.15(4)
	Non-plan	12.28	11.15	1.13(9)
2014-15	Plan	10.86	9.55	1.31(12)
	Non-plan	10.89	10.74	0.15(1)

(Source: Data provided by the PMCH, Dhanbad)

Under plan head, there were savings of 24 *per cent* and 12 *per cent* during 2010-11 and 2014-15 respectively. Reasons for saving were attributed by the Principal, PMCH to delayed receipt of rate approval of machines and equipment and release of funds at the fag end of the year.

Allotment made under non-plan and expenditure incurred with respect to para medical education at State level is given in **Table-2.1.3** below:

Table-2.1.3: Statement showing allotment and expenditure under non-plan of para medical institutions at State level

(₹ in crore)

Year	Allotment	Expenditure	Savings (per cent)
2010-11	3.37	2.92	0.45(13)
2011-12	2.94	2.90	0.04(1)
2012-13	3.56	3.07	0.49(14)
2013-14	2.98	2.76	0.22(7)
2014-15	5.42	2.74	2.68(49)

(Source: Data provided by the Department)

From **Table-2.1.3** it is evident that utilisation of fund was satisfactory during 2010-14. However, there was a saving of 49 *per cent* during 2014-15 which was due to excess allotment on account of pay arrears.

2.1.7 Planning

During 2010-15, the State Government planned the following:

(i) to upgrade the existing Medical Colleges to meet the stipulations of MCI in respect of infrastructure that included:

- a) purchase of medical equipment;
- b) construction of new buildings for enhancing the annual intake capacity from 50 to 100 seats in PMCH, Dhanbad and in MGMCH Jamshedpur, 90 seats to 150 seats in RIMS, Ranchi and to open PG courses in PMCH, Dhanbad and MGMCH Jamshedpur.

(ii) establishment of three new Medical Colleges each in the Government sector (Chaibasa, Dumka and Palamu) and under PPP (Dumka, Ranchi and Saraikela-Kharsawan).

(iii) a plan to encourage private sector investment in medical colleges.

(iv) establishment of para-medical courses at Dhanbad, Jamshedpur and Ranchi as envisaged in the Annual Plans of 2011-12.

(v) three new GNMTCS at Dhanbad, Bhognadih at Sahebganj and Jamshedpur as envisaged in the Annual Plans of 2012-13.

2.1.7.1 Establishment of medical colleges/ para medical institutions

Audit scrutiny of annual plans, budget provisions and detailed appropriation accounts pertaining to the period 2010-15 revealed the following deficiencies:

(i) Establishment of medical colleges in Government Sector

Establishment of three new Government medical colleges at Chaibasa, Dumka and Palamu were envisaged in Annual Plans for the period 2010-11 and 2011-12 with proposed plan outlay of ₹ 1.50 crore and ₹ 1.00 crore respectively against which only ₹ 10 lakh was allotted during 2011-12. However, this amount was surrendered by the Department at the end of financial year. As a result, work for establishment of three new Government medical colleges did not even commence.

Department accepted the fact and stated that establishment of medical colleges in Government sectors were under process. However, no details of the process were provided to audit.

(ii) Establishment of medical colleges in Public Private Partnership Mode/Private Sector

- Establishment of three new medical colleges under PPP was envisaged with departmental proposal for a plan outlay of ₹ 1.11 crore during 2012-15 against which a budget allotment of ₹ 1.10 crore was made during 2012-14. But this plan was not acted upon due to lack of detailed implementation plan and the entire amount was surrendered and no medical colleges were established under PPP in the State.

Establishment of three new medical colleges in Government sector could not commence during 2010-12 due surrender of fund by the department.

Establishment of three new medical colleges under PPP could not be done during 2012-15 due to absence of implementation plan and surrender of fund by the department.

Encouraging participation of private sector in establishment of new medical colleges in Private sector could not be achieved during 2010-12 as no eligible party turned up and the earmarked fund was surrendered by the department.

Opening of three para-medical courses envisaged in the Annual Plan 2011-12 could not be achieved due to non-provision of funds in budget.

During 2010-15 utilisation of UG seats in medical colleges were 1,277 against 1390 sanctioned seats leaving 113 vacant seats (8 per cent) and PG seats was 708 against 959 sanctioned seats leaving vacant seats of 251 (26 per cent).

Department accepted the fact and stated (November 2015) that establishment of medical colleges in PPP/private sector were under process. However, no details of the process were provided to audit.

- For encouraging participation of private sector in the field of setting up of new Medical Colleges, an outlay of ₹ 20.40 crore for the plan period 2010-12 (₹ 40 lakh for 2010-11 and ₹ 20 crore for 2011-12) was envisaged in Annual Plan against which budget provision of ₹ 17.40 crore (₹ 40 lakh for 2010-11 and ₹ 17 crore for 2011-12) was approved. This plan, however, was not implemented since required activities of seeking expression of interest, signing of Memorandum of Understanding (MoU) with interested stakeholders were not initiated and the amounts were surrendered at the end of the respective financial years.

This led to failure in encouraging participation of private sector in setting up new medical colleges.

While accepting the facts, Department stated (November 2015) that no eligible party turned up.

2.1.7.2 Establishment of new para-medical institutions

The State Government planned for opening three para-medical courses as envisaged in the Annual Plan 2011-12 but this could not be achieved due to non-provision of funds. Further, new GNMTCS envisaged in Annual Plan 2012-13 also could not be established due to surrender of entire plan outlay of ₹ one crore.

So the objective of increased capacity of MO's and PMP's for delivering health services could not be achieved.

While accepting the facts the Department stated (November 2015) that establishment of new para medical institutions were under process. No specific details were, however, provided.

Recommendation

We recommend that Government should take concerted efforts to open the medical colleges and para-medical institutions as envisaged in its annual plans.

2.1.7.3 Intake capacity and its utilization

The number of seats sanctioned by the MCI in all the three medical institutions under UG and PG levels and its utilisation during 2010-15 is given in **Appendix-2.1.1**. During 2010-15, utilisation of seats under UG course was 1,277 against the total sanction of 1390 seats, leaving 113 seats (8 per cent) vacant. Utilisation of seats under PG courses was low with only 708 seats being utilised against sanctioned 959, leaving 251 (26 per cent) seats vacant. Further, in the Budget Proposal of Health Department 2012-13 and also in the draft 12th Five Year Plan (2012-17), the State Government had outlined an annual requirement of 900 UG seats. So as per the plan the State Government during the period 2012-15 should have created an intake capacity of 2,700 seats. We however, observed that against 950 seats (35 per cent) could be created for admission to the students, of this only 865 students took admission to these courses.

