

Chapter 2

Performance Audit

MEDICAL EDUCATION AND RESEARCH DEPARTMENT

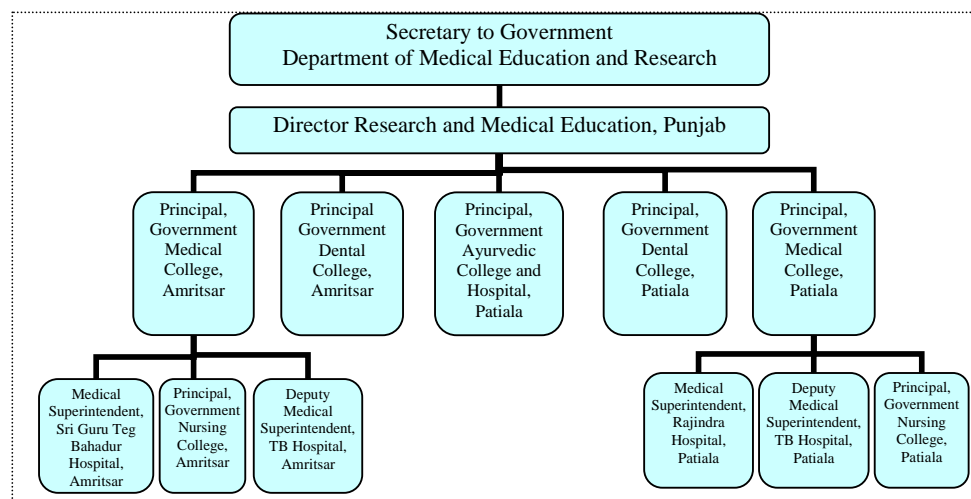
2.1 Functioning of medical colleges and hospitals under Director, Research and Medical Education

2.1.1 Introduction

With a view to provide better medical education, research and special care to ailing patients, the Government of Punjab, in 1973 set up the Directorate of Research and Medical Education. The Directorate is supported by two medical colleges at Amritsar and Patiala, two dental colleges at Amritsar and Patiala and one Ayurvedic college at Patiala as also the hospitals attached to them. The hospitals also provide specialised services as referral hospitals providing secondary and tertiary health care facilities. The Director, Research and Medical Education (DRME) is overall in charge of two Medical Colleges and their attached teaching hospitals, two dental colleges and one ayurvedic college. While the Directorate provides for 100 *per cent* intake of students in the fields of dentistry and ayurveda, 14 *per cent* of medical students are admitted in colleges outside its control in Government sector.

2.1.2 Organisational set up

DRME functions under the over all supervision of the Secretary to the Government of Punjab, Medical Education and Research (Secretary). The organisational chart of the Directorate is given below:-



Typical organisational chart of a medical college is as given in *Appendix 2.1*.

The office of the Director, Research and Medical Education was created with the object to develop human resource in the health sector and to improve the standards of medical education both at under graduate and postgraduate levels in the field of medical, dental and ayurvedic sciences. The DRME also sponsors teachers of medical institutions for national and international conferences, to keep in touch with the latest developments in the field of their specialties.

2.1.3 Audit coverage

The performance audit of functioning of the two Government Medical Colleges² (GMCs) and their attached hospitals, Dental and Ayurvedic Colleges under DRME for the period 2006-07 to 2010-11 was conducted from October 2009 to March 2010 and December 2010 to March 2011 by test checking of records in the offices of the Secretary to Government of Punjab, Department of Medical Education and Research, DRME and all the field institutions under the control of DRME.

2.1.4 Audit objectives

The objectives of performance audit were to examine that:

- the planning for medical education, health infrastructure, training and research, specialized health care and management of bio-medical waste was judicious and effective;
- financial resources were managed efficiently and effectively; and
- the monitoring, evaluation and internal control mechanism were in place and effective.

2.1.5 Audit criteria and methodology

The following were adopted as the sources of various criteria applied in assessing the performance of the GMCs and their attached hospitals:-

- Guidelines of Government of India/Medical Council of India/Dental Council of India/Indian Nursing Council/Pharmacy Council of India and the rules framed by the State Government.
- Goals and targets set by the Government of Punjab.
- Codes, manuals and instructions of the Department and Financial Rules of the Government of Punjab.

The performance audit commenced with a pilot study in the office of the DRME (October 2009). The audit objectives and criteria were discussed with the Secretary, Department of Medical Education and Research during an entry conference held in October 2009 and with the DRME in December 2010. To discuss the audit findings, an exit conference was held with the Secretary and

² GMC Amritsar and GMC Patiala

Director in September 2011. Their views/ replies have been considered while finalising this report.

Audit findings

The audit findings are discussed in the following paragraphs:-

I. Medical Education

The primary objective of the DRME is to ensure availability of highly skilled manpower viz. doctors, nurses etc. for effective and quality tertiary medical care to the people and also to promote medical research for enhancing the quality of human life. We examined the extent and sufficiency of planning of medical education in the State with a view to ascertain whether various institutions under DRME were taking adequate number of students to provide a basis for steady flow of health professionals for teaching, curative and other purposes. We noticed the following deficiencies:-

2.1.6. Inadequacy of courses

2.1.6.1 Under-graduate courses

The year-wise position of the applicants for the MBBS course and admitted in the GMCs is given in **Table 2.2**.

Table 2.2: Details of applicants admitted and capacity of colleges

Year	No. of applicants	No. of applicants admitted in the State	Total intake capacity of the			Applicants per medical seat
			Private colleges	College under the control of BFUHS	Govt. colleges	
2006-07	10197	670	320	50	300	15
2007-08	9183	820	470	50	300	11
2008-09	8179	818	468	50	300	10
2009-10	6628	818	468	50	300	8
2010-11	7227	820	470	50	300	9

The above table shows that the number of seats in GMCs remained at 300 during 2006-11, whereas the number of seats in private medical colleges increased from 320 to 470 during this period. As a result, the total strength of medical seats had increased from 670 in 2006-07 to 820 in 2010-11. The number of applicants per available seat came down from 15 in 2006-07 to nine in 2010-11. The existing level of doctor-population ratio in the State is 1:714 (2011) whereas the ideal doctor-population ratio of 1:400 required for the State has been projected by Baba Farid University of Health Sciences, Faridkot (BFUHS), which coordinates selection of students for all the medical colleges in the State. Short intake of students in the two GMCs would affect adversely the availability of doctors.

The DRME stated (September 2011) that the proposal to increase the number of MBBS seats from 150 to 250 in both the GMCs has been initiated. Further action of the department was awaited.

2.1.6.2 Post graduate courses

a) Shortage of seats

At the post graduate (PG) level, 20 PG degree courses are taught in the GMCs. An analysis of admission of the students to PG courses during 2006-11 revealed that though there was enough demand, only 27 to 40 *per cent* of the aspirants got admission because of limited number of seats. The various PG courses and the number of seats are given in (**Appendix-2.2**).

