

## MEDICAL EDUCATION, TRAINING & RESEARCH

### 15.1 INTRODUCTION

The Centre has set up regulatory bodies for monitoring the standard of medical education, promoting training and research activities. This is being done with a view to sustain the production of medical and para-medical manpower to meet the requirements of health care delivery system at the Primary, Secondary and Tertiary levels in the country. This chapter discusses the status of these activities conducted by the various bodies and institutions.

### 15.2 MEDICAL COUNCIL OF INDIA (MCI)

The Medical Council of India was established as a statutory body under the provisions of the Indian Medical Council Act, 1956, which was later, replaced by the Indian Medical Council Act (IMC), 1956 (102 of 1956). The main functions of the Council are:

- i. Maintenance of uniform standard of Medical Education or undergraduate and postgraduate level;
- ii. Maintenance of Indian Medical Register;
- iii. Reciprocity with foreign countries in the matter of mutual recognition of medical qualifications;
- iv. Provisional/permanent registration of doctors with recognized medical qualifications, registration of additional A qualifications, and issue of good standing certificate for doctors going abroad; and
- v. Continuing Medical Education, etc.

As per the IMC Act, 1956 prior permission of the Central Government is mandatory for opening of a new medical college, increase in an admission capacity and starting of new or higher course of studies as per provisions laid down in Establishment of Medical College Regulations, 1999 and Minimum Standard Requirements Regulation, 1999.

The Medical Council of India has been re-constituted on 6th November, 2013 vide notification dated the 5th November, 2013 replacing the Board of Governors who were nominated by the Central Government under the provisions of the Ordinance of 15.05.2010 in supersession of the Council to perform the function of the Council.

At present, there are 387 medical colleges in the country out of which 181 are in government and 206 in private sector with annual admission capacity of about 51,979 MBBS and 24,196 Postgraduate students per year. 25 new medical colleges have been granted permission for the academic year 2013-14 and a total of 6350 MBBS seats and 1081 PG seats increased for the year.

#### 15.2.1 Schemes to meet the shortfall of Human Resource in Health Sector

- i) **Schemes for strengthening and up-gradation of State Government Medical Colleges for increase of PG Seats:** The Central Government is also implementing a Centrally Sponsored Scheme for strengthening and up-gradation of State Government Medical Colleges for Starting/Increasing Postgraduate seats with priority to the disciplines like Anatomy, Forensic Medicine, Obst. & Gynaecology, Paediatrics, Anaesthesiology, General Medicine, General Surgery, Microbiology, Physiology, Pharmacology, Community Medicine, Geriatric, Transfusion Medicine and Bio-Chemistry. Under this scheme, central share of Rs. 1350 crores has been earmarked. Till 31.03.2014, central share amounting to Rs. 716.94 crore has been released to 72 State Government Medical Colleges in 20 States.
- ii) **Scheme for establishment of new Medical Colleges attached with existing District/Referral Hospitals:** The Central Government has approved

a centrally sponsored scheme for "Establishment of new medical colleges attached with existing district/referral hospitals". Under the scheme, 58 medical colleges with intake capacity of 100 in each to increase 5800 seats at undergraduate level in Government sector with central share of Rs. 8457.4 crores and State/UT share of Rs. 2513.7 crores with a fund sharing between the Central government and the State governments in the ratio of 90:10 for North Eastern and Special Category States and in the ratio of 75:25 for other States. The objective is to utilize the existing infrastructure of district hospitals for increasing additional undergraduate seats in a cost effective manner by attachment of new medical college with exiting district/referral hospitals.

- iii) Strengthening and up-gradation of State Government Medical Colleges for increase in intake capacity of MBBS seats:** The Central Government has approved a Centrally Sponsored Scheme for "Up-gradation of existing state government/central government medical colleges to increase MBBS seats in the country". Under the scheme 10,000 MBBS seats will be created in the country with central share of Rs. 7,500 crores and State/UT share of Rs. 2,500 crores with a fund sharing between the Central government and the State government in the ratio of 90:10 for North Eastern and Special Category States and in the ratio of 70:30 for other States with upper ceiling of the cost per MBBS seat pegged at Rs.1.20 crore. The scheme envisage to mitigate the shortage of Doctors by increasing the number of undergraduate seats in the country for equitable health care accessibility across country and to achieve the desired doctor population ratio.

### 15.3 DENTAL COUNCIL OF INDIA (DCI)

The Dental Council of India (DCI) is a statutory body constituted by an Act of Parliament viz. Dentists Act, 1948 (XVI of 1948) with the main objective of regulating the Dental Education, Dental Profession, Dental ethics in the country and recommend to the Govt. of India to accord permission to start a Dental College, start higher course & to increase of seats. For this purpose the

Council periodically carries out inspection to ascertain the adequacy of courses and facilities available for the teaching of Dentistry.

This Council had received 259 applications in prescribed form/scheme from the Central Government for (i) establish new Dental Colleges (ii) starting MDS Courses (iii) increase of seats in BDS/MDS/PG Diploma Courses for evaluation & recommendation in accordance with the provision of the Section 10A of the Dentists Act, 1948. During the said period, the Council had recommended to the Central Government to grant its permission to (i) establish 5 new Dental Colleges, (ii) start MDS course in 105 specialities at 41 Dental Colleges (iii) start PG Diploma course in 3 specialities at 2 Dental Colleges (iv) increase of admission capacity in BDS courses at 6 Dental Colleges, increase of admission capacity in MDS courses in 90 specialities at 35 Dental Colleges and increase of admission capacity in PG Diploma course in 1 speciality at 1 Dental College. The Central Government on recommendation of the Council had permitted 4 new Dental Colleges, for starting of MDS Course in 99 specialities at 40 Dental Colleges, for starting of PG Diploma course at 2 Dental Colleges in 5 specialities, for increase of seats in BDS course at 5 Dental Colleges, for MDS course at 35 Dental Colleges in 87 specialities and for PG Diploma course at 1 Dental College in 1 speciality.

This Council had recommended to the Central Government to allow/renew its permission for 2nd/3rd/4th/5th/6th year in BDS course at 23 Dental Colleges and for 2nd/3rd/4th/5th year with increased intake capacity in 16 Dental Colleges, allow/renew its permission for 2nd/3rd/4th year in MDS course at 111 Dental Colleges in 384 specialities and for 2nd/3rd/4th year with increased intake capacity at 51 Dental Colleges in 215 specialities, allow/renew its permission for 2nd/3rd year in PG Diploma course at 3 Dental Colleges in 8 specialities and for 2nd year with increased intake capacity at 1 Dental College in 1 speciality. The Central Government on recommendation of the Council had allowed/renewed its permission for 2nd/3rd/4th/5th/6th year in BDS course at 22 Dental Colleges and for 2nd/3rd/4th/5th with increased intake capacity at 15 Dental Colleges, allowed/renewed its permission for 2nd/3rd/4th year in MDS course at 108 Dental Colleges

in 461 specialities and for 2nd/3rd/4th with increased intake capacity in 246 specialities at 54 Dental Colleges, renewed its permission for 2nd/3rd year in PG Diploma course at 2 Dental Colleges in 3 specialities and increase of seat in 1 speciality at 1 Dental College. During this period 1111 inspections of the various Dental Colleges in the country had been carried out by the Council's Inspectors/Visitors.

This Council had taken decision to recommend to Central Government for recognition of the BDS/MDS/PG Diploma qualifications awarded by 26 Indian Universities under Section 10(2) of the Dentists Act, 1948. The Government of India on the recommendation of the Council had issued 115 notifications of recognition of BDS/MDS qualifications awarded by the 45 Indian Universities under Section 10(2) of the Dentists Act, 1948. The Council had recognised the Dental Mechanic Course at 2 Dental Colleges and Dental Hygienist Course at 1 Dental College.

The Govt. of India, Ministry of Health and Family Welfare, Nirman Bhawan, New Delhi has sanctioned an amount of Rs. 20 lakhs as Grant-in-aid to the Council for the year 2013-2014.

#### 15.4 PHARMACY COUNCIL OF INDIA (PCI)

The Pharmacy Council of India (PCI) is a body constituted under section 3 of the Pharmacy Act, 1948 to regulate the profession and practice of Pharmacy. The objectives of the Council is to prescribe minimum standards of education required for qualification as a pharmacist, uniform implementation of educational standards, approval of course of study and examination for pharmacists, withdrawal of approval, approval of qualifications granted outside India and maintenance of Central Register of Pharmacists.

The Council arranged 1813 inspections of diploma, degree and Pharm. D. institutions and held a number of meetings of the Executive Committee and central council during the last one year as a result of which approval of 308 Diploma & Degree institutions was extended u/s 12 of the Pharmacy Act; 120 new Diploma & Degree institutions was extended u/s 12 of the Pharmacy Act; 31 new Pharm. D. institutions were granted approval of the conduct of course and 10 new Pharm. D.

(Post Baccalaureate) institutions were granted approval for the conduct of course.

At Present 710 institutions with 42,282 admissions for Diploma in Pharmacy and 930 institutions with 62,375 admissions for degree in Pharmacy has been approved by the Pharmacy Council of India. The Pharmacy Council of India Regulations on curbing the menace of ragging in Pharmacy Colleges, 2012 has been notified in the Gazette of India.

**Continuing Education Programmes (CEP)** plays an important role in the growth of the knowledge bank of the pharmacist. The PCI from its own resources is giving a financial assistance of Rs. 10,000/- per course subject to ceiling of 12 courses to the State Pharmacy Council for the conduct of CEP for pharmacists.

**Grant under 11th Five Year Plan and Annual Grant-in-aid:** A new initiative for strengthening/up-gradation of Pharmacy institutions and continuing education programme for pharmacy teachers and practicing pharmacists was approved by the Standing Financial Committee under the Chairmanship of the Secretary (Health & Family Welfare) for Rs. 65.00 crores during 11th Five Year Plan. The scheme is still continuing in 12th Five Year Plan. The Central Govt. has provided Grant-in-aid of Rs. 20.00 lakh for the financial year 2013-14.

**Pharmacist Day and Pharmacy Award:** PCI declared Pharmacist's day for the first time to be celebrated in 25th September, every year. Accordingly PCI celebrated the Pharmacist Day on 25.09.2013 at Siri Fort Auditorium, New Delhi.

#### 15.5 DEVELOPMENT OF PHARMACY EDUCATION

**Strengthening/Up-gradation of Pharmacy Institutions:** The Scheme was approved by the Standing Finance Committee (SFC) of the Ministry of Health and Family Welfare in the meeting held on 27.12.2010 under the Chairmanship of Secretary (H&FW) with an outlay of Rs. 65 crores.

**Setting up of college of Pharmacy in Government Medical Colleges:** In this Rs. 824.30 crore has been allocated in the 12th Plan and Rs. 26.65 crore in the

financial year 2013-14. The proposal of the Govt. for establishment of college of Pharmacy in Govt. Medical College is in the interest of Pharmacy Profession and the Pharmacy Council of India fully supports the same. Such a move will: -

- a. Enable the deserving students to get quality education.
- b. Ensure the availability of skilled competent pharmacist workforce to the society.
- c. Create job opportunities for pharmacy teachers.

### 15.6 DEVELOPMENT OF ALLIED HEALTH (PARAMEDICAL) SERVICES

Two centrally Sponsored Schemes regarding paramedical services under this section as follows:-

1. A centrally sponsored scheme named "Establishment of National Institute of Paramedical Sciences and Eight Regional Institute of Paramedical Sciences as well as developing the existing RIPANS, Aizawal as the 9th RIPS and manpower development to support State Government Medical Colleges through one time grant" has been initiated by Ministry of Health & Family Welfare during the 11th Plan period and shared between the Centre & State Government have been allocated in the ratio 85:15.

➤ The Scheme aims to augment the supply of skilled paramedical manpower and promote paramedical training through standardization of such education/ courses across the country. This Capacity Building scheme will also lead to:-

- Reduction in regional imbalances in availability of Paramedics;
- Introduction of courses in New/Cutting Edge Disciplines;
- Augmentation of Capacity for Planning, Monitoring, Evaluation etc. and
- Provision of quality assured services through in-service training, action research, onsite support etc.

➤ The Scheme has two components:-

- i) Establishment of one National Institute of Paramedical Sciences (NIPS) at Najafgarh, Delhi and eight Regional Institutes of Paramedical Sciences (RIPS) at Bhubaneswar, Lucknow, Coimbatore, Chandigarh, Hyderabad, Bhopal, Bhalgalpur and Nagpur.
  - ii) To support State Govt. Medical Colleges for conducting paramedical courses through one time grant at a cost of Rs. 352.00 crores.
- Under the scheme Rs. 107.90 crore has been released so far as per details given below:-
- i) Rs. 86.00 crore has been released to HLL Lifecare Ltd., the Project Management consultant for construction of NIPS & RIPS.
  - ii) Rs. 1.20 crore has been released to PHFI to support MoHFW towards preparation of a business Model for the establishment of NIPS & RIPS as well as faculty development.
  - iii) Rs. 21.22 crore to Five Govt. Medical Colleges to start new courses and increase intake capacity of existing courses.
2. Setting up of State institutions of paramedical science in States and setting up of college of paramedical education under 12th Plan. EFC has been under process.

### 15.7 INDIAN NURSING COUNCIL (INC)

The Indian Nursing Council is an autonomous body under the Govt. of India, Ministry of Health & Family Welfare. Indian Nursing Council (INC) Act, 1947 gives statutory powers to INC maintain uniform standards and regulation of nursing education all over the Country.

The prime responsibility of Indian Nursing Council is to set the norms and standards for education, training, research and practice within the ambit of the relevant legislative framework.

#### Inspections:

1. First Inspection is conducted to start any nursing programme prescribed by Indian Nursing Council on receipt of the proposal as per calendar of events.
2. Periodic inspections are conducted to monitor the institutions offering quality education.

3. Re-inspection and inspection for enhancement of seats is conducted based on the application of the institution & the calendar of events.

**Income:** A sum of Rupees 9,33,20,008 has been received from the nursing education institutions towards inspection/affiliation fee and publication from 1.4.2012 to 25.10.2013.

**Institutions recognized by Indian Nursing Council:** The course wise number of Nursing Institutions recognized as on 25.10.2013 are as follows:

Sr. No.	Programme	Total
1.	ANM	1865
2.	GNM	2939
3.	B.Sc.(Nursing)	1658
4.	P.B.B.Sc. (Nursing)	750
5.	M.Sc. (Nursing)	571
6.	Post Basic Diploma Programme	294

**Number of Registered Nurses:** 15,62,186 Nurses, 7,26,557 ANM's and 55,498 Health Visitors have been registered with various State Nursing Council up to 31st December 2012.

#### New Initiatives:

1. **Capacity building of ANM Tutors:** In order to strengthen pre-services education of Auxiliary Nursing & Midwifery (ANM) Training programme. Indian Nursing Council in collaboration with (JHPEIGO) has initiated the project. The main objective: higher functioning educational institutions, better prepared Nurses and Midwives workforce who are competent, confident and ready to work upon graduation, especially in rural areas.
2. **On line details of the institutions:** Indian Nursing Council has developed web based teaching faculty & other details wherein institute has to update their teaching faculty details on Indian Nursing Council website. This will be online registration for Teaching faculty, Clinical facilities including students enrolled every year.

3. **Live Register:** Detailed project report on the Live Register has been developed.
4. **e-learning Module:** On HIV/AIDS care and treatment e-learning has been developed and is available on Indian Nursing Council website.
5. **National Consortium for Ph.D. in Nursing:** National Consortium for Ph.D. in Nursing has been constituted by Indian Nursing Council to promote research activities, in various fields on Nursing in collaboration with Rajiv Gandhi University of Health Science, supported by WHO. A total 234 students have been enrolled under National consortium of Ph.D. in Nursing.
6. **Website of Council:** The website of Council is [www.indiannursingcouncil.co.in](http://www.indiannursingcouncil.co.in) & [www.indiannursingcouncil.org](http://www.indiannursingcouncil.org) which is being updated regularly.

#### 15.8 EXISTING SCHEME OF DEVELOPMENT OF NURSING SERVICES

In order to improve the quality of Nursing Services, the following programmes have been implemented during 2013-14.

1. **Upgradation of Schools of Nursing attached to Medical Colleges into Colleges of Nursing:** Under the revised one time assistance of Rs. 6.00 crores approved for upgrading a School of Nursing into a College of Nursing in order to increase the availability of graduate nurses, the funds are released to the institute subject to the condition that State Government/Institution will bear the recurring expenditure. The financial assistance is meant for civil works including addition and alteration of school and hostel building and for furniture, audio-visual aids.  
  
A sum of Rs. 4.18 crore has been released during the year 2013-14 to School of Nursing at Udaipur, Rajasthan.
2. **National Florence Nightingale Award for Nursing Personnel:** National Florence Nightingale Award was given on 12.5.2013 by the Hon'ble President of India to 35 nursing personnel as a mark of highest recognition for meritorious

services in the nursing profession in the Country. Each award carries a Certificate of Merit and Cash Award of Rs. 50,000.

### 3. New Scheme of Strengthening/Up-gradation of Nursing Services under Human Resource:-

- **Opening of ANM/GNM Schools:** CCEA has approved this Ministry's proposal for opening of 132 ANM Schools and 137 GNM Schools under XI plan period. A Sum of Rs. 11,75,12,500 has been released during 2013-14 for opening of 5 ANM and 1 GNM School.
- **Launch of National Nursing Portal:** National Nursing Portal designed and developed by National Informatics Centre, Hyderabad was launched by Smt. Anuradha Gupta, AS&MD, (NRHM) on 14th February, 2013; The Nursing Portal is an online resource center for nurses, students, nursing institutions, national and state nursing councils and boards and Ministry of Health and Family Welfare; The purpose of the portal is to bring the entire nursing & midwifery cadre, students, State Nursing Councils (SNC), Indian Nursing Council (INC), Ministry of Health and Family Welfare (MoHFW) and the other stakeholders on a common platform and to improve the nursing & midwifery services by providing useful information to all the stakeholders.

### 15.9 RAJKUMARI AMRIT KAUR (RAK) COLLEGE OF NURSING, NEW DELHI

The Rajkumari Amrit Kaur College of Nursing was established 67 years ago with the objective to develop model programmes in Nursing Education. The College continues to offer four regular programmes i.e. B.Sc. (Hons.) Nursing, Master of Nursing, M.Phil and Ph.D. in Nursing. Besides these, the College conducts short-term continuing education courses. The institution works in close association with Ministry of Health & Family Welfare, Hospitals, Health Center and Allied agencies.

#### Admissions and Graduation

The admissions to B.Sc.(Hons.) Nursing and Master of Nursing and M. Phil in Nursing are made on the basis

of merit in the selection test as laid down by the Academic Council of the University of Delhi.

i) Total admissions made in July, 2014	:	90
B.Sc. (Hons.) Nursing 1st year	:	66
Master of Nursing 1st Semester	:	24
ii) No. of Foreign students	:	03
iii) No. of Physically handicapped students	:	Nil
iv) No. of participants in short term courses		
National level	:	58
State Level	:	240

#### Scholarship and Financial Aid:

- 52 B.Sc.(Hons) Nursing students were awarded Merit Scholarship by the Department of Welfare for SC/ST/OBC & Minority, Government of N.C.T of Delhi.

#### Budget

The Budget Provision for the 2013-2014 was Rs. 6,50,00,000/- (Rupees six crore fifty lakh only) in Non-Plan and Rs. 10,00,00,000/- (Rupees Ten crore) only in plan scheme.

#### Continuing Education

Two national level short term courses and 13 State level workshops were conducted for updating the skills of nursing personals working in Delhi. Apart from that professional study programmes, educational tours and individual study programmes were planned and co-ordinated for visiting nurses, health professional and students from other states.

#### Rural Field Teaching Centre, Chhawla

The Rural Teaching Centre was established in 1950 for the purpose of providing objective oriented rural community health experience to the students. It covers 7 villages with an approximate population of 52,000 and is situated 32 kms away from the college. The centre provides an integrated comprehensive health and family welfare services to the community. Special emphasis is given on MCH services, Family Planning, Immunization, Family Welfare Services, Nutrition, Adolescent Girl's

Health and Health Education Programme by the students and staff of rural unit in collaboration with the staff of RHTC, Najafgarh. Staff and students also participated in National Health Programmes like Malaria Control Programme, Dengue Control Programme, Revised National Tuberculosis Control Programme, AIDS Control Programme, Diarrhoea Disease Control and Intensified Pulse Polio Programme etc. The centre also has DOTS and Microscopic centre for screening and treatment of T.B. & MDRTB patients. In addition, the centre provides mobile van clinic services to seven villages with special emphasis on primary, secondary and tertiary levels. RFTC Chhawla is also a 'Team Movement Point' for pulse polio programmes.

### Library

The College Library has a total 20588 books. Number of books purchased during the year, 2013-2014 is 207.

Number of Journals purchased are Foreign Journals - 27, Indian Journals-3, Newspapers -6 and Magazines -7.

The total expenditure on books and journals during the period was Rs. 21,51,878/- (Rupees Twenty One lakh Fifty One thousand Eight Hundred and Seventy Eight) only. Xerox facilities and lending facilities were provided to the students and staff.

### Other Activities

Despite the limitations of accommodation, faculty positions, other restraints and constraints, the College has made great strides in the field of nursing and health care. Some teachers of the college are engaged in many areas of research in different fields of nursing and nursing education. Some of them are providing consultative and advisory services and are participating in some projects and meetings at national level.

In accordance with the Delhi University regulation "Policy on Sexual Harassment Ordinance XV(D): Prohibition of and Punishment for Sexual Harassment of University of Delhi", A College Complaint Committee of 9 members including two outside members has been formulated for dealing with cases of Sexual Harassment.

### Achievements

- The College continued to work as Programme Study Centre for Ph.D. programme offered by Ph.D. Consortium initiated by Indian Nursing Council and R.G.U.H.S.
- The College is functioning as sub-recipient for Global Funds for AIDS, Tuberculosis and Malaria (GFATM) Project. The College is conducting following activities under the project:-
  - 1 NACO TON were conducted in which 15 participants were participated
  - 1 ANM TOT were conducted in which 37 participants were participated
  - 2 ANM TON were conducted in which 65 participants were participated
  - 2 RE-TON was conducted in which 78 participants were participated.

### 15.10 NATIONAL ELIGIBILITY CUM ENTRANCE TEST (UG), 2013 FOR ADMISSION TO 15% ALL INDIA UG SEATS-2013 CONDUCTED BY CBSE

National Eligibility cum Entrance Test, 2013 was conducted by Central Board of Secondary Education (CBSE) on 5th May, 2013; 18th May, 2013 and 26th May 2013 for 15% All India Quota Seats and 85% State Quota seats in Medical/Dental courses all over the country. Total 658040 candidates appeared in the Test out of which 366317 candidates have been declared qualified for the Test. The result was declared on 5th June, 2013 whereas a total of 13645 candidates were declared eligible to participate in the counseling for 15% All India Quota Seats. Allotment was in 148 Government Medical Colleges and 32 Dental Colleges on 3012 MBBS Seats and 281 BDS seats respectively.

Allotment of college and courses to successful candidates were made as per their Rank by Online Counseling conducted by Directorate General of Health Services (DGHS) in Ministry of Health & Family Welfare for the academic year 2013-14 in three rounds. The whole admission process for 15% All India quota of MBBS/ BDS seats was successfully completed by 29/8/2013.

### **15.11 ALL INDIA ENTRANCE EXAMINATION FOR ADMISSION TO 50% ALL INDIA PG SEATS-2013 CONDUCTED BY NBE**

In Compliance with directions of the Hon'ble Supreme Court of India, the National Board of Examination, New Delhi conducts the All India PG Entrance Examination on all India Basis.

The Entrance Examination was held at 51 Centers in 33 capital cities across the country on 23rd November - 6th December, 2012. A total of 95673 candidates were registered and 90377 candidates appeared in the Examination for admission to MD/MS and Diploma Courses. The result was declared on 16th May, 2013 for enabling the allotment of seats for the merit/wait list candidate in 136 Medical Colleges all over India as per prospectus for 2013 approved by Ministry of Health & Family Welfare, Government of India. There were 5534 recognized/approved seats in MD/MS and Diploma Courses under the 50% All India PG Quota for the academic year 2013-14. The allotments were made to the successful candidates through On-line Counseling conducted by DGHS in Ministry of Health & Family Welfare, Government of India. The whole allotment process of 50% All India PG Quota Counseling-2013 was successfully completed by 21/08/2013.

### **15.12 ALL INDIA ENTRANCE EXAMINATION FOR ADMISSION TO MDS COURSE UNDER 50% ALL INDIA QUOTA - 2013 CONDUCTED BY AIIMS, NEW DELHI**

In Compliance with directions of the Hon'ble Supreme Court of India, the All India Institute of Medical Sciences, New Delhi conducts the All India PG Entrance Examination for MDS course under 50% All India Quota basis.

The Entrance Examination was held at 33 Centers in 06 capital cities in the country on 13/01/2013. A total of 16549 candidates were registered and 15172 candidates appeared in the Examination for admission to MDS Courses. The result was declared on 20th May, 2013 for enabling the allotment of seats for the merit/wait list candidate in 26 Dental Colleges all over India as per prospectus for 2013 approved by Ministry of Health & Family Welfare, Government of India. There were 192

recognized/approved seats in MDS Courses under the 50% All India PG Quota for the academic year 2013-14. The allotments were made to the successful candidates through On-line Counseling conducted by DGHS in Ministry of Health & Family Welfare, Government of India. The whole allotment process of 50% All India PG Quota Counseling-2013 was successfully completed by 21/08/2013.

### **15.13 ALLOCATION OF MEDICAL/DENTAL SEATS FROM CENTRAL POOL**

A Central Pool of MBBS and BDS is maintained by the Ministry of Health and Family Welfare by seeking voluntary contribution from the various States having medical colleges and certain other Medical Education Institutions. In the academic session 2013-14, 225 MBBS and 30 BDS seats were contributed by the States/UTs and medical institutions. These seats were allocated to the beneficiaries of the Central Pool, viz., States/Union Territories, which do not have Medical/Dental Colleges of their own, Ministry of Defence (for the wards of Defence Personnel), Ministry of Home Affairs (for the children of para-military personnel and Civilian Terrorist Victims), Cabinet Secretariat, Ministry of External Affairs (for meeting diplomatic/bilateral commitments and for the children of Indian staff serving in Indian Mission abroad), Ministry of Human Resource Development (for Tibetan Refugees) and Indian Council for Child Welfare (for National Bravery Award winning children).

#### **MDS Seats**

There are 4 MDS seats in the Central Pool contributed by Government of Uttar Pradesh, which are allotted to the in-service doctors sponsored by the States/Union Territories without MDS teaching facility on a rotational basis. For the academic session 2013-14, no eligible in-service doctors were sponsored by the beneficiary States/UTs.

#### **Post Graduate Medical Seats for Foreign Students**

There are 5 P.G. medical seats in the Institute of Medical Sciences, Banaras Hindu University, Varanasi reserved for foreign students in a calendar year. The foreign students against these seats are nominated by the Ministry of Health & Family Welfare on the advice of



Ministry of External Affairs. During the academic year 2013-14, two seats were allocated to the candidates from Nepal.

#### 15.14 NATIONAL BOARD OF EXAMINATIONS (NBE)

The National Board of Examinations conducts examinations in a planned and scientific manner with regards to validity and reliability of assessment. A sound examination linked with evidence in educational research and evaluation system reduces subjectivity and promotes uniformity and standardization. The intent is to ensure accurate measurement of professional competence and adherence to quality assurance through scientifically structured tests keeping in view the objectives of the NBE. Structured training and practical/clinical/viva-voice examinations and a continuous review of evaluation processes are the major thrust areas for achieving this goal. Exams held during the year 2012-13 are as follows:

Examinations Details	Appeared	Pass
Centralized Entrance Test (CET)	45718	36921
Centralized Entrance Test (Super-Specialities)	1590	1166
Fellowship Entrance Test	740	681
DNB Final Examination	5748	3118
Fellowship Exit Examination	120	86
Foreign Medical Graduates	13953	3664
National Eligibility-Cum-Entrance Test for Post Graduate Courses (NEET-PG)	90276	70297

#### Post-Doctoral Fellowship Programmes

India has expertise in various sub-specialty areas, with medical institutions having requisite technology and trained manpower delivering high quality medical services. There are many young medical post-graduates with aptitude for higher learning and considering the need to increase manpower that can render highest degree of professional work; the National Board has started Post-doctoral Fellowship courses.

Well-equipped centers, after due procedure have been identified in concerned specialties for imparting hands on training. Candidates with DNB/MD/MS/DM/MCH qualification in the concerned specialty are eligible to pursue NBE fellowship training. Selection is based on an entrance test and centralized counseling. The trainees go through a structured training programme, maintain performance record books and undergo examination at the end of the training. Successful candidates are awarded the fellowship of National Board at the annual convocation. The sub-specialties in which the fellowship programmes are available along with the 170 seats during the reporting period.

#### Accreditation Committee

NBE approves the accredited centers of studies which provide adequate facilities for training. During the year 2012-13, two meetings of the Accreditation Committee were held on 3rd May 2012 and 4th December 2012. The committee recommended accreditation to 42 hospitals for Broad specialty, 22 hospitals for Super specialty and 7 hospitals for FNB courses accounting to 112 seats for broad specialty, 57 seats for Super specialty and 15 seats for FNB courses also renewal was granted to 164 hospitals for Broad specialty, 53 hospitals for Super specialty and 26 hospitals for FNB courses accounting to 550 seats for Broad specialty, 133 for Super specialty and 63 for FNB courses.

#### Continuing Medical Education Programme/ Workshops

NBE in its continuing endeavor to strengthen research and facilitate capacity building in Research Methodology periodically conducts workshop for benefits of Post Graduate trainees and faculty members.

Workshops in Research Methodology:

- St. John's Medical College & Hospital, Bengaluru, Karnataka
- PSG Institute of Medical Sciences & Research, Coimbatore, Tamil Nadu
- Seth GS Medical College & KEM Hospital, Mumbai, Maharashtra
- Indian Institute of Public Health (IIPH), Hyderabad, Andhra Pradesh

- v. Indian Institute of Public Health (IIPH), Delhi
- vi. University College of Medical Science & GTB Hospital, Delhi
- vii. Kanchi Kamakoti Childs Trust Hospital, Chennai, Tamil Nadu

### External Appraisal

The purpose of local appraisal is to further improve the quality of training, assess the training infrastructure for the DNB candidates and also assist the local institutions to develop into a center of academic excellence. This would further add value to the services being rendered in these accredited hospitals/institutions. During the year 2012-13, 1484 assessors appointed for hospitals/medical institutions all over India and feedback of shortcomings observed and suggestions for further improvement of each candidate and hospital were also communicated to the concerned hospital and DNB Trainee for further improvement.

### Thesis & Research

As per NBE norms, writing a thesis is essential for all DNB candidates towards partial fulfillment of eligibility for award of DNB degree certificate. During the period i.e. 1st April 2012 to 31st March 2013 the outcome of the thesis assessment were 3657.

### Development of Regional Offices

The regional office at Bengaluru has been already operationalised last year and the Regional Office at Hyderabad is also being operationalised this year. The Regional offices have been equipped to strengthen service delivery, research, training and assessment. In addition to the above, a centre at Chennai is also at the final stage of establishment by taking over the building from Southern Railway Headquarter Hospital.

Further it is also stated in the matter that the Board is also under the process of developing regional offices at Jammu & Kashmir and in the North-East region.

### NBE Contact Center

National Board of Examinations inaugurated a centralized office i.e. "NBE Contact Center" for the purpose of communicating a large volume of telephonic

and email queries. The purpose of developing NBE Contact Center is to provide valid, appropriate and satisfactory information on each query raised. NBE Contact Center is functioning for both Inbound and Outbound calls. An Inbound Contact Center of NBE is operated by Candidate Care Executives (CCEs) to manage incoming query and e-mails from the candidates.

Outbound Contact Center of NBE is operated for calling the candidates/doctors/hospitals etc for providing them the information regarding their thesis status, results, hospital accreditation, CME workshops and for taking their valuable feedback which is used for internal trainings and improvements. During last year approx. 57000 telephonic calls were answered by NBE Contact Center delivering solutions to approx. 95% of total queries.

### Satellite Education

Satellite based interactive sessions are conducted using television broadcast on Gyan Darshan Channel every Thursday (2.30 pm to 7.30 pm). During last year approx. 213 Teleconferencing sessions were conducted by National Board of Examinations delivering a broadcast of approx. 160 hours of programme. These sessions provide two-way audio communication and one-way video communication between the faculty and the DNB students and it is also available on DTH Platform.

**Gyan Vani (Radio FM):** NBE also conducts interactive sessions on FM Radio every Thursday from 5.00 pm to 6.00 pm on Radio Gyan Vani. This transmission is available all over India. The Radio session provides an economical and convenient access for the Post Graduate trainees across various hospitals to eminent faculty members and important topics from the curriculum. During the year 2012-13, a total of 44 sessions were held delivering 44 hours of programme.

**NBE Awards for Teacher and Institutes:** NBE has also instituted awards for teacher & medical institutions for excellence in teaching under the following categories to honor distinguished faculty members & accredited institutions for their valuable contribution to DNB programme in the following categories:

1. Emeritus Teacher Award
2. Eminent NBE Alumni Teacher Award
3. Distinguished DNB Teachers of Excellence Award
4. Excellence in teaching for DNB programme - NBE accredited hospitals

### 15.15 NATIONAL ACADEMY OF MEDICAL SCIENCES (INDIA)

The National Academy of Medical Sciences (India) was established in 1961 as a registered Society with the objective of promoting the growth of medical sciences. The National Academy of Medical Sciences (India) is a unique institution which fosters and utilises academic excellence as its resource to meet the medical and social goals. Over the years the Academy has recognized the outstanding achievements of Indian scientists in the field of medicine and allied sciences and conferred Fellowship and Memberships. Fellows and Members are chosen through a peer review process consisting of screening by the Advisory Panel of Experts and the Credentials Committee, election through voting by the Council and by all the Fellows.

As on 10th January, 2014, the NAMS has on its roll 3 Honorary Fellows, 850 Fellows and 5771 Members (MAMS-1731 and MNAMS 4040).

The 53rd Annual Conference of the Academy was held from 25-27 October, 2013 at the All India Institute of Medical Sciences at Jodhpur. Dr. R. Chidambaram, Principal Scientific Advisor, Government of India, was the Chief Guest.

A Regional Symposium on "Sleep Medicine" was held on 25th October, 2013.

A NAMS Scientific Symposium on "Regenerative Medicine" was held on 26th October, 2013.

Eighty one candidates were given Scrolls of Fellowship and Membership of the Academy at the ceremonial occasion of the Convocation of Academy held at All India Institute of Medical Sciences at Jodhpur on 26th October, 2013.

Lifetime Achievement Award was conferred on noted Cardiologist, a distinguished Fellow and Past President of NAMS, Dr. S. Padmavati at the ceremonial occasion

of the Convocation of Academy held at All India Institute of Medical Sciences at Jodhpur on 26th October, 2013. .

Nineteen Bio-medical Scientists of the Country have been chosen for Orations and Awards for the 2013-14.

Thirty Bio-medical Scientists elected as Fellows and Fifty eight elected as Members of the Academy for the year 2013.

During this year, NAMS-AIIMS collegiums has been formed with AIIMSs at Bhopal, Bhubaneswar, Jodhpur, Patna, Raipur, and Rishikesh in order to provide the benefit of rich pool of expertise of eminent Emeritus Professors and Fellows of NAMS to advise and support academic programmes at the newly established AIIMSs.

The Academy has been recognized by the Government of India as Nodal Agency for Continuing Medical Education for medical and allied health professionals and is advising the Government of India in several matters of National Health Policy and Planning. National Academy of Medical Sciences encourages and sponsors nationwide CME programmes, Symposia and Workshops in basic sciences and applied clinical disciplines; high priority is accorded to activities that would result in the practical application of recent advances in medicine and promotion of research in areas of national health priority.

**CME:** Since 1982, supporting CME programmes is an important activity of the NAMS to keep medical professionals abreast with newer/current medical problems of the country and to update their knowledge for better delivery of medical education, patient care and health care at large. In this financial year 2013-14, Fifteen CME programme proposals have been sanctioned so for financial assistance.

The Academy also contributes towards Human Resource Development by selecting and sending Junior Scientists to Centres of excellence for training in advanced methods and techniques. Seven Scientists/Teachers have been selected for advance training at specialized centres during 2013-14.