In test checked units, vacancy of seats under UG level was mainly during 2011-12 (12 vacant seats against 50 sanctioned) and 2014-15 (29 vacant seats against 100 sanctioned). The Principal, PMC, Dhanbad attributed this to non-availability of eligible candidates who need to secure minimum 40 *per cent* marks for qualifying in entrance examination under ST category.

Thus, on the objective of the State Government to increase the output of doctors/specialist doctors there was a significant failure which is bound to have adverse impact on the provision of health services in the State in the years to come. Although the State in its 12th Five Year Plan has planned an increase in the capacity of UG courses but it has not developed any road map for ensuring this in a time bound manner.

While accepting the fact the Department stated (November 2015) that it was trying its best to enhance the intake capacity of medical colleges through opening of new medical colleges and other ways.

2.1.7.4 Enhancement of intake capacity of UG courses

PMCH, Dhanbad took admission on increased seats despite refusal of recognition by MCI during 2014-15 thereby putting the future prospects of students admitted on enhance seats uncertain.

As per the Annual Plan of the Department, intake capacity of medical seats for UG courses was to be increased from 50 to 100 in PMC Dhanbad, during 2010-11 to 2012-13. The MCI accorded one time permission (July 2013) for increase of intake capacity under UG courses from 50 to 100 in 2013-14 subject to renewal on annual basis. However, MCI in its inspection (March 2014) noted deficiencies in terms of acute shortage of faculty, non-posting of regular librarian, inadequacies in lecture theatres, equipment in central library, teaching area in OPD etc. and refused to renew its permission to increase intake capacity for academic session 2014-15. In spite of this, the PMC Dhanbad took admission of students against the increased seats. Meanwhile, the Hon'ble Jharkhand High Court stayed (September 2014) the order of MCI regarding non-renewal of increase of seats from 50 to 100 subject to removal of the deficiencies pointed out by the MCI within a time bound schedule of ten months i.e. up to June 2015. The Principal PMCH stated (July 2015) that action by Government was awaited. Thus, future prospect of the students admitted on enhanced seats was rendered uncertain.

While accepting the facts the Department stated (November 2015) that shortage of faculty was being addressed and appointment procedure of junior faculty was under process.

2.1.7.5 Opening of New PG courses under Centrally Sponsored Schemes (CSS)

Opening of 49 new PG seats in PMCH could not be achieved despite expenditure of ₹ 4.85 crore on purchase of medical equipment during 2012-15 due to acute shortage of faculty (60 *per cent*).

Under Centrally Sponsored Scheme (75:25) for strengthening and upgrading of State Government medical colleges, which were not covered under Prime Minister *Swasthya Suraksha Yojana* (PMSSY), Government of India (GoI) approved (2011-12) a plan for opening of PG courses in PMCH, Dhanbad with an intake of 49 seats in 17⁴ disciplines. Against plan outlay of ₹ 18.15 crore (₹ 13.61 crore Central share and ₹ 4.54 crore State share), a sum of ₹ 11.34 crore (₹ 6.80 crore Central share and ₹ 4.54 crore State share) was

⁴ Anatomy, Physiology, Biochemistry, Pharmacology, Pathology, Preventive and Social Medicine, Forensic Medicine and Toxicology, Medicine, Skin, Pediatric, Surgery, Orthopedics, Anaesthesia, Obstetric and Gynecology, Ear Nose and Throat, Ophthalmology and MD TMF.

released to PMCH, Dhanbad during February to March 2012 out of which ₹ 4.85 crore was spent on purchase of medical equipment during 2012-15. However, due to an acute shortage of faculty (60 *per cent* during 2010-15) in PMCH, Dhanbad the department did not proceed with inspection by MCI, as was required prior to opening of PG courses. Thus, the plan for opening new PG courses could not be achieved even after three years of launch of the programme.

In reply, the Department accepted the fact and stated (November 2015) that initiative have been taken for fresh appointment of faculty required for opening of new PG courses.

Recommendation

We recommend that Government should take initiative to commence the PG courses.

Result of test check

Part I- Medical College

2.1.8 Infrastructure

2.1.8.1 Civil Works

To fulfill the infrastructure requirements laid down by MCI, in PMCH, Dhanbad 12 civil works for construction of new buildings or renovation works etc. were sanctioned under State Plan during 2011-15, as detailed in **Appendix-2.1.2**.

Twelve works sanctioned during 2011-15 estimated at ₹ 53.77 crore for PMCH Dhanbad could not be completed as of July 2015 leading to non-creation of infrastructure required for fulfilling the MCI requirements.

The works were assigned to Engineering Cell, Health, Medical Education and Family Welfare Division, Hazaribag at estimated costs of ₹ 53.77 crore. For these works, ₹ 17.98 crore was allotted (during September 2011 to August 2014) to the Engineering Cell. Out of 12 works, two works namely construction of Library and of Auditorium sanctioned in 2011-12 were completed, but not handed over as of July 2015. Further, construction of Central Casualty Ward sanctioned in 2012-13 remained incomplete (July 2015) after incurring expenditure of ₹ 2.47 crore because the electrical and water supply components were not completed. As a result a 12 bedded Surgical ICU could not be operationalised as of July 2015.

Of the nine works sanctioned in 2014-15 only two works *i.e.* construction of building of Cath Lab and renovation of 500 bed main hospital building were in progress while agreements of four works (Construction of Paediatrics Department Buildings part A and B, buildings of Gynaecology, Surgery, Anaesthesia, ENT and Eye departments) were not executed (March 2015) by the department and for another two works (renovation of Lecture Theatre Hall and Construction of Body Storage Unit) tender process were not finalised as of July 2015. Construction of Burn Unit has not yet started (July 2015).

Thus, the objective of creation of infrastructure to fulfill the MCI requirements was not achieved.

In reply, the Department accepted the fact and stated (November 2015) that Central Casualty Ward had been handed over (October 2015) and remaining works were under progress and shall be completed soon. However, no timeline was provided.

2.1.8.2 Shortage of medical equipment

A medical college is required to maintain medical equipment as per standard list prescribed by the MCI for various departments. In PMCH, Dhanbad, we observed shortage of medical equipment in 13 out of 23 departments (**Appendix-2.1.3**).