On being pointed out, the DRME stated (September 2011) that the Government was going to increase the number of PG seats in GMC, Patiala. Further action of the department was awaited

b) Under-utilisation of services of the teaching faculty

With a view to start the PG course in Blood Transfusion Medicine in GMC, Patiala, the Government created and filled up posts of teaching faculties (Professor:1 and Associate Professor:1) as per Medical Council of India (MCI) norms. Despite the fact that the department had the required infrastructure and equipment as per the norms of MCI since April 2006, the PG course was kept in abeyance for want of re-inspection by the BFUHS, Faridkot. The Department of Blood Transfusion Medicine rectified the discrepancies pointed out (March 2006) by the BFUHS and requested for re-inspection in April 2006. However, the re-inspection could not be conducted for the next four years as the college authorities did not deposit the inspection fee until April 2010. This showed the non-serious attitude of the college authorities which resulted in delay in starting the PG course in Blood Transfusion Medicine coupled with under utilisation of services of the qualified staff and infrastructure. On being pointed out (November 2009 and April 2011), the Principal, GMC, Patiala stated (April 2011) that its application for starting the PG course could not be processed as MCI had raised doubts about the continuation of recognition for the MBBS degree in this college owing to shortage of manpower and infrastructure. The Principal added that the application had again been sent for reconsideration.

2.1.6.3 Lack of super-specialty courses

It was observed that the no super specialty course is operative in both the GMCs. The super-specialty courses in plastic surgery and paediatric surgery which remained operative from 1975 to 1992 in GMC, Patiala were discontinued without assigning any reason. Consequently, the facilities of super specialty courses were not provided to the medical students and no practical trainings were imparted in important and essential areas like open heart surgery, kidney transplantation and neurosurgery to the undergraduate and post graduate students. Similarly, no super specialty facilities were provided to the patients in the teaching hospitals attached to both the GMCs and the patients of open heart surgery, kidney transplantation and trauma patients having head injuries were referred to other institutions.

In the context of large scale shortage of specialist doctors in the State, there is a need to start super specialty courses to provide super specialist care to the patients.

2.1.7 Lack of administrative control of training centres

As per the MCI norms, every medical college shall have the primary health centre and the urban health centre for imparting training to the students in community oriented health issues and should have full administrative jurisdiction over these centres.

It was noticed that the community medicine departments in GMCs, Patiala and Amritsar have no financial or administrative control over the adjoining Rural Health Training Centre (RHTC), Bhadson and RHTC, Verka, respectively. The community medicine departments in both the GMCs were facing acute shortage of manpower and transport facilities for carrying out field work as per norms of the MCI, which hinders the students familiarizing themselves with the difficulties in providing treatment to the rural and urban people.

On being pointed out, the DRME stated (September 2011) that the matter had been taken up with the Secretary, Health and Family Welfare Department in May 2010 to handover the administrative control of RHTC, Bhadson to GMC Patiala. However, no such action had been taken by the GMC, Amritsar.

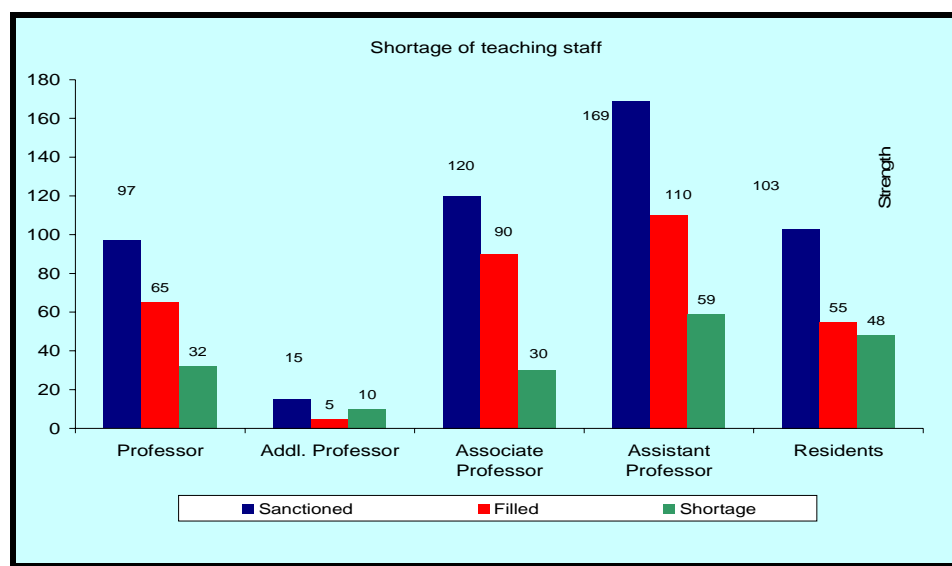
2.1.8 Shortage of teaching staff

The adequacy of providing teaching faculty for GMCs, Ayurvedic college, Dental colleges and Nursing colleges was scrutinized. The following deficiencies were noticed:-

2.1.8.1 Shortage of teachers in GMCs

The teaching posts in the GMCs are filled through the Punjab Public Service Commission. While 75 *per cent* posts of lecturers and senior lecturers are filled from amongst the Punjab Civil Medical Services (PCMS), 25 *per cent* are selected through direct recruitment. Similarly, 75 *per cent* posts of Assistant Professors are filled from amongst lecturers and senior lecturers and 25 *per cent* by direct recruitment. Posts of Additional Professors and Professors are filled by 75 *per cent* from Assistant/Associate Professors and 25 *per cent* by direct recruitment.

Scrutiny of the cadre-wise sanctioned and actual strength of teaching staff in both the GMCs during 2010-11 (**Appendix-2.3**) revealed that against the sanctioned strength of 504 posts of Professors, Additional/Associate Professors and Residents, only 325 were in position leaving an over all shortage of 36 *per cent*. The shortage was acute in the cadres of Associate Professor and Additional Professor which was 25 *per cent* and 67 *per cent*, respectively. The vacancies in all the cadres of teaching staff adversely affected not only the medical education to the under graduate and post graduate students but also the level and quality of the health care services in the hospitals.



Scrutiny of records in the office of DRME, Punjab revealed that the recruitment process of Senior Residents, which is the feeding cadre of higher level teaching faculty, was problematic as 103 doctors from PCMS who had applied for the posts of 'Resident' in the colleges under DRME were not given 'No Objection Certificate' by the Department of Health and Family Welfare, Punjab during the period 2008-09 to 2010-11. The department stated that the shortage of doctors in PCMS was due to posts of doctors not being filled up by the Government. The Principals of the GMCs stated (January 2011) that concrete efforts were being made at Government level to fill up the vacant posts.