**Intramural CME Programmes:** The Academic Committee identifies, from time to time, topics of

national and academic relevance for funding as intramural CME Programmes. The Academy provides TA/DA and honorarium to Fellows who attend the CME programmes as Observers.

Two Regional Symposia were held (1) NAMS-PGI Symposium on Non-alcoholic Fatty Liver Disease in Children and Adolescence held at Postgraduate Institute of Medical Education and Research, Chandigarh on 10th March, 2013 and (2) NAMS-NIF Symposium on Micro-nutrient Deficiencies held at Nutrition Foundation of India, New Delhi on 22nd March, 2013.

**NAMS Tele-education Programme:** NAMS has made a major effort to improve the outreach of CME programme by establishing tele-linkages between medical colleges so that more medical colleges can participate and benefit from CME programmes.

### 15.16 ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS), NEW DELHI

All India Institute of Medical Sciences (AIIMS) was established in 1956 by an Act of Parliament as an institution of national importance. AIIMS was conceived to be a center of excellence in modern medicine with comprehensive training facility. This was in pursuance to the recommendations made by the Bhore Committee in 1946.

The institute has been entrusted to develop patterns of teaching in undergraduate and postgraduate medical education in all its branches so as to demonstrate a high standard of medical education to all medical colleges and other allied institutions in India, to bring together at one place educational facilities of the highest order for the training of personnel in all important branches of health activity, and to attain self-sufficiency in postgraduate medical education.

For pursuing academic programmes, the AIIMS has been kept outside the purview of the Medical Council of India. The Institute awards its own degrees. The AIIMS continues to be a leader in the field of medical education, research and patient-care in keeping with the mandate of the Parliament.

The Institute is fully funded by the Government of India. However, for research activities, grants are also

received from various sources including national and international agencies. While the major part of the hospital services are highly subsidized for the patients coming to the AIIMS hospital, certain categories of patients are charged for treatment/services rendered to them.

AIIMS has manpower of over 10,000 including over 750 faculty members, supported by a large number of resident doctors, nurses, paramedics, scientists, non-medical officers and staff.

Till date, the Institute has awarded degrees to 5198 specialists (MD, MS, MDS, MHA-176/2013), 1344 super-specialists (DM/M.Ch.-85/2013), 2646 MBBS doctors (50/2013), 996 Ph.Ds (52/2013), 764 Postgraduates (M.Sc & M.Biotech.-46/2013) and 2565 nurses and paramedical professionals including 109 B.Sc-Hons.

These figures of course include 509 degrees awarded by the Hon'ble President, AIIMS, Minister of Health and Family Welfare on the occasion of 41st Institute Annual Convocation held on 12.09.2013.

AIIMS has been active in sharing its knowledge and expertise through CMEs, Conferences and Workshops. There is a provision for short term, long term and elective training to students and employees from various organizations in India as well as abroad. During the year 2013-2014 the various persons underwent training are as below:

S.No.	Training	No. of trainees
1.	WHO Fellows - Foreign nationals	70
2.	Elective Training (Undergraduate)- Foreign nationals	37
3.	Postgraduate training - Foreign nationals	26
4.	Conference/Workshops/Symposium etc.	188
	<b>Total</b>	<b>321</b>

During the last year the faculty and the scientists of the institute have published over 1800 research papers in

national and international journals, written books and monographs and also contributed a large number of chapters in books. Over 500 young scientists at different positions like research fellows, research associates and Ph.D. students have been engaged in significant research projects. 508 research projects are in progress and they brought extramural funds of Rs. 69 crore, which is 25% increase from last year's funds and that was very creditable.

211 research projects were successfully completed this year, bringing new knowledge and useful research data at the institute. Rs. 5 crore institutional funds were also distributed to young faculty for undertaking 58 new research projects, involving newer areas like Cardiology, Neuro-Sciences, Stem Cell Studies, Drug Designing, Protein Research, Genetics and Immunology.

During the institute's foundation day celebration on the 25th September, 2013, 12 faculty members were awarded with cash prizes and certificates of excellence for their outstanding research publications during the preceding year. A health exhibition was also held on this occasion showcasing institute's contribution to Health sciences. "AIIMS Foundation Day Lecture" had been started last year and this year Professor T. Ramasami, Secretary, Ministry of Science and Technology, Govt. of India, a distinguished scientist delivered lecture on "Perspectives on Health Research".

The work on building a Convergence Centre, which will house all modern platform based state-of-the-art technology for the faculty, scholars and students to undertake the research is progressing at a fast speed. It will soon become the knowledge hub which will allow to store and manage large clinical material and research data for enhancing capability in research.

### Medical Education

AIIMS is running various academic programmes including undergraduate, postgraduate and Ph.D programme. The admissions and selections for various these courses the details of admissions made to various courses in year 2013 are as:

S. No.	Course Name	No. of students admitted/residents recruited during 2013-2014
1.	MD/MS/MDS/MHA	118
2.	DM/M.Ch	42
3.	Ph.D	44
4.	Senior Residents (Non-Acad.)	201
5.	Junior Residents (Non-Acad.)	163
6.	M.Sc Courses	19
7.	M. Biotechnology	15
8.	M.Sc Nursing	24
9.	MBBS (AIIMS, New Delhi)	72
	MBBS (6 new AIIMS)	600
10.	B.Sc (Hons.) Nursing (AIIMS, New Delhi)	77
	B.Sc (Hons.) Nursing (6 new AIIMS)	360
11.	B.Sc (Nursing) Post-Certificate	24
12.	B.Sc (Hons.) Ophthalmic Techniques	19
13.	B.Sc (Hons.) Medical Technology in Radiography	9
	<b>Total</b>	<b>1787</b>

AIIMS organized various orientation programmes including integrated self-enrichment orientation programme for fresh MBBS students from July 15-17, 2013. Workshop for MBBS students was also conducted at AIIMS by CREST from July 18-27, 2013. These programmes focused on improving communicative understanding and collaboration with senior students of these students as well as orient them about various work stations at AIIMS.

Specially designed orientation programmes in research and patient care, including communication and soft skill acquisition were also offered to the new Resident doctors and Assistant Professors in this year.

In addition, AIIMS conducted entrance examination and counseling leading to final selection of students to MBBS and B.Sc. (Hons.) Nursing courses for 6 new AIIMS.

**Centre/Department wise information regarding important achievements and newer facilities at AIIMS:**

**Department of Anatomy:** The Department of Anatomy has established a State of the art E-learning facility which is utilized by all Departments. It has established state of art cadaveric and plastination facility used by various clinical Departments for demonstration and national/international workshops in Neurosurgery, Otolaryngology and Orthopaedics. The Department has Human cytogenetic and molecular reproductive and genetic facility which leads in cutting edge genetic research and offers genetic diagnostic services for various Endocrinological, Gynaecological, Ocular and Haematological disorders. The Department also has Fluorosis diagnostic laboratory and several labs working in neuro and developmental biology. The Department has established problem based and integrated teaching learning modules to make learning interactive and interesting. The faculty delivered over 50 lectures, published over 50 articles in high impact factor journals. Faculty was invited for CME, delivering prestigious orations and taking lectures in other universities and medical colleges.

**Department of Biochemistry:** The Department of Biochemistry has innovative teaching programmes involving problem based learning and case oriented small group discussions for MBBS students, which seek to develop the students ability in critical thinking and analysis. The Department provided short-term research training to 4 postgraduate (MD & M.Sc.) students from BPKIHS, Dharan, Nepal. Research exposure to undergraduate students was also provided to a number of students in the form of summer training. The Department has attracted research funds amounting to Rs. 12 crores approximately from ICMR, DST, DBT, DRDO, CSIR and Indo-Canadian, UKIERI and some other international agencies. 32 funded research projects with Departmental faculty being the Principal Investigators are ongoing in the Department. This has led to several publications in reputed National and International journals.

Two faculty members received the 2nd and 3rd prizes under AIIMS excellence award for best publications. One faculty member was elected President of Indian Association for Cancer Research for 2 years (2014-16).

Nine Ph.D. students received awards at various National conferences. One Ph.D. student received Gold Medal for best work in clinical research. One Ph.D. student received Indo-German DAAD Fellowship of 6 months. Twelve students were awarded Ph.D. degree, 4 MD degrees and 3 M.Sc. degrees. The Department organized a Flowcytometry workshop.

**Department of Biostatistics:** The Department had many research projects, mostly collaborative in nature with various centres/departments in the Institute. Faculty members and scientists: Served on various administrative and scientific committees in the Institute; Invited members of various scientific committees of the ICMR, DBT, DST, AYUSH, TERI, NIREH and NIMS; Served on Data Safety Monitoring Boards (DSMB) of several National and International Clinical Trials; Delivered invited lectures all over the country during various workshops on Research Methodology and Biostatistics; and, Examiners to various universities in the country. In the last one year, faculty and scientists had ninety two research publications in various peer reviewed medical journals. Faculty members and scientists continued to be reviewer for almost all the major medical journals in the country and for a number of International Medical Journals from various medical specialties.

**Department of Biophysics:** A significant contribution has been made in research by the Department of Biophysics is concerned with determining the molecular basis of biological process, rational structure based drug design and discovering new specific biomarkers. The structure of the iron-free true C-terminal half of bovine lactoferrin produced by tryptic digestion and its functional significance in the gut has been determined. The three-dimensional structure of peptidyl-tRNA hydrolase from the multidrug resistant bacteria, *Acinetobacter baumannii*, has been determined. Proteomic analysis of seminal plasma has resulted in the identification of a high molecular weight multiprotein complex. Expression of COX, LOX, p38b and p38 $\alpha$  enzymes has been correlated with clinic-pathological stage of cancers in different sites and effect of therapy.

The heparin binding carboxypeptidase E protein has been shown to exhibit antibacterial activity in human semen. The identification of clinical mycobacterial isolates by protein profiling using matrix assisted laser desorption ionization-time of flight mass spectrometry has been completed. The Department provides facilities for data collection on protein and small molecule crystals, medical bioinformatics, protein sequencing and peptide synthesis, proteomics, dynamic light scattering and kinetic parameters using binding studies with BIAcore.

**Blood Transfusion Services:** The Blood Transfusion services of C.N. Centre caters to round the clock transfusion needs of patients admitted in C.N Centre of AIIMS by collecting, processing and providing safe and quality blood and blood components. The activities include both inhouse and outdoor blood collection, blood donor motivation and pre-donation and post-donation counseling, blood component preparation and various serological tests. Components like packed red cells, plasma, fresh frozen plasma, platelet rich plasma, platelet concentrate, cryoprecipitate, leucodepleted red cells and platelets are available in adequate nos. at all times. Facility for Apheresis procedures and autologous donation is available. Serological tests performed in the BTS include tests for blood grouping, screening for irregular antibodies, compatibility tests using latest technology like column agglutination. Every unit of blood collected is tested for transfusion transmissible infections like Hepatitis B, Hepatitis C, HIV- 1 and 2, syphilis, Malaria. In addition, test for CMV is carried out for heart transplant cases. Automation is used in most of the laboratories in the department for better output and quality. Donor blood samples are also being screened by NAT (Nucleic Acid Amplification test) as an additional screening test to detect HIV/HCV/HBV.

**Department of Cardiac-Anaesthesia:** Collaboration with university of florida. "Neurological biomarkers following Desflurane vs TIVA in the patient undergoing aortic valve replacement" Dr. Poonam Malhotra and Dr. George Mychaskiw.

- Papers Published - 9
- Workshop/Conferences - 5
- Chapters in Book - 5

**Department of Cardiac-Radiology:** The DM programme in Vascular Radiology got approved during this year. The faculty of the Department delivered 20 lectures and conducted 2 workshops at national and international scientific meetings. Additionally, they are members of editorial boards and reviewers for numerous scientific journals. The departmental faculty has been running 5 research projects and 3 thesis. They published 11 research papers in various national and international journals. The department continues to provide cardiovascular imaging and vascular interventional treatment services to patients referred from various speciality departments in the hospital.

**Department of Cardiothoracic & Vascular Surgery:** The Department of Cardiothoracic & Vascular Surgery was in the forefront in the field of patient care, teaching and research. 44791 patients were seen in the Out Patient Department and 4043 surgeries of all types of cardiovascular ailments across of all age groups were performed with excellent results. In the field of research, the faculty of the Department published more than 50 research papers in national and international journals of repute and presented more than 50 invited lectures and oral papers in national and international conferences. There are 15 national and international research projects under way in the Department. The Department successfully organized live operative workshops on Mitral Valve Repair and Wet Lab session on Bentall Procedure, besides a workshop on Aortic Dissection. These benefitted a large number of surgeons and medical and para-medical staff from all over the country.

In addition, to cope up with the tremendous patient-load, and to conduct India-centric research in field of cardiovascular sciences, the Cardiothoracic Centre has proposed 800 bedded National Cardiovascular Centre in Jhajjar Campus of AIIMS which has been approved in principle by the Ministry of Health & Family Welfare.

**Centre for Dental Education and Research:** The Centre for Dental Education and Research was approved for designation as WHO Collaborating Centre on "Oral Health Promotion" by WHO. An innovative, low-cost technology "SealBio" was indigenously developed for treatment of infected non-vital permanent mature teeth in adults, which was granted patent by Australian patent office.

**Department of Clinical Neuro Psychology:** In the last one year a separate **Cognitive Disorders and Memory** has formally started.

**Department of Dermatology & Venereology:** The Department of Dermatology & Venereology was involved in organising XI International Congress of Dermatology, December 4-7, 2013 in New Delhi that was attended by more than 4000 delegates. Prof. V.K. Sharma awarded the International League of Dermatological Societies Award the ILDS 2014 "**Certificate of Appreciation**" for life long dedication and contribution to International Dermatology. Department is continuing research of vitiligo and psoriasis. Department has carried out Genetic research with Indo-US collaborative (ICMR) project funded by National Institute of Health, USA. The project involved the genome wide association study of 2000 psoriasis patients and 2000 controls. The initial investigation had identified some novel MHC (major histocompatibility) i.e TNIP and IL 12B and non-MHC loci (ULK1) that may have potential therapeutic implication. There are three Ph.D and 17 MD Dermatology & Venereology under training in the department. The Department is providing special services like vitiligo surgery, lasers for birth marks like portwine stain nevus of ota and CO2 fractional laser, PUVA and narrow band therapy. Conducted 4 fellowships in dermatology for IADVL members.

**Department of ENT:** Expanded the frontiers in minimal invasive surgery for head and neck. The Department was the first to start transoral robotic surgery in the country and has applied the experience in excision of parapharyngeal tumors and also performing the supraglottic laryngectomy by this technique. The Department has started providing services of Outreach OPD at Jhajjar and plans to extend the operation services to its patients at CHC Ballabgarh. The Department has utilized its state of art temporal bone lab facility to provide surgical training to residents and delegates and organized temporal bone courses. Department hosted 9 visitors from national and international centers for short term training/ observership at the institute.

**Department of Forensic Medicine and Toxicology:** The Department of Forensic Medicine and Toxicology is continued to provide round the clock medico-legal

services like in cases of injury, sexual offences, poisoning etc. to the South and South-East district of Delhi. About 1500 such calls were attended during this period. A total of 1728 medico legal autopsies were conducted at main mortuary. The Department examined cases of age estimation, potency, DNA Fingerprinting, medical examination etc. referred from the court, CBI and other investigating agencies. About 603 such cases were dealt during this period. Doctors of the Department attended court of law in about 814 cases from Delhi and other States. About 149 tests were performed for various poisons referred from the clinical Department of AIIMS, medico-legal cases and in academic cases

**National Drug Dependence Treatment Centre:** The centre currently functions as a national resource centre for Ministry of Health and Family Welfare, Government of India, Ministry of Social Justice and Empowerment, National AIDS Control Organization, United Nations Office on Drugs and Crime (UNODC) Regional Office for South Asia, WHO (India) and WHO SEARO. Recognizing the role and leadership that the centre enjoys nationally and internationally, the centre has been declared as the WHO Collaborating Centre on substance use disorders (WHO-IND 95). It has also been designated as a Regional Learning Centre by UNODC and Regional Technical Training Centre by Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) Round 9.

The centre is 50 bedded and offers clinical care through out-patient, in-patient services for drug dependent persons and runs three specialty clinics-Tobacco Use Cessation, Adolescent Drug Use, and Dual Diagnosis (Substance Use Disorder and Psychiatric Illness) clinics. These patients along with women drug users are admitted to the ward in special sections. Presently, the centre operates two community based clinics in urban slums at Trilokpuri and Sundar Nagri (East Delhi) areas. During the Year 2013-14, a total of 72722 patients were seen in out-patient, of whom 4299 were new and 27385 were old cases of whom 971 persons were admitted in the ward and 41038 were seen in various community clinics.

**Department of Neurosurgery:** During the last financial year department treated 43766 patients in OPD and more than 3400 surgeries were performed in



neurosciences centre. The gamma knife centre acquired a new dedicated MRI machine which became functional on 22nd November. The gamma knife centre has treated more than 3700 patients from its inception, out of which nearly 563 patients were treated last year. This number is amongst the highest number of patients treated in a year till now. On the newly functional MRI machine more than 613 MRI were done and it has helped the patients and department immensely. Department of neurosurgery also acquired new endoscopes for cranial and spinal surgery and more than 200 procedures were performed endoscopically. In the intraoperative MRI suite, many complex cases of brain tumors are being operated and more than 600 patients have been operated in this high end theatre.

The center for epilepsy became fully functional (as a center of excellence funded by DBT). More than 100 epilepsy surgeries were performed at the neurosciences centre during the past one year.

**Department of Neuro-Anaesthesiology:** Anaesthetic management for 2,973 neurosurgical procedures (Elective-2181; Emergency-792) and 416 neuro-radiological procedures (246 diagnostic; 170 therapeutic) was performed. More than 3,000 patients were managed in neurosurgical intensive care unit. A total of 2,217 patients (1,607 new and 610 old) were seen in PAC clinic OPD. A total of 815 patients (181 new and 634 old) were seen in pain clinic OPD (298 were treated with nerve blocks).

Four Departmental and one funded research projects were completed while 22 research projects (05 funded, 16 departmental and 01 collaborative) were going on. Faculty and residents published 31 articles (11 international, 20 national) in scientific journals. Seven abstracts published in international journals. One chapter in a book was written by faculty.

**Department of Neurology:** Launch of first of its kind '*prospective cohort study to unravel the causes of stroke and cognitive decline: a cross-cultural perspective*' as a DBT-funded Indo-Dutch collaborative project with secured funding of approx. Rs. 31 crore for eight years. Completed first randomized controlled trial on the role of positive airway pressure therapy in prevention of new vascular events among stroke patients. Ongoing

CSIR, ICMR and DBT funded projects for identification of novel clinical and molecular markers for cerebellar ataxias. Completed customized comprehensive management of 300 patients with refractory epilepsy and 253 customized polysomnographic sleep studies in 2013-14. Facility of Quantitative Sudomotor Axonal Reflex Test (QSART) started in our Neurophysiology lab. Rural communities at Biyavra (MP), Naksalbari (WB), Chatarpur (Odisha), Anuppur (Chhattisgarh), Jhansi (UP), Wadi (Karnataka), Karad (Maharashtra) and Dalmau (UP) were provided specialized Epilepsy Screening Clinics and epilepsy education using the Lifeline Express.

**Department of Neuro-Radiology:** Latest state-of-art Biplane flat panel DSA system was installed in the Department and made fully functional in the month of October 2013. These systems along with the existing 2nd Biplane DSA suites are capable of all advanced neurovascular applications including intra-operative CT facility. Department of Neuroradiology, AIIMS is the first to have two state-of-art Biplane DSA suites. Latest state-of-art 1.5T MRI installed adjacent to GK facility was made fully operational to enhance diagnostic and GK knife planning facility for neurosciences centre patients. This system will be soon made soundless to enhance the patients comfort and co-operation.

**Department of N.M.R.:** The Department has procured and installed the state-of-the-art high field Animal MRI system (7T) for preclinical and other biomedical research using small animals. The Department developed a method to distinguish malignant breast tissue from normal lactating breast tissue using diffusion MRI and MR spectroscopy. HOD was elected as FNA (Fellow of the Indian National Science Academy; INSA) and also awarded the prestigious Drs. Kunti & Om Prakash Oration Award for significant contribution in the field of biomedical sciences of the Indian Council of Medical Research (ICMR), Government of India in September 2013.

**Department of Pediatric Surgery:** The Department of Pediatric Surgery at AIIMS offers State-of-the-art patient care not only in General Pediatric Surgery but also in the field of Neonatal surgery, Urology including Intersex disorders, Thoracic surgery, Oncology, GI Surgery and Neuro-surgery in children up to 14 year of age. Department faculty is also actively involved in various

intramural and extra mural research projects pertaining to congenital malformations and cancers in the field of molecular biology and the stem cell research. Department being on the forefront in patient care, research and teaching and training, receives large number of requests from India and overseas to visit the department and seek training in Pediatric surgery and its sub-specialties.

**Departmental of Physiology:** The Department of Physiology provides rTMS at dorso lateral prefrontal cortex after through investigation of the chronic pain syndrome by objective methods in fibromyalgia patients. rTMS is a safe, economical, non-invasive technique. During the year more than 40 patients have been cured of their symptoms. Intraoperative neuro monitoring was done in 70 surgeries. In 10 cases, the neurological alarms were sounded after which the surgeons took corrective measures. No permanent neurological deficits were found in any of the patients. There were no false positive and false negative cases. A total of 332 (three hundred and thirty two) subjects were enrolled and trained for yoga-based lifestyle modification at IHC during the year 2013-2014. This includes patients of chronic diseases (like diabetes type 2, hypertension, obesity, depression, etc.) referred from different departments from AIIMS.

**Department of Radiodiagnosis:** The institute has a well-equipped multi-modality general radiology Department with high end state-of-the-art equipments. Over 3 lakh radiological investigations were performed during the last year. A high-end Digital Subtraction Angiographic machine with advanced features was installed in the department last year for performing various radiological interventions. Upgradation of the existing Radiology Information System and PACS was done to improve reporting and archiving of data. A continuing medical education programme on 'Recent advances in applied physics' was organized here specifically focused to postgraduate students. The 11th National conference of Indian Association of Radiological Technologists was organized by the Department which was attended by various national and international faculty and delegates. The Department was involved in over 20 research projects last year and is currently involved in over 100 ongoing projects

which is expected to take it to new heights. The Department faculty published over 70 research papers in the previous year. With many more research projects and education programmes to come the Department serves as a role model to other institutes in the country.

**Department of Reproductive Biology:** Started several (over 25 more parameters) newer tests for hormones, vitamins, tumor markers, etc (under standardization) under CRIA unit facility. Molecular cytogenetic technique using STR/microsatellite markers in addition to ongoing FISH (fluorescent in situ hybridization) services.

**Stem Cell Facility:** Initiation of construction of cGMP facility as per ICMR- DBT guidelines for newer clinical trials in various diseases like myocardial infarct, stroke, limb ischemia, spinal cord injury, ocular surface disorders, retinitis pigmentosa, vitiligo etc. Differentiation of Mesenchymal Stem Cells from various tissue sources like bone marrow, adipose tissue, dental pulp etc. into cells of various lineages:

- Neuronal Cells, especially dopaminergic neurons
- Cardiomyocytes

Conducting AIIMS-IIT Delhi, Collaborative High Impact Research Project: In this interdisciplinary proposal we are exploring to develop a corneal tissue construct *in vitro* that possesses the biomimetic multilayered structure and precise cell orientation, in order to achieve transparency, mechanical integrity, higher transplant success rates. *INDO-US DBT funded Vision Research Programme:* This project aims to develop corneal constructs by Tissue engineering, addressing these issues by following two different approaches- (a) first by culturing corneal cells on micro-patterned films, and then (b) using decellularized cornea constructs. These insights will be correlated with pathological conditions, and ultimately feasibility studies will be done to apply such bioengineered tissues as 'tectonic corneal grafts. *In-vitro* studies to explore strategies for extended utilization of donor corneal tissues by harnessing their full clinical potential. This project aims to maximize the existing corneal pool by Improving preservation techniques, Establishing newer sterilization methods, Developing better storage media.

**Medical Record Section (Hospital)****OPD Attendance**

1. Main Hospital	:	1313791
2. Casualty	:	134096
3. EHS	:	178189
<b>Total</b>	:	<b>1626076</b>

**Admissions**

1. Main Hospital	:	93898
2. CNC	:	20185
<b>Total</b>	:	<b>114083</b>

**Surgical Procedures (Major & Minor)**

1. Main Hospital	:	81192
2. CNC	:	7536
<b>Total</b>	:	<b>88728</b>

### 15.17 JAWAHARLAL INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION & RESEARCH (JIPMER), PUDUCHERRY

JIPMER seeks to be the model health system of India through innovations in education, patient oriented research, population health & service excellence. It's mission is to develop compassionate, ethically sound health professionals and provide service of the highest order across the health care continuum, through innovations in education that yield lifelong learners and leaders in health care. Original research in basic sciences and patient oriented discoveries will lead to clinical transformation across the organization that is patient centered, safe, effective, accountable and transparent. It's emphasis is on quality and value in all endeavours. Institute emphasize partnerships with organizations encompassing congruent ideals and advocacy for community wellness and public health with a focus on socio-economic disparities.

**Academic Highlights**

- The admission to first year MBBS course in JIPMER is through All India Entrance Examination. For the academic year 2013-14 the

total number of seats were 150. A total of 69,391 applications were received and 52,298 candidates appeared in the Entrance Examination for the first year MBBS Course, 2013-14 session. Out of the 19,240 candidates who qualified in the Entrance Examination, 146 candidates were admitted based on their category merit rank. Four candidates nominated for the Academic Session 2013-14 by the Government of India were admitted.

- Besides the popular MBBS course, JIPMER conducts various courses in many other disciplines. A certificate course is conducted in the discipline of Emergency Medical Technology as Emergency Medical Technician Certificate Course. It has 20 seats and in the year 2013-14, 20 candidates were admitted.
- B.Sc. courses are available in Nursing and Allied Medical Sciences. There are B.Sc. courses in 9 disciplines. The total number of seats is 133 and in the year 2013-14, a total of 124 candidates were admitted.
- JIPMER also has M.Sc. courses in 5 disciplines. These courses have a total of 46 seats and 43 candidates were admitted in the year 2013-14.
- Postgraduate medical degree courses (MD/MS) are available in 23 disciplines. There are a total of 126 seats in these courses. In the academic year 2013-14 a total of 126 candidates were admitted in MD/MS courses.
- Super-speciality medical courses (MD/MCh) are conducted in 16 disciplines. These courses have a total of 32 seats. In the academic year 2013-14 a total of 32 candidates were admitted.
- Ph.D. programmes are available in 8 disciplines at JIPMER. These programmes have a total of 18 seats. Fifteen candidates were admitted in Ph.D. programmes in the academic year 2013-14.
- Besides above courses, Fellowship programme is available in 5 disciplines. There are 15 seats for the Fellowship programmes at JIPMER. A total of 7 candidates were admitted to Fellowship programmes in the academic year 2013-14.

While JIPMER is currently ranked among the top 3 best medical schools in India, its goal is to move to the top. Towards this, institute has embarked on investments in 3 areas: infrastructure enhancement, curriculum innovation and research. With respect to infrastructure, a new hostel complex and JIPMER Academic Center were commissioned during the last academic year. The new hostel complex houses 1100 students and has full-fledged sports complex including indoor gym & common facilities. JIPMER Academic Center is the home for preclinical departments, academic offices & department of medical education.

The curriculum innovations include enhancement of integrated modules, case based & rapid cycle learning methods, inclusion of patient safety & health care quality concepts at all levels, clinical effectiveness discourses & simulation based strategies, to name a few. National Teacher Training Center of the institute will be expanded to meet the national needs of capacity building for teachers and bring in teaching innovations to align with national health missions. JIPMER's Learning Resource Centre, under development, will house simulators for task training, creating physiologic scenarios for learning, error reduction & team building and other e-learning modules such as telemedicine, virtual reality & robotics. This will also be a national resource for continuing education in support of national health missions in all spheres of health care, including physicians, nurses, allied health professionals & community workers.

JIPMER invested Rs. 2.57 crores in its library last year, including addition of journals & 1409 new books, to add to collection of 41,650 books in the central library & 6556 in the book bank. Library is in the process of setting up 2nd Computer lab with Wi Fi connectivity and additional journals at the cost of Rs. 1.25 crores. In order to expand JIPMER's online library resources we will explore subscription for Science Direct through consortia.

### **Clinical Achievements**

JIPMER Hospital has daily average number of out-patient attendance of 6,058 and daily average number of in-patient attendance of 1434. In the year 2013-14,

a total of 15,15,047 out-patients were treated in JIPMER Hospital. In the year 2013-14, a total of 57,473 admissions were made in the Hospital. A total of 32,04,021 investigations were carried out in the year 2013-14. Total number of deliveries conducted were 11,062. Total number of operations performed were 29,416. The total attendance in Emergency Medical Service (Main Casualty) was 1,91,165 and the total attendance in OG Casualty was 20,383.

JIPMER launched a novel programme on patient safety in October 2012, with a CME across the organisation and formation of JIPMER Quality Council. This quality cell is comprised of representatives from all departments institute wide, and is making great strides in many domains of quality. During the last year JIPMER started Renal Transplantation and Bone Marrow Transplantation towards becoming a Multiorgan Transplantation Center. It witnessed several medical & surgical 'firsts' for JIPMER during the last year including Single Incision Laparoscopic Surgery (SILS).

### **Other Achievements**

A "Clean JIPMER, Green JIPMER, Strong JIPMER" campaign was launched last year. The campaign goals are to create a culture of civic responsibility for campus cleanliness, renewable energy, water conservation, reducing carbon emission and employee wellness, so as to develop sustainable environmentally sound campus. Over 900 trees & saplings have been planted with additional 2000 planned in the coming months. In order to beef up infrastructure, an engineering division has been formed, new roads are being laid across whole campus and IT networking with fibre optic/copper cables as well as campus wide Wi Fi connectivity have been enabled. A new website has been developed. To modernize the whole enterprise, a 'REDO JIPMER' campaign was rolled out last year- REDO being an acronym for Restructuring to ensure Empowerment, Decentralization & Ownership in all spheres of activities. In order to ensure all aspects of 'wellness', in addition to physical wellness initiatives, JIPMER have enhanced its counselling programme for students, staff & faculty.

**Future Plans:** Our priority targets during the 12th five year plan include:-

1. JIPMER International School of Public Health;
2. Institute of Allied Health Sciences;
3. Center for Healthcare quality, Health IT, Health Administration & Patient safety;
4. Augmentation of Power with creation of 110 KVA substation and renewable energy solutions such as solar power;
5. Apex Emergency, Trauma & Disaster Management Center;
6. Expansion of Regional Cancer Center into a National Comprehensive Cancer Care Center;
7. Multi Organ Transplant Programme including stem cell & regenerative medicine;
8. Expansion of Laboratory Services, BSL3 facility, Pneumatic tube conveyer system;
9. Staff Wellness Center including swimming pool and
10. Upgradation of various specialties and super-specialties.



*CME on Patient Safety*



*Introduction of In-Campus Vehicle for Patients*

The Fourth Convocation of JIPMER was held on 20.04.2013. Prof. (Dr.) M.S. Swaminathan delivered the Convocation address. During the Convocation 289 degrees were awarded to MBBS, B.Sc., PG (MD/MS), DM / M.Ch and Ph.D., students who have successfully completed the course during the year 2012-13. Medals in various disciplines were awarded to 64 students.

### 15.18 POSTGRADUATE INSTITUTE OF MEDICAL EDUCATION & RESEARCH, CHANDIGARH

The Postgraduate Institute of Medical Education and Research, Chandigarh was declared as an Institute of "National Importance" and became an Autonomous Body by an Act of Parliament (Act 51 of 1966), on 1st April, 1967. The Institute is fully funded by the Government of India. The main objectives of the Institute are:-

- I. To develop patterns of teaching of undergraduate and postgraduate medical education in all its branches so as to demonstrate a high standard of medical education;
- II. To bring together as far as may be in one place educational facilities of the highest order for training of personnel in important branches of health activity and
- III. The attain self-sufficiency in postgraduate medical education to meet the country's need for specialists and medical teachers.

The Institute has excelled in all the three areas namely-patient care, medical education and research. The patient care load over the years has been increasing exponentially and now it has become enormous. From an annual attendance of 1,25,163 out patients and 3,328 admissions in 1963-64, the figure has gone up to 19,11,490 out-patients and 72,382 admissions in the current year. The Institute is spearheading the medical education of large number of medical colleges of the country and abroad.

The Institute continues to excel in quality research and the clinicians and basic scientists published 1096 papers during the year and 116 scientists were awarded fellowships, orations and other national and international awards. Last year various Departments of the Institute completed 190 research projects funded by DST, WHO, DBT, ICMR and other outside agencies and 552 research projects were being continued and supported by national, international and PGI research funds.

**The Golden Jubilee celebrations** of the Institute were duly set in motion on 7th July 2012. A commemorative souvenir befitting the occasion and other mementoes to keep the memory intact in the future, were released on the inaugural day. A documentary film about PGI's contributions was made which has won wide acclaim. A five rupee commemorative postage stamp was released by the Hon'ble President of India, Sh. Pranab Mukherjee who had graced the Annual Convocation during the year. A resume summarizing the major research achievements of the last 50 years has been published. This document speaks volumes about the work of the Faculty. In January 2013, a first of its kind symposium on Medical Equipment, Safety and Innovation was held in the Institute. The Closing function and 51st Foundation Day was held on July 6, 2013, with chief guest Hon'ble Vice-President of India, Sh. Hamid Ansari. On March 15th, 2013, the Hon'ble President of India visited the Institute and was the Chief Guest for the 33rd Convocation of the Institute. The President awarded Gold medals to the students for their outstanding research & academic excellence awarded 393 degrees.

The Institute celebrated its first Research Day on August 11th, 2013 which gave the researchers the

opportunity to present their work in one place. Over 200 research posters were on display. On this occasion, the Institute invited eminent researchers, faculty members, scientists from biomedical research institutions in the Tricity such as IISER, NIPER, CSIO etc.

### Academic Activities

Postgraduate Institute of Medical Education & Research, Chandigarh has been empowered to grant medical, dental and nursing degrees, diplomas and other academic distinctions and titles under the PGIMER, Chandigarh Act, 1966.

### Hospital Services

The Postgraduate Institute of Medical Education & Research, Chandigarh provides tertiary care in all the medical and surgical specialties to patients, who come not only from the adjoining States but also from far-off States like Odisha, West Bengal and Bihar.

The patient care services in PGI have expanded from Nehru Hospital to a number of independent centres like New OPD Block, Advanced Pediatric Centre, New Emergency Block, Advanced Eye Centre, Drug De-addiction Centre, Advanced Cardiac Centre and Advanced Trauma Centre with enhanced number of hospital beds and operation theatres. Research activities have been undertaken in the field of Hospital Administration.

The total bed strength of the PGI has increased to 1948 beds. The number of patients who attended the out-patients departments and those admitted for treatment during the last three years is as under:

<b>Patients Attendance</b>	<b>2012-13</b>	<b>2011-12</b>	<b>2010-11</b>
Outdoor	19,70,708	18,49,015	16,62,391
Indoor Admissions	72,382	68,175	64,969
<b>Surgeries</b>	<b>2012-13</b>	<b>2011-12</b>	<b>2010-11</b>
Minor	1,23,988	99,078	72,885
Major	34,286	34,222	32,055

Emergency and critical patients were attended to round-the-clock.

## Emergency Services

The Emergency Complex and Advanced Trauma Centre provide all medical and surgical services including investigations and operations under one roof. The Emergency services are supervised by the Assistant Professor, Department of Hospital Administration and assisted by Senior Medical Officers (Casualty). They are responsible for dealing with medico-legal cases providing poor free services to deserving patients and supplying life saving medicines and consumable items. MHA Residents assist in day-to-day administrative working. The Emergencies are managed by medical/surgical and super-speciality consultants and senior residents. A disaster area having cupboards containing equipments and life saving drugs has been earmarked and is used for treating mass casualties. A well-equipped VIP room is maintained to meet any emergency situation in case VIPs are brought to the Emergency.

	2012-13	2011-12	2010-11
OPD	66,204	58,625	52,894
Admissions	36,067	33,637	32,563
Major Surgeries	11,409	10,294	9,539
Minor Surgeries	1,819	1,505	1,490

## Engineering Wing

During the financial year from April 2012 till March 2013, Rs. 4984.08 lacs have been spent under 'Non Plan' and Rs. 1197.50 lacs have been spent for new works under the 'Plan' head.