In 11 departments of PMCH Dhanbad shortage of medical equipment ranged between 22 and 90 per cent.

From the details, it is evident that while the position of medical equipment in the department of Ear, Nose and Throat (ENT) and Physiology was satisfactory, in the remaining 11 departments shortages ranged between 22 and 90 per cent. Yet, funds worth ₹ 1.76 crore for purchase of medical equipment was surrendered during the same period. Such shortages could affect the practical training and education of medical students.

The Department accepted the fact and stated (November 2015) that medical equipment as recommended by the MCI were being procured by the medical college. However, no details were made available.

Recommendation

We recommend that Government should rapidly create infrastructure in medical institutions commensurate with MCI norms.

2.1.8.3 Utilisation of medical equipment

In six departments of PMCH Dhanbad 11 machines and equipment worth ₹ three crore purchased under State plan during March 2011 and March 2015 were not put to use due to non-availability of reagent/Technicians.

The Principal PMC, Dhanbad purchased medical equipment worth ₹ 22.29 crore and ₹ 4.85 crore from State Plan fund and CSS fund, respectively, that was meant for opening of new PG courses during 2010-15. During audit, various irregularities were found in installation and functioning of medical equipment (detailed in **Appendix-2.1.4**). In six departments, 11 different equipment worth ₹ three crore purchased under State Plan during March 2011 and March 2015, were not put to use for one to four years. This was mainly due to non-availability of reagent/technicians. A machine, 'Elisa Reader with Washer' purchased and received in Biochemistry Department in March 2011 was not installed as of July 2015. Similarly, in the Obstetrics & Gynecology Department 'Digital Colposcope and Colour Doppler System' purchased in March 2015 was not functional as construction of room for its installation was not completed as of July 2015. Further, equipment purchased in March 2015 for 12 bedded Surgical ICU was not in use since the Central Casualty Ward building where these were to be installed was not complete.

Further, in three departments, seven items of equipment worth ₹ 1.25 crore purchased under CSS during October 2013 and February 2015 were never put to use for want of reagent/ or technicians or the failure to commence PG courses.

Thus, failure to dovetail the purchase of medical equipment with its associated infrastructure led to idling of such expensive equipment leading to the possibility of their permanent failure or disuse or damage. Also public were denied of the benefits of better health services.

The Department accepted the facts and stated (November 2015) that eligible technician were being hired on outsource basis and fund for reagent has been provided.

In three departments PMCH Dhanbad seven machines and equipment worth ₹ 1.25 crore purchased under CSS during October 2013 and February 2015 could not be put to use for want of reagent/technician and failure to open PG courses.

2.1.8.4 Bed occupancy

As per provisions contained in Para B 1.8 of MCI guidelines, average occupancy of indoor beds shall be a minimum of 75 *per cent* per annum for a Teaching Hospital.

As per information given by PMCH, Dhanbad the bed occupancy during 2010-15 was low in comparison to the prescribed norms of MCI as detailed in **Table-2.1.4** below:

Table-2.1.4: Statement of inpatient occupancy against availability of beds

Year	Total no. of beds available	Total no. required for 100 <i>per cent</i> bed occupancy (no. of beds available x no. of days per year)	Actual no. of occupancy	Percentage of occupancy
2010-11	407	148555	78825	53
2011-12	407	148962	72928	49
2012-13	407	148555	73277	49
2013-14	407	148555	77694	52
2014-15	407	148555	85725	58

(Source: Data provided by the Superintendent, PMCH, Dhanbad)

Bed occupancy of teaching hospital of PMCH Dhanbad ranged between 49 and 58 *per cent* during 2010-15 against the required MCI norms of 75 *per cent*.

From the above details it is evident that indoor occupancy ranged between 49 to 58 *per cent* during 2010-15 which was far less than the criteria prescribed in MCI guidelines of minimum 75 *per cent* bed occupancy.

Low bed occupancy could adversely affect the prescribed and necessary level of clinical training and exposure of medical students.

The Department accepted the facts and stated (November 2015) that the minimum bed occupancy shall be maintained.

2.1.9 Academic and research activities

The intake capacity under UG course in all the three Government Medical Colleges was 190 seats during 2010-11 which was subsequently increased to 350 in 2014-15. The MCI regulates the academic and research activities carried out in the medical institutions. The following points were observed:

2.1.9.1 Impact on teaching due to shortage of faculty

Shortfall in actual teaching hours devoted against prescribed minimum norms of MCI ranged between 14 and 48 *per cent* in case of seven test-checked departments of PMCH Dhanbad

The MCI prescribed teaching hours to be devoted for various disciplines under UG medical education for the entire duration of nine semesters. Audit checked the teaching hours actually devoted by the faculty, against these prescribed norms for seven subjects (out of 23) in PMCH, Dhanbad for a batch of students that had completed all the nine semesters. We observed that there were shortfalls in actual teaching hours that ranged between 14 and 48 *per cent* (**Appendix-2.1.5**).

Further, a joint interview was conducted on 9 July 2015 with the Warden-cum-Tutor of Forensic Medicine and Toxicology (FMT) department and the students of ninth semester (21 out of 50 students were interviewed). In reply to the query regarding completion of theory courses, especially in absence of adequate faculty, all students admitted that courses were completed by mixing up different batches in single class by the respective faculty and about 75 *per cent* practical classes were also completed in this manner. This indicates that quality of education was compromised.

The Department accepted the facts and stated (November 2015) that filling up of the faculty had been going on.

2.1.9.2 Rural and Urban Health Training Centre

As per MCI guidelines, every medical college shall have three PHCs/ Rural Health Training Centres (RHTC) for training of students in community oriented primary health care and rural based health education. Separate residential arrangements for boys and girls, interns and undergraduates with mess facilities shall also be provided in at least one PHC/RHTC. Besides, there shall be one Urban Health Training Centre (UHTC). Both RHTC and UHTC shall be under the full administrative jurisdiction of the medical college. Further, adequate transport facility shall be provided for carrying out field work, teaching and training by the Department of Community Medicine (DCM).

Audit scrutiny revealed that Baliapur, Govindpur and Nirsa Community Health Centres (CHCs) were nominated as RHTC for training of students on rural based health education. Shree Shree Laxmi Narayan Trust Hospital was nominated as the Urban Health Training Centre (UHTC) and was under the administrative control of DCM. The building at RHTC, Govindpur was in a dilapidated condition with no basic facilities like water, electricity, toilet facility etc.