2.1.8.2 Shortage of teachers in Government Ayurvedic College

The cadre-wise sanctioned strength and men-in-position of teaching faculty vis-a-vis as per the norms of Central Council of Indian Medicine (CCIM), in the Government Ayurvedic College, Patiala during 2010-11 was as given in **Table 2.4**

Table 2.4 : Cadre-wise sanctioned strength and men-in-position of teaching faculties

Cadre	Sanctioned strength as per CCIM Norms	2010-11		
		No. of posts filled in	No. of vacant posts	Shortfall (per cent)
Professor	12	4	8	67
Associate Professor	2	0	2	100
Asstt. Professor	9	4	5	56
Reader	6	2	4	67
Senior Lecturer	2	1	1	50
Lecturer	14	6	8	57
Junior Lecturer	2	2	0	0
Demonstrator	12	1	11	92
Total	59	20	39	66

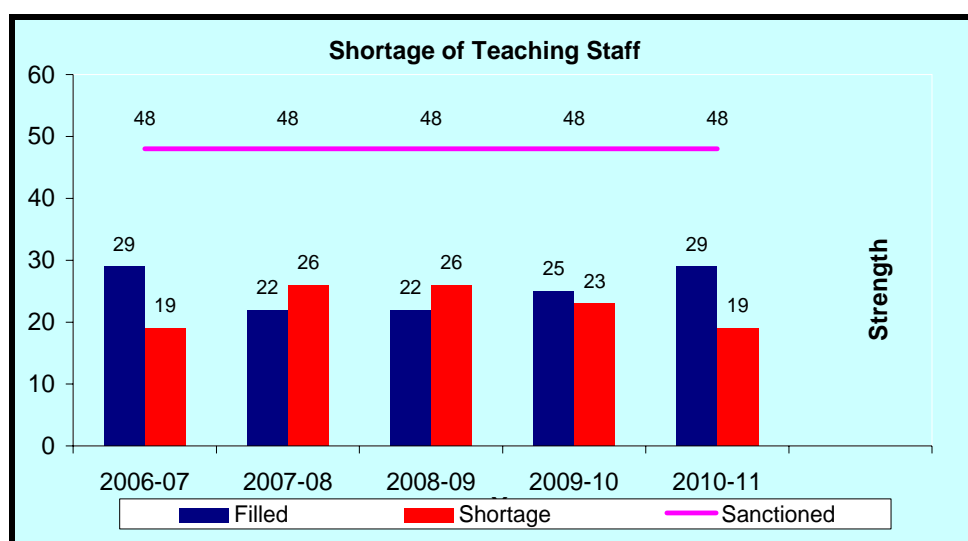
As is apparent from the table above, the shortage of teachers was acute in the cadres of Demonstrator and Associate Professor which was 92 per cent and 100 per cent respectively.

The Principal admitted (June 2011) that the shortage of staff overloaded the faculty members adversely and affected the medical education to Ayurvedic students.

2.1.8.3 Shortage of teachers in Dental Colleges

The Dental Colleges, Amritsar and Patiala were recognised by the Dental Council of India (DCI) in 1952 and 1958 respectively. Each college was sanctioned 40 seats for the Bachelor of Dental Surgery (BDS) course and seven seats for the Master of Dental Surgery (MDS) course.

As compared to the DCI norms, there was shortage of teaching staff ranging from 19 to 26 during the period 2006-07 to 2010-11 in both the Government Dental Colleges (*Appendix-2.4*) as indicated below:



The vacancies in all the cadres of teaching faculty had adversely affected not only the dental education to BDS and MDS students but also constrained provision of oral health care services to the public. Moreover, due to shortage of teachers, the MDS courses in Community Dentistry and Orthodontia in Amritsar and Orthodontia and Oral Surgery in Patiala sanctioned by DCI could not be started as of March 2011.

2.1.8.4 Failure to provide qualified teaching faculty in Nursing Colleges

Indian Nursing Council (INC) is the regulatory body responsible for granting permission and overseeing the functioning of Nursing colleges in the country. From the academic session 2003-04, the State Government upgraded the Schools of Nursing at Patiala (October 2002) and Amritsar (August 2003) to Colleges of Nursing having four years B.Sc. (Nursing) course. The affiliations of the colleges were granted provisionally by the BFIHS, Faridkot in August 2003 and November 2003 respectively. Though, these courses started with the then existing staff and infrastructure of the Schools of Nursing, it was noticed that no qualified staff was posted as per the norms of INC since the up-gradation. Contrary to the INC norms of teaching to be imparted by a person

holding M.Sc. (Nursing) degree, staff having qualification of B.Sc. (Nursing) were teaching the students of B.Sc. (Nursing). Moreover, in both the colleges, the posts of Principals were lying vacant since their up-gradation. Besides, the infrastructure available in the colleges was not in consonance with the norms of INC. Thus, the colleges were running with non-qualified staff and inadequate infrastructure.

II. Training and research activities

2.1.9 Absence of focus on training and research activities

One of the main objectives of the department was to pursue and encourage research in the field of medical sciences. In order to update the knowledge of medical professionals, the department was to organise in-service trainings, continued medical education programmes, workshops etc.

In both the GMCs, no central database of training and research activities undertaken had been maintained. However, information collected from the departments in both GMCs revealed the following shortcomings:-

- Demand for grants of the DRME had no distinct head of account showing allocation of funds for training and research. It was noticed that no financial assistance had been specifically provided by the Government to the DRME/GMCs for any such purpose during 2006-11. Hence, no research activities/projects had been undertaken in the GMCs.
- Only twenty articles of general nature were published by faculty members of GMCs in indexed medical journals during the period 2006-11.
- There was no provision in the rules to facilitate availment of special casual leave, TA/DA etc. by the faculty members for participation in conferences, seminars and training courses.

Thus, lack of encouragement for taking up research work was indicative of the absence of focus on training and research activities in the GMCs.

III. Health infrastructure

2.1.10 Inadequacy of infrastructure for education and health care

2.1.10.1 Government Dental College and Hospital, Patiala

With a view to provide facilities like operation theatres, laboratories, wards, auditorium and lecture theatres to the students and patients, Government accorded (September 2003) administrative approval for ₹ 2.45 crore on the basis of rough cost estimate submitted by the Public Works Department (PWD).

It was noticed that in the absence of necessary budget allotment, the PWD could not award, till January 2007, the work for construction of Block 'C' in the Government Dental College and Hospital, Patiala. However, in February 2007, without receiving any funds, PWD allotted the work to a contractor. The contractor abandoned the work in May 2007 due to non-payment of work done. An amount of ₹ 17.53 lakh was paid to the contractor in February 2009 out of ₹ 28.63 lakh released by the State Government in 2008-09. Further payment of ₹ 41.98 lakh was made (February and March 2011) to the contractor after another tranche of ₹ 1.65 crore was released by the State Government, in September 2010.

Thus, due to funds not being released in time by the State Government, an expenditure of ₹ 59.51 lakh has been rendered ungainful for the last four years. Besides, cost of the work had escalated by ₹ 2.66 crore as the case for revised administrative approval for ₹ 5.11 crore was under process. In the meanwhile, the students and patients have been deprived of the intended benefits of the facilities like operation theaters, laboratories, wards, auditorium and lecture theaters etc.