A. During the aforementioned year, this department has completed the following major works:-

1. The Advanced Trauma Centre (ATC) has been made fully functional.
2. The construction work of the 250 bedded hospital (Expansion of Nehru Hospital) is going to be commenced shortly.
3. The fully furnished Auditorium of NINE has been handed to its user Department.
4. The work of Oxygen Plant and Hot water supply system in Advanced Cardiac Centre (Phase-II) has

been completed and certain civil works are near to completion.

5. An agreement for Modernization of Nehru Hospital and Research Blocks 'A' and 'B' has been signed with National Building Construction Corporation (NBCC) Ltd., New Delhi on 26.03.2013 and work shall commence soon.

6. During the Golden Jubilee year, an Alumni Cell has been set up at the Kairon Block of the Institute.

B. The following works already started and sanctioned by the Ministry of Health & Family Welfare, New Delhi under the 11th Five Year Plan are near completion and will soon be handed over to its users:-

1. Advanced Cardiac Centre (Phase II)
2. Advanced Eye Centre (Phase II)
3. Renovation of PGI Houses (Sector-12 & 24, Chandigarh)
4. Renovation of Hostels
5. Renovation of Trauma-'A' (Old Emergency)

C. Similarly, there are certain other major works like construction of new Hostels, residential houses, National Institute of Paramedical Sciences (NIPS) and hostels etc. sanctioned by the Ministry of Health & Family Welfare, New Delhi under the OBC Expansion Scheme are yet to be commenced due to some clearances, technical hurdles and other formalities of the Chandigarh Administration and the Forest Department. The work will be commenced soon after getting clearances of these projects.

## 15.19 LADY HARDINGE MEDICAL COLLEGE & SMT. S.K. HOSPITAL, NEW DELHI

The Lady Hardinge Medical College, New Delhi was established in the year 1916 with a modest beginning of just 14-16 students. Over the years, the Institution has matured as a pioneering Institute for Medical Education for MBBS girl students. The College, which is affiliated to the University of Delhi since the year 1949, has continued to admit students from all over India, as well as from foreign countries. A separate out-patient block was started in 1958 to cater the needs of ever increasing population of Delhi.

The Hospital statistics for the period 2013-14 (till date) is as under:-

Bed Strength	:	877
OPD Attendance	:	450508
Indoor Admissions	:	31524
Sterilization	:	747
Bed Occupancy	:	68%
<b>Surgeries Performed</b>		
Major	:	6219
Minor	:	6992
Total	:	13211
Deliveries conducted	:	11283

On obtaining the requisite approval the Comprehensive Redevelopment Plan (CRP) of Lady Hardinge Medical College & associated hospitals started at a great pace. It was a proud moment of the Institute that the Hon'ble Prime Minister of India laid the foundation stone for the construction of new patient care, academic, hostel and residential facilities on 3rd November 2012.

#### Department wise highlights and achievements during the year 2013-14

**Department of Medicine:** Department of Medicine is functional with six medical units. The Department is having modern intensive coronary unit, rheumatology clinic, medical ICU with four ventilators and two cardiac beds, four bedded thalassemia day care centre for adults (opened in August 2011) which is having a regular registered patient load of 30 patients. The department actively provided support of medical experts for the relief camp in the relief camp set up in Uttarakhand & Andhra Pradesh.

**Department of Microbiology:** Department is having facility for Voluntary Counseling Test Centre (VCTC), Prevention of Parent To Child Transfer (PTCT) for HIV patients, HIV DNA PCR lab under National Pediatric HIV Initiative to diagnose HIV infection in newborns up to 18 months under National AIDS Control Programme. The Department is also having surveillance facilities for meningococcal Dengue fever.

**Department of Surgery:** Department of Surgery has the facility for endo-urological procedures like TURP (for BHP), TURBT (Bladder tumors), URS, Thoracic surgery for Carcinoma lung (lobectomy, pneumonectomy, mediastinoscopy), Vascular surgery procedures-making A-V fistula for CRF patients awaiting transplant/undergoing dialysis, Comprehensive surgical and medical management of Gastro-intestinal, Urological, Breast Cancer, Plastic & Reconstructive Procedures, Impedence, Manometry for diagnostic and research purpose and Advance laparoscopic surgeries using high definition camera.

#### Department of Ophthalmology:

- M.S. (Ophthalmology) 100 % result.
- MBBS: 100% Result.
- Participated in various blindness prevention activities like such as Eye donation week, glaucoma week, Motiabind Mukti Abhiyan Programme.
- Organized Comprehensive Eye Health Care Camps with NGOs.

**New Initiatives:** Procured and installed the following new equipments to augment surgical and diagnostic facilities:

- Phaco emulsification machine for cataract surgery.
- OT table.
- Radio frequency knife for oculoplasty surgery.
- Ultrasonic Pachymeter.
- Plasma sterilizer for Eye OT.
- Ophthalmic Operating Microscope.
- Slit Lamp.

**Department of Community Medicine:** The Department of Community Medicine is actively involved in undergraduate (intake 200/year) and postgraduate (intake 9/year) teaching and training. Seven theses by the postgraduate students were completed during the year. Department of Community Medicine also provides comprehensive health care services in the community through Urban Health Centre, Kalyanpuri, Primary Health Centres at Palam



and Mehrauli and Child Health Promotion Centre at Kalawati Saran Children Hospital. Special emphasis is given on MCH services, family planning, immunization, nutrition and health education.

From January to October 2013, OPD services were attended by 93,509 patients and Antenatal care was provided to 3556 women. 2,961 children were given the immunizations and contraceptive were provided to more than 20,000 beneficiaries. The Department is also involved in training programmes of students enrolled for Post Graduate Diploma in Maternal & Child Health from Indira Gandhi National Open University, training of nursing students in Community Health and Public Health administration. Faculty members are also involved as Resource Persons in various training programmes organized by National Institute of Health & Family Welfare, International Institute of Health Management Research, National Institute of Public Cooperation & Child Development, National Centre for Disease Control and Training Programmes under various National Health Programmes. The Department is a nodal centre for various national programmes namely Pulse Polio Immunization, Vector Borne Disease Control Programme and RNTCP.

**Department of Skin & STD:** Patch testing for diagnosis of allergic contact dermatitis in children and few new Dermatological procedures has been started in the Department.

**Department of Pathology:** The department has been chosen as one of the 7 centers for the project entitled "Creating the Virtual Medical classrooms a pilot" National Knowledge Network (NKN) project, New Delhi for teaching and also diagnostic for patient care Flowcytometry & Automated Coagulometer. Quadruple bags with integral filters for pre storage leukoreduction facility to blood bank.

**Department of Biochemistry:**

- MBBS students (200 admissions annually),
- Postgraduate MD Biochemistry training (4 admissions per year),
- Routine Clinical Biochemistry lab, Hormone lab, 24 hours Emergency lab,

- More than 7 lacs investigations are done annually and
- Molecular Biology work for PG dissertation, Postgraduate practical work, ICMR-STS projects, Project proposals in ICMR (4 projects), Ph.D. thesis.

**a. New initiatives:**

**New tests introduced:**

- Hormone assays: Serum Testosterone, Estrogen, Progesterone, PSA (total & free) and b-HCG
- Urine quantitative analysis

**The new instruments procured:**

- Electrochemiluminescence based analyser
- Electrolyte analyser
- Biosafety Hood
- Lyophiliser
- Urine analyser
- Cold Centrifuge

**15.20 KALAWATI SARAN CHILDREN'S HOSPITAL (KSCH), NEW DELHI**

Kalawati Saran Children's Hospital (KSCH) is a premier referral Children's Hospital of national importance. The Hospital started functioning in the year 1965 for imparting medical care service exclusively for Paediatrics patients upto 18 years of age. At present it has 370 beds. Under the scheme for the improvement of KSCH (JICA) the bed strength of this Hospital is being increased to 500.

Kalawati Saran Children's Hospital is one of the busiest children hospitals in the country and caters to a daily OPD attendance of 800-1000 children, and 80-100 new admissions per day from Delhi and neighbouring States. The hospital is a Sentinel Centre for Poliomyelitis, Tetanus and Measles. It has the unique distinction of having a separate Pediatric Emergency with direct inflow of patients. It also houses the Diarrhoea Training and Treatment Unit, the first such unit in the country, which has also been recognized by WHO and Govt. of India as a training centre for diarrhoeal diseases. The hospital has also served as a training centre for ARI, UIP and other National Health Programmes.

Neonatal wing of the hospital, with 86 beds catering to 15,000 deliveries a year, is the biggest neonatal unit in the country and is providing state of art services for premature and sick newborns including ventilator care. The Institution is a super speciality hospital in real sense with its fully developed subspecialities like Neurology, Nephrology, Gastroenterology & Nutrition, Hematology, Pulmonology and Endocrinology.

Indo-Japan Friendship Block of Kalawati Saran Children's Hospital has been constructed with an expenditure of over Rs. 54 crores for the building and the latest equipment for various sections of the Hospital which has been helpful in easing out the problem of inadequate space and technological upgrading of the Institution.

The Hospital has established with the approval of Ministry of Health & Family Welfare, a "**National Nutritional Rehabilitation Resource and Training Centre**" with the support of UNICEF. The Centre has 12 dedicated beds for management of Severe Acute Malnutrition (SAM). The Centre has organized two national level Training of Trainers on the request of Ministry of Health & Family Welfare.

Kalawati Saran Children's Hospital is designated the National Nodal Centre for Facility Based Newborn Care.

Infant and Young Child Feeding Counseling Centre was started in Kalawati Saran Children's Hospital to strengthen IYCF practices. Autism evaluation cell was started in the Hospital. Hemophilia follow-up clinic facilities are provided on first Wednesday (afternoon) of every month in the Department of Physical Medicine & Rehabilitation Department. Once a month After Completion of Therapy (ACT) clinic for follow-up of children treated for lymphoma and leukemia was started in the first Monday of every month.

The Hospital statics for 2012-13 are as under:-

1. Name of Hospital	:	KSC Hospital	
2. No. of Beds			
3. Distribution of Beds	:	EW }	
		ICU }	45
		CCW }	

Unit -I	54
Unit -II	60
Unit III	63
Unit -III Extended	
Ward	
NN Ward	50
Surgical	36
Ortho	10
DTTU	10
TDCC	12
Nursery	30
PMR	05

4. No. of Discharges	:	27773		
5. No. of Admissions	:	Male	Female	Total
		18772	9074	27846
6. Bed Occupancy Rate	:	110.0		
7. OPD attendance	:	Male	Female	Total
		254976	137295	392271
8. Casualty	:	Male	Female	Total
		35256	19833	55089
9. Immunization No. of patient vaccinated	:	65250		
10. Total no. of Surgical Operation	:	Major	Minor	Total
		1296	1830	3126
11. Total no. of X-ray examination	:	46628		
12. Total no. of Clinical Lab examinations	:	392271		
13. Total no. of Bio-Chemistry Examination	:	1537797		
14. Total no. of Microbiology Examination	:	39822		
15. No. of patients admitted in ICU	:	1256		
16. Neonatal & Nursery Care	:	9166		
17. a) ECG	:	1553		
		b) EEG	:	1465
		c) BERA	:	45
		d) EMG	:	50
18. Patients attended in PMR Deptt.	:	69345		
19. Gross Death Rate	:	6.7		

(Figures in thousand of Rupees)

Budget	Allocation	Actual Expenditure
Plan 2210	227500	218429
N.Plan 2210	282000	279271
Plan 4210	27280	21885

### 15.21 MAHATMA GANDHI INSTITUTES OF MEDICAL SCIENCES (MGIMS), SEVAGRAM, MAHARASHTRA

The Mahatma Gandhi Institute of Medical Sciences (MGIMS), Sevagram is India's first rural Medical College. Nestled in the Karmabhoomi of Mahatma Gandhi, in Sevagram, this Institute was founded by Dr. Sushila Nayar in 1969. Kasturbsa Hospital has the distinction of being the only hospital in the country which was started by the Father of the Nation himself. Over the past 44 years the Institute has grown to be one of the top 25 reputed colleges of the country and has been accredited by National Assessment and Accreditation Council (NAAC) in 'A' grade. The credit goes to Govt. of India, Govt. of Maharashtra and the Kasturba Health Society (KHS) who share the expenditure in the ratio of 50:25:25 respectively.

The Institute believes that Gandhian values and principles are as relevant today as ever before. The entrance examination to the MBBS course includes a separate qualifying paper on Gandhian Thought. The students and staff of the Institute adhere to a unique code of conduct, where they are expected to wear handwoven khadi, participate in shramdan, attend all-religion prayer on every Friday evening, abstain from non-vegetarian food, alcohol and tobacco.

The Institute offers MCI recognized degrees and diplomas in 19 postgraduate disciplines and Ph.Ds in seven Departments. Since 1991, all graduates of the Institute have to serve for two years in rural areas and 96 non-governmental rural organizations have joined hands with the institute to fulfill this dream. This rural service is a mandatory eligibility criterion for getting post-graduation in this Institute. The Report of the Task Force on Medical Education of the National Rural Health Mission spells out the need to draw inspiration upon MGIMS Sevagram's, initiatives and experience in

curriculum innovation and rural placement of its graduates. It suggests launching a participatory exercise with MGIMS and other like-minded institutions, so that national guidelines can be formulated. Several such visionary and innovative education strategies which started from the Institute have now been adopted by the Government.

The Institute has been running an OPD and 6-bed hospital as part of its Tribal Health Research Project in Melghat all these years with two of its faculty members. However, in view of high maternal and infant mortality rates, in 2012 it has decided to take this initiative forward with the help of the faculty and residents of MGIMS who are posted to the Melghat campus on rotation. In 2012 it has started a new 30 bed hospital for women and children in the tribal area of Utawali, Dharni. The centre has an OT for emergency services and ophthalmic operations.

The Government of Maharashtra has also recognized this as a referral unit. Since it was started in Jan. 2012, much to the respite of the tribal population 32 caesarian sections and 80 gynecological operations have been done. A total 197 ophthalmic procedures have been conducted and as many as 8053 patients were examined in the OPD with 1036 admissions.

#### Academics

One of the report of the Task Force on Medical Education of the National Rural Health Mission had spelt out the need to draw upon MGIMS Sevagram's initiatives and experience in curriculum innovations and rural placement of its graduates and had suggested launching a participatory exercise with MGIMS and other like-minded institutions, so that national guidelines could be formulated. As a result of that during current year the Ministry of Health & Family Welfare, Govt. of India has selected MGIMS and CMC Vellore in co-ordination with the Centre for Innovations in Public Services (CIPS), Hyderabad as co-coordinators to disseminate to other colleges the innovations conducted by the two Institutes. As an initial initiative, five medical colleges, one each in Kakinada (A.P), Vadodara (Gujarat), Patiala (Punjab), Jorhat (Assam) and Agartala (Tripura) have been selected and MGIMS and CMC are interacting with them in order to help

them replicate the innovations introduced in the curriculum by the MGIMS, Sevagram and CMC, Vellore.

### **Innovations in the Curriculum- Undergraduates**

The entrance examination includes a separate qualifying paper on Gandhian Thoughts, the marks of which are added to the aggregate for the calculation of merit. The institute conducts its own PMT at 5 different centres in India. After admission, the students attend the Orientation Camp and are kept in Gandhiji's Sevagram Ashram where they experience in practical the ethos of Gandhian ideology. Then a few months later for the Social Service Camp they are posted in an adopted village where they stay for 15 days in the village itself alongwith the villagers in order to get acquainted with rural life and get the feel of the problems and voes faced by the villagers. Alongwith they assist in the total health check-up of the village. Each student is allotted 4-5 families to be taken care of till the end of his/her graduation.

In the final year when the students are academically more mature and equipped with knowledge they are again posted for ROME camp at one of the Primary Health Centre under Institute's control where they, under supervision, learn to treat the patients and also take up projects pertaining to rural social and health problems.

### **Medical Education Unit**

The Medical Education Unit was formally started in 1994 as per the MCI guidelines. Over the years it has developed into a highly competent unit. It provides inhouse training to faculty, postgraduates, interns and students on various teaching learning modules, research methodology, communication skills etc. Seven of the faculty have received fellowships from FAIMER (Foundation for Advancement of International Medical Education and Research) and two of them are now faculty and resource persons for Regional Centres in India with one of them is also being the global faculty of FAIMER-Institute, Philadelphia. This unit is also organizing programmes for enhancing the skills of the faculty. In the year under review workshop was held on construction of Multiple Choice Questions (MCQ). The topic was thoroughly debated and discussed in interactive sessions. Two separate workshops, one on Medical

Education Technology and another on Mentoring was conducted where the role and responsibility of mentor was defined and dilemas they face were discussed.

### **Centralized Skill Laboratory**

The skills lab is primarily designed to teach and assess learners at all levels- from first- year medical and nursing students to postgraduate students and staff. The models and mannequins that are available in the clinical skills lab are designed to provide learners with the ideal setting to practice the clinical skills of history taking, physical examination, communication, and interpersonal skills. The lab provides the students with the opportunity in a safe environment to practice clinical techniques on simulators.

### **Hospital Activities**

The Kasturba Hospital which has gradually expanded from a 15 bedded Hospital to a 780 bedded hospital primarily caters to the rural populace as three fourth of the patients that visit hospital come from rural areas. Besides Wardha district the patient load comes from adjoining parts of Andhra Pradesh, Madhya Pradesh and Chhattisgarh. It acts as a tertiary care hospital with all the modern health care amenities but provides health services at affordable cost. It has a unique insurance scheme in which this year 58186 families, equivalent to 232548 members were insured.

<b>Total Beds</b>	780
Teaching-660	
Service Beds-100	
Private beds-20	
OPD	709002
Outreach patients examined	192511
Indoor patients	44903
Investigations (Patho, Bio. and Microbiology)	681608
X-rays	59479
Ultrasound	23976
CT Scan/MRI	5546
Surgeries performed	13954
Blood Donations Camp	44

### **New Medicine Block inaugurated**

MGIMS added a new edifice to its existing infrastructure- an imposing modern building which houses 192 beds alongwith all services provided by the Department of Medicine. The new state- of-the-art construction spread across 70,000 sq feet area comprises of an out-patient Department, triage facility, medical wards, a 26- bedded Intensive Care Unit (ICU), facilities for endoscopy, hemodialysis, a prayer room and a well-equipped conference/seminar room with all modern amenities.

**The Department of Radiology** recently installed a Magnetic Resonance Imaging 1.5 Tesla MRI machine. This state of the art machine has 16 channels and S2 gradient system which are comparable to the best machines in its class. This machine incorporates all essentials in patient monitoring without compromising on the comfort of the patient. This machine enables the color mapping of the functional areas of the brain, tactography, perfusion imaging etc. thus helping in the evaluation of neurological and psychiatric patients. It has also opened broader avenues into neurological research.

**The Department of Radiotherapy** with the help of grant-in-aid from the Centre under the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS) Scheme and special grant from the State Government, has received the status of Tertiary Cancer Center. Computerized radiotherapy unit for portal imaging and dosimetry have already been installed in the Department and the Dual Energy (6MV and 15MV) Electron Linear Accelerator (LA) compatible with all latest modern techniques will very soon replace the existing Linear Accelerator.

**The Department of Microbiology** has been carrying out both laboratory and community-oriented funded research. The thrust on research has been primarily on tuberculosis, its prevalence, diagnosis, drug resistance (MDR & XDR), NTM and short course chemotherapy. Work has also been undertaken on Interferon Gamma Assays in tuberculosis. As one of the major achievements, the Department has been certified by National Mycobacteriology Certification System of Central TB Division, Ministry of Health & Family Welfare,

Govt. of India for Tuberculosis drug susceptibility testing by conventional culture based DST. It is now a certified referral centre for first line drug resistance testing under the RNTCP programme.

**The Department of Obst. & Gynae** has been running various projects which aim at reducing maternal mortality, imparting family life education to adolescent girls. Community Based Reproductive Health Care camps were organized at 58 adopted villages. Diagnostic, cancer detection and screening camps were held at various villages. The faculty has taken up some Govt. of India projects as Maternal Near Missed (MNM) Project for developing national policy.

**The Department of Ophthalmology** runs a Sentinel Surveillance Unit under the National Programme for Control of Blindness for Wardha district. This year 6930 cataract surgeries were performed. IOL implantation was done in 6891 patients and conventional cataract surgery was performed in 39 patients. LASIK (Laser-Assisted in Situ Keratomileusis) is the latest addition to the range of quality services being provided. LASIK is a procedure that permanently changes the shape of the cornea, using an excimer laser. The LASIK Centre at MGIMS has the aim of providing excellence and affordability in laser vision correction. LASIK surgery machines are also evolving with new cutting edge technology for improving the vision and eliminating or reducing the dependence on glasses and contact lenses.

**The Department of Pathology** runs a Population based Cancer Registry of Wardha district with financial assistance from ICMR. It is the only centre that provides data on both rural and urban population.

The Directorate of Health Services (Maharashtra) has selected the **Department of Pediatrics** as the only nodal center in Vidarbha and one of the only 3 nodal centers in Maharashtra State for training of government health personnel (including pediatricians, medical officers, nurses) in Facility Based Newborn Care. The Department has also been selected as training center by Govt. of Maharashtra for 6 months training of Medical Officers in Pediatrics under the Medical Officers Certificate Programme.

## Community Work

The Department of Community Medicine has been implementing community-based programmes to enhance health care services to the rural communities. It has under its administrative control adopted four PHCs; Anji, Gaul, Kharangana and Talegaon with a population of more than 120,000 and developed a model of decentralized healthcare delivery at village level through community-based organizations and the Panchayati Raj Institutions. It has formed 325 Self-help groups, 9 Kisan Vikas Manch and 54 Kishori Panchayat in the adopted villages which provide a platform for dissemination of behavior change communication messages. It runs community outreach clinics in 24 villages to take curative health care to the rural populace. Through innovative strategies, family life education is provided to adolescent girls both in schools and out of schools in all the programme villages. The Department is actively involved in conducting community-based health research through partnership with various national and international agencies. The thrust areas of research includes developing a decentralized model of health care delivery for rural areas, safe motherhood and child survival and life-style disorders.

The Department is continuing its participation in National Ongoing Programme such as Universal Immunization Programme (UIP), Revised National Tuberculosis Programme, National Leprosy Elimination Programme, Integrated Disease Surveillance Programme, Integrated Child Development Services, National Rural Health Mission, Adolescent Health Programme, National Vector Borne Disease Control Programme and Emergency Obstetric Care (EmOC).

**The Dr. Sushila Nayar School of Public Health (DSNPH)** was started on 23 Jan 2007, in response to the National Health Policy 2002, to promote teaching and training of public health in the country. The centre works in partnership with like-minded individuals and institutions so that advocacy and policy research on priority public health issues may be initiated. The School also works in collaboration with the health system to improve accessibility and availability of health care to the marginalized and downtrodden.

## Research

The focus of the Institute has been on community based medical research. Quality research has been the hallmark of this rural institute and the large number of funded projects awarded to the various Departments is ample testimony to the potential of the researchers. Being located in Sevagram has never been a hurdle in acquiring either funds or facilities as the enthusiasm and the dedication of the faculty surpasses all other deterrents. The Institute brings out biannually its own scientific journal named J MGIMS which is indexed in INDMED.

Awards & Fellowships	
Faculty	11
Students	39
Publications	163
On-going Funded Research Projects	39
On-going Non Funded Research	71
Short Term Projects by ICMR	09
Research Projects completed	38
Nos. of Conferences Attended by the faculty	66
Nos. of Workshop/Meeting attended by the faculty	160
Educational programmes/Conferences/CMEs organised	47

## GENDER BUDGETING

### STUDENTS ADMITTED

	Male	Female	% Female
<b>MEDICAL STUDENTS</b>			
UGs-100	53	47	47.00%
PGs-61	41	20	32.78%
<b>NURSING STUDENTS</b>			
Kasturba Nursing School	-	40	100%

### PATIENTS ADMITTED

	Total Patients	Male	Female	% Female
Indoor	44903	44903	24037	53.53%
OPD	709002	349538	359464	50.70%

### TOTAL NO. OF EMPLOYEES

	Total Employees	Male	Female	% (Female)
	1047	576	471	45%

## 15.22 NATIONAL CENTRE FOR DISEASE CONTROL (NCDC), NEW DELHI

The Institute is under administrative control of the Director General of Health Services, Ministry of Health and Family Welfare, Govt. of India. The Director, an officer of the Public Health subcadre of Central Health Services, is the administrative and technical head of the institute. The Institute has its headquarters in Delhi and had 8 branches located at Alwar (Rajasthan), Bengaluru (Karnataka), Kozhikode (Kerala), Coonoor (Tamil Nadu), Jagdalpur (Chhattisgarh), Patna (Bihar), Rajahmundry (Andhra Pradesh) and Varanasi (Uttar Pradesh). There are several technical Divisions at the headquarters of the institute i.e. Centre for Epidemiology and Parasitic Diseases (Dept. of Epidemiology, Dept. Parasitic Disease), Division of Microbiology, Division of Zoonosis, Centre for HIV/AIDS and related diseases, Centre for Medical Entomology and Vector Management, Division of Malariology and Coordination, Division of Biochemistry and Biotechnology.

In each division there are several sections and laboratories dealing with different communicable diseases. The divisions have well equipped laboratories with modern equipments, capable of undertaking tests using latest technology. The activities of each division are supervised by an officer in-charge, supported by medical and nonmedical scientists, research officers and other technical and paramedical staffs. The branches are also well equipped and staffed to carry out field studies, training activities and research.

**A. Integrated Disease Surveillance Project (IDSP):** Integrated Disease Surveillance Project (IDSP) was launched with World Bank assistance in November 2004. The project envisaged data collection on a number of communicable as well as non-communicable disease risk factors, but later focused on epidemic prone diseases only in 2007 on the recommendations of international and national experts. The project was extended for 2 years up to March 2012. The project continues in the 12th Plan with domestic budget as Integrated Disease Surveillance Programme under NRHM for all States at an outlay of Rs. 640.4 crores.

### Project Components:

- Integration and decentralization of surveillance activities through establishment of surveillance units at Centre, State and District level.
- Human Resource Development-Training of State Surveillance Officers, District Surveillance Officers, Rapid Response Team and other Medical and Paramedical staff on principles of disease surveillance.
- Use of Information Communication Technology for collection, collation, compilation, analysis and dissemination of data.
- Strengthening of public health laboratories.

### Current Status of IDSP Implementation

Surveillance units have been established at all State and District Headquarters (SSUs, DSUs). Central Surveillance Unit (CSU) is integrated with National Centre for Disease Control (NCDC), New Delhi.

### Human Resources and Training

Considering the non-availability of health professionals in the field of epidemiology, microbiology and entomology at District and State level, Ministry of Health & Family Welfare approved the recruitment of trained professionals under National Rural Health Mission (NRHM) in order to strengthen the disease surveillance and response system by placing one epidemiologist each at State/District headquarters, one microbiologist and entomologist each at the State headquarters. The recruitment of 400 epidemiologists, 165 microbiologists and 23 entomologists has been completed under IDSP till March 2014. Induction training given to majority of them. Training of State/District Surveillance Teams (Training of Trainers) and Rapid Response Teams (RRTs) has been completed in all 35 States/UTs.

The main focus of training for State level participants is on basics of disease surveillance, concepts of epidemiology and data management, whereas the district training focuses on correct procedures of data collection, compilation and reporting and outbreak response. A need based special two-week disease surveillance and Field Epidemiology Training Programme (FETP) have

been initiated for the District Surveillance Officers. 606 District Surveillance Officers have already been trained in this special 2- week FETP.

### **IT Network**

The IT network has been established at 776 sites (connecting all the State/UTs and district headquarters, medical colleges, Infectious Disease Hospitals (IDHs), and premier health institutions for data entry, data transference, analysis and video conferencing with the help of National Informatics Centre (NIC) and Indian Space Research Organization (ISRO) to provide the terrestrial and satellite connectivity. However, satellite connectivity is not available since September 2010. Recently, ISRO has allocated the bandwidth and has started migration of network from GSAT-3 to GSAT-12 to restart the satellite connectivity. IDSP has started one stop portal (<http://www.idsp.nic.in>) for data access and transmission, trend analysis and free resources like training material, guidelines, advisories for health personnel related to disease surveillance.

### **Data Management**

Under IDSP data are collected on epidemic prone diseases on weekly basis (Monday-Sunday). The information is collected on three specified reporting formats, namely "S" (suspected cases), "P" (presumptive cases) and "L" (laboratory confirmed cases) filled by Health Workers, Clinicians and Laboratory staff respectively. The weekly data gives information on the trends and seasonality of diseases. Whenever there is a rising trend of illnesses in any area, it is investigated by the Rapid Response Team (RRT) to diagnose and control the outbreak. Data analysis and actions are being undertaken by respective State/District Surveillance Units. Emphasis is now being laid on reporting of surveillance data from major hospitals. Presently, about 90% districts in the country report weekly surveillance data on epidemic prone diseases through e-mail or portal.

In addition, States and districts have been asked to notify the outbreaks immediately to the system. On an average of 30-35 outbreaks are reported every week to Central Surveillance Unit (CSU). A total of 553 outbreaks of epidemic prone diseases were reported and responded

through IDSP in 2008, 799 outbreaks in 2009, 990 outbreaks in 2010, 1675 outbreaks in 2011, 1584 outbreaks in 2012 and 1964 outbreaks in 2013. 285 outbreaks have been reported and responded till 31st March, 2014. Earlier only a few outbreaks were reported in the country by the States/UTs.

Media scanning and verification cell was established under IDSP in July 2008 to detect and share media alerts with the concerned States/Districts for verification and response. A total of 2402 media alerts were reported from July 2008 to September 2013. Majority of alerts were related to diarrhoeal, food borne and vector borne diseases.

### **Strengthening of Laboratories**

50 identified district laboratories are being strengthened for diagnosis of epidemic prone diseases. Till date 29 States i.e. 42 labs have been made functional. These labs are also being supported by a trained manpower to manage the lab and an annual grant of Rs. 4 lakhs per annum per lab for reagents and consumables.

In 9 States (Gujarat, Punjab, Rajasthan, Uttarakhand, Karnataka, Tamil Nadu, Maharashtra, Andhra Pradesh and West Bengal), a referral lab network has been established by utilizing the existing functional labs in the medical colleges and various other major centers in the States and linking them with adjoining districts for providing diagnostic services for epidemic prone diseases during outbreaks. Additional 23 identified medical college labs in Bihar, Assam, Odisha, Tripura, Kerala, Haryana, Jammu & Kashmir and Manipur were included in the laboratory network in 2012-13.

In addition, a network of 12 laboratories has been developed for Influenza surveillance in the country. These Laboratories are testing clinical samples of Influenza A H1N1 in different regions of the country.

### **B. Up-gradation of National Centre for Disease Control:**

- All statutory approvals on building plans from local authorities have been received. The final approval on building plans from North Delhi Municipal Corporation received on 28.01.2013.
- The National Buildings Construction Corporation



(NBCC) has been engaged as an Agency for construction of civil works and services. They have further engaged M/s. Era Infrastructure Engineering Limited and M/s. Krishna Builder for construction work under phase-I. The construction work started in February, 2013. The Hon'ble HFM laid the Foundation Stone on 28.04.2013. About 30% of the construction work has been completed.

- During the Annual Plan 2013-14 the approved outlay is Rs. 100.00 crore (Revenue: Rs. 5.25 crore and Capital: Rs. 94.75 crore. For 2014-15 the proposed outlay is Rs. 4.80 crore under Revenue and Rs. 200.00 crores under Capital.
- 103 new Scientific & Technical posts and 11(eleven) administrative posts have been created under upgradation of NCDC.

### C. Division of Parasitic Diseases:

**(i) Yaws Eradication Programme (YEP):** Yaws Eradication Programme (YEP) was launched as a centrally sponsored scheme in 1996-97 in Koraput district of Odisha, which was subsequently expanded to cover all the 51 Yaws endemic districts in ten States (Andhra Pradesh, Odisha, Maharashtra, Madhya Pradesh, Chhattisgarh, Tamil Nadu, Uttar Pradesh, Jharkhand, Assam and Gujarat). The programme aimed to reach the un-reached tribal areas of the country.

National Centre for Disease Control has been identified as the nodal agency for the planning, monitoring and evaluation of the Programme. The Programme is implemented by the State Health Directorates through the existing health care system. The number of reported cases has come down from 3751 to nil during the period from 1996 to 2004 and subsequently no case has been reported from any of the States till September 2013.

The programme envisaged achieving its objective through adopting following strategies:

- Case finding: active case search, passive surveillance, rumour reporting
- Treatment of cases and contacts
- Manpower development
- IEC activities
- Multi-sectoral approach
- Sero -survey in 1-5 year children

The disease has been declared eliminated on 19th September, 2006. However, monthly surveillance, active search operations, verification of rumour reports, health education and sero-survey in 1-5 year children are being undertaken as per the international requirements to eradicate the disease. During the year a total of 140 sera samples collected from 1-5 years children and examined. All the samples were found to be negative for Yaws disease by RPR/TPHA test.

Funds in the form of "Grant-in-aid" are being provided to the States for operational cost to undertake activities under YEP.

**(ii) Guinea Worm Eradication Programme (GWEP):** In 1983-84, National Centre for Disease Control (Formerly: National Institute of Communicable Diseases) was made the nodal agency by the Ministry of Health & Family Welfare, Govt. of India for planning, co-ordination, guidance and evaluation of Guinea Worm Eradication Programme (GWEP). At the beginning of the Programme i.e. in 1984, about 40,000 GW cases were reported in 12,840 guinea worm endemic villages across 89 districts of seven endemic States, viz. Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra and Rajasthan. The State of Tamil Nadu remained free from GW disease since 1982.

The last guinea worm case in India was reported in July 1996 in Jodhpur district of Rajasthan. World Health Organization certified India as guinea worm disease free country in February 2000. However, routine surveillance is being continued till the disease is eradicated globally.

**D. Zoonosis Division:** The objectives of the division is to provide technical support for outbreak investigations, conduct operational research and trained manpower development in the field of zoonotic diseases and their control in the country. Diagnostic support is provided to State Governments for laboratory diagnosis of zoonotic infections of public health importance.

The Division has Reference Laboratory for Plague. It has also been recognized by the World Health Organisation as WHO Collaborative Centre for Rabies. Currently the work is being carried out on following Zoonotic diseases: Plague, Rabies, Kala-azar, Arboviral infections (Dengue, JE & Chikungunya), Toxoplasmosis, Brucellosis, Leptospirosis, Rickettsiosis, Hydatidosis and Anthrax.

Major Role and Activities of Division during 2013-14 are as follows:

S. No.	Referral diagnostic services provided to the States	No. of samples tested (01.04.13 - 31.03.14)
1.	Rabies (a) Post-mortem diagnosis in animal brain samples by Negri body, FAT, BT (b) Diagnosis in hydrophobia cases by (c) Assessment of antibodies by ELISA test (i) Human (ii) Animal	04  06  295 Nil
2.	Kala-azar (a) Parasitological Diagnosis by smear examination and culture (b) Serological diagnosis by IFA test	38  165
3.	Toxoplasma Serological and Diagnosis by IFA test	559
4.	Brucellosis Serological diagnosis by tube agglutination test	119
5.	Rickettsiosis Serological diagnosis by Weil Felix test, ELISA	1158
6.	Hydatidosis Serological by ELISA	24
7.	Arboviral Diseases (a) Serological diagnosis by IgM ELISA test for Japanese Encephalitis 1. Human Sera Samples 2. Human CSF (b) IgM ELISA test for Dengue (c) IgM ELISA test for Chikungunya	  534 669 379 185
8.	Plague (a) Serological diagnosis by PHA and PHI in rodent Sera (b) Culture for Isolation of Y. Pestis From rodent organs	Nil  5055
9.	Leptospirosis Serological diagnosis by ELISA	396
10.	Anthrax	08
11.	Viral Isolation Chikungunya Dengue Rabies AES/JE	1 200 13 173
12.	Lyme's Disease by ELISA	10
13.	Hanta virus by ELISA	36

### Three New Initiatives under the 12th Five Year Plan (2012-2017)

#### 1. National Rabies Control Programme:

**Human Component:** MoU has been signed with 5 States. Expert meeting was held to develop operational guidelines for implementation of the programme. Nodal officers have been identified by 12 States. National guidelines on Animal bite management & Rabies prophylaxis has been uploaded on NCDC Website.