Dilapidated condition of building of RHTC, Govindpur

The RHTC and UHTC both of PMCH Dhanbad for imparting practical training on community oriented primary health care were defunct for want of man power as well as infrastructure.

Further, against the 17 sanctioned posts in the RHTC, only three viz. an Assistant Professor, a Lady Medical Officer and a Health Inspector were posted and on part-time basis as the Assistant Professor and Lady Medical Officer were on deputation to the Gynecology and Anesthesia Department respectively, for the last eight years. Similarly, the only Assistant Professor posted in UHTC was working in the Principal's Office in PMCH. Thus, RHTC and UHTC were both practically defunct in terms of manpower as well as infrastructure. Further, the Medical curriculum prescribed by MCI for UG level envisages 15 field visits for second semester students and four weeks community posting for third, fourth and sixth semester students. Due to non-functioning of these centres, students were deprived of field trainings.

In reply, the HOD, DCM accepted (July 2015) the facts and stated that no transport facility was provided by the Principal for commuting of students and staffs for field training.

The Department accepted the facts and stated (November 2015) that transport facility required for field trainings to medical students would be provided. However, no details were furnished.

2.1.9.3 Research activities

Research activities are one of the important functions of medical college. According to the MCI guidelines, fully furnished space for research work in various departments of the college should be provided.

No research paper was published by PMCH Dhanbad during last three years.

It was observed that fund for research work was not provided by the college to any of its departments as no fund was allotted by the Health Department during 2010-15. Further, as per information provided by the five departments (Anatomy, Gynecology, Pediatric, PSM and Surgery), the space for research activities were inadequate/nil. As per information provided to the MCI by different departments of the college, no research paper had been published during last three years.

The Department accepted the facts and stated (November 2015) that filling up of the faculty had been going on.

2.1.9.4 Defunct Departments

Out of 23 departments sanctioned in PMCH Dhanbad, four departments were defunct as no faculty was posted during 2010-15.

In PMCH, Dhanbad 23⁵ departments were sanctioned. During scrutiny it was observed that in four {Department of Psychiatry, Radiology, Radiotherapy and Physical Medicine & Rehabilitation (Optional)} departments, no faculty was posted during 2010-15. Further, as per medical curriculum prescribed by MCI in Psychiatry and Radiology departments a minimum of 20 teaching hours was mandatory. Since no faculty was available in these departments, students were not taught the above subjects.

The Department accepted the facts and stated (November 2015) that filling up of the faculty had been going on.

2.1.10 Human Resources Management

In order to get recognition from MCI for running UG courses as well as PG courses in a medical college, deployment of adequate faculty is the most important criterion. Data regarding human resources in all the three medical colleges in Government sector was not provided by the Department. However, year-wise details of sanctioned strength and person in position of teaching faculty and non-teaching cadre in PMCH Dhanbad for 2010-15 are detailed in **Table-2.1.5.**

⁵ Anatomy, Anesthesia, Biochemistry, Dentistry, FMT, Medicine, Microbiology, Obstetrics & Gynecology, Ophthalmology (Eye), Orthopedics, Oto-Rhino-Laryngology (ENT), Pediatrics, Pharmacology, Pathology, Physiology, Physical Medicine & Rehabilitation, PSM, Psychiatry, Radiology, Radiotherapy, Skin & VD, Surgery and TB & Chest

Table-2.1.5: Statement showing sanctioned strength and persons-in-position of teaching faculty and paramedical cadres during 2010-11 to 2014-15

Sl. No.	Year	Category	Sanctioned strength	PIP	Vacancy (in per cent)
1	2010-11	Teaching Faculty	163	78	85 (52)
		Para Medical	100	66	34 (34)
2	2011-12	Teaching Faculty	163	72	91 (56)
		Para Medical	100	63	37 (37)
3	2012-13	Teaching Faculty	163	71	92 (56)
		Para Medical	100	60	40 (40)
4	2013-14	Teaching Faculty	163	68	95 (58)
		Para Medical	100	57	43 (43)
5	2014-15	Teaching Faculty	163	65	98 (60)
		Para Medical	100	52	48 (48)

(Source: Data provided by PMCH, Dhanbad)

In PMCH Dhanbad vacancy position of teaching faculty increased from 52 per cent during 2010-11 to 60 per cent during 2014-15. In Paramedical cadre it increased from 34 per cent during 2010-11 to 48 per cent during 2014-15.

As evident from **Table-2.1.5**, the overall vacancy position in all cadres of faculty, taken together, worsened to 60 per cent during 2014-15 in comparison to 52 per cent during 2010-11. The vacancies increased from 34 per cent during 2010-11 to 48 per cent in 2014-15 in the Para Medical cadres. Persistent vacancies of manpower had resulted in installed medical equipment lying idle and consequently compromising on quality of medical education.

For removing shortage of teaching faculty in medical institutions the MCI Undergraduate Working Group 2010 recommended in its “Vision 2015 documents” the tapping of consultant posts in Government Service Departments, dual/adjacent appointments, interdisciplinary appointments, faculty development programme, defining career paths, employment of retired teachers, increasing age of superannuation in specific areas and increasing the pool of young teachers by increasing postgraduate output. We observed that State had only acted upon the recommendation to employ the retired teachers. In case of seven other recommendations, no initiative had been taken by the Health Department as of July 2015. As a result, shortage of faculty remained alarmingly high.

The Department accepted the facts and stated (November 2015) that the human resources requirements were being fulfilled. Further, for future requirements, the recommendation of MCI Undergraduate Working Group would be taken under consideration.

Recommendation

We recommend that Government should work on the recommendations of the MCI working group so that shortage of faculty can be minimised.

2.1.11 Monitoring

As per MCI guidelines, every medical institution shall have a College Council comprising of Head of Departments (HODs) as members and Principal/ Dean as chairperson. The council shall meet at least four times in a year to draw up the details of curriculum and training programme, enforcement of discipline and other academic matters. The Council shall also organise inter-departments

Monitoring of PMCH Dhanbad was deficient as only four meetings of college council were held during 2010-15 against the required 20 meetings.

meetings like grand rounds⁶, statistical meetings and clinico-pathological meetings including periodical research review in the institution regularly.