2.1.10.2 Government Dental College and Hospital, Amritsar

To provide facilities like boys hostel, guest house and staff quarters in the GMCs, the Government in August 2004, accorded an administrative approval for an expenditure of ₹ 8.27 crore on such works.

Scrutiny of related records (October 2010 to April 2011) revealed that the construction work was allotted by PWD (January 2005) in anticipation of release of funds, to a contractor at ₹ 4.92 crore. The work was to be completed in 36 months (January 2008) was stopped by the contractor (March 2008) owing to non payment of his bills even though a sum of ₹ 1.18 crore had been paid to contractor (2006-07) before stopping the work and further amount of ₹ 0.65 crore was paid to him in February 2009 i.e. a year after stopping the work. The work was still lying incomplete because an amount of ₹ 1.24 crore representing the value of work done, was still unpaid to the contractor. In March 2008, the contractor showed his inability to complete the work due to non payment of his bills and rising cost of material etc. and requested to finalise the bill. The matter taken up with the Superintending Engineer/Chief Engineer in November 2009 was still awaiting for their approval as of March 2011.

Thus, failure of the State Government to release funds, despite making provisions in the budget every year in the annual plans upto 2009-10, resulted in the work which was to be completed by December 2007, remaining incomplete even after three years (May 2011), thereby delaying the intended benefits.

2.1.10.3 Sri Guru Teg Bahadur Hospital, Amritsar

Under the National Mental Health Programme, GoI released (December 2006) ₹ 44 lakh for strengthening the Psychiatric wing of SGTB Hospital, Amritsar. But the Principal, GMC, Amritsar instead of getting the existing building repaired, proposed to construct a new Psychiatric wing and Government accorded (October 2007) administrative approval for an expenditure of ₹ 1.75 crore on the work.

Scrutiny of records (January 2010) revealed that though ₹ 30 lakh out of ₹ 44 lakh released by GoI were sufficient for completing the work as per original plan, under the expanded scope of work, released funds were just sufficient to construct the building upto the plinth level.

Thus, the decision to construct the new Psychiatric wing instead of getting the existing building repaired and without ensuring availability of sufficient funds, was counter-productive. Moreover, purchase of equipment before completion of the building led to idling of the equipment valuing ₹ 13.89 lakh.

The Nodal Officer (Head of Radiology Department in GMC, Amritsar) accepted the audit contention, whereas the DRME stated (November 2010) that in the year 2009-10, no proposal for additional funds had been received from the Principal, GMC Amritsar.

IV. Deficient facilities for specialised health care

2.1.11 Machinery and Equipment

2.1.11.1 Idle machinery and equipment

Machinery and equipment form an integral part of the infrastructure needed to provide education and the medical care in the medical colleges and the attached hospitals. It was, however revealed that equipment costing ₹ 3.92 crore were lying unutilised in various teaching hospitals (*Appendix-2.5*).

It is, thus, evident that in these cases, purchases were made without ascertaining/ensuring the availability of required infrastructure, accessories and qualified staff etc. and the investment of ₹ 3.92 crore remained largely unfruitful as the objectives of acquiring the equipment had not been achieved completely.

2.1.11.2 Delay in procurement of machinery and equipment

a) Mammography unit not set up due to ill planning

Mammography is the only modality in the world that can detect breast cancer in early stages. If detected in early stage, the disease is controllable and curable.

The GoI released a grant of ₹ 30 lakh under the National Cancer Control Programme (NCCP) in October 1999 for procurement of an imported mammography unit at Rajindra Hospital, Patiala. The grant could not be utilized till 2009-10 due to non-finalisation of the specifications of the mammography unit by the Controller of Stores. GoI revalidated the funds for the financial year 2010 -11. The purchase committee, constituted in 2010-11 to purchase the mammography unit, also could not finalise the tenders (December 2010). As the committee could not resolve difference of opinion, in regard to the specifications of the mammography unit to be procured, the matter could not progress further. The department stated (December 2010) that the case was under active consideration of the department for procurement of an indigenous mammography unit. The unit, thus remains to be procured even after the lapse of more than eleven years. Thus, facilities of better diagnosis and better treatment for breast cancer could not be provided to the patients. Further, the cost of the unit would have escalated further rendering the amount of grant inadequate.

b) Inordinate delay in procurement of equipment

Under the NCCP, GoI released a grant of ₹ 2 crore each to GMC, Amritsar (December 2005) and GMC, Patiala (May 2007) for development of the Oncology wing and for the purchase of cobalt therapy unit and simulator treatment planning system, respectively.

We observed that there was a delay of four years in the purchase of machinery due to non finalization of the tender specifications by the Controller of Stores. The equipment finally purchased during June 2010 and February 2011 was awaiting installation in Rajindra Hospital, Patiala (March 2011). Though the equipment was installed in SGTB Hospital, Amritsar (January 2011), it remained un-utilised because the building in which it has been placed is incomplete. Consequently, 881 patients from SGTB, Amritsar who required radiotherapy were referred to the other institutions for treatment during the period March 2009 to February 2011.³ In the meanwhile, UCs for these two grants had been sent to GoI (April 2010).

On being pointed out (February and March 2011), no specific reasons for delay in procurement of equipment were furnished to audit.

2.1.12 Inadequate supply of medicines

2.1.12.1 Government Medical College Hospitals

Details of the number of patients treated and medicines purchased in the two leading teaching hospitals at Patiala and Amritsar during the period 2007-11 are given in **Table 2.3:**

³ Rajindra Hospital Patiala, however, did not maintain any record of the referred patients.

Table 2.3 : Details of patients treated and expenditure on medicines

Year	No. of patients treated			Medicines purchased (₹ in lakh)			Expenditure per patient (₹)
	Indoor	Outdoor	Total	GMC Patiala	GMC Amritsar	Total	
2007-08	59024	710316	769340	5.19	7.42	12.61	1.64
2008-09	67420	760383	827803	10.62	0.88	11.50	1.39
2009-10	63984	812363	876347	6.67	0.40	7.07	0.81
2010-11	72580	916608	989188	1.12	0.42	1.55	0.16

During the period 2007-11, while 7.69 lakh to 9.89 lakh patients per year had visited the two medical college hospitals for treatment, expenditure on purchase of medicines for the patients (OPD and Indoor) during the period had steadily fallen from ₹ 1.64 in 2007-08 to ₹ 0.16 in 2010-11 which shows that for all practical purposes medicines provided by the hospitals to the patients were next to nothing. Based on the doctor's prescription, the patients had to arrange medicines from the open market at their own cost.

The Medical Superintendents of hospitals attached to GMCs stated (December 2010 and April 2011) that due to shortage of funds, medicines could not be purchased as per requirements.

2.1.12.2 Government Ayurvedic College Hospital

In Government Ayurvedic College, Patiala, no medicines were purchased and provided to the patients during the period 2006-11. The patients had to arrange medicines from the open market at their own cost. The Principal, Government Ayurvedic College attributed (June 2010) this to the absence of suitable provision of budget for purchase of medicines.