**Animal Component:** MoU has been signed with AWBI. During 2013-14, 70 lacs were transferred to AWBI for carrying out various activities under animal component.

**2. Programme for Prevention and Control of Leptospirosis:** MoU has been signed with 3 States. Expert meeting was held to develop operational guidelines for implementation of the programme.

**3. Strengthening of Intersectoral Coordination for Prevention and Control of Zoonotic Diseases:** Expert meeting was held to develop operational guidelines for implementation of the programme. During 2014-15, 2 crores has been allocated.

**E. Centre for AIDS & Related Diseases:** Details of routine activities undertaken by the centre from April 2013 to Mar. 2014.

#### National Reference Laboratory:

- Confirmation of HIV sero-status of all samples received from SRLs and their ICTCs, which are showing indeterminate or discordant results-80.
- **External Quality Assessment Scheme (EQAS) for HIV Serology:** Participated in National EQAS for HIV serology conducted by NARI, Pune. The results had 100% concordance.
- Conducted two round of EQAS for HIV serology for 13 linked State Reference Laboratories (SRLs) and their ICTCs in the States of Delhi, Haryana, Rajasthan and Jammu & Kashmir.
- **HIV/HBV/HCV diagnostic kits evaluated:** A total of 44 batches of diagnostic kits (33 batches

of HIV rapid test kits, 1 HBV rapid 5 batches of HCV ELISA test kits and 04 HIV ELISA and 1 HbsAg ELISA were evaluated). A total of approximately 22,000 tests were carried out in this evaluation.

#### Serology Laboratory:

- Confirmation of HIV sero-status of samples received from non-SRL laboratories or hospitals (both private & government)-104.
- HIV-2 confirmation of patients referred through ART Centres of seven States of Delhi, Punjab, Chandigarh, Haryana, Rajasthan, Jammu & Kashmir and Himachal Pradesh-29.
- Samples tested under HIV Sentinel Surveillance programme-1575.
- HIV testing of clients visiting ICTC-552.

#### Immunology Laboratory:

- CD4/CD3 count in HIV positive patients referred from linked ART centre/ PPTCTCs-3420 samples.
- This centre participated in National EQAS for CD4 testing conducted by NARI, Pune in collaboration with QASI, Canada in April and September, 2013 and performed satisfactorily.

#### STI/Oppportunistic Infections:

- Qualitative RPR for Syphilis-192
- Semi Quantitative RPR : 35
- TPHA-192
- A total of 2 samples were tested for opportunistic infections.
- Participated in Inter Laboratory evaluation of quality assurance of serological tests for Syphilis (VDRL/RPR) - Series VIII conducted by VMMC and Safdarjang Hospital, New Delhi. The qualitative results had 100% concordance.

#### NABL Accreditation:

- The centre has received certification for renewal of accreditation by NABL (National Accreditation Board for Testing and Calibration Laboratories)

in the field of medical testing conforming to ISO 15189:2007 Standard from 14 February, 2014 to 13 February, 2016.

**F. Microbiology Division:** Details of routine activities undertaken by the Division of Microbiology from April-2013 to March-2014.

**Broad activities of the Division:**

- Routine and Referral diagnostic services for viral, bacterial and mycotic diseases.
- National laboratory for Polio surveillance (AFP) and supplementary surveillance (sewage).
- Laboratory support to outbreak investigations.
- Laboratory support to IDSP.
- Microbiological analysis of environmental samples.
- Training on laboratory aspects.
- Preparation and supply of reagents, culture media, diagnostic kits and other materials as support to outbreak investigations in the country as well as to the network of collaborating laboratories in various organizations and institutes in the country.
- Outbreak investigations for unknown pathogens.

**Achievements of the Division:**

- Approval from the standing finance committee on AMR and viral hepatitis has been obtained and activities under the programme will begin by March 2014.
- WHO accredited national polio laboratory testing more than 100 samples/day.
- 12 labs under IDSP are carrying out Influenza surveillance.
- Around 10 research projects/MD thesis /PHD on various topics have been successfully undertaken.
- Indo Swedish collaboration for Antimicrobial resistance.

**Two New Initiatives under the 12th Five Year Plan (2012-2017)**

**1. National Programme on Prevention & Control of Anti- Microbial Resistance:**

- Anti-Microbial Resistance Surveillance Programme.

- The SFC has been approved for the 12th Five Year Plan(2012-2017).
- Two separate groups i.e. the Expert Working Group and the Steering Committee have been constituted under the chairmanship of the DGHS for implementation of the programme.
- In the first phase of the programme 10 Medical College Labs have been identified and signing of the Memorandum of Understanding between the Colleges and the NCDC is underway, following which funds will be transferred.
- A common unified National Treatment guidelines for treatment of different infectious diseases is to be formulated, which can serve as a guide to the doctors all over the country. In this regard there have been two meetings of the Expert Working Group in the months of February & March.

**2. Viral Hepatitis Surveillance Programme:**

- The SFC on "National Hepatitis Surveillance Programme in Various Geographical Location of India under 12th Five year plan (2012-2017)" has been approved.
- The first meeting of the Expert Working Group was conducted at NCDC, New Delhi to develop treatment guidelines for various types of Viral Hepatitis.
- In the first year two medical colleges (SKIMS, Srinagar & MMC, Chennai) have been identified to be included under the surveillance network.

**Coxsackie B Virus:** To find out the association between myocarditis and Coxsackie B virus, paired serum samples from 32 cases from different hospitals were received and tested. All the samples were found negative to Coxsackie B group (B1-B6) virus infection.

**Measles:** one hundred fifty seven (157) clinically suspected cases of SSPE were reported to the laboratory. Eighty three (83) of these cases were confirmed by laboratory tests showing of high titre anti measles antibodies in serum and CSF samples. No such case, so far, is reported following measles vaccination.

**Viral Hepatitis:** A total of 827 serum samples were received and tested for various markers of viral hepatitis.

**Congenital Viruses:** A total of 537 samples from women having bad obstetric history and congenitally malformed babies and viral encephalitic cases were tested for antibodies against Rubella, Cytomegalo virus & Herpes simplex virus infections. 136 serum and 118 CSF were tested for HSV encephalitis.

**Viral Encephalitis:** 237 cases from viral encephalitis from Delhi hospitals were received and tested for anti-measles, Varicella (08/37 positive) Mumps (1/10 positive), EV-71 (18 negative), and Anti Parvo B-19 (47 negative) antibodies.

**Influenza Surveillance:** 1783 Nasal and throat swabs from all over the country from suspected cases of Swine flu were tested for respiratory including Swine flu. Out of which 56 for H1N1 positive, 109 for H3N2 positive, 7 positive for Influenza A seasonal and 4 positive for Influenza B.

#### **National Polio Surveillance**

**AFP Surveillance:** The Virology laboratory of NCDC has been accredited as WHO National Polio Lab to assist NPSP on lab based surveillance. In this regard, 17620 contact stool specimens, 8921 cases were received and tested. Isolates found positive for polio virus were processed for further typing and intratyping characterization. No wild poliovirus has been reported till date.

**Supplementary Surveillance:** As per Govt. of India, Ministry of Health & Family Welfare, NCDC has been selected to carry out supplementary surveillance by collecting sewage samples on weekly basis from 7 sites selected by NPSP to see the presence of any wild poliovirus in the sewage. In this regard, 363 sewage samples have been collected and tested at NCDC and include 4 sites of Punjab 108 sewage samples collected and tested. Positive isolates were tested at NCDC, Delhi. No wild poliovirus since October, 2010 has been reported.

**Tuberculosis:** A total of 78 clinical samples (mainly sputum and few other samples like CSF, pleural fluid, Pus and urine) obtained from suspected cases of tuberculosis. 14 samples were found to be positive in culture (only 3 samples were found to be AFB smear positive). In addition, 125 serum samples obtained from different States of India and evaluated serological diagnostic RPR test kits for YAWS Diseases. Not found positive samples.

**Bacteriology:** 60 samples (including CSF, blood) obtained from suspected cases of pyogenic meningitis were processed. 234 clinical samples from suspected diphtheria cases in Delhi were processed for diphtheria cases in Delhi. 207 urine samples were subjected to culture examination. Blood culture was carried out in 75 samples from cases of enteric fever. 22 pus, throat swabs were processed. 46 blood samples were processed for widal test and Typhi dot IgM and 4 C. diphtheriae isolates received from Government General Hospital, Rangaraya Medical College, Kakinada (Andhra Pradesh) for identification.

**Antimicrobial Resistance (AMR) Study:** Monitoring of carbapenems resistance in environmental, Community and Hospitalized Patients Having Urinary Tract Infections (UTI) 493 were processed from Environmental, Community and Hospitalized Patients Having Urinary Tract Infections (UTI) for AMR Studies.

**Diarrheal Diseases Laboratory:** A total of 402 stool samples and Rectal swabs were collected from different hospitals of Delhi out of which, 74 are positive for Ogawa, 5 NAG, 12 Salmonella, 15 Shigella, 19 Enteropathogenic E. coli., 1 Giardia lamblia.

**Environmental Laboratory:** A total of 286 drinking water samples belonging to different drinking water sources (collected during outbreak investigations of water borne diseases, samples from air-line caterers serving VVIP flights, referred samples from schools, hospitals, domestic sources etc.) were tested for bacteriological standards by the MPN Coliform method. 217 of these were found satisfactory, while the remaining 69 were unsatisfactory.

**Mycology Laboratory:** Mycology Laboratory diagnostic services were provided to referred patients from different Government Hospitals/Medical Centers of Delhi. Out of 56 clinical samples (CSF-18; Tissue-19; Pus-5, Fluid-01 and NAIL-05, Gastric Fluid-01, Sputum-01, blood culture-04, throat swab-02, Urine-01 were isolated.

**G. Division of Biotechnology:** The division is actively involved in disease diagnosis during epidemics and outbreak, operational research, manpower development, advisory role and other

multifarious activities towards prevention and control of a cascade of epidemic prone disease of larger public health importance. The division is collaborating with different divisions of NCDC and with outside Organizations/Institutes.

#### **Broad mandate of the Division:**

(i) **Referral Molecular Diagnostic Support** in the field of genomics of important epidemic-prone diseases which includes:

- Fool-proof Molecular Diagnostic support for confirmation of pathogen,
- Tracing the origin and source of infection of emerging/re-emerging diseases,
- Tracking-down the routes of pathogen transmission,
- Identifying reservoirs sustaining transmission,
- Identifying new, emerging and re-emerging pathogens,
- Genotyping and Sub-typing of strains,
- Characterizing drug-resistant strains,
- Identifying links between cases and infections,
- Linking pathogen variants to endemicity and epidemicity,
- Monitoring impact of immunization programmes,
- Monitoring the progress of disease control activities,
- Maintenance of "Gene Bank" of important disease pathogens and
- Molecular typing of drug resistant strains of bacterial pathogens etc.

- **Molecular characterization of Hepatitis C virus:** An outbreak of HCV infection was reported in the district of Anantnag, J&K. Outbreak was belonged to HCV genotype 3a.

- **Molecular characterization of dengue virus isolates targeting Cpre-M and Env/NS1 gene region during DF outbreaks:** Molecular characterization and genotyping was done for Delhi samples. DENV-1 genotype III and DENV-3 genotype III, which are relatively considered

milder strains in terms of severity of disease and circulation of DENV-2 genotype IV were reported.

- **Molecular studies of Chikungunya virus:** The downward trend of disease was found in Delhi having only 2 positive samples.

- **Diagnosis of Guinea Worm:** Suspected sample for guinea worm (*D. medinensis*) reported from erstwhile endemic district of Rajasthan was tested for molecular characterization using 18S-rRNA & CO1 gene specific primers. Sample did not confirm to be *D. medinensis*.

#### **ii) Specialized Training:**

- a. Specialized training imparted to >25 **M.Sc./B.Tech** students perusing from various **Indian Universities** and nominees of Indian Academy of Sciences.
- b. Four students pursuing *Ph.D. degree* from various Indian Universities.
- c. Imparted training and teaching to students of perusing MPH course at NCDC under GGSIP University, New Delhi.

#### **iii) Applied Research in genomics of important epidemic-prone diseases.**

- **Sequence-based genomic characterization of circulating strains of influenza A with special reference to 2009 Pandemic H1N1 virus.**

DNA sequencing of HA and NS gene of influenza A was carried out and data was analyzed for factors related to increased virus virulence, pathogenicity, severe infection and drug resistance. Data generated from sequencing was also analyzed by different bio-informatics tools to determine phylogeny of circulating strain.

- **Targeted characterization of 65kDa heat shock protein gene (DNA) and of 85B antigen gene (mRNA) of *M. tuberculosis* in endometrial biopsies from infertile women undergoing *in-vitro* fertilization.**

Endometrial samples were amplified for 740 bp region of the DC-Sign promoter region present in CD209 gene of humans to check for susceptibility to tuberculosis infection in these patients due to presence of the two known SNP's namely, -871 and -336.

- **Genotypic characterization of nef gene from HIV-1 infected Rapid progressors.**

Analysis of HIV-1 nef gene was carried to unveil important genomic changes in rapid progressors and long term non-progressors. Some striking amino acid changes were observed which may serve as predictors for the two above categories of AIDS patients.

- **Computational and molecular analysis of HIV release by 'Viral Protein-U' (vpu) at the time of pregnancy.**

Genetic characteristics of the trans-membrane and cytoplasmic domain of the vpu protein of HIV during pregnancy was done. In addition we also studied BST-2 m-RNA expression at the time of pregnancy and post-partum.

- **Genetic characteristics of the hypervariable region (V3-V5) of env gene of HIV-1 distinguishing Subtype C from B.**

Molecular characterization of the hyper-variable region (V3-V5) of the envelope (env) gene of HIV-1 and compared them with subtype B sequences retrieved from database to determine Subtype C distinguishing genetic characters that may possibly account for its high pathogenicity.

- H. **Division of Malariology & Coordination:** The division has a malaria laboratory to check/cross check blood smears of clinically diagnosed cases for the presence of malarial parasites, referred by various hospitals of Delhi and surrounding districts of Uttar Pradesh and Haryana state. During the year 2013 upto 30th September, 2013 a total of 632 blood smears were examined, of which 58 were found to be positive **51 for P.vivax and 7 for P. falciparum.**

A total of 554 students from different institutes were given short term training in orientation of NCDC and Communicable Diseases. The details are as below:

S. No.	Date	Institutions	No. of participants
1	7-1-13 to 11-1-13	Post Graduate (MD) students of Deptt. of Microbiology, RML Hospital, New Delhi	3
2	16-1-13	B.Sc. Nursing students of St. Andrews College of Nursing Shukarwar Peth, Wadia hospital campus, Pune	56
3	4-2-2013	B.Sc. Nursing students of Mahatama Gandhi Mission's Mother Teresa Nursing college, Aurangabad	23
4	5-2-2013	Veterinary Doctors of NDEHMS-39 course from RVC Centre & College, Meerut Cantt	8
5	5-2-2013	Participants of training programme in Diploma in Health Promotion Education and Diploma in community Health care for paramedical Health workers from family welfare and training centre, Mumbai	29
6	19-2-13	2nd Year B.Sc. ( N) students of RML Hospital, New Delhi	50
7	21-3-13	Final Year BHMS students of Dr. Padiar Memorial homoeopathic College, Chottanikkara P.O. Ernakulam, Kerala - 682312	42
8	1-4-13	IV year B.Sc. Nursing students of College of Nursing, St. Philomena's Hospital, Bangalore	45
9	4-4-13	GNM 1 year and B.Sc Nursing III year students of Rufaida College of Nursing, Jamia Hamdard, New Delhi	45
10.	9-4-2013	4th year Basic B.Sc. & 2nd Year Post Basic B.Sc Nursing Students of Hiranandni College of Nursing ,Hiranandni gardens, Powai, Mumbai	44
11	25-4-2013	Senior Medical Officers from BSF Gwalior	22
12	26-4-2013	B.Sc. Nursing students from St. Ann/s College of nursing, Mulki, Mangalore	45
13	29-7-2013	M.Sc Public Health Entomology students of VCRC Pondicherry	10
14	29-8-2013	Air force warriors from NBC protection, AF station, Arjangarh, Air Headquarters (Offensive), New Delhi	62
15.	11-9-13	2nd Year B.Sc. (H) Nursing students, from R.A.K. College of Nursing, Delhi	70
			<b>554</b>

**I. Centre for Medical Entomology and Vector Management:**

Centre for Medical Entomology and Vector Management is reorganized to develop it as a National Centre par excellence for undertaking research, providing technical support and to develop trained manpower in the field of vector - borne diseases and their control. The centre provides technical guidance, support and advice to various states and organizations on outbreak investigations and entomological surveillance of vector-borne diseases and their control. Major achievements are highlighted below:

**Major achievements:**

1. Based on the detection of dengue virus antibodies in vector mosquitoes warning signals were issued to Municipal Health Officer, MCD, Delhi for possible outbreak of dengue.
2. First time map for distribution of presence of infected Aedes mosquitoes in Delhi was prepared. List of high-risk localities was communicated to Municipal Corporation of Delhi and NVBDCP for action taken.
3. Dr. R. S. Sharma attended Expert group meeting on Malaria Vector Control, from 24-26 Feb. 2014 at Geneva.
4. Entomological Surveillance of vector of Yellow Fever, Dengue and Chikungunya mosquitoes in and around Amritsar airport, Kandla seaport, Goa airport.
5. Provided training to health official at Goa Port Health Organization.

**Paper published:**

1. Roop Kumari et al., Mapping of dengue virus and dengue vector in Delhi. Published in Dengue Bulletin. 2013, Vol. 37

**Ongoing Research Projects**

1. Studies on the presence of dengue/JE virus in vector mosquitoes.
2. Japanese Encephalitis/ Dengue virus detection in mosquitoes of some endemic areas.

3. Entomological surveillance of vector of Yellow Fever. Dengue and Chikungunya mosquitoes in and around international airports and seaports and vector control measures thereof.
4. Studies on rodent-flea association at major Sea Ports of India.
5. Entomological surveillance of vectors of scrub typhus in selected urban, peri-urban and rural set up of Delhi, NCR and other parts of the country.

**J. Epidemiology Division:**

**i. Activities of the Division:**

1. Organization and coordination of training courses in Epidemiology to develop trained health manpower. Development of teaching materials such as Modules, Manuals etc. on disease surveillance and outbreak investigation of epidemic prone communicable diseases.
2. Investigation of outbreak of diseases of known/unknown etiology and recommend measures for its prevention and control to the States/UTs of the country. Provision of technical support to State government for investigation and control of disease outbreaks.
3. Provision of administrative and technical supervision to three branches of the Institute viz., Alwar (Rajasthan), Jagdalpur (Chhattisgarh) and Conoor (Tamil Nadu).
4. Provision of technical support to various National Health Programmes in the form of developing guidelines for control, manpower development, evaluation of different components/indicators.
5. Assisting the Director for publication of monthly Bulletin "CD Alert".
6. Carry out field research on different aspects of communicable diseases.

**ii. Outbreaks Investigated/Rapid Health Assessment:**

During the period, officers from the division of Epidemiology carried out investigations of outbreaks in the country and suggested containment measures to the authorities. Officers of Epidemiology division mentored outbreak investigations carried out by EIS Officers.



- iii. Manpower Development:** National Centre for Disease Control (NCDC), Delhi is a WHO Collaborating Center for Epidemiology and training. The division of Epidemiology conducts regular training programmes and numerous other short-term training activities every year. The course curricula of these training programmes are designed and tailor-made to develop the necessary need-based skills for the health professionals. The participants to these courses come from different States/Union Territories of India. In addition, trainees from some of the neighbouring countries like Nepal, Bhutan, Sri Lanka, Thailand, Timor Leste, Maldives and Indonesia also participate in some of the training programmes.
- iv. The Training courses organized during the reported period:**
1. Three months Regional Field Epidemiology Training Programme for the health personnel of South East Asia Region started from 24th June to 20th September, 2013. A total of 15 participants from 6 countries.
  2. 9th batch of MPH (FE) was inaugurated on 1st Aug 2013 in which 5 students joined.
  3. Second batch of India EIS training has been started on 16th September 2013. A total 7 officers are currently undergoing the training in the second cohort.
- v. Global Disease Detection-India Centre:** Global Disease Detection-India Centre in collaboration with CDC Atlanta started functioning at NCDC in 2012. The objectives of GDD India Centre are to build epidemiological and laboratory capacity for detection and response to Emerging and Reemerging infectious diseases. The focus will be on development of human resources, both in epidemiology and laboratory and sharing best practices for detection and response to emerging infections, wherever required.
- vi. Epidemic Intelligence Services (EIS):** The second cohort of the India EIS training was launched on 15th September 2013 with the initiation of one month inception course for EIS trainees was held at NCDC from 16th September to 15th October 2013. It is a Govt of India initiative in collaboration with US Centres for Disease Control, Atlanta. A total of 14 officers (seven in each cohort) are attending the training programme.
- vii. CD Alert:** A bulletin on communicable diseases and an important tool for Rapid Dissemination of Information towards Control of Diseases is published by the National Centre for Disease Control, Delhi. It is widely circulated to different parts of the country including Directorates of Health Services of different States, Districts, Primary Health Centres, Medical Colleges and individuals. Many a times, the important topics covered in CD Alert have been reproduced, in part or whole, by Indian Medical Association for dissemination of knowledge. The first issue was published in August 1997 on emerging and reemerging diseases and a total of seventy five issues have been published so far. Issues have been published on commonly known topics which have also been updated from time to time. The CD Alerts give an inside view of the disease including the global scenario, Indian scenario and also the diagnostic facilities of the particular disease within our country. The CD Alert becomes a handy tool for the Rapid response Teams for management and containment operations in outbreak/epidemic situations.
- viii. NCDC Newsletter:** It is a quarterly publication of the National Centre for Disease Control (NCDC) and the first issue was released on 4th October 2012 by Hon'ble Secretary, Ministry of Health and Family Welfare, Government of India. The purpose of this newsletter is to provide a forum for sharing information on outbreaks, programme updates from various departments at NCDC, technical and programmatic news and updates including capacity building and information on selected documents and guidelines, forthcoming conferences, world days and monitoring of disease trends. So far, six issues have been successfully published and widely circulated.

### 15.23 LADY READING HEALTH SCHOOL, DELHI

Lady Reading Health School, Delhi is considered as one of the pioneer institutions and first of its kind for training Health Visitors. It was established in 1918 under the Countess of Dufferin Fund for training Nursing personnel for M.C.H. service programme. In 1931, it came under the administrative control of the Indian Red Cross Society (Maternity & Child Welfare Bureau). In 1952 the Government of India took over the school and attached Ram Chand Lohia MCH Centre to it. Total capacity of the school was 24 Health Visitors trainees from all over India, even these candidates were not available at that time. Duration of the course was one and a half year for matriculates who were qualified midwives, which was replaced by two and half years integrated course for health visitor in 1954.

The School aims at providing training facilities to various categories of Nursing Personal in community health as well as M.C.H. and family welfare services through the attached Ram Chand Lohia MCH and Family Welfare Centre.

The institution is imparting the following courses at present:

1. **Auxiliary Nurse-cum-Midwife Course:** The last batch of 40 students under CBSE appeared in final examination in March, 2013 and all candidates passed out. Now this course is under Indian Nursing Council and eligibility criteria for the course is 12th pass. This year 40 students have been admitted for session 2013-15. Total number of students are 80 i.e. 40 students each for 2012-14 and 2013-15.
2. **Certificate Course for Health Workers (Female) under Multipurpose Workers Scheme:** This course is of six months duration. Students are admitted twice a year i.e. in January and July every year with admission capacity of 20 in each batch. 20 students were selected for January, 2013 to June, 2013 batch. But only 15 candidates joined the course and all passed out in June, 2013. 30 candidates were selected for July, 2013 to December, 2013 batch and out of them 28 joined the course. These students will appear for final exam in December 2013.

3. **Diploma in Nursing Education and Administration (DNEA) (Elective in Community Health Nursing):** This course is of 10 months duration which started on the 15th July 2013 with total admission capacity of 30 students. 4 students appeared in Final Examination in May, 2013 and all passed out the examination. This is the last batch of DNEA Course as per the INC resolution. This course is to be stopped and Post Basic B.Sc. (Ng.) to be started to upgrade Lady Reading Health School to a College.
4. **Post Basic B.Sc. (Nursing):** Administrative approval of the Ministry has been granted for conducting Post Basic B.Sc. (Nursing) at this institution.
5. **Hostel:** At present total 80 ANM students are under training require hostel facilities.
6. **Clinical Experience:** The students are sent for their clinical experience in Rural and Urban Health Centre, different Hospitals like Safdarjung Hospital, RML Hospital, Lady Hardinge Medical College and Kalawati Saran Children's Hospital in Delhi and out of Delhi. Students are also posted for Rural Field Experience at Rural Health Training Centre, Najafgarh & Rural Field Training Centre, Chhawla. Students are also posted to different MCH Centres of Municipal Corporation of Delhi within 2 Km radius of school.
7. **Ram Chand Lohia MCH and Family Welfare Centre** under Lady Reading Health School provides field practice area for Urban Health experience for the students. It gives integrated Maternity and Child Health & Family Welfare Services to over 40,000 population. Weekly clinics like Antenatal Care, Post Natal Care, Well Baby Immunization and Family Planning Clinics, door to door services are also imparted to the community by the students and staff. Exhibition and Health education are also organized in the community by MCH centre through students & staff.  
Programme like regular surveys are conducted to find out the latest status of Immunization and number of target couple in the community under Ram Chand Lohia Maternity Child Health & Infant

Welfare centre of Lady Reading Health School. The target couple detected during the period was 7054 which gives approximately 70% coverage of family planning and it is also found that there is 100% coverage of all immunization.

8. **Other Activities:** Health Education Programme is organized in the school, centre as well as in the community by different approaches i.e. Film shows, Baby shows, Magic show, Cultural programme, Puppet show, Role play, followed by group exhibitions and Speech competition.
9. **Budget:** The total budget for the institution and family welfare staff is Rs. 3,55,00,000 (Rs. Three crore fifty five lakh only) for the year (2013-14) and the budget is utilized in the designated area.

#### 15.24 PASTEUR INSTITUTE OF INDIA (PII), COONOR

Pasteur Institute of India, Coonoor started functioning as Pasteur Institute of Southern India, on 6th April 1907 and the Institute took a new birth as the Pasteur Institute of India (registered as a Society under the Societies Registration Act 1860) and started functioning as an autonomous body under the Ministry of Health and Family Welfare, Government of India, New Delhi from 10th of February, 1977. The affairs of the Institute are managed by the Governing Body.

##### Present Activities:-

- Production of DPT and Tissue Culture Anti (TCAR) vaccine in compliance with the revocation of suspension of production license by the Ministry of Health and Family Welfare, New Delhi.
- Establishment of cGMP (Current Good Manufacturing Practice) compliant DPT vaccine laboratories is underway.
- Academic programmes like Ph.D. Microbiology, Biochemistry and Biotechnology (Part time & Full time) affiliated to Bharathiar University, Coimbatore.
- Breeding of Mice and Guineas pigs for Experimental purpose like Quality Control of DPT group and TCAR vaccines.

- This Institute has Rabies Diagnostic Lab and Anti Rabies treatment center to cater to the need of the general public.

##### Activities Undertaken in respect of establishment of Green Field Manufacturing GMP (Good Manufacturing Practice) facility for Production of DPT Vaccine:-

- The Ministry has proposed to create Green Field GMP facility for manufacturing DPT group of vaccines at PIIC. HLL Life Care Ltd., Trivandrum has been engaged to carry out the Project for an estimated expenditure of Rs. 149.16 crores.
- After the approval on relaxation for the restriction of building height from Govt. of Tamil Nadu and construction of proposed building from the Coonoor Municipality, the construction work is in progress. HLL is likely to complete the civil construction of GMP facility by October, 2014.
- The technical bid evaluation for the procurement of critical equipments as per user requirement specification has been finalized.
- After that Equipment Installation, Validation and Process validation the new facility will supply 130 million doses (DPT-60Mid; TT-55 Mid; DT-15 Mid) annually.

#### 15.25 ALL INDIA INSTITUTE OF PHYSICAL MEDICINE AND REHABILITATION (AIIPMR), MUMBAI

All India Institute of Physical Medicine and Rehabilitation, established in 1955, is an apex Institute in the field of Physical Medicine and Rehabilitation under, Ministry of Health and Family Welfare, Government of India.

##### Objectives:

- To provide need based Medical Rehabilitation Services, including provision of Prosthetic & Orthotic appliances, for persons with neuro-musculo-skeletal (locomotor) disorders.
- To provide training at Under Graduate and Post Graduate level to all categories of Rehabilitation professionals.

- To conduct research in the field of Physical Medicine and Rehabilitation (P.M.R.).
- To provide and promote community based programmes of Disability Prevention & Rehabilitation for the rural disabled.

**Training of Rehabilitation Professionals:** Graduate and Post Graduate Courses in Medical and Paramedical Courses are conducted by a team of highly qualified and dedicated Faculty. Health functionaries at the community level are also trained. The Institute has comprehensive facilities for research and teaching. In the field of Rehabilitation and Allied Sciences, AIIPMR is in the lead having numerous publications and presentations to its credit. Collaboration and co-ordination with government and NGOs is done to provide consultative services to formulate improvement and monitor rehabilitation services from time to time.

#### Annual Statistics (April 2012-March 2013)

- **Medical:**

#### I) Out Patient Department:

**Services:** Number of PWDs managed through Out Patient Department:

New Persons with Disabilities registered	-	11875
Follow-up PWD	-	19285
Total No. of PWDs	-	31160
No. of Disability Certificate issued	-	1139
No. of Railway Concession issued	-	726
No. of Driving Certification	-	683
No. of Special Certificates	-	29

#### II) In Patient Services:

Admissions in ward for reconstructive Surgery and inpatient rehabilitation	-	781
Major reconstructive surgical procedure	-	519
Minor Surgeries	-	2034

#### III) Audiology & Speech Therapy Department:

No. of PWD for speech and language disorder registered in the department	-	762
No. of audiometry tests and other hearing tests	-	208

Home exercise programme and counseling	-	143
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Cases attended Therapeutic Treatment	-	1218
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#### IV) Prosthetic & Orthotic Workshop:

(a) Registration of Supply of Orthoses to PWDs:-	-	3339
(b) Registration of Supply of Prostheses to PWDs:	-	571
(c) Maintenance and Services of Orthotics and Prosthetics:		
Total number of Jobs Executed	-	3910

#### V) Physiotherapy Department

New Patients	-	7252
Old Patients	-	8018

#### VI) Occupational Therapy Department

Total number of PWDs	-	15236
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<b>Mobility Devices/Aids Delivered:</b>	-	<b>1651</b>
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#### VII) Vocational Guidance Department:

No. of PWD evaluated for pre job counseling and job placement	-	200
No. of PWD for evaluated for Intelligence and development test	-	561
Counseling of PWD for inclusive education, special education, self-employment& other benefits	-	765

#### VIII) Vocational Training Workshop:

Number of candidates assisted for self & open employment	-	120
No. of physically disabled for job environment evaluation and suitability for the job.	-	75
Number of physically disabled enrolled for Vocational Training in various trades	-	25
Placement of the PWD's done in the various private sector with the help of NGO from New Delhi and local Employment Exchange.	-	24

**IX) Medical Social Work Department:**

Total donation received from individual and corporate offices. - 76,121.00

Amount spent for subsidy for patients belonging to below poverty line. - 46,322.00

Total Number of PWDs for financial assistance for medical expenses during the hospitalization, free aids and appliances i.e. special C.P. chairs, wheel chairs, crutches, walker and rollators etc. through Institute funds, social welfare funds. - 15

**X) Radiology Department:**

No. of Digital X-Ray Investigations - 7722

No. of PWD's attended - 7890

USG and Color Doppler - 690

**XI) Pathology Department:**

Investigations in Clinical Pathology - 10560

Investigations in Bio-Chemistry - 11040

Investigations in Serology - 2304

Total number of Pathological Investigations - 23904

Average number of investigations per day - 92

**Augmentation of capacity****> Physical Medicine and Rehabilitation (PMR)**

- PMR Department is involved in patient care-both indoor & outdoor, teaching at Post Graduate level and conducting research.

- New gymnasium for indoor patients constructed and made functional.

**> Prosthetic & Orthotic Department**

- Dynamic positioning and stretching plastic AFO/ KAFO's have been tried upon and being employed in regular clinical practice. Twenty five patients have been fitted till date, follow-up report and feed back is awaited.

- These splints have replaced the conventional static splints which were prescribed earlier and initial clinical results are heartening.

**Physiotherapy Department****● Gait & Motion Analysis Laboratory**

Total number of subjects assessed - 92

**● Isokinetic assessment and training muscle of performance**

Total number beneficiaries - 64

Total number of sessions - 245

- **Balance assessment and training** - Assessment of static and dynamic balance is carried out using clinical test batteries which are indicative intervention.

Number of beneficiaries -

Balance assessment - 190

Training/Session



*Turnbuckle Orthosis for Angular Deformities of the Knee Joint*



*Orthopedic Department*

## Scientific Publications &amp; Research

Sr. No.	Department	Staff Guided Research				
		Papers Presented	Papers Published	Dissertation Completed	Invited Lecturers	Conference/Workshop/Seminars/Attended
1	Medical					
	a) PMR	11	04	--	--	07
	b) Radiology	01	--	--	--	--
2	Physiotherapy Department	--	--	12	--	--
3	Occupational Therapy	02	--	07	--	03
4	Prosthetic & Orthotic	--	--	16	--	--

Institute is taking initiative in building up capacity further by building up infrastructure and manpower by starting satellite center in the District hospitals so as to reach large number of Person with disabilities.

### 15.26 ALL INDIA INSTITUTE OF SPEECH AND HEARING (AIISH), MYSORE

The All India Institute of Speech and Hearing (AIISH), Mysore is the leading organization in the country in providing training, research, clinical care and public education pertaining to communication disorders. Founded in 1965 as an autonomous institute under the Ministry of Health and Family Welfare, Government of India, AIISH has been successfully carrying out its activities for the last 48 years. The activities carried out by the institute from 1st April to 30th September, 2013 are given below:

**Education and Training:** The institute offered 14 academic programmes pertaining to communication disorders ranging from certificate to post-doctoral level and totally 561 students were admitted to various programmes. Also, the Institute organized four guest lectures by eminent personalities, 44 orientation/short-term training programmes and 14 workshops/seminars/symposia on various aspects of communication disorders during the period. In addition, the Institute underwent assessment for accreditation by the National Assessment and Accreditation Council (NAAC), Bengaluru.

**Research Activities:** Totally, 20 funded research projects were completed and 15 projects were newly initiated at the institute during first April to September, 2013. Also, 45 projects were progressing in different departments. The funding for the research projects were sponsored by

organizations such as the Department of Science and Technology, Govt. of India and Indian Council of Medical Research, in addition to the funding given by the Institute.

Other major research initiatives of the Institute during the period include the setting up of Centre for Neuropsychological Research and Rehabilitation to cater to the persons with brain damage or dysfunction having communication disorders, Electrophysiological Laboratory to promote basic and applied research in the area of auditory electrophysiology and Human Genetics Unit to construct pedigrees to determine the pattern of genetic inheritance in persons with communication disorders in Indian population.

Also, an **Epidemiology Unit** was established as a centralized data bank for all activities of prevention and early identification of communication disorders and to promote epidemiologic research in the area.

**Clinical Services:** The institute offered a wide variety of clinical services to a total number of 26,897 persons with various types of communication disorders, from 1st April to 30th September, 2013. The clinical services offered include assessment and rehabilitation pertaining to speech, language and hearing disorders, psychological disorders, and otorhinolaryngological disorders. In addition, specialized clinical services were also rendered on augmentative and alternative communication, autism spectrum disorders, cleft lip palate and other craniofacial anomalies, fluency, learning disability, listening training, motor speech disorders, professional voice care, voice disorders and vertigo. The detailed clinical statistics during the period 1st April to 13th September, 2013 are given.