Although College Council in PMCH, Dhanbad was in existence, only four meetings out of the stipulated 20 meetings during 2010-15 (One each in 2010-11 and 2012-13 and two in 2011-12) were held. Scrutiny revealed that in these meetings only enforcement of discipline and other minor academic matters were taken up but there were no discussions on details of curriculum and training programme, inter departmental meetings, statistical meetings and clinico-pathological meetings. Thus, working of College Council was deficient both in terms of number of meetings and its substantive contents. It did not draw up a schedule of inspection as enumerated in the MCI guidelines. However, Principal, PMCH, Dhanbad informed that although no schedule of inspection was drawn up, 25-30 surprise inspections were done during 2010-15. However, the claim was not backed by documentary evidence.

The Department accepted the facts and stated (November 2015) that Principal was being directed to strictly follow the MCI norms.

Recommendation

We recommend that Government should ensure detailed planning and implementation of its stated intentions to create greater capacity and regularly monitor its medical institutions.

Part-II Para medical institutions

Para medical institutions (ANMTCs, GNMTCs and Colleges of Nursing) are entities which produce nursing personnel to serve as supporting staffs to MOs. In this section we have focused on activities of para medical institutions.

2.1.12 Financial Management

2.1.12.1 Allotment and Expenditure

Fund for GNMTCs Dhanbad and College of Nursing RIMS, Ranchi was released to PMCH Dhanbad and Director RIMS, Ranchi respectively. However it was provided in lump sum and so it could not be segregated for each institution. The allotment under Salary head to three test checked ANMTCs and expenditure there against is given in **Table-2.1.6**.

Table-2.1.6: Statement showing Allotment and Expenditure under salary head of test checked ANMTCs

Year	Deoghar			Chaibasa			Jamshedpur		
	Allotment	Exp	Saving (per cent)	Allotment	Exp	Saving (per cent)	Allotment	Exp	Saving (per cent)
2010-11	50.36	50.09	0.26(1)	20.41	19.53	0.88(4)	28.47	26.96	1.51 (5)
2011-12	33.80	33.20	0.6 (2)	14.12	14.02	0.1(0)	22.44	21.34	1.1 (5)
2012-13	47.85	43.97	3.88 (8)	23.56	12.84	10.72(46)	30.89	29.62	1.27 (4)
2013-14	28.72	28.63	0.09	16.94	16.49	0.45(3)	33.78	31.86	1.92 (6)
2014-15	56.00	27.19	28.81(51)	46.00	16.28	29.72(65)	57.75	26.82	30.93 (54)

(Source: Principal in-charge ANMTCs)

Scrutiny of above table revealed that utilisation of fund during 2010-14 was satisfactory except in Chaibasa during 2012-13 where saving was 46 per cent.

⁶ Grand round: a formal meeting at which physicians discuss the clinical case of one or more patients as part of residency training.

During 2014-15, there was huge saving of fund in all three test checked ANMTCs which ranged between 51 *per cent* in Deoghar and 65 *per cent* in Chaibasa. Reason for saving was attributed by the Principal in charge to excess allotment on account of arrear pay.

The Department accepted the facts and stated (November 2015) that during 2014-15 fund was surrendered due non-payment of arrears.

2.1.12.2 Up-gradation of GNM School, Dhanbad into College of Nursing

Government of India sanctioned ₹ 5.21 crore for up-gradation of existing School of Nursing, PMCH, Dhanbad into College of Nursing under the scheme of Development of Nursing services during 2009-10. Under this scheme, ₹ one crore was provided for furniture, ₹ 3.21 crore for civil work, ₹ 65 lakh for laboratory equipment and ₹ 35 lakh for books respectively. Accordingly, GoI released the first installment of ₹ 62.50 lakh in February 2010 and second installment of ₹ 40 lakh in October 2010 to the Superintendent, PMCH, Dhanbad.

Upgradation of GNM school Dhanbad could not achieved despite expenditure of ₹ 1.01 crore as of July 2015 due to non-submission of utilization certificate supported with audited expenditure.

Against the available funds of ₹ 1.03 crore, ₹ 1.01 crore was released to Jharkhand Hill Area Lift Irrigation Corporation (JHALCO), Dhanbad by the Superintendent, PMCH, Dhanbad (₹ 40.63 lakh in July 2010, ₹ 40.49 lakh in January 2011 and ₹ 20 lakh in February 2012) for construction of a new Nursing College building in Dhanbad at an estimated cost of ₹ 1.94 crore.

Audit scrutiny revealed that JHALCO had executed work worth ₹ 78.58 lakh up to October 2011. Thereafter, no further work was executed by JHALCO for want of fund. The GoI did not release any installment after October 2010 as the utilization certificate supported by audited expenditure, was not furnished by the Superintendent, PMCH, Dhanbad to GoI.

Thus, due to negligence of the Superintendent, PMCH, Dhanbad to furnish utilisation certificate, subsequent instalment of fund was not released which resulted in non-completion of the work as of July 2015, despite expenditure of ₹ 1.01 crore (₹ 78.58 lakh on construction of incomplete building and ₹ 22.52 lakh unadjusted advance with JHALCO). Hence even after five years the GNM School, Dhanbad could not be upgraded into college of nursing.

In reply, the Department stated (November 2015) that number of reminders along with expenditure reports were furnished to the GoI for release of balance fund. The reply was not acceptable as utilisation certificate supported with audited expenditure was to be furnished to GoI for release of balance fund which was not done.

ANMTCs and GNMTCs

2.1.13 Status of Infrastructure

Shortage of medical equipment and building

The INC prescribes medical equipment in nursing institutions. The available medical equipment *vis a vis* the norms in the in test check of three ANMTCs and GNMTC is given in **Table-2.1.7:**

Table-2.1.7: Details showing number of machines and equipment

Sl. No.	Name of centre/college	Requirement (No. of items)	Available (No. of items)	Shortage in number (per cent)
1	ANMTC, Chaibasa	68	41	27(40)
2	ANMTC, Deoghar	76	33	43 (57)
3	ANMTC, Jamshedpur	Laboratory did not exist.		
4	GNMTC, Dhanbad	430	159	271(63)

(Source: Information furnished by the respective ANMTC and GNMTC)

In test-checked ANMTCs and GNMTC shortage of machine and equipment ranged between 40 per cent and 63 per cent.