In the exit conference, the Secretary ensured (September 2011) that some norms would be fixed to procure medicines out of available funds under Provincial Professional Service Scheme.

This reflected the apathy of Government/hospital authorities in giving importance to the public health in the leading hospitals of the State.

2.1.12.3 Lack of advanced trauma centre

Despite the fact that GMCs Amritsar and Patiala are premier tertiary care centres of Punjab, no trauma care centre exists in the hospitals attached to these colleges. The trauma patients⁴ have to seek such treatment at distant places outside the State or in some private specialized hospitals at great personal expense and inconvenience. Many trauma patients lost their precious lives for want of timely care.

Though, a proposal of the GOMOCO-ALUMNI Association, Patiala to set up a trauma centre in the premises of Rajindra Hospital, Patiala on a piece of land

⁴ Rajindra Hospital, Patiala -16309 patients referred during 2006-07 to 2010-11
SGTB hospital, Amritsar- data non available

to be provided by the hospital authorities was approved by the Chief Secretary, Government of Punjab for this purpose, the State Government sanctioned and released ₹ one crore (June 2006) to the Society, but it could not be set up due to non allotment of site by the hospital authorities in the hospital premises.

On being pointed out, the DRME stated (September 2011) that the site was not provided to the Society as the existing structure was to be dismantled, besides it involved shifting of skin department. Finally, the Society cancelled (February 2009) the lease deed and refunded the amount of ₹ one crore.

The reply was not acceptable as despite availability of funds, the Trauma Centre at Patiala could not be set up and the intended benefits could not be provided to the ailing patients.

2.1.13 Deficiencies in services for patient care

2.1.13.1 Cardiac Surgery Department

The Cardiac Surgery Department was suffering from lack of following necessary infrastructure and qualified doctors:

- The Cardiology Department of the Rajindra Hospital, Patiala has been running without Cardiologist since May 2002 and doctors from the Medicine Department were examining the heart patients and serious heart patients were referred to other institutions.
- The facility of angiography was not provided in both the teaching hospitals due to lack of cardiac cath laboratory required as per the MCI norms. As a result, 1582 patients were referred by the Rajindra Hospital, Patiala to other medical institutions for angiography during the period 2006-11. The data relating to number of similarly referred cases was not available in SGTB Hospital, Amritsar.

In both the hospitals, the Cardiology Department did not possess the essential machinery and equipment like echo colour doppler, cine film projector, mechanical heart valves, high pressure autoclave sterilizer and automatic scrub station etc. On being pointed out, the Medical Superintendents of both the hospitals stated (February 2011 and March 2011) that the demand for equipment and posting of required Professors and Assistant Professors was being sent to the Government since 2007 which has the authority to order processing of the procurement of such equipment and recruitment of teachers.

2.1.13.2 Neurology Department

- The services of the neurology department in both the GMCs were not optimally utilized. In the absence of neuro surgeon and neuro surgery unit, the patients having head injuries had to be referred to other hospitals. During the period from December 2009 to March 2011, the Rajindra Hospital, Patiala had referred 832 out of 5803 patients having head injury to other institutions.

- The department in both the GMCs had EMG-MNCV⁵ machines to test the muscle strength and velocity of the nerves of the paralysed patients, but no tests have been carried out since 2007 due to non posting of the EMG technicians in the department. No action was taken to post an incumbant despite several requests made (April 2011) by the heads of departments to the Principals of the respective GMCs.

2.1.13.3 Nephrology Department

As per MCI norms, nephrology department in a hospital should be staffed by qualified nephrologists. Contrary to these norms, nephrologists were not posted in the SGTB Hospital, Amritsar and Rajindra Hospital, Patiala since 2005 and 2006 respectively. Due to non posting of nephrologists, the services in the department were, instead, being handled by doctors from the Department of Medicine, thus rendering such services sub-optimal as the department offers only dialysis services to the kidney patients and the cases of renal transplantations are referred to other medical institutions for treatment. The DRME stated (September 2011) that the efforts were being made to fill up the vacant posts of medical, dental and ayurvedic faculties as per the prescribed norms. However, the reply did not indicate the reasons for not filling up the posts since 2005 and 2006 and specific steps being taken now to fill up the vacant posts.

2.1.13.4 Ophthalmology Department

The department has one Eye Bank each in GMCs Patiala and Amritsar to preserve the donated eyes for short term storage for 24 hours. It was noticed that out of 334 persons, who got registered with the eye banks for keratoplasty⁶ in both the hospitals, only 139 patients had got eye transplanted during the period 2005-10. It was, however, noticed that out of 139 patients who could receive eye transplantation, only 22 persons were registered patients and the remaining 117 patients who had been benefited, were un-registered patients. The department stated that the registered persons could not be accommodated due to shortage of transportation and telephone facilities. Justification provided for overlooking registered patients and according priorities to un-registered patients was, prima facie, untenable.

2.1.13.5 Anaesthesia Department

(i) Operation Theatres (OTs) in the Rajindra Hospital, Patiala are under the control of the Department of Anaesthesia. During 2006-11, against the requirement of 22 Anaesthetists, only 12 were in position. The shortage of man power affected the optimum utilisation of the OTs. The Professor and Head of the Department, GMC, Patiala attributed this to the lower remuneration being offered by the Government to the specialists as compared to that paid by private institutions/corporate sector. DRME stated (September 2011) that the efforts were being made to fill up the vacant posts as per the

⁵ EMG-MNCV- Electro Magneto Gram- Muscle Nerve Control Velocity

⁶ Keratoplasty: - A surgical procedure in which part or all of a damaged or deceased cornea is replaced by healthy corneal tissue from a donor.

prescribed norms. However, the reply was silent on the specific efforts made to fill up the vacant posts.

(ii) The Boyle's apparatus, required to administer general anaesthesia to patients in OT, were not working properly due to non-renewal of the annual maintenance contract. Several requests made by the head of the department to the Principal, GMC, Patiala since January 2007 had not resulted in any appropriate action. In the absence of such basic equipment, medical care facilities were badly affected and the risk of loss of life was ever present in the hospital.

2.1.13.6 Deficient Ambulance Services

Ambulance services should be available in every hospital round the clock every day to cater any emergency. In this context, following deficiencies were noticed in the two teaching hospitals attached to GMCs at Amritsar and Patiala:-

- In Rajindra Hospital, Patiala all the four ambulances attached to the hospital remained un-utilized for the period ranging from five months to 18 months due to non availability of funds under the sub head POL (Petrol, Oil and Lubricants). Consequently, the drivers remained without work and the patients who were in need of emergency medical care had to make their own arrangements to reach the hospitals.
- Out of the three ambulances attached to SGTB Hospital, Amritsar, one met with an accident in the year 2008. It has been left un-repaired since then.
- All the ambulances were not fitted with the emergency kits and oxygen cylinders for giving emergent treatment to the patients.