Clinical Services	No. of Clients Assessed	Therapy Sessions/ Surgery
Augmentative and Alternative Communication	120	701
Autism Spectrum Disorders	646	2903
Adult & Elderly Persons with Lang. Disorders Assessment	4	-
ENT Examination	12149	-
Fluency Assessment	259	1140
Hearing Evaluation	7180	-
Learning Disability Assessment	468	-
Listening Training	1611	9561
Mapping for Cochlear Implants	-	52
Medical Speciality	747	-
Motor Speech Disorders	15	19
Neuropsychological Assessment	12	38
Physiotherapy	411	3394
Pre-School Services	213	-
Psychological Assessment	3372	-
Speech and Language Assessment	4277	35937
Structural Craniofacial Anomalies Assessment	107	413
Vertigo Assessment	110	-
Voice Disorders Assessment	311	-

**Outreach Clinical Services:** The major outreach activities of the institute during the period include the diagnostic services at its outreach clinical centers, tele-intervention service and infant screening for communication disorders in various hospitals and industrial screening.

The institute formally launched the New Born Screening (NBS) programme for screening new-borns for communication disorders on 9th August, 2013. This will help in detecting the condition in the beginning stages of the child's development.

**Public Education:** A number of public education activities pertaining to communication disorders were carried out such as organization of six public lectures on various aspects of the disorder, six screening camps on communication disorders and preparation and

dissemination of public education materials related to the prevention and control of communication disorders in print and electronic format.

**Infrastructure Development:** The Institute installed a Digital EPBAX System which features state-of-the-art voice communication system. The system facilitates linking of all the remote centers of the Institute with the AIISH Intercom network. Other major infrastructure development includes the initiation of civil work for Centers of Excellence.

**Other Activities:** The other major activities and events took place at the institute during the period include the following.

- a. **Right To Information-** The details of the information requests and the decisions taken under the RTI Act, 2005 are given below.

	Opening balance	No. of applications received as transfer from other PAs u/s 6(3)	Received (including cases transferred to other PAs)	No. of cases transferred to other PAs u/s 6(3)	Decisions where requests/ appeals rejected	Decisions where requests/ appeals accepted	Registration Fee Collected (in Rs.) u/s 7(1)
Requests	8	9	28	0	1	44	
First appeals	0	N/A	2	N/A	0	1	Rs. 200

- b. **Official Language Implementation (OLI) -** Various activities such as Hindi training for staff members, organization of workshops, displaying of Word a Day in Hindi and translation of materials in Hindi were carried as a part of Official Language Implementation. Also, Hindi Week was celebrated on 12-18 September, 2013.

**Capital Work-** Capital works cost Rs. 37.58/- lakhs were completed and works cost Rs. 2601.87/- lakhs were going on at the institute campus during the period.

**Financial Status-** The financial status of the institute during the period is given.

(Rs. in lakhs)

Type of grant	Amount allocated for 2013-14	Amount released
<b>Plan</b>		
Grant- in-Aid General	1614.00	807.00
Grant- in-Aid Capital	4970.00	1639.22
Grant- in-Aid Salaries	1530.00	704.86
<b>Non-Plan</b>		
Grant- in-Aid General	556.00	241.30
Grant- in-Aid Salaries	794.00	380.46
<b>Total</b>	<b>8114</b>	<b>3151.08</b>

### 15.27 CENTRAL INSTITUTE OF PSYCHIATRY (CIP), RANCHI

The Central Institute of Psychiatry (CIP), Ranchi established in 1918 functions under the aegis of the Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India. Initially it had a bed capacity for 174 patients (92 male, 82 female). In 1922, the hospital was rechristened as European Mental Hospital. In the same year, the hospital was affiliated to the University of London for Diploma in Psychological Medicine Examination, earning it the distinction of being the first institute in India to impart post-graduate training in psychiatry. In 1948 the hospital was renamed as Inter-Provincial Mental Hospital and in 1952, as Hospital for Mental Diseases. In 1954, the management of the Institute was taken up by the Government of India. In 1977 the hospital was given the status of an institute and was renamed as the Central Institute of Psychiatry.

The Institute campus is spread over 210 acres and has a current capacity of 643 beds. Some beds are reserved for patients sponsored by the Central Government, State Governments, Coal India and the Railways. The Institute has 17 wards: 9 male wards, 6 female wards, an emergency ward and a family unit. Patients are not kept confined and can walk about within the hospital campus. Along with drug therapies, psychotherapies, behavioral therapy, group therapy and family therapy are also administered to the patients. The patients are also

encouraged to take part in regular physical exercises, yoga, outdoor as well as indoor games to keep them physically fit. Patient care, research and manpower development remain the major objectives of the Institute.

The Institute has been providing patient care through Adult in-patient services, Erna Hoch Centre for Child and Adolescent Psychiatry, SS Raju Centre for Addiction Psychiatry, Charak Outpatient Department, Outreach programmes and Special Clinics. 3,233 patients (2,671 male and 562 female) were admitted between January and September 2013. 3,216 patients were discharged (2641 male and 575 female). The average bed occupancy during the period was 79.8%.

The child guidance clinic and the 50-bedded child psychiatry unit impart training to resident doctors and postgraduate students in the field of child and adolescent mental health. It caters to the needs of psychotic children, children with developmental disorders and with mental retardation. During the period January-September 2013, 5454 patients (1487 new cases and 3967 follow-up cases) attended the out-patient department (OPD) for treatment. There were a total of 134 admissions and 125 discharges during the period under report.

The Institute has a modern De-addiction Centre with a capacity of 57 patient beds for treatment of persons suffering from alcohol & drug related problems. It is also the nodal centre in eastern India for manpower training and research in the field of alcohol and drug abuse. During the period January-September 2013, 927 patients were seen in the OPD in the De-addiction Clinic; 566 patients received admission in the De-addiction Centre while 586 were discharged.

The total number of cases seen on an outpatient basis during the period January-September 2013 was 56,274 (20,109 new cases & 36,165 follow-up cases) [including all psychiatry cases (Adult & Child), Staff OPD, Extension Clinics, Skin Clinic, School Mental Health Programme & Psycho-Social OPD]. The total number of new psychiatry cases seen were 11,033 (7571 male & 3462 female) while 34,042 psychiatry follow-up cases were seen during this period (26724 male & 7318 female).

The Institute runs Extension Clinics which include the General Psychiatry Clinic at West Bokaro, Hazaribag and Epilepsy Clinic at Deepshikha, Ranchi. Regular



camps, awareness programmes, workshops with teachers and parents are also conducted at the extension clinics. School mental health programmes are being run in two schools through the outreach programme. The case-load in the extension clinics during the period January-September 2013 was 1585.

**The Institute runs a number of special clinics:** the Chronic Schizophrenia Clinic, Skin & Sex Clinic, Neurology Clinic, Sleep Clinic, Epilepsy Clinic, Staff OPD, Headache Clinic, De-addiction Clinic, Child Guidance Clinic, Mood Clinic & Obsessive-Compulsive Disorder (OCD) Clinic. Total attendance of patients in special clinics during the period January-September 2013 was 15,379.



*Psycho-Social Unit (PSU)-The Outpatient Wing of the Department of Clinical Psychology*

The Clinical Psychology Department at the Institute is the oldest independent Department of Clinical Psychology in India. In 1962 a teaching course in Clinical Psychology-Diploma in Medical and Social Psychology-was started (this course is now known as M.Phil. in Clinical Psychology). The course of Ph.D. in Clinical Psychology was started in 1972. At present, there are 18 seats in M. Phil (Clinical Psychology) and 4 seats Ph.D. (Clinical Psychology).

There is a separate out-patient unit of the Department called the Psycho-Social Unit (PSU). The PSU caters to the needs of those patients who suffer from minor psychological problems and who can be managed exclusively by psychological methods such as counseling, behaviour therapy, biofeedback, relaxation therapy etc. 935 patients were assessed and 1635



*The Bhaskaran Rehabilitation Centre*

therapies were carried out by the Department during the period January-September, 2013.

The clinical psychology laboratory (a first in the country), is equipped with various psychological tests, rating scales, instruments and apparatus which aid in the diagnosis and assessment of patients. Research is an integral part of the Department and Research papers are published in various international and national journals.

The department of psychiatric social work came into existence in the 1950s although family psychiatry can be dated back to 1922.

The Institute began the course of Diploma in Psychiatric Social Work (DPSW) in the year 1970. In 1985 this course was upgraded to M.Phil. in Psychiatric Social Work. At present, 12 seats are available for M. Phil. trainees. The Department is actively engaged in academic and research activities in the field of mental health.

The Department of Nursing Service provides quality nursing care to in-patients as well as out-patients. The Nursing Education section of the Institute is responsible for training nurses to obtain the Diploma in Psychiatric Nursing (DPN) and giving clinical nursing experience to visiting nurses. One nursing student enrolled in the DPN course in 2013. The number of visiting nurses who received training during the period January-September 2013 is as follows:

M.Sc. in Psychiatric Nursing	– 46
B.Sc. Nursing	– 69
General Nursing and Midwifery (GNM)/ Auxiliary Nursing and Midwifery (ANM)	– 40

The Institute currently offers occupational therapy to adults as well as child and adolescent in-patients with either acute psychiatric illness or severe and enduring mental health problems. About 50-60 male patients and 35 female patients attend OT daily. The department also has a well-equipped and modern physiotherapy unit. The OT department is also involved in training medical as well as non-medical professionals such as psychiatry residents, clinical psychologists, psychiatric social workers and psychiatric nurses in various aspects of occupational therapy and rehabilitation.

The Centre for Cognitive Neurosciences was originally established in 1948, when it was known as the Electroencephalography (EEG) Department. The EEG Department initially had a 6 channel and then an 8 channel electro encephalograph machine. It is now called the Centre for Cognitive Neurosciences.

The Centre has two sections - a clinical section and a research section. The clinical section possesses a 21 channel paper electroencephalogram, a 32 channel quantitative electroencephalogram and a 40 channel video electro encephalogram and other equipments. The research section possesses Dense Array EEG acquisition systems (64, 128 and 192 channels), Evoked Response Potential (ERP) acquisition units (40 channels), a 40 channel poly somnography (PSG) unit and a repetitive Transcranial Magnetic Stimulation (rTMS) unit. The Centre has acquired advanced signal processing software such as Advanced Source Analysis (ASA), Brain Electrical Source Analysis (BESA) etc.

The Centre also runs a weekly Epilepsy Clinic in the Out-patient Department of the Institute (Thursdays) and at Deepshikha, ICD&MH, Ranchi (Wednesdays). The Centre also carries out regular group therapies, public awareness programmes and rural camps at Ramkrishna Mission, Baripada and Pakur (Odisha) for case-identification and management. For more than a decade now, a self-help group for epilepsy patients has been running under the guidance of the Centre.

The Department of Pathology and Biochemistry was officially renamed as the S. D. Sharma Centre for Investigation Medicine in December 2011. The Centre is equipped to perform tests of clinical pathology, microbiology, bacteriology, biochemistry, serology and immunology. The Centre performs these tests for both clinical as well as research purposes.



*rTMS Session in Progress at the Centre for Cognitive Neurosciences*



*The Olympus Au400 Automated Biochemistry Analyzer*



*rTMS Session in Progress at the Centre for Cognitive Neuroscience*

### **Achievements in 2013**

- 210 bedded men hostel & 15 married resident flats have been added.
- 67 candidates were admitted for various courses conducted by the Institute in the session starting from 1st May, 2013.
- Installation of underground electric cables and development of lawns in the Institute has progressed apace.

- 308 Print Journals, 650 e-Journals have been subscribed and 6295 books have been purchased for the Central Library (1258 books in Hindi).
- Sixteen more CCTV cameras have been installed in the Ibn Sina Central Library.
- SAN System back-up storage server has been installed in the Central Library.
- Alitomatch Hematology analyser & Chamilusent analyser have been installed in the Deptt. of Pathology & Biochemistry.
- Neuro-Navigational system for rTMS has been installed for patients care services.
- Several latest software have been procured for the K. S. Mani Centre for Cognitive Neurosciences.

### Budget Provision for the Financial Years 2013-14

(Rs. in thousands)

Financial Year		Plan				Non-Plan			
		Budget Estimate	Revised Estimate	Final Estimate	Expenditure	Budget Estimate	Revised Estimate	Final Estimate	Expenditure
2012-13	Revenue	119000	119000	114600	114333	300000	290000	306476	306154
	Capital	338400	319000	159000	112400	--	--	--	--
<b>Total</b>		<b>457400</b>	<b>438000</b>	<b>273600</b>	<b>226733</b>	<b>300000</b>	<b>290000</b>	<b>306476</b>	<b>306154</b>
2013-14 (Up to Sep. 13)	Revenue	160000	--	--	81858	310000	--	--	169926
	Capital	340000	--	--	79500	--	--	--	--
<b>Total</b>		<b>500000</b>	<b>--</b>	<b>--</b>	<b>161358</b>	<b>310000</b>	<b>--</b>	<b>--</b>	<b>169926</b>

### 15.28 CENTRAL RESEARCH INSTITUTE (CRI), KASALI

Central Research Institute was established on 3rd May, 1905 as Pasteur Institute for North India. It is a subordinate office of Directorate General of Health Services, under the Ministry of Health & Family Welfare of India. Currently the institute is engaged in (i) large scale production on Bacterial and Viral vaccines & Sera. (ii) Research and Development in the field of immunology and vaccinology. (iii) Teaching and training. (iv) Quality Control of vaccine and Sera.

**Staff Strength:-** There are 725 sanctioned posts in CRI-Kasauli. The number of sanctioned posts of group A, B and C are 51, 86 and 588 respectively. The total staff in-position is 516. The staff in-position of group A, B, and C are 16, 76 and 424 respectively.

#### Performance during the Current Year:-

- Manufacturing of Diphtheria- Pertussis- Tetanus (DPT) group of vaccines has been started in existing facilities.

Details of batches started, quantity manufactured, demand received and quantity released are given.

**Production, Demand and Supply of the Vaccine and Anti-Sera**

(Quantity in Lakh of Doses)

S.No.	Vaccine & Anti-Sera	Installed Capacity	Production	% Produced	Demand	Supplies	% Supplied
1	DPT	255	28.99	11.37	158.50	29.00	18.30
2	DT	200	0.00	0.00			
3	TT	300	11.86	3.95	133.70	8.00	5.98
4.1	YFV(CRIK)	0.35					
4.2	YFV(IMPORT)		1.28		0.16	0.095	59.38
5	ARS	2.50	0.2279	9.12	0.26	0.26	100.00
6	ASVS	3.00	0.0662	2.21	0.14	0.09	63.80
7	DATS	0.80	0.0359	4.49	0.0040	0.0030	75.00
8	NHS	0.004	0.0036	0.00	0.000	0.000	
9	DR	2.75	0.3820	13.89	0.18	0.29	160.39

**Significant Achievements during the Current Year:-**

- Ministry of Health & Family Welfare has engaged M/s HLL for renovation and up-gradation of DPT facility at CRI, Kasauli to make it cGMP (Current Good Manufacturing Practice) compliant at an estimated cost of Rs. 49.83 Crores.
- DPT facility at CRI, Kasauli is updated. The civil work and installation qualification, NRA inspection and Validation of equipments and production process are completed. Documentation SOPs is in progress. Trial batches have been initiated in the diphtheria, pertussis and tetanus blocks.

**15.29 VALLABHBHAI PATEL CHEST INSTITUTE (VPCI), DELHI**

The Vallabhbhai Patel Chest Institute (VPCI) is a unique post graduate medical Teaching and Research institution devoted to the study of chest diseases and allied sciences. It is a University of Delhi maintained institution under ordinance XX (ii). The Institute is administered by a Governing Body constituted by the Executive Council of the University of Delhi and is funded entirely by Grants-in-Aid from the Ministry of Health and Family Welfare, Government of India. The Institute fulfils the national need for providing relief to

large number of patients in the community suffering from Respiratory Diseases. It has eminently discharged its role and has earned a unique place in the field of Chest Medicine.

**Aims and Objectives**

The main objectives of VPCI are to conduct research on basic and clinical aspects of Chest Medicine, to train post graduates (DM, MD, DTCD and Ph.D.) in Pulmonary Medicine and allied subjects, to develop new diagnostic technology and disseminate scientific knowledge related to Chest Medicine to other institutions in the country as well as neighboring SAARC countries and to provide specialized clinical and investigative services to patients.

**Media Achievements**

- The National Centre of Respiratory Allergy, Asthma and Immunology (NCRAAI) website ([www.ncraai.org](http://www.ncraai.org)) was launched.
- Dr. Anita Kotwani, Department of Pharmacology, Research work on antibiotic use in the community was quoted in India Today in the article, "Your antibiotic is sick", 18th March, 2013.
- Dr. Anita Kotwani, Department of Pharmacology, gave an interview to BBC Radio on "Antibiotic

Use, Resistance and Antibiotic Policy", on 20th March, 2013.

### Research

- The Institute has been identified and approved for the establishment of centralized Multi-disciplinary Research Unit (MRU) for promoting health research by the Govt. of NCT of Delhi. Under this scheme, the Department of Health Research (DHR), Ministry of Health and Family Welfare, Govt. of India under the aegis of the Indian Council of Medical Research (ICMR).
- The Research Cell was constituted to facilitate research activities and to organize and conduct CME's and other research oriented workshops in the institute.
- The Institute continued its research activities in Respiratory Diseases and allied sciences. These research projects were sponsored by different agencies of Government of India, World Health Organization, Asia-Pacific Alliance for the Control of Influenza, etc. Presently, 30 extramurally Research Projects are ongoing.

### Patient Management Services

The Viswanathan Chest Hospital (VCH), is the hospital wing of the Institute which provides the patient management services with the following facilities; Outpatient Department, Inpatient Facility with 128 beds, 24 hours Respiratory Emergency, 8 bedded Respiratory Intensive Care Unit (with 7 ventilators), Sleep Laboratory, National Centre of Respiratory Allergy, Asthma and Immunology (NCRAAI), Tobacco Cessation Clinic, Yoga Therapy and Research Centre, Cardio-pulmonary Rehabilitation Clinic, Picture Archiving and Communication Systems (PACS), Medical Records Section, Oxygen Plant.

During the year 2012-13 the VCH enrolled 10311 new patients, 52867 old patients. A total number of 3873 patients were admitted as Indoor cases. A total number of 15679 were provided 24 hours Respiratory Emergency Services and 492 patients were provided ventilator (invasive and non-invasive) treatment in ICU. Specialized investigations done were as follows: Pulmonary function tests: 18381, Arterial blood gases:

7443, Bronchoscopy: 212, Bronchoalveolar lavage: 33, CT scans: 2934, Ultrasound examinations: 236, X-rays: 21708, Electrocardiograms: 7912, Polysomnograms: 69, HIV testing: 350, Serum IgE tests: 3268, Skin tests: 1336, Clinical biochemistry: 39910.

### Post Graduate Teaching and Training

At present, 5 DM students (1 for the academic year: 2011-14 and two each for the academic year: 2012-15 & 2013-16), 23 MD students (8 for academic year 2011-14, 5 for academic year 2012-15 & 10 for academic year 2013-16) and 11 DTCD students (6 for academic year 2012-14 & 5 for academic year 2013-15) are pursuing their studies. In addition, a total number of 28 research scholars are pursuing their Ph.D. programmes.

Besides that, the Institute conducts various conferences/workshops/training programmes/public lecture series related to chest diseases and allied sciences to disseminate the knowledge to the doctors and general public of the society.

### Publications

The Institute has been publishing a quarterly periodical, The Indian Journal of Chest Diseases and Allied Sciences and continues its effort to disseminate the recent advances in Chest Diseases and allied sciences. It is available online at the website address; <<http://www.vpci.org.in>>.

Further, 80 research papers authored by Institute's faculty members were published in reputed national and international journals and book chapters during the year 2012-13.

Moreover, the Institute is also responsible for documentation and dissemination of research output through Annual Report and other publications of the institute.

The Institute's Website <[www.vpci.org.in](http://www.vpci.org.in)> which almost covers most of the activities of the Institute is an additional information tool for all the concerned public.

### Budget during the Year 2013-14

Plan	Rs. 16.94 crores (Budget Estimate)
Non Plan	Rs. 25.60 crores (Budget Estimate)

### 15.30 CENTRAL BUREAU OF HEALTH INTELLIGENCE (CBHI)

Central Bureau of Health Intelligence (CBHI), established in 1961, is the health intelligence wing of the Director General of Health Services in the Ministry of Health & Family Welfare, Government of India with the vision to have "A strong Health Management Information System in entire country". This national institution is headed by a SAG level medical officer with specialization in public health administration of Central Health Services (CHS), supported by officers from Indian Statistical Services as well as CHS and through its field survey and training units.

The Mission of CBHI is "To strengthen Health Information system in each of the district in the country up to facility level for evidence based decision making in the Health Sector"

#### The Objectives of CBHI are:

- To Collect, Analyze & disseminate Health Sector related data of the country for evidence based policy decisions, planning and research activities,
- To identify & disseminate innovative practices for Health Sector Reforms,
- To develop Human resource for scientifically maintaining medical records in both Government & private medical Institutes in India,
- To Carry Out Need Based Operational Research for Efficient implementation of Health Information System & use of Family of International Classifications in India,
- To sensitize & create a pool of Master Trainers in Health sector for implementation of Family of International Classification in India,
- To collaborate with National & International Institutes for imparting knowledge & skill development,
- To Collect & disseminate indicators for Health related Millennium Development Goals,
- To act as a resource centre for implementation of Electronic Health Record in India and
- To function as collaborating centre for WHO FIC in India & SEAR countries.

#### Organization:

- a) In Dte.GHS/Govt. of India, the CBHI headed by a Director has three divisions viz. (i) Policy, Training and Co-ordination, (ii) Information & Evaluation, and (iii) Administration.
- b) Six Health Information Field Survey Units (FSUs) of CBHI are located in different Regional Offices of Health and Family Welfare (ROHFW) of Govt. of India at Bengaluru, Bhopal, Bhubaneswar, Jaipur, Lucknow & Patna; each headed by a Dy. Director with Technical & Support staff, which functions under the supervision of Sr./Regional Director (Health & Family Welfare/Govt. of India).
- c) Regional Health Statistics Training Center (RHSTC) of CBHI at Mohali, Punjab (near Chandigarh), CBHI-FSUs and Medical Record Department & Training Centers (MRDTC) of Safdarjung Hospital New Delhi & JIPMER Puducherry; conduct various CBHI In-service Training Courses.

#### Major Activities of CBHI:

- CBHI collects primary as well as secondary data on various communicable and non-communicable diseases, human resource in health sector and health infrastructure from various Government Organizations/Departments to maintain and disseminate Health Statistics through its annual publication "National Health Profile" which highlights most of the relevant health information under 6 major indicators viz. Demographic, Socio-economic, Health Status, Health Finance, Health Infrastructure and Human Resources.
- CBHI collects the information on reform initiatives for Health Sector Policy Reform Option Database (HS-PROD). [[www.hsprodindia.nic.in](http://www.hsprodindia.nic.in)]
- Though States/UTs of India have reforms in the health sector, a lot of this goes unnoticed and hence not documented. Thus, Ministry of Health and Family Welfare/Govt. of India under its Sector Investment Programme (SIP) is funded by the European Commission, entrusted CBHI to develop and maintain HS-PROD. It is a web-enabled database that documents and further creates a

platform for sharing of information on good practices, innovations in health services management while also highlighting their failures that are very important for the success of NRHM. More than 250 such initiatives under 16 key management areas have been taken from a varied range of stakeholders like all the 35 State/UT governments, development partners, non-government organizations etc.

- Sense of ownership and pride is to be taken in an

effort like HS-PROD by all public health professionals.

### Millennium Development Goals

CBHI publishes a concise list of all MDGs and comprehensive list of Health related MDGs i.e. Goal-4 (Reduce Child Mortality) and Goal-5 (Improve Maternal Health) and Goal-6 (Combat HIV/AIDS, Malaria and Other Diseases) in its annual publication "National Health Profile".

### National Level In-service Training programme per year

S.No.	Name of the Training	Batch	Duration	Training Centre
1.	Medical Record Officer	2 (at each training centre)	6 months	1. Medical Record Deptt. & T.C. at Safdarjung Hospital in New Delhi 2. JIPMER, Puducherry
2.	Medical Record Technician	2 (at each training centre)	6 months	1. Medical Record Department & T.C. at Safdarjung Hospital in New Delhi 2. JIPMER, Puducherry

With a view to Capacity Building & Operation Research for Efficient Health Information System (HIS) including Family of International Classification (ICD-10 & ICF) use in India and South East Asia Region, CBHI is

conducting National Level training course on Master trainers on ICD-10 & ICF at RHSTC at Mohali, Chandigarh. It is also organizing sensitization workshop on ICD-10 & ICF in big Govt./Private Hospitals.

S.No.	Name of Training	Batches/ year	Training Duration	Training Centre
1.	Training Course on Master Trainers On (ICD-10 & ICF)	2	5 days	RHSTC Mohali
2.	Orientation training course on Health Information Management (For Officers)	14	5 days	RHSTC Mohali & 6 FSUs
3.	Orientation training course on Health Information Management (For non medical personnel)	14	5 days	RHSTC Mohali & 6 FSUs
4.	Orientation training course on Family of International classification (ICD-10 & ICF) (For Non-Medical Personnel)	14	5 days	RHSTC Mohali & 6 FSUs
5.	Orientation training course on Medical Record & Information Management for Non-Medical Personnel	7	5 days	RHSTC Mohali & 6 FSUs

On regular basis, 48 batches of Training Courses covering more than 960 candidates are held every year. In addition, special batches of National/International Training Courses are conducted on request of States/UTs & various organizations like IRDA, WHO etc.

Training Calendar, Eligibility Criteria, Guidelines and Application Forms for all the above courses can be downloaded from the CBHI website: [www.cbhidghs.nic.in](http://www.cbhidghs.nic.in)

During 2013-14 (up to 31.10.2013), 401 personnel from all over the country have been trained in various in-service training courses viz. Medical Record Officer, Medical Record Technician, Health Information Management for Officers, Health Information Management for Non-medical Personnel, Family of International Classification (ICD-10 & ICF) for Non-medical Personnel, Master Trainers on Family of International Classification (ICD-10 & ICF) and Medical Records and Information Management through CBHI Training Centres and 16 batches of trainings are still to be conducted up to 31st March, 2014. In 2013-14, 40 batches of in-service training courses are expected to train more than 800 functionaries.

### Operational Research & Reviews

CBHI (Hqrs) and its six FSUs located in Regional Offices of Health & Family Welfare/Govt. of India at Bengaluru Bhubaneswar, Bhopal, Jaipur, Lucknow and Patna help CBHI in getting the validated health information from States/UTs and facilitate in capacity building of health care delivery functionaries as well as operational research keeping in view the objectives of CBHI. The CBHI regularly undertakes half yearly meetings to review functioning of all the FSUs and Training Centres. During 2013-14, 19th half yearly review meeting was held during 8-9 July 2013 at FSU, Bengaluru and 20th such meeting is tentatively to be organised by MRD, SJ Hospital, New Delhi during February, 2014.

CBHI is playing an important role for implementation of Electronic Health Record in India. It is identified as Resource Centre for implementing and maintaining the licensing of SNOMED CT in the country.

CBHI as WHO Collaborating Centre on Family of International Classification (FIC) for disease, mortality,

morbidity and related health aspects function at disabilities as well as health interventions (ICD, ICF & ICHI) in India.

CBHI with due approval by the Ministry of Health & Family Welfare (Govt. of India) has been functioning as "WHO Collaborating Centre on Family of International Classifications (ICD-10, ICF & ICHI)" w.e.f. September, 2008 for coding morbidities, mortality, related health aspects, function and disabilities in India, while closely, linking with South East Asian Asia Pacific regional network on FIC and its main functions.

### CBHI as WHO Collaborating Centre on Family of International Classifications (ICD-10 & ICF) in India are to:

- (1) To promote the development & use of the WHO Family of International Classifications (WHO-FIC) including the International Statistical Classification of Diseases and Related Health Problems (ICD), the International Classification of Functioning (ICF), Disability and Health and other derived and related classifications and to contribute to their implementation and improvement in the light of the empirical experience by multiple parties as a common language.
- (2) Contribute to the development of methodologies for the use of the WHO-FIC to facilitate the measurement of health States, interventions and outcomes on a sufficiently consistent and reliable basis to permit comparisons within and between countries at the same point in time by:
  - Supporting the work of the various committees and work groups established to assist WHO in the development, testing, implementation, use, improvement, updating and revision of the member components of the WHO-FIC.
  - Studying aspects related to the structure, interpretation and application of contents those concerning taxonomy, linguistics, terminologies and nomenclatures.
  - Participating in the quality assurance procedures of the WHO-FIC classifications regarding norms of use, training and data collection and application rules.



- (3) Networking with current and potential users of the WHO-FIC and act as reference centre by:
- Assisting WHO Headquarters and the Regional Offices in the preparation of member components of the WHO-FIC and other relevant materials.
  - Participating actively in updating and revising the member components of the WHO-FIC.
  - Providing support to existing and potential users of the WHO-FIC and of the data derived in India and SEARO Region. Linkage will also be made with other countries of Asian Pacific Region for seeking status on FIC implementation.
- (4) Work in at least one related and/or derived area of the WHO-FIC: Specialty- based adaptations, primary care adaptations, interventions/procedures, injury classification (ICECI).

#### Maintenance of three Web Sites

CBHI with the assistance of NIC has recently redesigned & reformatted its three websites viz. (i) [www.cbhidghs.nic.in](http://www.cbhidghs.nic.in) (ii) [www.hsprodindia.nic.in](http://www.hsprodindia.nic.in) (iii) [www.cbhighf.nic.in](http://www.cbhighf.nic.in), for online data transmission and public viewing.

#### Major Publications of CBHI during 2013:

- National Health Profile (NHP) 2012
- National Health Profile (NHP) 2013 is in the final stage of publication

#### CBHI - On Line Data Entry System through website [www.cbhidghs.nic.in](http://www.cbhidghs.nic.in)

State/UT Health and Family Welfare Directorates are responsible for punctually and regularly furnishing the (i) Monthly Communicable Diseases (ii) Monthly Non-Communicable Diseases and (iii) Annual Data on Medical/Nursing/Para-Medical education & infrastructure in the prescribed formats to CBHI/Dte.GHS. Based on this information from all the States/UTs and other reporting agencies, provide up-to-date data related to morbidity & medical/health infrastructure for framing reply to the Parliament Questions. CBHI also brings out annual publication "National Health Profile" which serves as National Reference Document

for policy, planning and evaluation now of health related activities in the country. The above requisite health information are being sent by the States/UTs On-line through CBHI website [www.cbhidghs.nic.in](http://www.cbhidghs.nic.in).

#### CBHI Linkages and Coordination:

1. All 35 States/UTs of India;
2. All 20 Regional Offices of Health & Family Welfare of Govt. of India;
3. National Rural Health Mission (NRHM) and National Health Programmes in India;
4. Medical, Nursing & Paramedical Councils & Educational Institutions;
5. Public Health/Medical Care Organizations and Research Institutions under Department of Health Research including ICMR and various other Ministries;
6. Census Commissioner & Registrar General of India;
7. Planning Commission, Government of India;
8. Union M/o Statistics & Programme Implementation;
9. Union Ministries of Railways, Labour, HRD, Rural Development, Communication & Information Technology, Shipping Road Transport & Highways, Home Affairs, Defence, Social Justice & Empowerment etc.;
10. Non-Government Organizations in Health & related sectors in India;
11. WHO and other UN Agencies Concerned with Health and Socio-economic Development and
12. All the WHO-Collaborating Centres on Family of International Classification (FIC) in the world, Asia Pacific Network on FIC and countries of South East Asia Region of WHO.

#### Budget

CBHI, under the budget head "Health Information and Monitoring System" has been allocated an amount of Rs. 1.15 crores (Rs. one crore 15 lacs only) during the financial year 2013-14 in the plan budget.

### 15.31 NORTH EASTERN INDIRA GANDHI REGIONAL INSTITUTE OF HEALTH AND MEDICAL SCIENCES (NEIGRIHMS), SHILLONG

NEIGRIHMS is a super specialty teaching institute under the Ministry of Health & Family Welfare established in 1987 under the Meghalaya Regulation of societies Act 1983.

The objective of the institutes to provide advanced and specialized medical facilities of the highest level in the selected specialties and to serve as a regional referral service centre for comprehensive health care. The Institute is also conducting both the Post Graduate and Under Graduate courses in medical sciences. The B.Sc. Nursing programmed started by the Institute is the first technical graduate programme in the State of Meghalaya.

The Institute at present is having 467 beds. The number of beds will be increased to 500 with opening of new Department. The institute at present is offering super specialty services in Cardiology, Neurology, CTVS, Urology and Gynaecology, ENT, Orthopaedics and Ophthalmology. These Departments are very well supported by the Department of Radiology, Anaesthesiology, Pathology Microbiology, Forensic Medicine and Biochemistry.

#### MD/MS Programme in NEIGRIHMS

The Ministry of Health & Family Welfare has approved starting of MD/MS course in four disciplines i.e. Anaesthesiology, Obstetrics & Gynaecology Pathology and Microbiology with two seats in each respective Department. The MD/MS courses in these Department has started in the current academic year.

A sum of Rs. 106.25 crore has been released to NEIGRIHMS during the year 2013-14.

#### The major projects of NEIGRIHMS are as under:

- i) Expansion of Nursing College and Hostel at a total cost of Rs. 61.89 crore was approved by the Standing Finance Committee (SFC) in its meeting held on 30-10-2013 under the chairmanship of Secretary (H&FW) and also approved by Hon'ble HFM. Administrative approval of the Competent Authority (HFM) has been conveyed

to NEIGRIHMS on 16-01-2014. The institute has already initiated the process.

- ii) Two EFC proposals that is (i) Establishment of Under Graduate Medical College with Hostel and (ii) Setting up of Regional Cancer Centre at an estimated cost of Rs. 377.16 crore is under pipeline.

### 15.32 NATIONAL INSTITUTE OF BIOLOGICALS (NIB), NOIDA

The National Institute of Biologicals (NIB) has been performing Quality Evaluation of Biological and Biotherapeutic products including Albumin, Normal and Specific Immunoglobulin, Coagulation Factors VIII, Insulin and its Analogues, Erythropoietin, Granulocyte Colony Stimulating Factor (G-CSF), Streptokinase, Immunodiagnostic Kits (HIV, HCV, HBsAg), Blood Grouping Reagents and Glucose Test Strips in its various state-of-the-art Laboratories and Animal House by following various National/International pharmacopoeias. The Institute has performed Quality Evaluation of 1516 batches of 96 types of various biologicals during the year 2012-13.

Efforts have been initiated to establish a laboratory for evaluation of high profile novel drugs like Therapeutic Monoclonal Antibodies which are used for Hematological, immunological and oncological disorders. In this regard, standardization and validation of Rituximab has been taken up. Interferons are under process of validation. Testing of Glucose Test Strips, which are commonly used for measuring sugar level particularly in human beings suffering from the diabetes, has been fully taken up. Nucleic Acid Testing (NAT) laboratory has done evaluation of 9 kits used for monitoring of viral load in the patients. DNA sequencing of Five Isolates of HBV has been done.

Standardization and Validation of Viral Vaccines like CCRV, MMR vaccine, Live Attenuated Measles Vaccine, Rubella Vaccine, JE Vaccine, HPV Vaccine, HBIG, HRIg and Bacterial Vaccines like BCG, HibTT, Meningococcal Polysaccharide Quadrivalent, Typhoid Vi Polysaccharide are going on.

As an on-going exercise, the Institute is supplying National Reference Standard of Insulin and Reference Sera Panel of HIV, HCV, HBsAg to the indigenous

manufacturers as and when required. The Institute has successfully participated in External Quality Assurance Programme of HIV, HBsAg, HCV and Syphilis with National Reference Laboratory, Australia. Successful participation is achieved in Proficiency Testing of Protein conducted by European Directorate of Quality Medicine, France. Institute is also regularly participating in EQAS of Glucose Testing at Christian Medical College (CMC), Vellore, India.

With regard to additional manpower, the Institute has deployed 117 staff on contract basis after approval of the Ministry. A separate proposal has also been submitted for creation of 43 regular posts and same is under active consideration of Ministry.

Haemovigilance Programme has been initiated by the Institute to report Adverse Drugs Reactions (ADR) caused due to administration of blood and blood products in the country. 90 Medical Colleges has been enrolled for this programme.