From the above details, it is evident that shortage of medical equipment ranged between 40 per cent and 63 per cent. In ANMTC, Jamshedpur a laboratory was also not in existence and the practical classes of ANMTC, Jamshedpur were conducted in GNMTC, Jamshedpur. Because of this INC, upon inspection of ANMTC, Jamshedpur in April 2015 ordered (June 2015) for closure of the ANM programme. Further, it was seen that the buildings of GNMTC, Dhanbad and of ANMTC, Jamshedpur were in a dilapidated condition. Principal in-charge, GNMTC, Dhanbad had reported (December 2014) this matter to the department and stated that 135 girl students were residing in a building that was in a very precarious condition but no action was taken as of July 2015. Thus, above mentioned deficiencies may adversely affect the teaching of para medical students.

In reply, the Department stated (November 2015) that to address the shortage of medical equipment the Government had already released funds from National Health Mission and the accommodation for the institutes and the hostel were being shifted to a suitable buildings. The reply was not tenable as these institutes continued to lack adequate equipment and buildings.

Recommendation

We recommend that Government should ensure the creation of infrastructure in para medical institutions commensurate with INC norms.

2.1.14 Academic activities

Intake capacity and its utilization

In test-checked ANMTCs there were 627 vacant seats (70 per cent) against 900 sanctioned seats during 2010-15. In three years period no students were admitted in all the three test-checked ANMTCs. In GNMTC Dhanbad 15 per cent seats were vacant during 2010-15

The INC approves course of study and number of seats for admission in a nursing institutions for a specified period. In three test checked ANMTCs, total of 900 seats were approved by the INC for ANM course during 2010-15. We noticed that in test-checked ANMTCs as against the 900 seats, only 273 students were admitted leaving 627 seats (70 per cent) vacant. During three years period (2011-12 and 2013-15), no students were admitted in any of the three test checked ANMTCs, as detailed in **Appendix-2.1.6**. This was because district authorities did not furnish the list of candidates for admission to the institutions.

In GNMTC, Dhanbad 15 per cent seats (30 out of 200 sanctioned) for GNM course were vacant during 2010-15 (**Appendix-2.1.6**).

Thus, non-utilisation of sanctioned seats had an adverse impact on availability of trained para medical personnel in the State and the capacity of health services delivery in the State.

The department accepted the facts and stated (November 2015) that all the 10 ANMTCs have their district quota for admission through a very cumbersome

process which was not in direct control of the department and now the department had taken an initiative to hold a central admission test.

2.1.15 Human Resource Management

Status of Human Resources

In Jharkhand, there are 10 ANMTCs, three GNMTCs in Government sector. Cadre-wise details of human resources were not made available by the Health Directorate at State level for the training centres. However, consolidated data of teaching and non-teaching staff against sanctioned strength as of April 2015 was furnished by the Health Directorate, which is given in **Table-2.1.8** below:

Table-2.1.8: Details showing sanctioned strength and persons-in-position of Para Medical training centres as of April 2015

Sl. No	No. of training centre	Total number of sanctioned post (both teaching and non-teaching)	Persons-in-position	Vacant post (per cent)
1	ANMTC (10)	81	26	55 (68)
2	GNMTC (3)	22	5	17 (72)

(Source: Principal ANMTCs, GNMTCs)

At State level, vacancy position of staff in ANMTCs was 68 per cent and in GNMTC it was 72 per cent as of April 2015.

From the details in **Table-2.1.8**, it is seen that Para Medical Centres were facing an acute shortage of staff with vacancy rates of 68 per cent in ANMTCs and 72 per cent in GNMTCs.

In the test checked ANMTCs, and GNMTC, shortage of teaching staff for 2010-11 and 2014-15 is given in **Table-2.1.9** below:

Table-2.1.9: Details of sanctioned strength and persons-in-position of teaching staffs in test checked ANMTCs and GNMTC during 2010-15

Sl. No.	Name	Teaching Staff					
		2010-11			2014-15		
		SS	PIP	Vacancy (per cent)	SS	PIP	Vacancy (per cent)
1	ANMTC Chaibasa	9	1	8 (89)	9	1	8(89)
2	ANMTC Deoghar	9	7	2(22)	9	2	7(78)
3	ANMTC Jamshedpur	9	2	7(78)	9	2	7(78)
Total		27	10	17(63)	27	5	22(81)
4	GNMTC Dhanbad	7	2	5(71)	7	0	7(100)

(Source: Principal in-charge of test-checked units)

In test-checked ANMTCs shortage of staff increased to 81 per cent during 2014-15 as against 63 per cent during 2010-11. In GNMTC Dhanbad it increased to 100 per cent during 2014-15 as against 71 per cent during 2010-11.

From the table it can be seen that in ANMTCs there was a shortage of 63 per cent teaching staff in 2010-11 which increased to 81 per cent in 2014-15. In GNMTC, it was 71 per cent in 2010-11 which reached 100 per cent in 2014-15. No fresh appointment was made against the vacant posts which resulted in increasing vacancy rates.

The paramedical centres were facing acute shortage of teaching staff which might adversely impact the teaching as well as the quality of nurses and technicians that graduate from these colleges.

The Department accepted the facts and stated (November 2015) that new Service Rules were under consideration for fresh appointment.

Recommendation

We recommend that Government should ensure special measures to attract qualified medical personnel for para medical institutions for meeting the INC norms.

2.1.16 College of Nursing

College of Nursing offers B.Sc. course in Nursing Science. There is only one Nursing College in the State under the administrative control of RIMS, Ranchi. Audit of records of College of Nursing, Ranchi revealed the following deficiencies:

In College of Nursing, Ranchi shortage of equipment was 72 per cent against the INC norms as of July 2015.

In College of Nursing, Ranchi no admission was taken against the sanctioned 80 seats during 2011-12 and 2014-15 due to delayed receipt of recognition by the INC.

In College of Nursing Ranchi only two personnel were deployed against 18 sanctioned posts during 2010-11 and 2014-15 leaving vacancy of 16 (89 per cent).

- College of Nursing faces an acute shortage of equipment. Against the requirement of 176 equipment as per prescribed norms of INC, only 49 were available as of July 2015 leaving a shortage of 127 (72 per cent). This may adversely impact the teaching of para medical students.