Both the Medical Superintendents of SGTB Hospital, Amritsar and Rajindra Hospital, Patiala stated (February and April 2011) that the matter to make these ambulances functional would be taken up with the DRME.

V. Management of bio-medical waste

2.1.14 Improper handling of bio-medical waste

Rule 5 of the Bio Medical Waste Management Rules, 1998 provides that bio medical waste (BMW) should be treated and disposed of properly.

Scrutiny of records in the office of DRME (December 2010) revealed that the department entered (March and April 2010) into agreements with two firms for



disposal of BMW of each hospital located at Amritsar and Patiala, at the rate of ₹ 3.45 (Amritsar) and ₹ 3.65 (Patiala) per occupied bed per day. As per the agreement, the generator (hospital) was to collect the segregated BMW in distinct plastic bags supplied by the service provider (firm) and the service provider was required to collect this from the identified common waste collection sites. During our inspection of wards, laboratories and central collection points in the hospitals, we noticed that despite availability of different coloured baskets in the wards, all types of waste was being disposed of in one basket. We also noticed that the hazardous waste of the hospital was piled up in the open in an unsafe manner instead of being storing in the colour coded containers at the central collection point. Scavengers were seen taking out BMW from the dumped waste. The BMW including blood soaked cotton plasters and hospital waste thrown in the open were being removed by the Municipal Corporation as the service provider was to collect the segregated BMW only from the identified common waste collection sites in the hospital. Thus, failure on the part of hospital staff to segregate BMW at initial stage and to deliver at designated collection points remain an unaddressed environmental hazard.

The Medical Superintendents of the hospitals admitted (February/ April 2011) the lapses in disposal of the BMW and assured to take appropriate action for proper collection and disposal of the same.

2.1.15 Wasteful expenditure on procurement of incinerator

With a view to dispose of the hospital waste, an incinerator with burning capacity of 50 Kg per hour was purchased by GMC, Patiala in September 1992 at a cost of ₹ 8.85 lakh.

Mention was made regarding non-installation of the incinerator in the Audit Report of CAG for the period ended March 1998. The para was settled by the Public Account Committee in September 2005 on the assurance given by the Secretary to Government of Punjab, Department of Medical Education and Research that enquiry would be conducted as to why this expenditure was allowed to become wasteful, and results thereof would be reported to the Public Accounts Committee. Despite this assurance, neither the enquiry was conducted nor the incinerator shifted to elsewhere for its gainful utilization even after a lapse of six years.

Medical Superintendent, Rajindra Hospital, Patiala stated (March 2011) that the machinery could not be put to use due to non-clearance by the Punjab Pollution Control Board.

VI. Financial management

With a view to ascertain whether the management of financial resources was done efficiently and effectively, the budget allocation and expenditure under Non-Plan and Plan heads were scrutinized and discussed in following paragraphs :-

2.1.16 Budget allotment and expenditure

The budget allocation and the expenditure incurred during the last five years was as follows:-

Table 2.1:Detail of budget allotment and expenditure

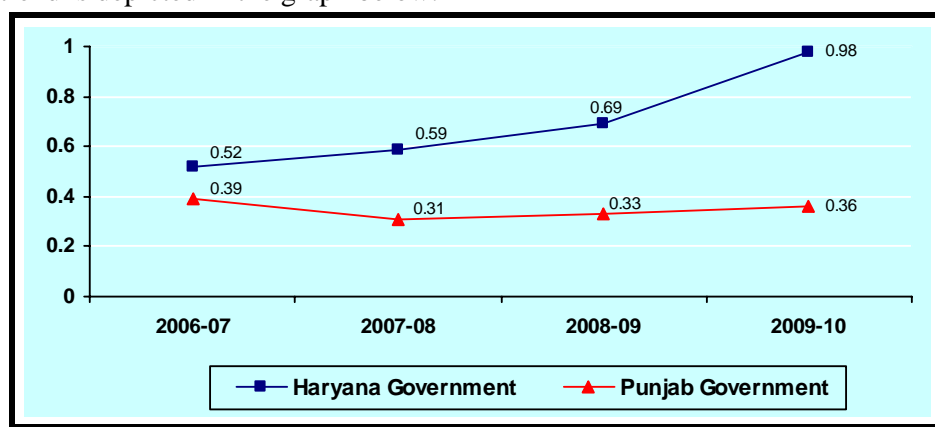
(₹ in crore)

Year	Non- Plan					Plan	
	Budget allotment	Total expenditure	Out of total expenditure, expenditure on			Budget allotment	Total expenditure
			Salary & wages	PPSS ⁷	Others ⁸		
2006-07	136.26	127.92	95.86	8.12	23.94	Nil	Nil
2007-08	137.86	137.67	104.52	8.48	24.67	18.87	0.16
2008-09	145.56	140.29	110.92	10.52	18.85	18.21	1.96
2009-10	157.63	154.18	124.82	11.18	18.18	20.08	Nil
2010-11	201.77	182.59	150.74	10.94	20.91	24.03	11.16
Total	779.08	742.65	586.86	49.24	106.55	81.19	13.28

PPSS = Provincial Professional Service Scheme

A comparison of the budget allocation during the years 2006-07 to 2010-11 (**Appendix-2.6**) revealed that the budget allocated to the Medical and Public Health Department ranged between 2.76 and 3.71 *per cent* of the total budget of Government of Punjab and that of DRME ranged between 0.42 *per cent* and 0.62 *per cent*. Out of the total Non-Plan expenditure of ₹ 742.65 crore incurred by the department during the years 2006-07 to 2010-11, 79.02 *per cent* (₹ 586.86 crore) was on the salaries and wages and 6.63 *per cent* (₹ 49.24 crore) was on PPSS .

Though the functioning of the Department of Medical Education and Research is human resource driven, yet the non-plan expenditure of the department failed to get prioritization over the years 2006-10 which is evident from the declining percentage of expenditure to the total expenditure in Punjab whereas the trend was other way round in the neighbouring State of Haryana. The trend is depicted in the graph below:



(Source : Combined Finance and Revenue Accounts)

⁷ PPSS budget is meant for improving the environment for the students, improvement of patient care, procurement of medicines/equipments including maintenance etc. and to meet any emergent demand of the colleges/hospitals.

⁸ It includes the miscellaneous expenditure viz. office expenses, travelling allowances, medical re-imbursement, petrol oil and lubricants etc

The budget allotment under the PPSS is more or less equal to the collection of user charges made by the medical institutions. It was, however, observed that the medical institutions failed to tap their full potential for collecting user charges, as mentioned in subsequent para 2.1.17. Consequently, the department could not secure additional budget of ₹ 3.26 crore under PPSS during the period from 2006-11. To that extent, their ability to meet with day-to-day and emergent requirements of medical education and patient care was constrained.