#### Budget:

The funds of the Institute are received as Grant-in-aid from the Ministry of Health & Family Welfare. The B.E. & R.E. of the Institute are as under:

(Rs. in crores)

Year	B.E.	R.E.	Expenditure
2011-12	17.80	14.40	13.95
2012-13	17.00	19.50	19.21
2013-14	25.00*	27.00	11.02**

\* Proposed

\*\* Upto September, 2013

### 15.33 BCG VACCINE LABORATORY, GUINDY

The BCG Vaccine Laboratory, Guindy, Chennai was established in 1948. The major activities of the Institute are:

- Production of BCG Vaccine (10 doses per vial) for control of childhood Tuberculosis and supply to Expanded Programme of Immunization (EPI).
- Production of BCG Therapeutic (40 mg.) for use in Chemotherapy of Carcinoma Urinary Bladder.

#### Staff Strength

- There are 113 sanctioned posts in BCG VL, Guindy. The number of sanctioned posts of group A, B, and C are 3, 13 and 97 respectively.

#### Performance of BCG VI (Production, Demand & Supply)

S. No.	Particulars	Quantity
1	Installed capacity per annum	800 lakh doses
2	Quantity manufactured	87.50 lakh doses
3	Quantity of demand received	87.50 lakh doses
4	Quantity of Supply Released	81.00 lakh doses

#### Significant Achievements

Ministry has engaged M/s HLL as Project Consultant for BCGVL revival project with a cost of Rs. 64.72 crores. Chennai Metropolitan Development Authority and Chennai Corporation has approved building plan and construction work for upgradation is in advanced stage. Till the new plant is commissioned, production of vaccine will continue from the old building with existing facilities. After completion of new facility, the production will be shifted to new facility and the existing infrastructure will be used for allied facilities. After validation of trial batches of BCG Vaccine from the new facility, the production would start in 2014.

### 15.34 ALL INDIA INSTITUTE OF HYGIENE & PUBLIC HEALTH (AIH&PH), KOLKATA

The All India Institute of Hygiene & Public Health (AIH&PH), Kolkata, is the oldest public health institute in the South-East Asia region, which was established in the year 1932. It is devoted to teaching, training and research in various disciplines of public health and allied science.

#### Vision, Mission & Objective

**Vision:** Capacity Building for Excellence in Public Health.

#### Mission

- To develop competent public health work force through best practices in public health teaching and training.

- To ensure universal coverage through primary healthcare in the field practice areas.
- To develop innovative approaches to strengthen public health services.
- To develop best quality of infrastructure to create conducive environment of learning.
- To develop and strengthen collaboration and networking at local, national and international levels.
- To offer technical expertise and leadership to improve public health.

### Objective

1. To develop manpower by providing post graduate teaching and other training in the area of health services.
2. To conduct research directed towards the solution of various problems of health and diseases in the community.

### Institutional set up

The Institute has two campuses at Kolkata. The main campus is at 110, Chittaranjan Avenue, Kolkata-700073 and the second campus is at Bidhan Nagar (JC Block, Sector-III, Salt Lake) Kolkata. There are eleven academic Departments. Besides these, the Institute also has two field practice units, one in the rural area (Rural Health Unit & Training Center, Singur, District-Hooghly) and the other in urban area (Urban Health Centre, Chetla, Kolkata) which provide hands-on-training to the students on rural and urban health problems respectively. These field practice units are utilized for community based training for other health institutes also for their field training programmes. The Institute Library is one of the few reference libraries on health sciences in the country.

### Teaching and Training Activities

The Institute has been providing teaching and training in various disciplines of public health through its regular and short term training programmes. Details of various courses run by the Institute are given below:

Sl.No.	Department	Course
1	Preventive & Social Medicine (PSM)	MD (Community Medicine)
2	Sanitary Engineering	Short courses
3	Microbiology	Master of Veterinary Public Health
4	Epidemiology	<ul style="list-style-type: none"> <li>● Master of Public Health (MPH) in Epidemiology</li> <li>● Post-graduate Diploma in Public Health Management. (PGDPHM)</li> </ul>
5	Biochemistry & Nutrition	<ul style="list-style-type: none"> <li>● M.Sc. in Applied Nutrition.</li> <li>● Diploma in Dietetics (Dip. Diet)</li> </ul>
6	Public Health Administration	Diploma in Public Health (DPH)
7	Maternity and Child Health	Diploma in Maternity & Child Welfare (DMCW)
8	Occupational Health	Diploma in Industrial Health (DIH)
9	Department of Health Promotion & Education	Diploma in Health Education (DHE)
10	Statistics	Short Courses & Assistance to other courses
11	Public Health Nursing	Short Courses

### Short Term Training Programme during the year 2013-14

- Training course on “Calcium Metabolism and Bone Health” for Medical Officers, Nursing Personnel and PG Students of the institute;
- Training programme for M.Sc. Nursing (Community Health);
- Short duration courses on Basic and Health Statistics;
- Computer applications in health data analysis using packages like SPSS, Epi Info. etc.;
- Two week FETP(IDSR) for the state surveillance Officer of Sikkim, Nagaland, Mizoram, Tripura and West Bengal and
- In service training on AFP & Measles Surveillance & IPPI Reorientation Training.

### Research activities, other training and seminars

- Seminars of different topic of "Zoonoses" are held regularly;
- UGC sponsored National Seminar on "100 years for the Hypothesis of Vitamin Deficiency Diseases" was organized by Biochemistry and Nutrition Department, AIIH & PH in collaboration with Dept. of Food and Nutrition, Prasanta Chandra Mahalanobis Mahavidyalaya at Kolkata on 25th and 26th September 2013;
- An epidemiological study of Chronic Obstructive Pulmonary Diseases (COPD) in an urban slum area of Kolkata;
- Cross sectional study of association of adverse perinatal outcome with indoor air pollution and parental occupation;
- Study on occupational stress and hazard of EMU local train drivers in Eastern Railway;
- Community based research works/projects on MCH/RCH and related fields sponsored by ICMR;
- Seminar on National programme of prevention and control of diabetes, cardiovascular disease and stroke (NPDS) & mid-day meal programme-current status, critical review;
- Seminar on Management of biomedical waste and hospital acquired Infections;

- Seminar on WHO multicentre growth reference study and new WHO growth curves for assessing growth & development;
- Seminar on Public-Private partnership in health care system in India;
- This Institute provided consultancy to other organization in the area of Public health services like professional development course of IISW&BM, Kolkata; M. Sc. Nursing, Asia Heart Foundation; Training Course on RCH, ATI, Kolkata etc.;
- The 100th Science Congress-Medical Seminars/ Poster Sessions round the clock Medical Unit was set up in the Campus and
- Regional Training of Senior Level Medical Officer of Central Government Health Scheme.

### Monitoring of NRHM, West Bengal

The Implementation of NRHM in West Bengal is monitored on quarterly basis as per the Ministry's instruction. This year four districts have been covered. The monitoring team submits the analytical reports and suggestions for improvement to the State Government and the Ministry. It provides supportive supervision to the state health system by actually showing as to how the gaps in the system may be removed (like documentation, HMIS, Financial aspects etc). This has led to improvement in grievance redressal system, documentation, mode of JSY payment, IEC etc.

### Other important activities undertaken during the year

- EMR duties attended by the officials of this Institute in the State of Uttarakhand and Odisha.
- Yellow Fever Vaccination was given to 780 persons by the department. 1070 and 530 doses were supplied to Port Health Organization and Airport Health Organization respectively
- 244 water samples were tested for portability of which 55 were not found fit for human consumption. 153 & 122 samples were processed in the section of Bacteriology & Parasitology respectively.

- Health care services in RHU&TC service area is being provided by two Union Health Centres (UHC) through OPD, Indoor and Field Services. General OPD & MCH clinic run by Medical Officers at Nasibpur UHC, Anandanagar UHC and Paltagarh Sub centre, Nasibpur, Balitipa sub-centres. Immunization sessions are conducted at all sub centers. DOTS for TB patients are also provided. Health care services are also supported by Public Health Laboratory, Bio-chemistry Laboratory and Sanitary Engineering Workshop at RHUTC, Singur.
- The Urban Health Centre (UHC, Chetla) covers an area of 3.9 Sq. Km. with population of 1.2 lakh comprising of a slum population around 35,000. The centre also provides primary health care services for the beneficiaries and specialist clinic services on MCH, Gynecology & Obstetrics, Skins & VD, Occupational Health, RNTCP, NCD, School Health, Nutrition & Public Health Laboratory Services.

#### Implementation of official language and policy

- As part of implementation of official language policy, Hindi Cell of the Institute organized Hindi workshops in the Institute. Hindi Pakhawara was also organized for the officers and other staff members in the month of September, 2013.

#### Right to Information

The Institute has received a total number of 61 RTI applications during the year 2013.

#### Budget allocation (2013-14)

Details of the budget allocated for the financial year 2013-14 are given below:

Plan	Non-plan	Total
17.60 crore	33.85 crore	51.45 crore

### 15.35 CENTRAL LEPROSY TEACHING AND RESEARCH INSTITUTE (CLTRI), CHENGALPATTU

The Central Leprosy Teaching and Research Institute (CLT&RI), Chengalpattu was initially established in

1955 by the Government of India under a Governing body by taking over Lady Wellington Leprosy Sanatorium established in 1924. Later, in 1974, Govt. of India had made CLT&RI as a subordinate office of Directorate General of Health Services, Ministry of Health & Family Welfare with an objective to provide diagnostic, treatment and referral services to leprosy patients, trained manpower development for leprosy, control/elimination, research on applied aspects of leprosy and its control.

#### Objectives

- To undertake research in basic problems relating to the occurrence and spread and complication of leprosy.
- To train manpower necessary to implement National Leprosy Eradication Programme (NLEP).
- To provide specialized services for diagnosis of leprosy, reaction, relapse and Reconstructive Surgery (RCS).
- To Monitor and Evaluate NLEP.
- To function as a pivotal center for promoting anti leprosy work in the country.

#### Clinical Division

It comprises of five wards and OPD, Nursing section, Sanitary Section and Central Kitchen. Hospital has Investigation ward, Main hospital, Sick room and women hospital. It is mainly used for expertise management of lepra-reactions, investigation for relapses/ drug resistance and for other general's medical conditions, management of lepra reactions by using Thalidomide in special situations.

#### Patient care facilities provided in the Clinical Division are:

- Out-patients care/Inpatient treatment and MDT services.
- Expert Management of Lepra reactions, relapses/ drug resistance etc.
- Training activities & Research activity.
- Study of relapse and lepra reactions cases in Leprosy.

**In-patients services**

Total patients treated	8452
Total Discharges	0677
Patients remains at the end of the year	074
No. of Deaths	003

**Out -patients services**

Total No. of New case of Leprosy	089
Total patients treated	8690

**Surgical Division**

The Surgical Division comprises the Operation Theater for RCS, Physiotherapy section, Artificial limbs and Footwear section, X-Ray Section and Micro-Cellular Rubber (MCR) sheets manufacturing unit. The functions are:

- Reconstructive Surgery (RCS), DPMR activity.
- Support in Training Programmes.
- Camp based RCS Surgery in Tamil Nadu.

**Patient care Activities**

This division provides treatment in the areas of deformities and deformity prone conditions are extended. Prevention disability and correction of deformity is main objective.

**Reconstructive Surgery:** Major Surgeries 16 and Minor Surgeries 17.

**Physiotherapy Section**

It provide Physio services and counseling of patients by imparting health education in the care of insensitive hands and feet and support training activity and nodal in Physiotherapy Technician Training.

**Micro Cellular Rubber (MCR) Mill**

The Micro-Cellular Rubber Mill is a small production unit manufacturing MCR sheets of the quantity needed for use in the manufacturing of footwear for leprosy patients. Quality Assurance of MCR Production has been initiated at 2012. Installation of Dispersions Kneader to the production capacity with help of Central

Leather Research Institute, Chennai . We are providing MCR sheets to various State Leprosy Society.

MCR Sheet Production	790/year
MCR Footwear Produced	850pairs/year

**Division of Laboratories**

It has Microbiology, Myco-bacteriology, Serology and Clinical Pathology, Skin Smera, Histopathology, Molecular-biology Hematology Biochemsitry, Immunology and Animal House. This division has been upgraded with the basic facilities for the isolation of DNA, PCR amplification and Gel documentation. Animal House with different animal colonies with provisions for animal experimental investigations including Mouse Foot Pad (MFP) inoculation for the viability and drug susceptibility tests for M. leprae is also available.

**Annual performance of Laboratory Division**

Clinical Pathology & Skin Smear	1294
Hematology & Serology	3741
Bacteriology	0148

**15.36 REGIONAL LEPROSY TRAINING AND RESEARCH INSTITUTE (RLTRI), RAIPUR**

Regional Leprosy Training and Research Institute (RLTRI), Raipur established in the year 1979 with the aim to provide training, research and treatment for the leprosy affected persons under administrative control of Central Leprosy Division of DGHS.

The Institute is having 75 beded indoor patient services and is daily OPD services. It is also having well equipped Laboratory and well trained technical manpower in the laboratory for skin smear examination and other laboratory investigation. Institute also carry out Polio Surgery in the hospital. RLTRI also provide technical guidance as and when required.

Institute organize following Training Programmes routinely in the filed of leprosy.

- National Level SLO/DLO/BMO Training(1 week duration)

- BPT Interns training (1 week duration)
- Final year MBBS students orientation training in Leprosy (1 day)
- Physiotherapist Training(1 week)
- Skin Smear Technician Training (1 week)

RLTRI has been assigned additional responsibilities of Regional Office of Health and Family welfare (ROHFW) for the State of Chhattisgarh to monitor various National Health Programmes including NLEP at State and District level and cross checking of beneficiaries like JSY, immunization status of children, ANC/PNC follow up, eligible couple using different contraceptive methods, work of ASHA (Mitani) at different level.

### RLTRI Activity

#### OPD Services

New Leprosy Cases detected	732
No. of MB cases in newly detected cases	435
No. of PB cases in newly detected cases	297
No. of old cases provided treatment	3661

#### IPD Services

No. of patients admitted for RCS & Physiotherapy	191
No. of patients admitted having Ulcers	170
No of patients admitted having ENL reaction	174
Total No. of patients admitted in the wards	553

#### Lab services

No. of Microbiological investigation undertaken	1818
No. of clinical pathological investigation undertaken	1245
No. of bio-chemical investigation	362
Total No. of investigation done	3425

#### Physiotherapy Services

No. of patients given wax bath therapy	63
No. of patients given oil message, hydro-oiling therapy	233
No. of patients given Active & Passive Exercise	652
No. of patients given Electric Vibrator massage	3

No of patient given short wave diathermy	1
No. of patient given I.R.	6
Others	34
Total No. of patients provided Physiotherapy	992

#### Training Conducted

National level DLO /BMO/MO Training imparted to Medical College students	4 batches	32 Nos
Training imparted to BPT Intern students	5 batches	80 Nos
Training of Physiotherapist	16 batches	53Nos
	1 batch	6 Nos

#### Reconstructive Surgery for Leprosy patients

No. of surgeries conducted at RLTRI	52
No. of surgeries conducted outside RLTRI (at district level)	64

#### Surgery for Polio Cases

No. of Polio Surgery conducted at RLTRI	25
No. of procedures	36

#### Special Activities under RLTRI

**Technical supervision of NLEP activities in the ten districts:** During the year ten districts were covered for assessment of the NLEP programmes.

Sl No.	District	DHs	CHCs	PHCs	HSCs	Total
1	Bilaspur	1	3	3	3	10
2	Jashpur	1	3	3	3	10
3	Korea	1	3	3	3	10
4.	Korba	1	2	2	3	8
5	Durg(Divided)	1	4	4	6	16
6	Bemetara	1	2	4	4	11
7.	Dhamtari	1	4	4	5	14
8.	Rajnandgaon	1	3	3	3	10
9.	Mahasamund	1	4	3	5	13
10.	Kawardha	1	3	3	3	10
	<b>Total</b>	<b>10</b>	<b>32</b>	<b>32</b>	<b>38</b>	<b>112</b>



## Research/Project Activities in NLEP

ICMR sponsored extramural project-A study on endemicity of leprosy and utilization of health services in two districts of Chhattisgarh i.e. Mahasamud and Sarguja.

Under the project samples were collected from patients of selected villages and also collected environmental samples (water and soil) also by the team of this Institute and sent to JALM, Agra for further investigation.

### 15.37 REGIONAL LEPROSY TRAINING AND RESEARCH INSTITUTE, ASKA

This institute was established in the year 1977. At present there is 38 (Gr.A-2, Gr.C-22, Gr.C(MTS)-14) staff in position out of 67 sanctioned posts. It has a 50 bedded hospital and average bed occupancy is about 43.3%. The institute provides both Out-door and In-door services to leprosy patients. The institute also works as a referral center for management difficult to diagnose leprosy cases, Skin smear examination and problematic, complicated and intractable cases of reaction and ulcers. Thalidomide is also given to intractable recurrent ENL reaction cases. Physiotherapy measures and MCR chappal are provided to the needy patients. Amputation and various others surgical procedures are carried out regularly and RCS (Reconstructive Surgery) camps have been done in the past.

It also works as a nodal training and research center for the cause of leprosy elimination.

#### Brief activities performed by the Institution

- OPD Attendance-1604(Leprosy-1211, Non Leprosy-393)
- Indoor-Total admission-209
- Reaction cases Managed-80 (In 348 episodes of reaction Type I-302 & Type II-48 in 80 patients) and Thalidomide course was given to 2 patients of recurrent ENL Reactions.
- Major surgeries-29
- Lab- Total Inv-628(Clinical-242 Bio-Chem-07)
- Training-Faculty of this institute is going as resource person to impact modular training in NLEP to doctors and paramedical staffs of State.

A total of 108 MOs and 35 AYUSH MOs of different district of Odisha trained in 3 days modular training in 5 batches organized by Govt. of Odisha. Faculty of this institute also participates in NLEP review and planning meeting of States and monitoring of NLEP activities of different district of allotted States.

### 15.38 REGIONAL LEPROSY TRAINING AND RESEARCH INSTITUTE, GOURIPUR

Regional Leprosy Training and Research Institute, Gouripur, Bankura, in short RLTRI, Gouripur, a 50 bedded leprosy hospital under Central Leprosy Division of Ministry of Health and Family Welfare has been set up by Govt. of India in 1984 with the aims & objectives of (a) creation of sufficient trained man-power for better implementation of NLEP in different Indian States, especially, the north-eastern zone states to eradicate leprosy and for (b) operational research on leprosy. The institute is located at a village named Gouripur which is well connected with the district town Bankura and the neighbouring Jharkhand State by roads and rails.

In the changing scenario of NLEP management, presently the institute has been conducting 'Training of Trainers'(TOT) course for senior officers (DLOs & BMOs) on leprosy throughout the year, catering OPD services 3 days a week and running an indoor ward of 30 beds for ulcer care and reaction management of leprosy patients. For diagnosis of difficult cases and to provide quality care to deformed/complicated leprosy cases, the institute runs one laboratory unit, one X-ray unit & one physiotherapy unit. In addition, there is one field unit that carries out IEC activities regularly throughout the year in its' field area covering 300000 population to increase voluntary case reporting for early case detection and prevention of deformity. A significant numbers (45%) of OPD patients of RLTRI, Gouripur, belongs to SC/ST categories of people because of dominance of habitation in the area.

Apart from TOT programme, the institute is having an excellent atmosphere for carrying out of short course training programme on leprosy for Para/Non-Medical personnel. Last but not the least, the institute can be an ideal place for epidemiological studies considering its' location and resources.

Performance report up to 31st October, 2013 during the year 2013-14 is as detailed below:

- **Training** - TOT Programmes -2 nos. (11 + 11 = 22 nos.) Candidates attended in two TOT programmes. In addition, one day orientation Training imparted to 50 nos. of B.Sc. Nursing Students.
- **Indoor** - Admission -122 nos., Discharge -126 nos.
- **O.P.D.** - New Case- 40 Nos., Old Cases -1565, MDT given-252 no, RFT-04 nos., Relapse -5 nos.
- **Field/IEC activities**- Group Discussion-251, Leaflet Distribution-1754 nos., IEC Programme-50, Villages covered-50 nos.
- **Laboratory Unit**- Slit Skin Smear-585 nos., Bio-chemistry-184 nos., Clinical Pathology-111.
- **Physio. Unit**- Plaster-14 nos., Exercise-1231, Muscle stimulation-395, Wax Therapy-146, Infra Ray-78.
- **Special Activity**- Dr. B. C. Mandal, Director has composed and published a book entitled-"ANTARDEEPAN" during the year on health awareness including leprosy and on other social issues of national interest for the mass awareness.

### 15.39 NATIONAL MEDICAL LIBRARY (NML), NEW DELHI

National Medical Library (NML) provide valuable library information services to support the academic, research and clinical work Health science professionals in the country. It occupies important position in country's health care information delivery system. Some of the significant services provided by NML are:

#### Activities and Services

**Reference Services & Collection Building:** One of the greatest strengths of NML is its richest collection of books, reports, serials, bound volumes of journals and computer databases. This invaluable treasure of biomedical and health science information, which is often the only source, is widely used by professionals from all parts of the country. It has collection of over 1.35 lakhs books and over 5.2 lakhs bound journals. The Library subscribed 1524 (Titles) print journals worth Rs. 16.04 crore in 2012-2013. The books and journals

acquired during the year have been classified and catalogued by using LIBSYS library software package.

**Local Area Network (LAN) and Online Public Access Catalogue (OPAC):** Servers and computers in the library are networked to form a LAN having an integrated Library Management Software Package-LIBSYS. About 41,350 records of books are now available through OPAC computer search by library users. Leased lines of (2 mbps) and broad band internet facility is available to provide internet services including access to full-text of the journals.

**Information Retrieval Services:** NML has been offering the service using MEDLINE since 1990. Besides, it has about 500 CDs on different subjects. The biomedical information sources available on Internet, namely PUBMED, PUBMED Central, ERMED etc. were also accessed to meet the requirement of library users. Many articles were searched through MEDLINE service for getting references and abstracts for research scholars during the year. A work station having the facility of 10 terminals fitted with CD writer is being developed for on-line access of foreign medical journals. Scheme to "Inter-linking of Government Medical College Libraries with the NML".

Government colleges are provided with financial assistance to acquire hardware, software, Internet connectivity and to hire contractual staff. This scheme has already covered 78 medical college libraries. The project aims to develop information communication technology capability among the participating colleges to be able to access the online information resources available in NML.

**Reference and Documentation Services:** The library remains open on 359 days of the year from 0900 - 2000 hrs on weekdays and from 0930 - 1800 hrs on holidays. Over 150 users visit the library every day for reference, consultation, obtaining photocopies of required articles and information retrieval service. Library has been visited by information seekers to avail following services:

- Queries answered 1276
- New Membership 45
- Issue/return of documents 233
- Inter Library loan (Print documents) 08

Library developed database of over 6000 medical thesis/dissertation submitted to medical colleges across the country. The same is available at < Search Medthes> at www.nml.nic.in. The library also developed a database of over 4000 medical articles published in Indian Medical journals in the country in MARC21 software under the "**Index Medicus-India**" project. The library also developed the database of over 6000 medical thesis submitted to different medical colleges across the country. The database is widely used through the NML website. Library brings out a quarterly List of New books Added to NML. It is also bringing out a weekly "**Indian Press Index on Health**" which covers important press release on topics related to health science in prominent Indian newspapers.

**Document Delivery Service:** The Document Delivery Service provides access to the full text of documents needed by various medical specialists. This service is in fact used more widely than any other service of the library and caters predominantly to requests for copies of articles in journals (current as well as back files). A large number of request for photocopy of articles are received from outside Delhi by post, e-mail and fax through Government as well as private photocopy counters. Photocopies of 496 articles has been provided to the Students/medical professionals of Institutions located outside Delhi and 50 articles were provided to NISCAIR/Medical institute located in Delhi comprises a total number of 22771 pages for which postal charges are free for delivery of articles to outside Delhi states.

**ERMED-India e-Journal Consortium:** Over the years the National Medical Library (NML) has been providing a wide variety of Health Information dissemination activities focused on reaching out Health Care Professionals of the country. NML disseminates over 8000 (8000 x 5 =40,000 pages) photocopy of articles from medical journals per month to medical scholars across the country. The system involves sizeable photocopy machines + man power + maintenance of back, volumes of medical journals, their shelving and repeated binding due to extensive use of journals. Despite above tedious efforts the end user does not get efficient document delivery service due to delay in postal services and human handling.

In order to cope up with the problem, NML started ERMED (Electronic Resources in Medicine) electronic journal consortium since January 2008 for 39 (28 ICMR Institutes + 10 DGHS Institutes/Medical Colleges + AIIMS), by spending Rs. 2.5 crores.

NML envisions that the availability of latest knowledge and skills through global Medical Literature to Indian Medical Fraternity. In 2010 ERMED purchased 1180 e-journals at the cost of Rs. 10.20 crores for 98 members (2 private members have made their own payment for per site e-journals). In 2011 ERMED purchased 201 e-journals at the cost of Rs. 7.50 crores for 96 members spread across the country.

**Training:** The Training cum Orientation programme for ERMED at National/Regional/State level had been conducted to create awareness and make the system more user friendly.

NML also provided sufficient number of "Users Manuals" and "Posters" to each participant to enhance awareness for ERMED. It is expected that the search skill of the users will be more efficient in future to make use of the ERMED resources

#### **Consultancy services provide to following Hospitals/Institutes**

- National Institute of Health & Family Welfare, New Delhi
- Institute of Human Behaviour and Allied Sciences (IHBAS), New Delhi.
- Safdarjung Hospital, New Delhi.

#### **Branch Library**

National Medical Library maintains a branch library in the Nirman Bhawan to cater to the library and information needs of staff and officers in the Directorate General of Health Services and the Ministry of Health and Family Welfare. Steps are being taken to renovate the present library set up and to improve library collection and services at Branch Library.

#### **Library Building**

As the library building is 34 years old, several measures have been taken to repair and restore the structure and

modify it as per the modern requirement. The building needed complete renovation and repair to improve the exterior get up of the library as per its status. Necessary repairs and renovation of the building has been done. The installation of lift and the dumb waiter are in the final stage of completion.

#### 15.40 NATIONAL INSTITUTE OF TUBERCULOSIS AND RESPIRATORY DISEASES, NEW DELHI

National Institute of Tuberculosis (TB) & Respiratory Diseases (Erstwhile L.R.S. Institute of TB and Respiratory Diseases) is an autonomous Institute under Ministry of Health & Family Welfare, Government of India.

The Institute is providing world class health care to sick and needy patients, supporting National Tuberculosis Control Programme, facilitating training, teaching and research activities. It has an extensive Out Patient Department (OPD) complex running daily OPD with computerized registration, round the clock emergency services, indoor facility comprising of 520 beds, a Respiratory Intensive Care Unit (ICU) for the critically ill patients and a state of the art MDR TB ward with international standards of infection control measures. The Public Health Department of the Institute implements the Revised National TB Control Programme for 10 lakh population in South Delhi. The Thoracic Surgery Department of the Institute is one of its kind and serves patients requiring surgical intervention from all over the country and even neighbouring countries. Institute also has facilities for Human Immuno-Deficiency Virus (HIV) care including a free Antiretroviral Therapy Centre under the aegis of National AIDS Control Organization (NACO) and chemotherapy for lung cancer. The Microbiology Department of the Institute is a National Reference Laboratory and assists the RNTCP for Quality Assurance networking for laboratory services.

The Institute is also a recognized centre for post-graduate DNB (Respiratory Diseases) degree course since 1999 and has been accredited for ten DNB seats per year w.e.f. 2009. Regular teaching activities such as seminars, journal club, faculty lectures, grand case presentation, mortality meetings, pathological

conference, radiological conference, and bed-side clinical rounds are routinely carried out. The Institute has been providing training to various classes of health personnel from within and even from outside the country. The Institute provided training to 345 trainees during the period from 1st April 2013 to 31st October 2013. A total number of 1630 trainees were trained in the Institute between April 2012 to 2013.

During the period from 01st April 2013 to 31st October 2013, a total number of 26730 symptomatics were newly registered in OPD. Taking follow up patients and patients of special clinics etc. into consideration, the total OPD load was 95425. A total number of 3959 patients required admission in hospital and 3151 were discharged with favourable outcomes. During the period from April 2012 to March 2013, a total number of 46210 new registrations took place under the Institute. Taking follow up patients and patients of special clinics etc. into consideration, the total OPD load was 1,51,786 patients. A total of 6635 patients were admitted and 6640 discharged during this period.

The Institute is also actively involved in research in the field of TB & Respiratory Diseases. Over the years, numerous research projects have been carried out on various sub-specialties of Respiratory Diseases within the Institute. During the period from 01st April 2013 to 31st October 2013, 11 new researches were initiated in addition to those already in progress and 8 publications took place in several reputed national and international journals and books, in addition to the regular 3-monthly publication of the Institute's newsletter.

#### **Other Achievements/Notable developments during the period:**

- The Private Ward Block was inaugurated at the Institute by the Hon'ble Union Minister for Health and Family Welfare.
- A book of Research Abstracts having a compilation of the researches carried out by the Institute faculty from 1990 to 2012 was also released by the Hon'ble Union Minister for Health and Family Welfare during the inauguration of the Private Ward Block.

The Department of Respiratory Critical Care, a new department, created on 21st February 2013 to provide

critical care to seriously ill TB and Respiratory disease patients set up a facility in Emergency ward for providing ventilation to patients of sputum positive TB. This facility, which has already served 30 patients with active TB, is rarely available even in the premier Institutes of the country. Efforts are on to:-

- expand the bed strength and the infrastructure of the department in a phased manner so as to benefit greater number of needy patients with critical illnesses.
- The Institute faculty chaired sessions, delivered lectures and participated as delegates in many Conferences/CMEs/scientific meets organized within or outside the country.
- The Institute faculty participated in various national level RNTCP Policy development meetings and trainings organised within and outside the Institute.
- The Institute faculty was on the editorial boards of many reputed national and international journals.
- A number of high end equipments were procured as follows:
  - a. Fully Automated Rapid Microbial Identification and Drugs Susceptibility System
  - b. Ultrasound Machine
  - c. PACS Imaging System
  - d. FACS Count
  - e. Portable Ventilator
  - f. 7 Bipap Machines
- A number of construction/renovation activities were undertaken to facilitate the patient care, diagnosis and research within Institute.

#### 15.41 NATIONAL INSTITUTE OF MENTAL HEALTH & NEURO SCIENCES (NIMHNS), BANGALORE

The National Institute of Mental Health & Neuro Sciences, Bengaluru was registered in 1974 on amalgamation of the Government of Karnataka Mental

Hospital and All India Institute of Mental Health, Bengaluru. The Central Government and State Government of Karnataka jointly finance it. The Institute is managed by NIMHANS Society with the Union Minister of Health and Family Welfare as its President, the Minister of Medical Education, Karnataka as Vice-President and senior officials of the Central Government and State Governments as Members. During the year 2013-14 a sum of Rs. 13280.00 lakhs under Plan and Rs. 10000.00 lakhs under Non-Plan (Total Rs. 23280.00 lakhs) has been allocated to the Institute as grant-in-aid by the Central Government.

The objective of the Institute is to promote the growth and development of Mental Health and Neuro Sciences and the main theme is multi-disciplinary approach in services. Teaching, research and community oriented activities are the main thrust of the Institute.

The National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru Act, 2012 to declare the Institution to be an "Institution of National Importance" and to provide for its incorporation and for matters connected therewith received the assent of the President on 13th September, 2012 and was notified vide Gazette Notification No. 45 dated 14th September, 2012. The Act has come into force with effect from 29th November, 2013.

#### New Facilities

- New spacious premises of the Department of Speech Pathology & Audiology in the Outpatient Block was inaugurated on 20 June 2013.
- A 12 Bedded Step Down Ward was inaugurated on 8 October 2013. This is being used to reduce the pressure on the Neuro ICU.
- Organic Waste Converter has been installed in the Institute to handle all organic solid waste (excluding bio-medical waste) and convert it into manure which could be used in the garden. This would convert all biodegradable waste generated in NIMHANS Campus (both residential and the Institute Campus) into organic manure.
- A centralized record storage facility, which is also is fireproof and pest-proof storage facility, has been created where all the old records of the

administrative sections such as Stores, Purchase, Academic, Personnel Section, Accounts are stored.

**Major equipment added during the period:** Several new equipment like Multi-Well Microplate Reader, Dynamic Light Scattering System, Ultramicrotome & Tissue Processor, Transcranial Magnetic Stimulator, Digital Slide Scanner, Intravital Fluorescence Microscope, Cardio Respiratory Monitors, Controlled Suction Apparatus, Electric Drills, ICP Monitoring System, Transoesophageal and Echocardiography Probe have been procured by the Institute during the current year.

#### Memorandum of Understanding

- NIMHANS signed a MoU with and Institute of Bioinformatics (IOB), Bengaluru, on 12 July 2013 for joint research and academic activities of mutual interests between the institutions.
- The Director of CBI and DIG visited NIMHANS and signed a MOU with the Institute on 26 November 2013. The MOU envisages providing of training to CBI staff by the Department of Clinical Psychology, NIMHANS.

**Academic Activities:** A total of 156 students of various courses at NIMHANS passed out during the current year. A total number of 51 students were admitted in Ph.D. programmes and 25 students of Ph.D. students qualified for award of degree. 81 students were admitted in Medical PG courses and 97 students were admitted in Non-Medical PG courses at the Institute. 91 students enrolled for various undergraduate courses and 26 students enrolled for Diploma Courses at the Institute.

**Training & Visiting of Students:** The total number of 2509 students from Government/Private Institutions undergone short term training at NIMHANS during the period 01.04.2013 to 30.11.2013.

**Patient Care Services:** More than 2.60 lakhs patients have received treatment at NIMHANS in the current year and around 11000 patients have been admitted in the NIMHANS for treatment.

#### Awards and Honours

- Dr. P Satish Chandra received prestigious Basanti Devi Amir Chand Prize for the year 2010, an award

instituted by ICMR for significant contributions to research in Biomedical Science, from Union Minister for Health and Family Welfare, on 24 September 2013

- Dr. Venkatasubramanian G, Additional Professor of Psychiatry, was presented Dr. Vidya Sagar Award (by ICMR) for the year 2010, on 24 September 2013.

**Research Projects:** NIMHANS has been awarded 29 new Research Projects during the current year along with 251 ongoing projects.

#### 15.42 NATIONAL TUBERCULOSIS INSTITUTE (NTI), BENGALURU

National Tuberculosis Institute (NTI), Bengaluru is an organization under the Directorate General of Health Services, Ministry of Health and Family Welfare, established in 1959 in close collaboration with the World Health Organization (WHO) and UNICEF. The Institute was established with the objective of formulating the National TB Control Programme. The Institute is the technical arm of the Central TB Division, which is responsible for implementation of National TB Control Programme across the country. This is a premier Institute in the field of Tuberculosis control in South East Asia, which caters to the human resource needs for TB control in the region. Since 1985, the Institute has been functioning as a WHO Collaborative Centre for Training and Research. The Institute is also involved in carrying out Operational Research on various components of TB Control. The Institute has a National Reference Laboratory for External Quality Assessment in the TB Control activity supported by animal Research facilities. It also provides technical support for Intermediate Reference Laboratories for effective implementation of Programmatic Management of Drug Resistant TB across the country.

The Institute has also been identified as the nodal centre for operational research related to RNTCP. The major activities as a nodal centre are to organize workshops and dissemination of research data through publications.

The Institute has been re-organized with formation of Divisions/Units the details are given.

Divisions	Units
HRD and Documentation Division	Training and Co-ordination Unit Computer Tr. Unit Library and Documentation Unit
Laboratory Division	NRL Animal Lab ICELT
Epidemiology and Research Division	Research
M&E Division	Monitoring of RNTCP
Communication and Sociology Division	Communication Sociology
Administration Division	Directors Office Establishment Section Accounts section Stores Hostel Transport Section Civil and Electrical Works Campus Maintenance Security EPBX

Some of the important activities carried out by Divisions/Units is given below:

### HRD and Documentation Division

The HRD Division comprises of Training and Co-ordination Unit, Computer Training Unit and Library and Documentation Unit.

The Institute has pioneered in the field of Human Resources Development. It is involved in conducting the following training programmes to the TB Programme Managers positioned at different parts of the country.