- During 2010-15, only 211 students (53 per cent) were admitted in College of Nursing, Ranchi against 400 seats approved by INC (**Appendix-2.1.6**). In two years (2011-12 and 2014-15) no admissions were made against the sanctioned 80 seats in each year due to delayed receipt of recognition (November 2011 and November 2014) by the INC.

Thus, non/short utilisation of sanctioned seats may have an adverse impact on availability of trained para medical personnel in the State.

- Against 18 sanctioned posts of faculty in College of Nursing, Ranchi only two personnel were deployed during 2010-11 and 2014-15 leaving a vacancy of 16 (89 per cent). Thus, the institution had been facing acute shortage of faculty which may impact the teaching as well as quality of nurses graduating from the college.

Recommendation

We recommend that Government should ensure special measures to attract qualified medical personnel and create adequate infrastructure for College of Nursing for meeting the INC norms.

2.1.17 Monitoring

No visit for inspection of the test-checked paramedical institutions was done by any higher authority.

For proper implementation of any programme there should be a system for monitoring and evaluation. It was noticed that there was no specific provision for monitoring and evaluation for para-medical institutions in the INC guidelines. Also no schedule of inspection was drawn up by the Department and no inspection of the institutions was conducted by any higher authority in any of the test checked para-medical institutions.

We recommend that Department should conduct regular and effective monitoring of para medical institutions.

2.1.18 Conclusion and Recommendations

- The State Government failed to establish new Medical Colleges in the Government sector and under the PPP mode in order to fill up its annual target of 900 UG seats and even the meagre allotments of plan expenditure was surrendered. Against the existing 1,390 UG seats in the existing three medical

colleges only 1,277 could be filled up leaving a vacancy of 113 seats. Likewise utilisation of PG seats was 708 against sanctioned 959 seats leaving vacancies of 251 seats. Although the State had stated in its 12th Five Year Plan to increase the capacity of UG courses, it did not develop any road map for ensuring this in a time bound manner.

We recommend that Government should take steps to increase the capacity of the medical colleges as envisaged in its annual plan.

- In PMCH, Dhanbad admissions were made for additional seats during 2014-15 without approval of MCI putting the future prospects of the students admitted to these additional seats uncertain. Further, in PMCH, PG courses could not be started due to acute shortage of faculty ranging between 53 *per cent* in 2010-11 to 60 *per cent* in 2014-15.

We recommend that Government should take initiative to commence the PG courses.

- Different departments of PMCH faced acute shortage of medical equipment ranging between 22 and 80 *per cent*. Medical equipment purchased from the State Plan and CSS fund worth ₹ 4.25 crore were never put to use mainly for want of reagents/technicians.

We recommend that Government should rapidly create infrastructure in medical institutions commensurate with MCI norms.

- Due to shortage of faculty, teaching hours devoted for different subjects were not as per the MCI guidelines, which might adversely impacted the quality of education.

We recommend that Government should work on the recommendations of the MCI working group so that shortage of faculty can be minimised.

- No substantial research activities were carried out in any of the departments of the Medical College. Further, monitoring by College Council was inadequate.

We recommend that Government should ensure that the medical colleges take up research activities as required and also ensure regular monitoring of its medical institutions.

- Para-medical institutions also faced shortage of medical equipment ranging between 40 and 63 *per cent* in test-checked ANMTCs and GNMTC, while it was 72 *per cent* in College of Nursing, Ranchi. Similarly, there were shortages of 68, 72 and 89 *per cent* of faculty in ANMTCs, GNMTC and College of Nursing respectively, which might adversely impact the teaching.

We recommend that Government should ensure creation of infrastructure in para medical institutions and initiate measures to attract qualified medical personnel for para medical institutions commensurate with INC norms.

Appendix-2.1.1

(Referred to paragraph 2.1.7.3; page 13)

Statement of no. of seats sanctioned, utilized and vacant in UG/PG course during 2010-15

Year	Name of Medical College	UG course			PG course		
		No. of seats sanctioned	No. of seat utilised	No. of seats vacant	No. of seats sanctioned	No. of seat utilised	No. of seats vacant
2010-11	PMCH, Dhanbad	50	49	1	0	0	0
	MGMMCH, Jamshedpur	50	49	1	11	10	1
	RIMS, Ranchi	90	90	0	173	110	63
2011-12	PMCH, Dhanbad	50	38	12	0	0	0
	MGMMCH, Jamshedpur	50	41	9	11	10	1
	RIMS, Ranchi	150	145	5	179	128	51
2012-13	PMCH, Dhanbad	50	50	0	0	0	0
	MGMMCH, Jamshedpur	50	50	0	11	9	2
	RIMS, Ranchi	150	148	2	184	142	42
2013-14	PMCH, Dhanbad	100	100	0	0	0	0
	MGMMCH, Jamshedpur	100	100	0	11	09	2
	RIMS, Ranchi	150	147	3	184	133	51
2014-15	PMCH, Dhanbad	100	71	29	0	0	0
	MGMMCH, Jamshedpur	100	70	30	11	11	0
	RIMS, Ranchi	150	129	21	184	146	38
	Total	1390	1277	113(8%)	959	708	251(26%)

(Source: Information collected from Secretariat, Health, Medical Education and Family Welfare Department)

Appendix-2.1.2
(Referred to paragraph 2.1.8.1; page 15)
Statement of Civil works at PMCH, Dhanbad

(₹ in crore)

Sl. No.	Year	Name of the Work	Date of Sanction	Approved cost	Stipulated completion date	Fund received Expenditure	Status of the Work
1	2011-12	Construction of Auditorium	10-09-2011	3.84	29-09-2013	<u>4.16</u> 4.16	Work approximately completed
2	2011-12	Library building	09-09-2011	3.50	09-01-2014	<u>4.09</u> 4.09	Work completed and process for handing over.
3	2012-13	Central Casualty Ward	12-01-2013	2.52	27-12-2014	<u>2.51</u> 2.47	-
4	2014-15	Cath Lab	27-08-2014	9.96	23-12-2016	<u>2.00</u> 2.00	Incomplete and work is under progress
5	2014-15	Construction of building of Paediatric department Part-A	27-08-2014	9.70	-	0	Agreement stopped by the order of department on 17.03.2015
6	2014-15	Construction of building of Paediatric department Part. B	27-08-2014	7.00	-	0	Agreement stopped by the order of department on 17.03.2015
7	2014-15	Construction of building for Gynaecology department	27-08-2014	6.36	-	0	Agreement stopped by the order of department on 17.03.2015
8	2014-15	Construction of building of Surgery, Anaesthesia, ENT and Eye Department	27-08-2014	6.91	-	0	Agreement stopped by the order of department on 17.03.2015
9	2014-15	Renovation of Lecture Theatre Hall	27-08-2014	0.07	-	<u>0.07</u> 0	Tender is under process
10	2014-15	Renovation of 500 bedded main building and OPD complex	27-08-2014	2.10	17-09-2015	<u>2.10</u> 1.95	Incomplete and work is under progress
11	2014-15	Construction of 10 bedded burn unit	17-08-2014	1.35	11-12-2015	<u>0.25</u> 0	Work is yet to be started.
12	2014-15	Construction of six no. of body storage	17-08-2014	0.46	-	0	Tender is under process
		Total		53.77		<u>17.98</u> 14.67	