Additional infrastructure in the medical colleges and hospitals in the form of buildings, equipment, human resources etc. is provided under the plan budget. It was noticed that in the 10th Five year plan (2002-07), the State Government had approved an outlay of ₹ 106.20 crore for medical education under the State funded schemes, but since no funds were released to the Directorate, no expenditure was incurred there-against. In the 11th Five Year Plan, the Government had approved an outlay of ₹ 81.19 crore (2007-11) for four State funded schemes. Though, funds to the extent of ₹ 50.42 crore were released by the Finance Department, an amount of ₹ 13.28 crore only had been spent as of March 2011 because funds amounting to ₹ 36.31 crore were released towards the fag end of different financial years. As a result, ongoing projects remained incomplete as discussed in the para 2.1.10.

2.1.17 Utilization of Welfare Funds through Personal Ledger Account

The Government through a notification⁹ (June 1978) authorized the heads of medical/dental colleges to operate the Personal Ledger Accounts (PLAs) to credit additional charges realized from the students for carrying out various student welfare activities, such as purchase of sports equipments, maintenance of playgrounds etc. To avoid inconvenience in administration and utilization of the funds, the Finance Department exempted (October 2004) the Department of Medical Education and Research from closing the PLA at the end of each financial year.

The following deficiencies were noticed in utilisation of these funds called “Amalgamated Fund of the Punjab State Medical and Dental Colleges”:-

2.1.17.1 Under-utilization of funds

The purpose of creating the PLAs in the GMCs was defeated as these GMCs could spend only ₹ 3.35 crore out of the total amount of ₹ 7.32 crore (2006-11) collected from the students and credited to PLAs. Of this, ₹ 1.79 crore (53 *per cent*) was spent on wages of servants in the hostel mess. No other student welfare activities were carried out despite availability of funds. On being pointed out, the Principals of GMCs, Amritsar and Patiala stated (February 2010) that the expenditure would be incurred as per rules. The reply was not acceptable as it did not explain why funds were not used for intended purposes.

⁹ The ‘Amalgamated Fund Rules of the Punjab State Medical and Dental College, 1978

2.1.17.2 Mis-utilisation of funds

Contrary to the provisions of Government notification for operation of PLAs, GMC, Patiala and Government Ayurvedic College, Patiala incurred an expenditure of ₹ 26.47 lakh out of PLA funds (2010-11) on account of payment of inspection and affiliation fee, office expenses and salary to teachers for which a distinct budget head existed. The Principals of GMC, Patiala and Ayurvedic College, Patiala while admitting the audit observation, assured audit to comply with the guidelines in future. The replies furnished by the Principals were not acceptable as misutilization of ₹ 26.47 lakh was an unauthorized diversion of funds. The amount had not been recouped so far (November 2011).

2.1.18 Inadequate mobilization of resources

As per Directorate's purchase policy (March 2004), the budget allotment under the PPSS is to be used for improving the welfare environment of the students, providing patient care, procurement of medicines/equipments including maintenance etc. and to meet any emergent demand of colleges/hospitals. Since the budget allotment is invariably based on the quantum of collection made from students and patients towards charges for services provided on rates specified for various categories of students, failure to make such collection constrained colleges/hospitals in providing appropriate services to the students/ patients.

Following instances show that the colleges/hospitals failed to recover their dues, thus adversely impacting the PPSS allocation.

2.1.18.1 Failure to recover rent

Rule 4.1 of the Punjab Financial Rules, Volume I provides that it is the prime duty of the controlling officer to see that all sums due to government are regularly and promptly assessed, realized and credited into the government account. The Government of Punjab, Department of Medical Education and Research had fixed (January 2009) the minimum rent of shops, constructed in the various colleges/hospitals at ₹ 140 per square feet. Further, such allotment of shops was to be made through public auction by giving wide publicity through leading news papers.

a) The Government of Punjab, Department of Medical Education and Research, decided (January 2009) that in case of defaulter of shops already rented out, provisions of the Public Premises Act be invoked. But such provisions were not invoked by the Medical Superintendent against four shop owners in the Rajindra Hospital, Patiala who did not pay any rent since April 2009 and from whom rent of ₹ 14.65 lakh was recoverable as of March 2011. On being pointed out (April 2011), the Medical Superintendent stated that notice for vacation of the shops would be issued to the unauthorised occupants. No further progress has been reported till November 2011.

b) Two shops (medical store and canteen) in the TB and Chest Diseases Hospital, Patiala were allowed to run by the Red Cross Society since 1975 for

the welfare of T.B. patients. While the medical shop was run by the Red Cross Society itself, the canteen was sublet by it to a contractor at the monthly rent of ₹ 7500. Though the Red Cross Society has been collecting rent, nothing was being paid to the hospital. Due to non-receipt of rent by the hospital, revenue of ₹ 17.62 lakh could not be collected by the hospital during the period February 2009 to March 2011. The amount recoverable as rent for the previous period could not be computed as no specific rent had been determined despite the letter of the allotment providing that rent was payable at the rate determined by the State PWD. The DRME had failed to pass suitable orders on various requests from the head of the hospital for determining the rent payable by the Red Cross Society.

Deputy Medical Superintendent of the hospital stated (April 2011) that the matter would be taken up with the Red Cross Society for allotment of shops in accordance with the allotment policy of the Government.

c) According to the standard terms and conditions of allotment circulated (February 2008) by DRME, the allottees of the shops were required to pay the rent in advance on or before 7th of every month. In case of default, their allotment was liable to be cancelled. The shops in the premises of the SGTB Hospital, Amritsar were leased out on rent by the Medical Superintendent without execution of any agreement.

It was noticed that rent amounting to ₹ 66.09 lakh was pending for recovery from 10 allottees as on 31 December 2010. Neither any concrete steps were taken by the hospital authorities to recover the amount nor any action was initiated to cancel the allotment due to absence of any formal agreement with the allottees.

On being pointed out, Medical Superintendent stated (February 2011) that efforts were being made to recover the outstanding amount of rent.

d) A shop measuring 128 square feet was let out in September 1967 by SGTB Hospital, Amritsar at a monthly rent of ₹ 400. According to the terms and conditions of the lease deed, the shop was to be handed over to the hospital authorities in case of the death of the original tenant or the termination of the lease deed. On expiry of the lease, the allottee did not vacate the shop and after the death of the allottee in 1986, his wife continued to run the shop unauthorisedly. The appeal filed by the widow for retaining the shop was quashed by the Hon'ble Supreme Court (March 2009). Thus, besides non-realising of rent of ₹ 5.66 lakh (upto April 2009), the hospital authorities had failed to get the site vacated. The DRME stated (December 2010) that execution had been filed to get the shop vacated. However, no further action to implement the decision of the Supreme Court was initiated (September 2011).