Training courses conducted at NTI include:

- RNTCP Modular Training
- TB/HIV training for ART centre MOs
- Training on Managing Information for Action
- Training in drug logistics management
- Computer related training programmes related to RNTCP (Epicentre/Nikshay)

- External Quality Assessment
- Culture and Drug Susceptibility Testing-both solid and liquid
- Orientation in EQA for Directors of STDCs & STOs
- Training in preventive maintenance and minor repairs of binocular microscopes
- Line Probe Assay

### Other Activities:

1. Seminars for post graduate medical students, sensitization of paramedical workers including nursing staff at the Scientific Gallery.
2. International training courses & workshops organized in collaboration with WHO, SAARC & the Union.
3. Organizing National level programme review meetings for STOs and STDC Directors.
4. Operations Research workshops.
5. WHO Regional workshops on TB surveillance, Programme monitoring & evaluation and impact assessment meetings.
6. Protocol development workshops.
7. Workshops on Leadership Skills & Management.
8. WHO Fellowship courses on various aspects of TB Control.
9. Publication Activities: The faculty of the Institute publish research papers in the leading journals on TB. Make Presentations and Poster sessions on the basis of the research studies conducted by the institute in the National Conference on TB and Chest Disease. The in-house publications of NTI Bulletin is undertaken.
10. National data base of trained manpower: It is proposed to set up an online portal which facilitates the national Institutes to update their training calendar and the participants trained.
11. Development of Model DOTS District incorporating the objectives envisaged as per the National Strategic plan 2012-17.

## Laboratory Division

The Laboratory Division comprises of National Reference Laboratory, ICELT and Animal Model Research Unit.

1. Operationalise the EQA for sputum smear microscopy network in the states in conjunction with STDCs or IRLSSs. Carry out NRL responsibilities of EQA such as Onsite Evaluation (OSE). Panel testing (proficiency testing of lab staff) to ten states at least once in a year for 3-4 days (including one to two districts visits), and make visits as and when required depending on the priorities/necessity to improve and help the performance of labs. Prepared slides are used for panel testing during the visits.
2. Conducting quality improvement workshops for the state level programme managers with a view to find solutions to EQA related operational and technical problems faced in the field.
3. To implement and verify Random Blinded Rechecking (RBRC) producers and improve the performance of labs based on analysis of the RBRC data in conjunction with STDCs.
4. Capacity building and strengthening the ten state level TB laboratories with respect to proficiency in culture and Drug Susceptibility Testing including second line drugs.
5. Conducting Anti-TB Drug resistance surveillances of priority states involving processing of representative sample of the states to obtain information of prevalence of drug resistance, with a view to support logistics of DOTS-Plus programme under expansion of DOTS and RNTCP and conduct/participate in National Level disease prevalence studies/surveys.
6. The Lab team of the Institute carryout on site evaluation of STDC laboratories of different states and provides necessary guidelines to establish quality laboratory to undertake EQA and DRS studies.
7. Carry out Lab based research studies using modern diagnostic techniques and tools viz., Gene expert, Genetic Analyzer, HPLC for NTMs, LPA and MGIT 960.

8. The Institute also has an Animal Model Research Unit which is responsible for maintaining homogenous stock of Guinea Pigs required for experimental purposes.
9. The Govt. of India in collaboration with FIND has established an International Centre for Excellence in Laboratory Training (ICELT) for providing trained manpower in newer diagnostic tools for diagnosing TB including Drug Resistant TB.

## Epidemiology and Research Division

The research studies/projects taken up by the institute are as follows:

1. Inventory Study to find out 'Underreporting' of TB cases in Tumkur District of Karnataka State;
2. Challenges in Implementation of Diagnostic Algorithm for Patients having Symptoms Suggestive of Pulmonary TB with Smear Negative report on initial sputum examination;
3. Annual Risk of Tuberculous Infection among school children in Nelamangala Taluk, Bengaluru rural District;
4. Evaluation of diagnostic algorithm among registered new Smear Negative PTB patients under RNTCP in Karnataka State;
5. Role of additional screening by chest X-ray among persons with symptoms suggestive of Pulmonary TB smear Negative on initial sputum examination;
6. Effectiveness of community based observation of treatment for tuberculosis in Bengaluru city in 2010-11;
7. Inventory Study to find out 'Underreporting' of TB cases in Tumkur District of Karnataka State and
8. Improving TB case finding efficiency and management of TB cases in private health care facilities in Bengaluru city.

## Monitoring & Evaluation Division

With full coverage of RNTCP in the country, the Institute is not compiling the reports on NTP. At present, the monitoring activity is being carried out by the



Central TB Division under DGHS. Currently one CSO, one Statistical Assistant and one Computer are posted the M & E division and are supporting CTD for monitoring.

### Communication and Sociology Division

1. The Scientific Gallery has been established to disseminate the general information on TB the evolution of the programme and achievements of the Institute since its inception. Considering the needs of various categories of trainees, two methods of display units viz., Photo Display and Projection facility and Information Kiosk are available.
2. One day Awareness Programmes are held by the Division for the Medical and Para medical students from different institutions of the state and neighbouring states, orientation to students of medical colleges and other teaching.
3. The Division is planning to carryout research on sociological aspects of TB.

### Administration Division

1. The Administration division handles the administrative, budgeting and financial issues pertaining to functioning of the Institute.
2. The administrative division facilitates for the comfortable stay of the participants who come for Training/Workshops/Seminars by taking care of their accommodation by proper up-keeping of Hostels and Guest Houses.
3. It also takes care of the Transport requirements for the Operations research and Field visits of Trainees.

It is also responsible for security, up- keeping and proper ambience of 23 acres of the sprawling NTI campus.

### 15.43 HSCC (INDIA) LIMITED, NOIDA

HSCC has been incorporated under the Companies Act, 1956 in March, 1983 as Public Sector Enterprise under the Ministry of Health & Family Welfare with an Authorized Capital of Rs. 50 lakhs and paid up capital of Rs. 40 lakhs. Authorized Capital and paid up capital

has been increased from time to time. The Authorized Capital of the Company as on 31.03.13 is Rs. 500 lakhs divided into 5, 00,000 equity shares of Rs. 100/- each. The paid up Capital of the Company as on 31.03.13 is Rs. 240 lakhs. It includes the Bonus Shares of Rs. 120 lakhs and Rs. 80 lakhs issued, during the financial year 2003-04 and 2008-09 respectively, to existing Shareholders out of its Reserve & Surplus. Since inception the total business of the Company has been managed without any borrowing either from the Government or from other sources. HSCC has earned the distinction of maintaining its '*Mini Ratna*' status from September 1999 onwards.

HSCC is a multi-disciplinary renowned consultancy organization in healthcare infrastructure such as Hospital, Medical Colleges, Laboratories and procurement of medical equipments and pharmaceuticals.

Its service spectrum covers feasibility studies, design engineering, detailed tender documentation, construction supervision, comprehensive project management, procurement support services in all areas of civil, electrical, mechanical, information technology and auxiliary medical services. Its important clients include:

- Ministry of Health & Family Welfare and its Hospitals/Institutes
- Ministry of External Affairs and other Ministries
- State Governments and their Hospitals/Institutes
- PSU/Other Institutes such as ICMR, CSIR, ICAR, DOBT, PIMS, PGI Chandigarh, Govt. of Punjab, Govt. of Haryana and other Business Associates.

HSCC being knowledge management consultancy company in health infrastructure sector employs competitive and highly skilled cadre of Architects, Engineers, Economists, Chartered Accountants, Cost Accountants, MBAs and a pool of Consultants in the areas of Medicines and Corporate Planning etc. HSCC enjoys a good working employees relationship at all levels.

In order to develop into a world class Consultancy Organisation, thrust is on diversifying and expanding the operations and also the client base of the Company. Further, the Company has also been exploring business opportunities abroad through Ministry of External Affairs.

The Company is an ISO 9001 accredited company. The Company has from, time to time, taken various steps to upgrade quality assurance system and degree of clients satisfaction. The Company is "ISO 9001:2008" certified Company and has internal quality control as required for its various projects and assignments.

HSCC has been signing MOU with the Ministry of Health & Family Welfare since 1996-97. The Company has been rated excellent by DPE from the year 2007-08 to 2011-12 and expected to be rated 'Excellent' for the year 2012-13 based on its audited results.

The Company follows good Corporate Governance practices. Corporate Governance Practices in the Company focus on transparency, integrity, professionalism, accountability and proper disclosure. Knowledge Management System, e-tendering, e-procurement, Internal cum Concurrent Audit.

During the year the company had taken initiatives towards research and development for sustained and continuous innovation and incurred Rs. 5.80 lakh as under:-

- The Company prepared Reports for Bio-Safety Cabinet for use by Medical Doctors/Scientist/ Technician while handling unknown viruses and Environment Management.
- The Company developed system to monitor progress of Projects for timely Completion

During the year under review the company had made efforts towards **sustainable development** and incurred Rs. 5.73 lakh as under:-

- The Company prepared reports for development of Green Building concept for Hospital Projects and Q Management of OPD Patients in Hospitals.
- The Company provided training of the employees on aspects of sustainable developments.
- The Company has installed Solar Energy Equipment/Devices at corporate office building Noida.

During the year under review the company had made efforts towards **Corporate Social Responsibility** as under:-

- The Company has contributed during the financial year Rs. 4 lakhs towards Contribution to Prime Minister Relief fund;
- The Company has also organised Blood Donation camp and incurred Rs. 1.52 lakh towards this activity.

The Company was awarded the work of rendering Consultancy Services for Design & Engineering, Project Management and Procurement of Medical Equipments, Drugs & Pharmaceuticals etc. for various prestigious & challenging projects in India and abroad. A list of the major on-going projects where HSCC is rendering Consultancy Services is as under:

#### Summary of Major On-Going Consultancy Projects as on date

##### A. Architectural Planning, Design Engineering & Project Management Services

- Construction of North Eastern Institute for Ayurveda & Homeopathy for NEIGRIHMS, Shillong;
- Construction of General hospital at Naharlagun (A.P);
- Construction of PG Gents & Ladies Hostel, UG Ladies Hostel, Nursing Hostel and Internee Hostel at Regional Institute of Medical Sciences (RIMS), Imphal (Package-I);
- RIMS, Imphal (Package-II) - Construction of OPD block;
- Construction of Bio-Safety Level-3 Laboratory at RMRC, Dibrugarh;
- Construction of Super Specialty Block, OPD & Academic Block at Kolkata Medical College, Kolkata under PMSSY;
- Construction of Super Specialty Block, OPD & Academic Block at Kolkata Medical College, Kolkata under PMSSY;
- Construction of Super Specialty Block at Dr. R. P. Govt. Medical College, Kangra at Tanda (H.P) under PMSSY;
- Construction of Guru Tegh Bahadur Diagnostic Centre at Govt. Medical College, Amritsar under PMSSY;

- Construction of AIIMS Housing Balance and phase-II work at Bhubaneswar (Odisha) under PMSSY;
  - Construction of PC Teaching Block for AIIMS within AIIMS Campus, Ansari Nagar, New Delhi;
  - Construction of Dinning Block for AIIMS within AIIMS Campus, Ansari Nagar, New Delhi;
  - Construction of Hostel block 1, 2, & 3 for AIIMS within AIIMS Campus, Ansari Nagar, New Delhi;
  - Redevelopment (Phase-I) of Safdarjung Hospital, New Delhi;
  - Super-speciality Block at Dr. Ram Manohar Lohia Hospital, New Delhi;
  - Construction of All India Institute of Ayurveda (Under Department of Ayush, Ministry of Health & Family Welfare) at Sarita Vihar, New Delhi;
  - Comprehensive Re-development Plan for Lady Hardinge Medical College, New Delhi;
  - National Institute of Unani Medicine (NIUM), Bengaluru Construction of Regimental Therapy Block, Auditorium & Pharmacy building under phase-III works;
  - Development of New Campus for IICB, Salt Lake, Kolkata;
  - Nursing college & National level Physiotherapy Workshop at GMC, Patiala;
  - Substation Work GMC, Patiala;
  - Advanced Cancer Diagnostic, Treatment & Research Centre, Bhatinda;
  - National Institute of of Animal Bio-technology, Hyderabad;
  - Kalpana Chawla Govt. Medical College, Karnal, Haryana;
  - Govt. Medical College at Palakkad, Kerala;
  - Mother & Child-Metro Block within the campus of Bengaluru Medical College for Bengaluru Metro Rail Corporation;
  - Construction of 750 Bedded Hospital (Phase-I-400 bedded) for IIT Kharagpur;
  - Vaccine processing facilities for Institute of Veterinary Biological Products, Pune;
  - IMTEC, Chandigarh.
  - Punjab Health Systems (PHC's & CHC's);
  - National Centre for Disease Control (NCDC), New Delhi;
  - Pediatric Hospital, Srinagar;
  - Mother & Child Hospital, Govt. of J&K;
  - J & K-PCC and
  - NRHM-Chhattisgarh, Uttar Pradesh, Kerala & Himachal Pradesh.
- Abroad**
- 200 Bedded Emergency and Trauma Centre for Bir Hospital, Kathmandu, Nepal.
  - District General Hospital at Dickoya, Sri Lanka.
- B. Procurement Management Services**
- Medical Equipment for NEIGRIHMS, Shillong.
  - Drugs and Pharmaceuticals for Central Government Health Schemes.
  - Procurement of Equipment for AIIA Sarita Vihar.
  - Medical Equipments for Bir Hospital, Kathmandu, MEA.
  - Supply of Medical Equipment for Sri Lanka.
  - Medical Equipments for Yangon & Sittway Myanmar.
- Financial Highlights**
- During the year 2012-13, the Company has completed 30 years and continued to maintain an all round progress in its activities and operations.
- The Company's financial achievements during the year 2012-13 are as under:-
- Highest ever Total income of Rs. 5835 lakhs as compared to Rs. 4458 lakhs in the previous year resulting 30.90% growth,
  - Highest ever Consultancy Fee of Rs. 3380 lakhs as compared to Rs. 2929 lakhs for previous year resulting 15.40% growth,
  - Highest ever company's profit before tax was at Rs. 3600 lakhs as compared to Rs. 2352 lakhs in the previous year resulting 53.10% growth,
  - Highest ever Net Profit of Rs. 2257 lakhs as compared to Rs. 1471 lakhs in the previous year resulting 53.50% growth,

- Highest ever Reserves & Surplus at Rs. 10347 lakhs as compared to Rs. 8708 lakhs in the previous year resulting 18.82 % growth,
- Highest ever Net Worth touched at Rs. 10587 lakhs as compared to Rs. 8948 lakhs in the previous year resulting 18.32 % growth,
- Highest ever Dividend of Rs. 468.03 lakhs compared to Rs. 300.02 lakhs in the previous year resulting in increase from 125% to 195% of paid-up capital.

This is the 28th consecutive year in which the company has recommended dividend and with this the cumulative dividend till 2012-13 will stand at Rs. 3058.19 lakhs.

#### 15.44 PRADHAN MANTRI SWASTHYA SURAKSHA YOJANA (PMSSY)

The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) has been launched with the objectives of correcting regional imbalances in the availability of affordable/reliable tertiary healthcare services and to also augment facilities for quality medical education in the country. PMSSY has two components-setting up of AIIMS like institutions and upgradation of State Government Medical Colleges.

In first phase, six AIIMS are being set up, one each at Bhopal, Bhubaneswar, Jodhpur, Patna, Raipur and Rishikesh. Two more AIIMS, one each in Uttar Pradesh and West Bengal have been approved. Simultaneously, 19 existing Government Medical College Institutions have been undertaken for upgradation for creation of super speciality facilities in the first and second phases of PMSSY. In addition, it has also been decided to take up upgradation of 39 (thirty nine) more medical college institutions in the third phase of PMSSY.

**Approved project** cost for the entire PMSSY Projects is as given under:-

(Rs. in crore)

	Capital Cost	Recurring Cost	Total
1st Phase	6210	3097.62	9307.62
2nd Phase	2396	1031.5	3427.50
3rd Phase	5071	0	5071.00
<b>Total</b>	<b>13677</b>	<b>4129.12</b>	<b>17806.12</b>

#### Setting up of six AIIMS (PMSSY Phase-I)

50 MBBS students, selected on the basis of All India Entrance Examination, 2012 were admitted in each AIIMS (totalling 300 students) to the 1st MBBS course for Academic Session 2012-13. During academic session of year 2013-14, about 100 students in the second batch of MBBS and 60 students in the first batch of B.Sc. Nursing have been admitted in each AIIMS (totalling 600 MBBS and 360 B.Sc. Nursing). OPD Services have also commenced at all six new AIIMS. IPD Services for teaching purpose have commenced at five AIIMS, viz. AIIMS Bhubaneswar, AIIMS Patna, AIIMS Raipur, AIIMS, Jodhpur and AIIMS Rishikesh.

AIIMS Act has been amended by enactment of AIIMS (Amendment) Act, 2012 which has come into force with effect from 16th July, 2013. The amendment has brought new AIIMS under the ambit of AIIMS Act, 1956 and also provides for establishment of more than one AIIMS at various locations. In order to meet day to day functional requirement, the Directors of six new AIIMS have been delegated certain administrative and financial powers till Institute body is constituted and its first meeting is held. In addition, Ad-hoc Committees for selection of personnel to various cadres and for finance were constituted. The Central Government has approved creation 4089 posts in faculty and non-faculty grades for each new AIIMS. The approval has been conveyed to respective Institutes for further necessary action.

The Ministry has appointed M/s. HLL Life Care Ltd. as Procurement Support Agent (PSA) for procurement of equipments for six new AIIMS. PSA has initiated process of procurement. Separately, the Institutes have been advised to procure equipment to meet their minimum operation requirement for the current academic session and starting hospital this year.

#### Setting up of two AIIMS (PMSSY Phase-II)

The Central Government has approved establishment of one AIIMS each in the States of Uttar Pradesh and West Bengal. The Government of Uttar Pradesh has transferred the land to the Central Government for establishment of AIIMS at Rae Bareli. The Ministry has appointed M/s. HSCC (I) Ltd. as Project Management Consultant for the Project. Work for construction of housing complex for the AIIMS, Rae Bareli has started and is

in full swing. Tender for Hospital and Teaching Blocks is being finalized.

For the proposed AIIMS at Raiganj, West Bengal, the land is yet to be allotted by the State Government.

### Upgradation of Government Medical Colleges (Phase-I, II & III)

The upgradation programme broadly envisages improving health infrastructure through construction of Super Speciality Blocks/Trauma Centres etc. and procurement of medical equipments for existing as well as new facilities. The upgradation of Medical Colleges has been undertaken in phases as under:-

#### Phase-I

Out of 13 medical colleges taken up for upgradation in the first phase of PMSSY, civil work at eight medical college institutions (viz. Trivandrum Medical College; Salem Medical College; Bengaluru Medical College; SGPGIMS, Lucknow; NIMS, Hyderabad; Jammu Medical College; Rajendra Institute of Medical Sciences (RIMS), Ranchi; and IMS, BHU, Varanasi has been completed.

In respect of Kolkata Medical College, construction of OPD Block, Academic Block has been taken up and 1st stage of construction has been completed and for the Super Speciality Block which is to be taken up in the second stage of construction, tender process has been initiated. 98% of work has been completed at Srinagar Medical College. In regard to Sree Venkateswara Institute of Medical Sciences (SVIMS), Tirupati; Grants Medical College, Mumbai and B.J. Medical College, Ahmedabad where upgradation involves procurement of medical equipments only, the procurement process is likely to be completed by July, 2014.

#### Phase-II

Out of 6 Medical College institutions taken up for upgradation in the second phase, civil work involves five institutions and the progress/status is as under:-

1. R.P. Government Medical College, Tanda - Civil work completed and the new SSB has been inaugurated on 1.3.2014;
2. Jawaharlal Nehru Medical College of AMU, Aligarh (86%);

3. Government Medical College, Amritsar (45%);
4. Pt. B.D. Sharma Postgraduate Institute of Medical Sciences, Rohtak (39%) and
5. In respect of Madurai Medical College, due to change in location for the new Super Speciality Block, plan had to be modified. The civil work has started in February, 2014.

At Government Medical College, Nagpur upgradation programme involves only procurement of equipments and entire procurement work is being undertaken by the Institute/State Government. An amount of Rs. 77.81 crore has been released to the Institute and expenditure of Rs. 36.14 crore has so far been made.

#### Phase-III

The Central Government has approved upgradation of additional 39 medical colleges under third phase of PMSSY-Upgradation on 07.11.2013. Gap Analysis Committee(s) have been constituted to conduct gap analysis/assess requirement of these medical colleges. In addition, Standard Tender Document, Standard Contract Agreement and IPHS guidelines for multi-speciality hospitals have been prepared by the Committees constituted for the purpose and these are under finalization. HLL, HSCC and CPWD have been appointed as Project Management & Supervision Consultants for civil work at the 39 upgradation projects. 9 medical colleges were identified for upgradation on priority basis.

Foundation stone of Government Medical College, Patiala has been laid by Hon'ble Health & Family Welfare Minister on 23rd February, 2014.

An expenditure of Rs. 21.05 crore and Rs. 2580.06 crore has been made for the entire PMSSY projects during X Plan and XI Plan respectively. An allocation of Rs. 12,000 crore has been made for XII Plan for the entire PMSSY projects. Year wise allocation and expenditure during XII Plan is as given below:-

(Rs. in crore)

Year	BE	RE	Expenditure
2012-13	1544.21	1010.00	973.50
2013-14	1975.00	1,377.00	1,282.11

## 15.45 INTERNATIONAL INSTITUTE FOR POPULATION SCIENCES (IIPS), MUMBAI

International Institute for Population Sciences, Mumbai, was established in 1956 as the Demographic Training and Research Centre. The Institute is a "Deemed University" functioning under the administrative control of the Ministry of Health and Family Welfare, to impart training, conduct research and provide consultancy services in the field of Population Studies. The Institute has six Departments viz. Department of Mathematical Demography and Statistics, Department of Fertility Studies, Department of Public Health and Mortality Studies, Department of Migration and Urban Studies, Department of Population Policies and Programmes, and Department of Development Studies. In addition, Department of Extra Mural Studies is functioning since August 1993 on yearly project basis. Apart from the Director & Senior Professor, the faculty consists of 39 members, who are engaged in both teaching and research.

### Teaching Programmes

During the year 2012-13, the Institute offered the following regular courses: (a) Diploma in Health Promotion Education (DHPE), (b) Master of Arts/Science in Population Studies (M.A./M.Sc.), (c) Master of Population Studies (MPS), (d) Master of Philosophy in Population Studies (M.Phil.) and (e) Doctor of Philosophy in Population Studies (Ph.D.). Apart from these programmes, the Institute also offers Master of Population Studies (MPS) and Diploma in Population Studies (DPS) through distance learning.

During 2012-2013, 19 students qualified for award of Diploma in Health Promotion Education, 21 students qualified for award of degree in Master of Arts/Science in Population Studies, 46 students qualified for award of degree in Master of Population Studies, 35 students qualified for the award of degree in Master of Philosophy in Population Studies, 14 students had qualified for the award of Doctor of Philosophy in Population Studies, 27 students qualified for award of degree in Master of Population Studies (Distance Learning) and 1 student had qualified for the award of Diploma in Population Studies (Distance Learning).

### Research Programme

Institute conducts research programme using its own resources and also through external funding. The externally funded projects are usually initiated at the request of the concerned agencies. The completed and ongoing projects at the Institute are given below.

#### A. Research Projects funded by the Institute

##### Completed Projects

- Functional Classification of Indian Towns;
- Digitization of Census Volumes 1872-1941.

##### Continuing Projects

- Understanding the pathway of poverty and fertility reduction in India;
- International Migration from Gujarat;
- Socio-economic and health conditions of Nepali migrants In Mumbai and
- Health Infrastructure and MCH Care in the Rural Areas of India.

##### New Projects

- Magnitude, Causes and Consequences of Kala-azar in India: A Study of Eastern Bihar;
- Use of verbal autopsy for estimating the causes of death in Amravati district of Maharashtra;
- A comparative study of two different methods of data collection used in a large-scale survey in India;
- Estimation of Vital Rates for Mumbai Presidency in the Colonial Period and
- Population Scenario in India: Long Term Prospective;

#### B. Research Projects funded by External Agencies

##### Completed Projects

- Training of District Level Officers (TDLO);
- Intergenerational Transfers, Population Aging and Social Protection in India and
- TMLM Project.

### Continuing Projects

- Longitudinal Aging Study in India (LASI)-Pilot;
- Study of Global Ageing and Adult Health (SAGE)-India;
- Family Health and Wealth Study (FHWS);
- District Level Household and Facility Survey-4;
- Health of the Urban Poor (HUP);
- Comprehensive Nutrition Survey in Maharashtra;
- Vital Rates Survey in Nagaland (VRS Nagaland) and
- Enhancing Capacity to apply research evidence in Policy Making.

### New Project

- Conditional Cash Transfer (CCT) Schemes and Welfare of Girl Children: Beneficiary Assessment of Select Schemes.
- Comprehensive Nutrition Survey in Gujarat.

### Short-term Training/Instructional Courses

The Institute conducts short-term training courses on request. The following two short-term training programmes were conducted during the academic year 2012-13.

- "Demography, Gender and Reproductive Health" was organized during 8th July to 4th August, 2012.
- Population and Development Course for participants from Bhutan commenced on 1st October, 2012 and ended on 12th October, 2012.

### Conferences/Seminars organised by IIPS

#### World Population Day

Observance of "World Population Day" on 11th July every year is one of the important activities of the Institute.

#### National Seminar

- A. **National Seminar-** National Seminar on Population Health and Environment was organized by IIPS in collaboration with Indian Institute of Forest Management, Bhopal during 21-23 March, 2013. Focus of the seminar was to recognize the

interconnectedness between people and their environment. Around 150 papers were presented in three plenary sessions, 19 oral and two poster sessions. First plenary session was on Health and Development in India, second dealt with Natural Resources and Environment and third was on Health and Development in Madhya Pradesh.

- B. **Seminar on Migration-** A National Seminar on "Migration and Development: Opportunities and Challenges" was jointly organized by R.J. College, Mumbai and IIPS on 4-5th January, 2013. More than sixty papers were presented that focused on various issues related to migration, development, gender, environment and health. A poster competition was also organized for the college students.

### Other Activities held at the Institute

**Publication Unit-** IIPS has a well-established publication unit. Periodically IIPS publishes Newsletters, Research Briefs and Working papers.

- **IIPS Newsletter:** The Institute brings out Newsletters, which publish information about various ongoing activities of the Institute. Two issues of IIPS Newsletters covering four numbers were printed during the academic year, 2012-13.
- **IIPS Research Brief Series:** The 'Research Brief Series' is a new initiative of the Institute started in 2007, to provide an opportunity to the faculty, Ph.D. students and visiting fellows to quickly disseminate the important findings of their research studies before they are published as a research report or in a scientific journal. So far 14 research briefs were published under this series.
- **IIPS Working Paper Series:** The 'Working Paper Series' is a new initiative started during 2009-10. Its main objective is to disseminate new research ideas, theoretical development and methodological insights initiated by IIPS to the national and international community as quickly as possible. The papers published under this series are peer-reviewed by two external experts working in the areas of Population, Health and Development. So far, 8 working papers were published.

## **Demography India Journal**

The professional Journal of Indian Association for the Study of Population (IASP) is presently managed at IIPS. This long standing journal publishes peer reviewed articles and book reviews, focusing on demographic and health issues and more specifically on Indian Demography.

## **Information, Communication and Technology (ICT) Unit**

The ICT Unit of the institute which was till recently known as the Computer and Data Centre is well equipped with the latest Pentium IV and higher generation computers and statistical software required for data analysis. The Unit has one main class room/lab room with 42 computers with three LCD projectors, another small class room/lab with capacity of 16 computers and LCD. Computer classes for MPS, MA/MSc, M.Phil and short term courses are held in these labs. The software packages installed are IBM SPSS Version 20, STATA Version 10, GIS Version 10, ML Win, Atlas Ti, Spectrum, Mortpak and Endnote. All the computers are configured for internet access and connected by Local Area Network. The ICT Unit has network attached storage (Nasstor) server which stores data from Census, National Family Health Survey, District Level Household Survey etc. and also providing the internal email facility to the institute. Wireless internet facilities have been established and made available to the students in the hostels and library. There are a total 260 desktop computers and eight servers in the Institute.

The data set of Census of 1991 and 2001, National Family Health Survey I, II and III, District Level Household Survey I, II and III, Demographic Health Survey (DHS) and National Sample Survey (NSS) data are available to researchers. Data sets from GATS, Youth, LASI and SAGE projects are also provided to researchers who request these data sets. An e-book in the CD-ROM media containing the full papers of DPS/MPS/M.Phil students seminar has been prepared, and six e-books on the topic related to the reproductive health, child and maternal mortality are also prepared. ICT unit is maintaining IIPS website. ICT unit is in the process of making website bilingual (English-Hindi). Steps have been initiated to start e-Governance in the

institute to cover the functioning of the various Departments of the institute including Accounts and Administration.

## **Library**

The Institute maintains an excellent library with most recent books on population and related topics. There are 81680 books, 14946 bound volumes of periodicals and 16601 reprints and 800 CD ROMS in the library. The library receives about 325 Indian as well as foreign journals, out of which 175 are received by the way of subscription and another 150 are received by gift & exchange. The bibliographic information of more than 25000 journal articles & book chapters have been indexed and made available in library catalogue through library operation software. The full text online databases offered in the library are JSTOR, INDIASTAT.COM, SCIENCEDIRECT (Soc. Sc. Collection) SCOPUS. The library also provide full text online access to core journals identified for the discipline of population studies from the leading publishers such as Sage, Taylor & Francis, Oxford, Wiley, Cambridge, Springer etc. The library has books on different disciplines such as Demography, Statistics, Public Health, Family Planning, Anthropology, Mathematics, Economics, Sociology, Psychology, Health Education, Political Science, Geography, Computer Programming etc. The library has a special collection of Census of India published during 1872-2011 and online accessible on the campus. The library also holding demographic related literature published by the United Nations, World Health Organization, World Bank, International Labor Organization, etc. The library is housed in a separate building on the first and second floors consisting of a reading hall with a seating capacity of 70 at a time. The library provides abstract and current awareness services, documentation, reference, Inter Library Loan and photocopying facilities. The library is fully automated in System for Library and Information Management (SLIM-21) which offers Online Public Access Catalogue (OPAC) in user friendly manner. The library has good collection of demography related books printed (in Devnagari script) Hindi language and indexed in Devnagiri script for retrieval. The IIPS library is a Member Library of INFLIBNET Centre (Information and Library Networking of UGC).



#### 15.46 FAMILY WELFARE TRAINING & RESEARCH CENTRE (FWTRC), MUMBAI

Family Welfare Training & Research Centre (F.W.T. & R.C.), Mumbai is a Central Training Institute responsible for the in-service training in the key health areas for different categories of health personnel all over the country. Training related to Primary Health Care, Family Welfare, R.C.H., HIV/AIDS and other integrated National Health Programmes are imparted to various categories of health professionals of state and district levels, i.e. DHOs, DEMOs, Key-trainers etc. from Health & Family Welfare Training Centres. Centre is also conducting a one year academic Post-graduate Diploma in Health Education (Renamed as Diploma in Health Promotion Education) for the candidates deputed from all over the country and also for candidates sponsored by WHO/UNICEF/UNDP/DANIDA etc. The first course of D.H.P.E. was started in the year 1987-88. Presently, 27th batch of Diploma in Health Promotion Education Course is in progress, with 19 trainees from Maharashtra, Andhra Pradesh,, Madhya Pradesh and Odisha.

With the launch of Government of India's National Rural Health Mission and the present health care services, FWTRC Mumbai is also conducting a Post-Graduate Diploma in Community Health Care, for the para-medicals working in family welfare in Health Departments, NGOs and Private Sectors to improve their efficiency to cope up with the work under the NRHM for better delivery of health care services. This course is very much in line with the present mandate of national government to train medical manpower with rural background and serving in rural areas. The first course of this was started from October 2007. The duration of the course is 15 months. With total of 8 trainees, the fourth batch of PGDCHC has been completed in October 2013 and the fifth batch will commence shortly. Apart from regular training sessions, observational visits were also organized for the trainees during the academic year to various organizations such as K.E.M. Hospital, Water Treatment Plant, Sewage Department, Haffkine Institute and Research Centre etc. The trainees had also completed their three months field training and internship in their respective States/Districts, the report of which was handed over by the trainees to FWT&RC.

The construction of the new Institutional premises of FWTRC, Mumbai at New Panvel, Navi Mumbai is progressing well. At present, approximately 60% of RCC structural work for Ground + 2 floors of the Institutional premises has been completed.

#### 15.47 NATIONAL INSTITUTE OF HEALTH AND FAMILY WELFARE (NIHFW), NEW DELHI

The National Institute of Health and Family Welfare (NIHFW), an autonomous organization of the Ministry of Health and Family Welfare, Government of India, acts as an 'apex technical institute' as well as a 'think tank' for promotion of Health and Family Welfare Programmes in the country. The Post-Graduate education and training, research and evaluation, consultancy and advisory services, specialized projects and specialized services in the field of health and family welfare have been the major focus of the Institute. In this endeavour, a wide range of issues have been addressed by the Institute through its departments like Communication, Community Health Administration, Education and Training, Epidemiology, Medical Care and Hospital Administration, Management Sciences, Planning and Evaluation, Population Genetics and Human Development, Reproductive Bio-Medicine, Statistics and Demography and Social Sciences.

##### Post-Graduate Education

Three regular courses under post-graduate education viz. (i) a three-year post-graduate degree (M.D.) in Community Health Administration; (ii) a two-year post-graduate 'Diploma in Health Administration'; and (iii) a one-year post-graduate 'Diploma in Public Health Management' have been conducted by the Institute. Also, three distance learning diploma courses of one-year duration each in 'Health and Family Welfare Management', 'Hospital Management' and 'Health Promotion' have been conducted regularly by the Institute every year.

##### New Initiatives in Post-Graduate Education

The Institute, with the support of European Union funded Institutional and Technical Support (ITS) Project, is also developing five new courses viz. (i) Professional Development Course in Management, Public Health and Health Sector Reforms for Senior Medical Officers

on e-learning mode; (ii) Programme Management and Support Unit for Programme Managers on e-learning mode; (iii) Post-graduate Diploma in Health Communication through distance learning for graduates as well as for those working in health sector; (iv) Post-Graduate Diploma in Applied Epidemiology for Medical Officers, Surveillance Officers and Epidemiologists; and (v) Post-Graduate Diploma in Public Health Nutrition for graduates working in Health sector.

### **In-service Training Programme**

A large number of in-service training courses ranging from one to ten weeks duration for middle and senior level health personnel who are working at different levels in various parts of the country have been organized by the Institute. The notable in-service training course of the Institute is the Professional Development Course in Management, Public Health and Health Sector Reforms for Senior Medical Officers which is run by the Institute in collaboration with 15 collaborating training institutes situated in various parts of the country. Around 60 courses have been planned by the Institute for 2013-14 of which more than 20 have already been completed.

### **Research and Evaluation**

The Institute is also known for its research endeavours and devotes a considerable time to research issues with special focus on operational research, applied research and evaluation of various health and family welfare programmes in the country. In all, the Institute has been engaged in 18 studies of which four have already been completed and the remaining are in various stages of execution. The completed studies during the year include: (i) Evaluation of immunization training of Medical Officers, Cold Chain handlers and Technicians; (ii) To study the knowledge and practices of school going Adolescents related to the use of smokeless forms of tobacco in selected states of India- a case study of state of Tamil Nadu; (iii) To study the knowledge and practices of school going Adolescents related to the use of smokeless forms of tobacco in selected states of India- a case study of Assam; and (iv) Nursing Management for Reproductive and Child Health (RCH) Services in the North Eastern States of India.

## **Specialised Projects and Other Activities**

### **RCH-II/NRHM**

As a Nodal Institute for training under RCH-II/NRHM, the NIHFW has been continuing its responsibilities of organizing national level training courses and coordination of the RCH-II/NRHM training activities in various parts of the country with the help of 18 Collaborating Training Institutions (CTIs). Recently, three more institutions i.e., RIHFW, Baramulla, Jammu and Kashmir; RIHFW, Haldwani, Uttarakhand; and Regional Institute of Paramedical and Nursing Science, Aizawl, Mizoram, have joined as Collaborating Training Institutions.

### **Annual Sentinel Surveillance**

The NIHFW continued with the responsibility of coordinating and monitoring of the Annual Sentinel Surveillance activities assigned by the National AIDS Control Organization (NACO). One of the key activities of the Project is to organise orientation trainings for the officers from all the States AIDS Control Societies and Regional Institutes (epidemiologists/micro-biologists and faculty from medical colleges/research organizations) to orient them to the operational guidelines for surveillance.