(Source: Data provided by the Department)

Appendix-2.1.3

(Referred to paragraph 2.1.8.2; page 16)

Statement showing shortage of medical equipment in PMCH, Dhanbad

Sl. No.	Name of Department	No. of Items (Prescribed as per MCI)	No. of Items available	No. of Items shortage (per cent)
1	Anatomy	36	28	08 (22)
2	Anesthesiology	21	3	18(86)
3	Biochemistry	39	09	30(77)
4	ENT	129	122	7(5)
5	Medicine	54	26	28(52)
6	Microbiology	45	28	17(38)
7	Obstetrics & Gynecology	97	46	51 (53)
8	Ophthalmology	40	28	12(30)
9	Pathology	71	44	27(38)
10	Pharmacology	142	57	85(60)
11	Physiology	87	79	8(9)
12	Radio-Diagnosis	10	01	01(90)
13	Surgery	51	27	24(47)

(Source: Information provided by the HOD of departments of PMCH, Dhanbad)

Appendix-2.1.4
(Referred to paragraph 2.1.8.3; page 16)
Statement of utilization of medical equipment during 2010-15

Name of the Department	Name of the machine	Date of purchased	Idle since	Amount (₹)	Reason
Under State Plan					
Biochemistry	Elisa Reader with Washer	26.03.11		354600	It was not installed by the vendor.
	Automated Electrophoresis	17.03.11	Nov 2013	1730400	For want of reagent.
	Fully Automated Analyser	23.03.12	Since installation	2475000	As it is required to PG teaching.
ENT	Cardiac Monitor with Defibrillator	31.07.12	31.07.12	305000	Not put to use. As no such occasion occurred.
Pathology	Automated Electrophoresis	17.03.11	Since installation	1725000	Due to non- availability of reagent and technician
Physiology	Gas Analyser Apparatus	30.03.12	Since last three years	26950	Lack of cartridge and updating
	Douglas bag	29.03.12	Since last two years	55200	Due to ban on mammalian experiments
Obst & Gynac	Blood Gas Analyser	16.03.11	Since last one year	150000	Due to want of software and Technician
	Digital Colpo Scope	26.03.15		1904500	Due to room construction of room is going on
	Portable Colour Doppler System	26.03.15		3809500	Due to room construction is going on
Surgery	12 Beded Surgical ICU	30.3.15		17479000	Due to non- handing over of building Central Casualty Ward was not shifted. Hence presently not in use.
Total				30015150	
Under CSS head					
Pathology	Automated Multipara metric Immunoassay	02.12.13	02.12.13	3123750	Non-functional due non availability of reagent and technician
	Nephelometry Immunochemistry System	13.12.13	13.12.13	5244750	Non-functional due non availability of reagent and technician
	Electrolyte Analyser	28.11.13	Since installation	414750	Non-functional due non availability of reagent and technician
Physiology	Vascular Non Invasive Physiology Analysis System	29.03.14	29.03.14	1986600	Non-functional as there is no PG teaching course.
	OT Table for Mammalian Experiment	26.02.15	26.02.15	480900	Non-functional as there is no PG teaching course.
	TMT Machine	26.02.15	26.02.15	1023750	Non-functional as there is no PG teaching course.
Obst & Gynac	CTG Machine	25.10.13	25.10.13	186060	Since 6 months as there is no belt.
Total				12460560	

(Source: Information furnished by HOD of Departments, PMCH, Dhanbad)

Appendix-2.1.5

(Referred to paragraph 2.1.9.1; page 17)

Details of teaching hours actually devoted against the prescribed minimum norms of MCI for batch 2010-11

Sl. No.	Name of Subjects/Department	Norms of MCI (teaching hour)	Actual teaching hours devoted by faculties	Shortfall of teaching hours	Percentage of shortfall
1	Anatomy	650	456	194	30
2	Biochemistry	240	205	35	14
3	Medicine	300	188	112	37
4	Microbiology	250	165	85	34
5	Pathology	300	218	82	27
6	Physiology	480	281	199	41
7	Obstetrics & Gynecology	300	155	163	48

(Source: MCI guidelines and information provided by the HOD of departments of PMCH, Dhanbad)

Appendix-2.1.6

(Referred to paragraph 2.1.14 & 2.1.16; page 23 & 25)

Statement of no. of seats sanctioned, utilized and vacant in ANMTC/GNMTC/College of Nursing during 2010-15

Batch	ANMTC									GNMTC			College of nursing, Ranchi		
	Chaibasa			Deoghar			Jamshedpur			Dhanbad					
	No. of seat sanctioned	No. of seat utilized	No. of seat vacant	No. of seat sanctioned	No. of seat utilized	No. of seat vacant	No. of seat sanctioned	No. of seat utilized	No. of seat vacant	No. of seat sanctioned	No. of seat utilized	No. of seat vacant	No. of seat sanctioned	No. of seat utilized	No. of seat vacant
2010-11	60	60	Nil	60	54	6	60	Nil	60	40	26	14	80	72	08
2011-12	60	Nil	60	60	Nil	60	60	43	17	40	26	14	80	Nil	80
2012-13	60	60	Nil	60	56	4	60	Nil	60	40	38	02	80	62	18
2013-14	60	Nil	60	60	Nil	60	60	Nil	60	40	40	Nil	80	77	03
2014-15	60	Nil	60	60	Nil	60	60	Nil	60	40	40	Nil	80	Nil	80
Total	300	120	180	300	110	190	300	43	257	200	170	30	400	211	189

(Source: Principal incharge of test-checked ANMTC/GNMTC/Nursing college)