2.1.18.2 Processing fee of Blood Banks

During 2006-07 to 2010-11, the Blood Banks attached to the GMCs at Amritsar and Patiala collected ₹1.80 crore¹⁰ as processing cost of blood from the patients admitted in the government/private hospitals. Instead of depositing the same in the Government account, the amount so collected was deposited in the bank accounts of respective District Blood Transfusion Societies without the consent of Finance Department. Moreover, the governing bodies of both the societies had adopted different parameters to collect, retain and credit the government receipts into their accounts. The District Blood Transfusion Council, Patiala collected, retained and credited the processing cost of blood units from all private hospitals and nursing homes into the Society's account whereas the District Blood Transfusion Council, Amritsar charged ₹ 200 and ₹ 300 per unit of blood from the patients of government and private hospitals, respectively, over and above the actual cost of blood ₹ 330 fixed by the Government and credited the amount into its account. Government had not prescribed uniform policy to collect, realise and credit the processing cost of blood from the patients.

It was stated (December 2010) by the Medical Superintendents that exemption from the financial rules would be obtained from the Finance Department of the State Government.

2.1.18.3 Delay in receipt of admission fee

As per para 10 (D) and Note 3 below Para 9 of the Department of Medical Education and Research Notification dated March 2008, admission fee has to be deposited by the successful candidates in the shape of demand draft drawn in favour of the Registrar, Baba Farid University of Health Sciences (BFUHS), Faridkot.

Scrutiny of records of GMCs, Amritsar and Patiala revealed that BFUHS, Faridkot collected admission fee of ₹ 18.26 crore from the successful candidates for admission during the years 2007-10 on behalf of GMCs, Amritsar and Patiala. However, the amount of fee so collected was transferred by BFUHS to the respective colleges after a delay ranging from 52 to 177 days. This resulted in loss of interest of ₹ 35.85 lakh to the GMCs, Amritsar and Patiala.

Though the Principal, GMC, Amritsar stated (January 2011) that in the notification neither any mention of time limit for transfer of the admission fee collected by the BFUHS nor was there any provision of charging of interest on delayed transfer of money. A demand had been raised (April 2010) against BFUHS for interest on delayed transfer of money. The Principal, GMC, Patiala stated (March 2011) that the matter would be taken up with BFUHS, Faridkot for immediate transfer of the admission fee.

¹⁰ Patiala - ₹ 1.08 crore for the period i.e 2006-07 to 2010-11 (upto 02/2011); and Amritsar - ₹ 0.72 crore i.e for the period 2008-09 to 2010-11 (upto 1/2011)

2.1.18.4 Delayed deposit of fees collected from NRI students

Rule 2.4 of the Punjab Financial Rules, Volume I provides that the departmental receipts collected are to be credited into the treasury on the same day or on the morning of the next day. In GMC, Amritsar, fees collected from the NRI students in the shape of demand drafts during the period from July 2007 to July 2010 were remitted into the treasury after delays ranging from 33 to 202 days. Non-adhering to the financial rules resulted in loss of ₹ 5.31 lakh to the State exchequer by way of interest.

The Principal, GMC, Amritsar while admitting the audit contention stated (January 2011) that such delay would be avoided in future.

2.1.18.5 Failure to revise rates

a) X-Ray fee

The Medical Superintendent, SGTB Hospital, Amritsar procured and installed CR radiography machine costing ₹ 28 lakh in November 2008 in the Department of Radio Diagnosis. The hospital had been charging ₹ 400 as X-Ray fee both for shorter and longer investigations, whereas the Guru Gobind Singh Hospital, Faridkot which is also a teaching hospital under the BFUHS, Faridkot, was charging ₹ 600 and ₹ 800 as X-Ray fee for shorter and longer investigations respectively. The Rajindra Hospital, Patiala was also charging ₹ 400 as X-Ray fee for shorter and longer investigations. Thus, non revision of the fees for X-Ray investigations had resulted in recurring loss of revenue to the hospitals attached to GMCs at Amritsar and Patiala.

b) Registration, admission and clinical tests fee

The Government of Punjab vide notification (May 1999) had fixed the rates of registration fee (₹ 10), admission charges (₹ 10 for general ward and ₹ 50 for special room) and various other charges for clinical tests and operations to be charged from the patients. Though the cost of the materials used for conducting the clinical tests had increased manifold and the pay and allowances of the staff deployed to carry out the clinical tests had also increased substantially, the Government had not revised the rates for registration of admission and clinical tests since 1999, despite appropriate proposals having been sent (September 2009) by the hospital authorities to the DRME, Punjab for revision of the rates. Government need to revise fee and charges to generate maximum revenue for better functioning of the hospitals.

VI. Monitoring, Evaluation and Internal Control

The Director was responsible for monitoring and evaluation of implementation of the programmes, schemes and other activities of the department. Scrutiny of records in the office of DRME (December 2010) revealed the following deficiencies:

2.1.19 Inadequate monitoring, evaluation and internal control

Monthly progress reports of each scheme/programme which were submitted to the Directorate by the controlling officers in the field were merely compiled at the Directorate level and no corrective steps/measures were being taken to improve the working of the department.

- The periodical reports, physical and financial progress of various schemes, received from the field units, were neither scrutinised nor effective follow up action taken at the Directorate level.

DRME stated that monitoring and evaluation of the on going projects would be undertaken as suggested by audit.

Conclusion

The planning for medical education, research and specialized health care, including infrastructure and human resource development was not judicious and effective as there was acute shortage of medical professionals (36 per cent) in both the Government Medical Colleges. Neither the seats for graduate and post graduate courses were adequate nor were the super-speciality courses being offered. Despite being premier tertiary care hospitals of the State, no trauma care centre exists in any of the GMCs and the trauma patients have to seek treatment at distant places. Adequate emphasis on research and training was lacking. Equipment costing ₹ 3.92 crore, required for specialised health care, were lying unutilised for want of required infrastructure, accessories and qualified staff. Further, the mammography unit at Rajindra Hospital, Patiala could not be procured for the last 11 years. Similarly, Cobalt therapy unit in SGTB Hospital, Amritsar could not be utilised despite installation. Bio-medical waste management was improper and unsafe. Ambulance services to be provided to cater to emergencies were found to be extremely deficient as these were not fitted with the mandatory emergency kits.

Recommendations

- There is a need to strengthen recruitment of medical professionals in colleges and hospitals.
- To achieve the ideal doctor-population ratio, number of seats for graduate and post graduate courses in both the GMCs need to be increased keeping in view the increase in demand for doctors and constant rise in population.
- Super-specialty courses need to be introduced in GMCs.
- Adequate emphasis on research and training is required to be given.

- Government should establish a trauma care centre in the State to take care of medical emergencies and provide relief to victims of trauma.
- The procedure for procurement and management of medical equipment needs to be systematized.
- Disposal of the bio medical waste should be ensured as per provisions of the agreements entered into with the service providers.
- With a view to strengthen the medical education and health care, Government needs to ensure allocation of adequate and timely release the funds.
- The health institutions should augment their own resources by enforcing timely collection of charges and revision of charges, fee etc.
- Monitoring, evaluation and internal control of the directorate should be strengthened to commensurate to the level of activities of the department.