### **Annual Health Survey**

Realising the need for generating comprehensive district level data on health and nutrition status of all the members of the family-fertility, mortality, maternal and child health, the Planning Commission has recommended Annual Health Survey (AHS) of all the districts. Currently, the survey is being carried out by the Institute in 284 districts in 9 States (Assam, Bihar, Chhattisgarh, Jharkhand, MP, Odisha, Rajasthan, UP and Uttarakhand).

### **District Level Household Survey (DLHS)-4**

Ministry of Health and Family Welfare, Government of India, has included the Clinical, Anthropometric and Biochemical (CAB) component for data collection in the District Level Household Survey (DLHS)-4 during 2011-2013. International Institute for Population Sciences (IIPS), Mumbai, is the nodal agency to conduct the DLHS-4 and the responsibility of operationalizing the CAB component has been entrusted with National

Institute of Health and Family Welfare (NIHFW). In order to operationize the CAB component for DLHS-4, the programme has been planned identical to AHS. The survey has been planned in 336 districts in the remaining 26 States and Union Territories (UTs) excluding those covered under AHS.

### **National Cold Chain and Vaccine Management Resource Centre (NCCVMRC)**

NCCVMRC has been proposed to set up at NIHFW with the objective of building capacity of 500 district level cold chain technicians involved in Universal Immunization Programme to undertake the repair and maintenance of about 70,000 cold chain equipments in about 25,000 cold chain points in the country. In addition, about 50 cold chain officers and vaccine and logistics managers will be trained in vaccine logistics management at this Centre.

### **Health Policy Project (HPP)**

The Policy Unit has been set up in the institute with the technical and financial support from USAID through Health Policy Project (HPP), Futures Group International, to undertake evidence based policy research and analysis, advocacy and multi-sectoral coordination on issues related to population, health and nutrition. Initially, the major focus of the Unit has been on population and family planning.

### **Mother and Child Tracking System (MCTS)**

The MCTS centre has been established in the institute on October 1, 2012 with an objective to build the capacity for improving data quality on Mother and Child Tracking System (MCTS). The centre is working under the guidance of the Director, NIHFW, and the Ministry of Health and Family Welfare, Government of India.

### **National Health Portal**

The Ministry of Health and Family Welfare, Government of India, has proposed to establish a Centre for Health Informatics at NIHFW under the overall administrative control of the Director, NIHFW. The work is in progress.

### **International Collaboration**

NIHFW has been able to sustain the momentum in the process of collaborations with various international

agencies such as WHO, UNICEF, USAID, Partners in Population and Development (PPD), INCLEN, Futures Group and European Union, IHBP, etc.

### **Use of Hindi in Official Work**

The institute attaches due recognition to the use of Hindi in official work as part of official language implementation policy in the Institute. For example, to mark the significance of Hindi, the Institute proudly publishes a Hindi publication called '*Dhaarna*' with the articles contributed by the faculty and staff members of the Institute and others on issues like public health, population and family welfare.

### **Consultancy and Advisory Services**

The Director and faculty members of the Institute have the privilege of serving as experts in various selection committees set-up by the national and international organizations and training courses and workshops organized by different institutions in the country. Also, they have honour to serve as examiners for Ph.D. and M.D. courses of different universities.

### **Specialized Services**

Over the years, NIHFW has consistently retained its reputation as one of the centres of excellence in the area of reproductive health. As a regular activity, NIHFW publishes its quarterly journal - 'Health and Population: Perspectives and Issues'. The journal is indexed/abstracted by nine national and international abstracting agencies. The National Documentation Centre (NDC) of the Institute fulfills the needs of the programme personnel and others who are concerned with health, population and family welfare.

### **Events**

Events such as the World Population Day, Hindi Fortnight, Independence Day, Communal Harmony Week, World AIDS Day, Republic Day and Vigilance Awareness Week are observed every year.

### **15.48 RURAL HEALTH TRAINING CENTRE, NAJAFGARH, NEW DELHI**

The centre was recognized as Rural Health Training Centre, Najafgarh in 1960, under the administrative control of Directorate General of Health Services

(DGHS), Govt. of India. In 1961 a decision was taken at the level of Directorate General of Health Services, Govt. of India to declare PHC, Najafgarh as a centre for imparting community health training for Medical Interns of Lady Harding Medical College under Rural Orientation of Medical Education (ROME) Scheme. To strengthen the Rural Health services, an ANM School was started in 1985 and vocationalised in 1991.

### Training

- Training to Medical Interns under ROME Scheme. Around 350 unpaid Medical Interns undergone rural posting from this Centre.
- Training to ANM 10+2 (Voc.) Students with intake capacity of 40 students per academic session.
- Community Health Nursing Training to B.Sc/M.Sc/GNM students of various Nursing Institutions like College of Nursing, Safdarjung Hospital, RML Hospital, Lady Hardinge Medical College, Holy Family Hospital, Batra Hospital, Apollo Hospital and various other Govt./State Govt./Pvt. Institutions. Nearly 1000 trainees were trained during the period.
- Promotional Training to Nursing Personnel.
- Health Education to the PGDHE Students.
- One Day Observation Visit.

### 15.49 GANDHIGRAM INSTITUTE OF RURAL HEALTH AND FAMILY WELFARE TRUST (GIRHFWT)

Established in 1964 with financial support from Ford Foundation, Government of India and Government of Tamil Nadu. The Health and Family Welfare Training Centre at GIRHFWT is one of 49 HFWTs in the country. It trains Health and allied manpower working in PHC, Corporations/Municipalities and Tamil Nadu Integrated Nutrition Projects. During the year 2012-13, 21 persons were trained in Post Graduate Diploma on Health Promotion and Education course (PGDHPE).

Gandhigram Institute is also engaged in upgrading the capabilities of ANMs, staff nurses and students of nursing colleges through the Regional Health Teachers Training Institute (RHTTI). The RHTTI has under taken following activities during 2012-13 and 2013-14.

- **Diploma in Nursing Education and Administration (DNEA):** 9 number trained during 2012-13 and 2 enrolled for 13th batch of DNEA course during 2013-14. INC has instructed to upgrade the DNEA course into Post B.Sc. (N) Course, hence this being the last batch, candidate turnout is very less.
- Health Visitor Course (Promotional Training for ANM/MPHW (Female) (6 months)-15 trained during 2012-13 and 29 trained during 2013-14.
- Short-term training in Community Health Nursing: In short term training in community health nursing, total number of 628 were trained during 2012-13 and 939 during 2013-14.

For this activity during 2013-14 Rs. 250.00 lakhs were available under BE.

### 15.50 HLL LIFECARE LIMITED (HLL)

HLL Lifecare Ltd. (formerly Hindustan Latex Ltd.), [HLL] was incorporated on 1st March 1966 under the Companies Act, 1956. HLL was set up in the Rubber rich state of Kerala in 1969 with the objective of providing quality Male Condoms for Government of India's National Family Welfare Programme.

HLL is a *Miniratna* (Schedule 'B' category CPSE) under the administrative control of the Ministry of Health and Family Welfare with 100% shareholding by the Government. The authorized share capital of the Company is Rs. 300.00 crores and paid up share capital is Rs. 193.53 crore. The Company's Registered and Corporate office is at Thiruvananthapuram in Kerala.

HLL mainly focuses on developing and providing healthcare related products and services and has created a significant impact in the public health arena.

The purpose of business at HLL is "providing quality products and services at affordable costs". "Affordability" is single driving force at HLL and the vital element of HLL's Growth Strategy.

### Manufacturing Units

HLL commenced its commercial operations on April 5, 1969 in the State of Kerala. Today, HLL has seven

state-of-the-art manufacturing facilities as mentioned below:

- i. Peroorkada in Thiruvananthapuram (1969)- for Male Condoms;
- ii. Kanagala near Belgaum (1985)- for Contraceptives and Pharmaceutical products;
- iii. Akkulam in Thiruvananthapuram (1994)- for Hospital Products;
- iv. Kakkanad in the Cochin Special Economic Zone (2004)- for Female Condoms and Male Condoms for export;
- v. Manesar in Gurgaon (2007)- for Rapid *In-vitro* Diagnostic Test Kits;
- vi. Indore (2010)- for production of a range of Pharma Products including Tablets, Capsules and Oral Rehydration Solution and
- vii. Gajewal, Medak in Andhra Pradesh (2012) for Male Condoms.

**The manufacturing unit at Peroorkada, in Thiruvananthapuram** district of Kerala was set up in 1969 in technical collaboration with M/s Okamoto Industries Inc., Japan. The plant has undergone continuous modernisation over the years and has an annual production capacity of 1600 million pieces of condoms. The facility is equipped with modern machines and equipment for production, inspection and quality testing, conforming to GMP and meets international standards.

**Akkulam Factory in Thiruvananthapuram** district of Kerala is the state-of-the-art facility for manufacture of Blood Bags and other medical devices namely Intra Uterine Devices (IUDs), Surgical Sutures, Hydrocephalus Shunts, Tissue Expanders and Tubal rings.

The annual production capacity of blood bags at the factory stood at 11.5 million pieces, copper IUDs-5.5 million pieces, surgical sutures-125000 dozens and tubal rings-2.5 million pairs. The products are exported to more than 20 countries. AFT has won awards for pollution control, productivity and innovation.

**The Kanagala plant in Belgaum** in the State of Karnataka commenced operations with the production of condoms in 1985 using Japanese technology. This unit underwent diversification in 1992 with the tableting facility for birth control pills-Mala-D/N and the formulation and tableting of Saheli (Centchroman) the indigenous, non-steroidal once-a-week pill. The tableting of Emergency Contraceptive pills started in 2003. Commercial manufacturing of women healthcare products commenced in 2006. KFB has also added a world-class hormonal/steroidal formulation plant-UNIPILL Block in 2012.

**HLL's female condom manufacturing facility at Cochin Special Economic Zone, Kakkanad** in Kerala has been set up in technical collaboration with M/s. Female Health Company (FHC), US. It is the second generation of female condoms made from Synthetic Nitrile latex, the product generically being termed FC2. The installed capacity of the plant is 7 million pieces of FC2 per year. In addition, KFC has a fully automatic testing and packing facility for male condoms with an annual capacity of 150 million. This facility mainly caters to the export market.

In addition to the product certification, KFC is also certified by M/s TUV, with ISO 18001:2007 and ISO 14001:2004 certifications for safety, health and environment compliance.

**HLL has its *in-vitro* immuno diagnostics kit manufacturing facility at Manesar in Gurgaon.** It has an installed capacity to manufacture 26 million rapid pregnancy test kits per year. The unit commenced operations in November 2007. The unit manufactures rapid test kits for detection of metabolic hormones such as human Chorionic Gonadotropin (hCG) in urine and prognosis of diseases such as Dengue, Malaria (different strains), Kala-azar (leishmaniasis), TB, Chikungunya and other infectious diseases. The facility has Quality Management Systems like ISO 9001:2008, ISO 13485 and CE mark according to IVD 98/79/EC directive for pregnancy test cards for professional use brands like Makesure, P-Test and Nishchay.

**Indore Facility, Indore (PFI):** HLL's Indore facility commenced operation in April 2010 in the Industrial area in the commercial capital of Madhya Pradesh. The

facility manufactures a range of pharma products which include formulations such as tablets, capsules and Oral Rehydration Salt. PFI also supplements the existing production facility of KFB in the area of women's healthcare products.

**Gajewal facility, Medak, Andhra Pradesh (GFM):** HLL's GFM commenced operations in Gajewal, Medak in Andhra Pradesh in 2012. The facility is equipped with modern production and testing machines with a capacity to produce 120 million Condoms annually.

### Business Activities

HLL is engaged in manufacturing and supply of contraceptives and healthcare products like Condoms, Intra-uterine devices (IUD), Blood Bags, Surgical Sutures, Oral Contraceptive Pill's, Pharmaceuticals, Ayurvedic, Personal hygienic products and Diagnostic kits etc. through its seven production units - two at Thiruvananthapuram, and one each at Kochi, Belgaum, Indore, Hyderabad and Manesar. The range of services includes Infrastructure Development, Procurement Consultancy and Facility Management.

### Financial Performance

The strategic and daring step taken by the Company in restructuring its business operations under six business groups has yielded laudable results with the company attaining highest ever revenue and profit. A summary of financial performance of the Company during the year ended 31st March, 2013 is given below.

Description	Amount (in lakh)
Revenue from operations (gross)	83,566.42
Less: Excise duty	(272.31)
Revenue from operations (net)	83,294.11
Other income	706.34
Total revenue	84,000.45
Expenses	
(a) Cost of materials consumed	19,036.76
(b) Purchases of stock-in-trade	18,365.52

(c) Changes in inventories of finished goods, work-in-progress and stock-in-trade	(2,769.18)
(d) Employee benefits expense	12,475.76
(e) Finance costs	1,402.68
(f) Depreciation and amortisation expense	2,084.96
(g) Other expenses	21,200.86
(h) Contract Expenses	8,422.22
<b>Total expenses</b>	<b>80,219.58</b>
Profit/(Loss) before Exceptional and extra ordinary items and tax	3,780.87
Exceptional items	---
Profit/(Loss) before tax	3,780.87
Tax expense:	773.40
Profit/(Loss) for the period from continuing operations	3,007.47
Profit/(Loss) from discontinuing operations	---
Profit/(Loss) for the period	3,007.47

### New Facilities/Expansion

**Capacity Augmentation of Surgical Suture manufacturing facility-** During the year under review, HLL has augmented the production capacity of Surgical Suture manufacturing facility at Akkulam Factory, Thiruvananthapuram [AFT] to 6.25L dozen per annum from the existing level of 1.25L dozen, involving estimated capital outlay of Rs. 6.00 crore.

**Augmentation of Sanitary Napkin manufacturing facility-** HLL contemplates to augment capacity for production of Sanitary Napkins at Kanagala, Belgaum by adding one more Sanitary napkin machine at an estimated cost of Rs. 6.50 crore, including construction of a warehouse near the existing plant.

**LNG Storage and Re-gasification facility-** The Company is setting up a LNG Storage and

Re-gasification facility at it Condom manufacturing at Peroorkada in Thiruvananthapuram as usage of LNG as an alternative for furnace oil has various advantages. The project is estimated to cost Rs. 4.00 crore and the company has signed an MOU with M/s. Petronet LNG Ltd. to implement the project.

**New Condom manufacturing plant at Kochi-** The Company plans to acquired a Condom manufacturing facility at Irapuram, Kochi having annual installed

capacity 300 M.Pcs involving estimated investment of Rs. 28.30 crore.

### Physical Performance

A review of HLL's Physical Performance during year 2012-13 is given below:

HLL has achieved 100% capacity utilization at its Condom production units. Efforts are being made to achieve better capacity utilization for other products.

### Manufacturing

Sl. No.	Product *	Unit	Installed capacity	Quantity manufactured	Capacity utilization (%)
1	Condoms	M.Pcs	1599.00	1629.23	101.89
2	Cu 'T'	M.Pcs	5.50	3.75	68.19
3	Blood Bag	M.Pcs	11.50	7.63	66.33
4	Steroidal OCPs	Million Cycles	98.66	46.23	46.85
5	Non-Steroidal OCPs	Million Cycles	30.00	28.52	95.07
6.	Pregnancy Test Cards	M.Pcs	26.00	19.14	73.63

\* HLL's major products

### Memorandum of Understanding

Department of Public Enterprises had rated the performance of the company as 'Excellent' for the year 2011-12.

### Research and Development

The company's Research & Development Centre is implementing Research & Development projects in collaboration with Indian Institute of Technology, Kanpur, Indian Council of Medical Research, (HQ) New Delhi, Central Drugs Research Institute (CDRI), Sri Chitra Tirunal Institute of Medical Science and Technology (SCTIMST), Trivandrum, Regional Cancer Centre, Trivandrum, National Institute of Reproductive Research in Health, Mumbai, Population Council, Washington and International Vaccines Institute, Seoul.

The company proposes to set up an incubation centre at the Corporate Research & Development Centre for pilot scale production of products for clinical trials, stability testing and test marketing at an estimated cost of Rs. 158.20 lakh.

The amount spent on R & D activities during 2012-13 is given below:

Capital expenditure	Rs. 1475.65 lakh
Recurring expenditure	Rs. 22.66 lakh

### Human Resources

The company gives high priority for development of human resources employed by it. With this objective, the company has formulated various policies for continuous development of employees collectively and

individually by providing appropriate training, motivation and employee welfare activities. During the year under review, the company had organized various training programmes involving 1205 man days for executives and 2086 man days for workmen.

During the year under review, industrial relations in the company continued to be very cordial and peaceful.

The company continues to follow the Presidential directives in respect of reservation to SC/ST/OBC Communities and efforts are taken to fulfil the directives in recruitment and promotion. Serious and focused effort was also taken for special recruitment drives.

The representation of SC/ST/OBC/Physically Challenged categories in the total employee strength as on 01.04.2013 is given below:

Description	Number of employees
Representation of SC	301
ST	76
OBC	438
Physically challenged	41
Other categories	1019
<b>Total strength</b>	<b>1875</b>

#### Awards and Recognitions

The company obtained the following awards and recognitions during the year 2012-13.

- **"Performance Excellence Award 2012"** instituted by Indian Institute of Industrial Engineering (IIIE), in the Gold Category.
- Prestigious Indira Gandhi National Award from Government of India for the outstanding performance made by the Company in Official Language implementation consecutively for the 7th time.
- Awards from Town Official Language Implementation Committee (TOLIC) for implementation of OL Policy.
- The Hindi magazine "Samanvaya" bagged the first prize for best magazine instituted by TOLIC, Thiruvananthapuram.

#### 15.51 HINDUSTAN LATEX FAMILY PLANNING PROMOTION TRUST (HLFPPT)

HLFPPT, a not-for-profit professional Health Service Organisation set up by the company continued to carry out projects under the following strategic areas.

- Social Marketing and Franchising;
- Prevention, care and support for HIV and Technical Assistance to NRHM;
- Knowledge Management and
- Engaging with PSUs and Private Corporates on Corporate Social Responsibility Projects.

HLFPPT has been rendering support in implementation of Reproductive and Child Health, HIV and AIDS Prevention, Care and Support Programmes in partnership with Ministry of Health & Family Welfare, Government of India, several State Governments and International Development agencies. HLFPPT has Pan India operations with offices in 21 States and core area is Reproductive Health.

The achievements during the year are summarized below:

#### Social Marketing and Franchising:

- In 2012-13, National Aids Control Organization [NACO] awarded the targeted Condom Social Marketing Programme to HLFPPT for implementation in six States namely Andhra Pradesh, Bihar, Delhi, Madhya Pradesh, Uttar Pradesh & Uttarakhand. The sales achieved in these states are - 62.3 million pieces of Condoms in UP & Uttarakhand, 9.4 million pieces of Condoms in Bihar, 12 million pieces of Condoms in MP, 4.5 million pieces of Condoms in Delhi, and 3.3 million pieces of Condoms in AP.
- HLFPPT is implementing Improved Family Planning and Reproductive Health Services project in Odisha and Bihar with support from DFID, to prevent unintended pregnancies and improve contraceptive prevalence especially among young, low parity, poor and socially excluded women.



- To facilitate reduction of Maternal Mortality Rate [MMR] HLPPT is implementing the project Accelerating Access to Maternal Health Products and Services in 19 high focus districts of Rajasthan under the Brand name of Merrygold Health Network.
  - With the endeavour to expand marketing of Contraceptives, HLPPT initiated innovative project on Social Marketing of Cycle Beads with support from Institute of Reproductive Health. Cycle beads have been socially marketed and 5776 women are currently using this in 40 urban slums and 2 blocks of Kanpur district of Uttar Pradesh.
  - HLPPT worked as a consortium partner with FHI 360 and implemented a large scale Urban Health Initiative (UHI) focusing on family planning in 11 cities of Uttar Pradesh. Key role of HLPPT was Social marketing of Oral contraceptive pills and Condoms. In 2012-13, the Trust sold 9.7 million pieces of Condoms and 4.2 lakh cycles of Oral Contraceptive Pills [OCs].
  - HLPPT implemented Oral Rehydration Salt [ORS] and Zinc social marketing project in Lalitpur in 661 villages, with support from UNICEF. Lalitpur project was scaled up as project 'Amrit' in 22 districts in 6 States reaching more than 24,000 villages. ORS and Zinc were made available in more than 16,000 villages. More than 9,000 healthcare workers have been trained on diarrhoea management through ORS and Zinc and around 5 lakh households were reached through ORS and Zinc demonstrations.
  - The Merrygold Health Network (MGHN) model is a social franchising model established across 35 districts of Uttar Pradesh to provide high quality, affordable Maternal and Child Health services. In 2012-13, under MGHN, 64 Merrygold Hospitals and 178 Merry silver clinics were operational in 30 districts of UP, with 9082 community level volunteers or Merry Tarang partners at remote village locations to provide information on maternal and new born care issues to women, refer women and accompany them to hospitals for Antenatal Care, Institutional deliveries, and family planning needs. In 2012-13, total services provided through this network include 15379 deliveries, 57217 Antenatal Care, 2759 Day Care procedure, 2110 IUD insertion, 429 sterilization cases. The Couple Year of Protection for 2012-13 is 21386.
- ### HIV Programming and Technical Support in Sexual and Reproductive Health
- Technical Support Group (TSG) for Condom Promotion essentially functions with an intent to ensure continuous increase in the demand for socially marketed condoms and strengthen logistics, availability, accessibility, reduce wastage of free Condoms by working very closely with NACO. In 2012-13, totally 8,85,538 outlets were created across 15 States.
  - As a commitment towards reducing HIV related morbidity and mortality in adults and children and mitigating the impact of HIV, HLPPT implemented Promoting Access to Care and Treatment, through 34 Community Care Centers [CCCs] in 5 States and 1 Union Territory, with support of Global Fund through Population Foundation of India. 18,259 People Living with HIVs have registered in and accessed services from CCCs throughout the year 2012-13. 70 regular trainings and 91 refresher trainings were imparted for Medical Officer and Nurses and CCC staff.
  - Link Worker Scheme project is being implemented with support from NACO, UPSACS, in 9 districts of Uttar Pradesh, to address complex needs for rural HIV prevention, care and support requirements. 360 Link Workers from village level workforce and 9175 volunteers have been trained on issues of HIV/AIDS, Gender, Sexuality, Sexual Tract Infections. 900 information centers, 1064 red ribbon clubs and 982 condom depots were established. 8866 HRG population, 40861 vulnerable population and 14272 bridge population, and 575 People Living with HIV (PLHIVs) were reached and linked to respective facility.
  - Swagati Project (Intervention at TI level) was operational in coastal districts of Andhra Pradesh among the High Risk Groups. This community-

led initiative covered 8 districts and supported 18 Community Based Organizations, supported 22784 community members, facilitated 978 Community Based Groups, 842 community leaders were developed, 137 trainings were organized covering 4100 community members in 6 months on health, savings, social entitlement & crisis management, trained 136 paralegal volunteers, opened 1572 savings accounts for community members and facilitated 1430 formal IDs for the community members.

- In 2012-13, Female Condom scale-up programme was implemented in 18 districts of 9 States - Gujarat, Karnataka, UP, MP, Chhattisgarh, Punjab, Haryana, Delhi, and Assam. The programme aimed at empowering Female Sex Workers (FSWs) by addressing their vulnerabilities and building negotiation skills.
- HLPPT continued to provide Technical Assistance to State Aids Control Society [SACS] in Andhra Pradesh, Madhya Pradesh & Chhattisgarh through Technical Support Units (TSU). The TSUs contributed significantly in strengthening HIV prevention through development and implementation of evidence based prevention strategies in the respective States.
- HLPPT implemented Sankalp with support from the Employees' State Insurance Corporation (ESIC) in the States of Karnataka and Uttar Pradesh (UP). Sankalp with deep commitment to effect changes in the five important health issues, viz. RCH, HIV, malnutrition, lifestyle diseases and vector-borne diseases among industrial workforce and their family members.
- With support of Delhi State AIDS Control Society (DSACS) in 2012-13, HLPPT capacitated 666 ASHAs in Delhi on basics of HIV AIDS and its preventive aspects. As part of HIV prevention and care mainstreaming effort, HLPPT also build the capacities of 40 grass-root level NGOs working with People Living with HIVs & Orphans and Vulnerable Children, District Collectorate office staff and 125 school teachers in Delhi with DSACS support.

- HLPPT continued promotion of voluntary blood donation in Kerala, with support of Kerala State Blood Transfusion Council, Kerala State Aids Control Society (KSACS) & Networking with NACO supported blood banks, donor motivator organizations and district forums, organize promotional events and voluntary blood donation camps etc. HLPPT supported KSACS in initiating 400 Red Ribbon Clubs in educational institutions in Kerala and organized orientation programme & capacity building for student peer educators & Programme Officers in all 14 districts of Kerala.

### **Knowledge Management**

- HLPPT has established knowledge management unit with the objective of documenting learnings in social marketing, various projects in HIV/AIDS and RCH; conducting research related to reproductive health and undertaking capacity building under NACP-IV and NRHM.
- To build capacity of health service providers on IUCD and Pregnancy Testing Cards, HLPPT signed MOUs with State NRHMs of 10 high priority States viz. Assam, Bihar, Jammu & Kashmir, Haryana, Rajasthan, Chhattisgarh, Uttarakhand, Uttar Pradesh, Odisha, Jharkhand. 1865 health service providers were trained in 74 districts, 180 health service providers were provided hand holding at facility level on IUCD insertion, and as per programme mandate 5% IUCD clients were followed-up at household level.
- HLPPT's innovative programmes during 2012-13 included development and roll-out of two e-learning modules on Family Planning and Infection Prevention & Waste Management. This was offered through a gateway and is accessible to programme managers and nursing professionals, across India.

### **HLL Biotech Ltd.**

HLL Biotech Ltd. (HBL), the 100% subsidiary company incorporated in March 2012, is implementing the Integrated Vaccines Complex (IVC) project at Chengalpattu near Chennai. HBL started functioning from corporate office set up at TICEL Bio-Park,

Taramani, Chennai on 7th June 2012. The total manpower strength of HBL as on 31st March 2013 was 51.

HBL is in discussion with different Vaccine manufacturers and know-how providers for acquiring know-how/technology for Measles vaccine, Hepatitis B vaccine, Pentavalent vaccine and Haemophilus influenzae type b vaccine and Japanese Encephalitis (JE) vaccines in the first phase. The process technology for Rabies vaccine is developed in-house by HBL R&D team and the pre-clinical trials of the developed vaccine is progressing as per schedule.

The means of financing envisaged for Rs. 594 crore IVC project is 1:1 debt-equity. Out of Rs. 285 crore equity investment planned by Government of India, a sum of Rs. 178 crore has already been infused in two tranches.

### 15.52 REGIONAL OFFICE OF THE HEALTH AND FAMILY WELFARE (ROHFW)

Regional Offices of Health and Family Welfare (ROH&FW) were established by merging Regional Coordinating Offices (RCO) and Regional Health Offices (RHO) in 1978 to supervise, monitor and co-ordinate matters relating to centrally sponsored Health & Family Welfare Programmes. Currently, there are 19 Regional Offices of Health & Family Welfare functioning under the Directorate General of Health Services, located in the various State Capitals and headed by a Senior Regional Director. The essential units of the ROH&FW are: (i) Malaria operation Field Research Scheme (MOFRS), (ii) Entomological Section, (iii) Malaria Section, (iv) Health Information Filed Unit (HIFU) and (v) Regional Evaluation Team (RET).

#### Roles and Responsibilities:

- Liaison of centre-state activities for implementation National Health Programmes.
- Cross-checking of the quality of the malaria work, maintenance of free malaria clinic in the office premises and review/analysis of the technical reports related to NVBDCP.
- Checking of the records in respect of Family Welfare beneficiaries and other registers maintained during the tour and provide feedback related to Family Welfare programme activities.

- Organizing training for laboratory technicians, medical and para-medical staff as well other categories of staff on orientation in various National Health Programme.
- Specified responsibilities are undertaken by Regional Evaluation Team (RET), Health Information Field Unit (HIFU) and Malaria Operational Field Research Scheme (MOFRS).

#### Performance of Technical Activities:

The Activities under taken by ROH & FW for the year 2013-14 are as below:-

- 84 Review meetings were held with State Programme Offices to review implementation of National Health Programmes.
- Implementation of National Health Programmes was reviewed by filed visits to district & sub-district level health facilities.
- 384 Meeting were participated at National and State levels.
- 119 Training Programmes were organized in which 1263 participants were imparted training in malaria microscopy, ICD-10 and other activities.
- 5 drug resistance studies, 33 entomological survey and 27 evaluation studies were undertaken through MOFRS, RETS and CBHI teams.
- 337184 peripheral smears were cross examined for malaria. Of them 3148 slides were found with discrepancies. Feedback was given to concerning health care facility and corrective actions were taken.

### 15.53 NEW DELHI TUBERCULOSIS CENTRE, NEW DELHI

NDTB Centre is a referral Centre for TB patients from all parts of the country who could avail diagnostic and treatment facilities. The Centre was designated as State TB Training and Demonstration Centre for the state of Delhi in the year 2005. Since then the Centre has been imparting training and retraining facilities to the medical and paramedical staff of the 25 Chest Clinics under RNTCP.

The Centre has a quality assured, well-functioning Laboratory which has been designated as Intermediate Reference Laboratory (IRL) by Central TB Division, Ministry of Health and Family Welfare, Government of India. The culture of mycobacterium and Drug Susceptibility Tests (DST) is performed in routine here. In addition, culture and DST is also carried out for samples of MDR suspects referred from 15 out of 25 Chest Clinics of Delhi. The IRL along with National Reference Laboratory at National Institute of TB and Respiratory Diseases have been truly the backbone for bringing the entire State under DOTS PLUS MDR Treatment since 2009.

The Bio-safety Level III Lab at New Delhi TB Centre is functioning with the introduction of newer diagnostic tests like Liquid culture MGIT 60 and Line Probe Assay (which gives the results within one week). The laboratory is providing free service to TB patients coming through Revised National TB Control Programme.

At present, the institute has following activities:

- Referral OPD services for TB and Allied diseases patients,
- Special Clinics for TB and Diabetes, TB and HIV, Chronic Obstructive Airways Diseases and Tobacco cessation clinic,
- State TB Training and Demonstration Centre related activities,
- Intermediate Reference Laboratory activities and
- Research in the field of TB and Respiratory Diseases.

#### **Newer Initiatives taken during the year:**

- A step forward by creating and launching its own website [www.ndtbc.com](http://www.ndtbc.com). The site has information about various facilities and activities undertaken by the Centre.
- National level Programmatic Management of Drug Resistant TB trainings for medical and paramedical staff of northern states of India were started during the year.

- Faculty members participated in National level RNTCP appraisals of districts of different states preparing for DOTS Plus activities.
- Two Research papers prepared by faculty of the Centre were published in the International journals during the year in addition to publications in national journals.
- Three operational Research proposals prepared by faculty of the Centre were submitted to National Operational Research Committee under RNTCP for approval.
- The Institute has won the crown of being designated as a National Institute under RNTCP along with National Institute of TB and Respiratory Diseases, New Delhi, National Institute for Research in Tuberculosis, Chennai, NTI Bengaluru and Jalma Institute, Agra. The institute has been given the responsibility of acting as a nodal agency for involvement of other health sectors in RNTCP.
- "TB Supervisor Course" (Previously TB Health Visitor Course) has been re-designed and has got accredited by RNTCP India. The course material has been finalized and the course will commence from next academic year.

During the year 2012-13, 12663 patients visited and revisited the centre for diagnosis and treatment of tuberculosis and other respiratory diseases. In all, about 29,000 laboratory examinations were done including drug sensitivity, culture and drug susceptibility testing. As far as teaching and training activities are concerned, in all 1091 medical and para medical personnel have been trained including students from Maulana Azad Medical College and PG students from VP Chest Institute. Centre has been actively participating in National Conferences. During the year, 3 research papers were presented at NATCON 2012 and 1 paper was presented in the international conference at Kaula Lampur. Newer research projects were undertaken during the year by the faculty members in collaboration with the other institutes to contribute in the research in tuberculosis.

An insight on New Delhi TB Center's activities during 2013-2014:

### Outpatient Attendance:

Parameters	Year 2012-13	Year 2013-2014	
		Achievement up to October, 2013	Target for 2013-14
New out patient registered	6815	4140	7400
Revisits of patients	5848	3056	6000
Total out patients attendance	12663	7196	13400

### Patients attendance for utilizing various diagnostic/treatment facilities available at New Delhi TB Centre:

Parameters	Year 2012-13	Year 2013-2014	
		Achievement up to October, 2013	Target for 2013-14
Attending for Laboratory tests	28786	5824	11000
Attending for Mantoux test	5173	2684	5000
Taking treatment under DOT Centre of NDTB Centre	100	118	-
Radiological Examinations	582	390	680
Attending special clinics (Diabetes, HIV, COAD)	136	401	-

### Trainings/IRL Visits/Publications:

Parameters	2012-13	Achievements up to October 2013
Personnel trained	1091	660
IRL Visits for EQA	26	-
Supervision & monitoring of chest clinics	36	3
Research and publications	7	4

### Research Projects being undertaken

- Rapid screening of Ofloxacin resistance among MDR (TB) suspects by molecular and solid culture method - submitted to National OR Committee.
- Assessment of barrier for utilization of RNTCP services in an urban slum of Delhi - a community based study -submitted to National OR Committee.
- Capture Recapture study to assess the prevalence of TB disease in urban area of Delhi -submitted to State OR Committee.
- To study association of TB and Tobacco usage among DOTS patients in Delhi- submitted to State OR Committee.
- Genetic polymorphism of rare mutation in Rifampicin resistance of *M. tuberculosis infected patients*- Project being done by M.Sc. students posted in Laboratory.
- Usefulness of Florescent based Rapid Liquid culture method for diagnosis of tuberculosis in children - Project being done by M.Sc. students posted in Laboratory.
- Usefulness of colorimetric MTT assay for diagnosis of Multi Drug Resistant Tuberculosis in Low resource conditions-Project being done by M.Sc. students posted in laboratory.

- MD/MS Thesis in different subjects being conducted in collaboration- for PG students of Maulana Azad Medical College and Lady Harding Medical College.

### 15.54 CENTRAL HEALTH EDUCATION BUREAU (CHEB)

Central Health Education Bureau was established in 1956 under the Directorate General of Health Services to promote Health Education in the country. It plans and implements programmes for promotion of health education in the country through training of Health professionals in the field of Health Education and Promotion, production of prototype health education material (both electronic and printed material) for promotion of health education, conducting health behavioural research, dissemination of Health Education to the general population etc.

The Major activities of CHEB in the financial year 2013-14 were:-

1. Running Postgraduate Diploma course in Health Education, affiliated to University of Delhi and recognised by Medical Council of India since 1971.
2. A total of 43 Orientation Training Programmes have been conducted for International and National level students. The trainees comprised of medical students (undergraduate & postgraduate) and nursing students. A total of 1593 trainees have been provided orientation training on Health Education and Health Promotion during the year.
3. Development of IEC Action Plans for Preventive component of "National Programme of Prevention and Management of Burn Injuries" and of "Capacity Building for Establishment of Trauma Care Facilities in Govt. Hospitals on National Highways" in the identified states during 12th Plan (2012-17).
4. Actively contributed and participated in India International Trade Fair 2013 in Health pavilion of Ministry of Health & Family Welfare. The various health education activities like healthy lifestyle exhibition, drawing competition, and health educational games were organised for visitors coming to IITF 2013.
5. Innovations in Health Education awareness by Planning and Developing Health Tambola on topics such as Organ Donation, Health Equity, NCDs, Women Issues, Mental stress etc.
6. Celebrated World Health Day 2013 at Nirman Bhavan, New Delhi and screened 1260 officials for Blood Pressure to create awareness about the importance of getting regular blood pressure check-up. An exhibition on Healthy Life style was also displayed.
7. Celebrated World No Tobacco Day 2013 at National Bal Bhawan, New Delhi and organised exhibitions on Health Hazards of Tobacco, slogan writing competition and oath taking ceremony for the students enrolled during summer vacations.
8. Planning and conducting Health Awareness Programme on "Indian Organ Donation day" with NOTTO in March 2014.
9. Pretesting of Pledge form of draft Transplantation of human Organs and Tissue Rules- 2013.
10. Contribution in development of Health Education curriculum for class 3rd to 10th students along with NCD cell, Dte.GHS and NIHFWS.
11. Display of 08 exhibitions on Healthy life style at different places in Delhi.
12. Launching new website of CHEB.
13. Draft of new edition of Booklet on "Healthy Lifestyle" finalised.

