CHAPTER 4

PROFILE OF SELECT HOSPITALS

4.1 ALL INDIA INSTITUTE OF MEDICAL SCIENCES, DELHI

4.1.1 Establishment and Growth over the years

All India Institute of Medical Sciences (AIIMS) was established in 1956 in New Delhi. It was created as an Act (AIIMS Act, 1956) of Parliament to serve as a central point for supporting and fostering top quality and calibre in health care sector in India. It was created to be the top most institution of education, research and clinical care facility in the country.

The Institute has wide ranging capabilities and facilities for all aspects of healthcare education and research such as teaching; patient care; empirical and theoretical investigations into topics of greater interest. AIIMS has now become synonymous with excellence. In another parliamentary act of 2012, the six new AIIMS like institutes have been given autonomous powers like the original AIIMS.

AIIMS is not a single hospital today. It is spread over 1500 sq. feet area over the main campus and houses various associate centers or hospitals along with the main building such as Dr. R. P. Centre (Rajendra Prasad Centre) for Ophthalmic sciences; ICRH -- Institute Rotary Centre Hospital; C T Centre or Cardiothoracic Centre; Neurosciences Centre or N S Center, and De-addiction Centre. At the end of 2013-2014 year, the combined hospitals treated about 2.8 million outpatients and 2 million inpatients every year. At present, the hospital has a total of 2428 beds (including all private and general beds in associate hospitals along with the main hospital). About 500 faculty members are currently employed in addition to non faculty members and other nursing and paramedical staff.

Another associate hospital of AIIMS Delhi is the Rural Health Services center which was established in Ballabgarh to cater to the burgeoning needs of Indian villages. This center which is named as comprehensive rural health services project (CRHSP) is 35 km from central AIIMS. It has shown considerable improvement in meeting the health needs of village community in India and encourages active participation of villagers through its wide spread system of sub divisional hospitals and primary
healthcare centers. At present, CRHSP has about 60 beds located at Ballabgarh, Haryana.

4.1.2 Vision and Objectives

The Vision

AIIMS has become synonymous with equitable, affordable and superior healthcare delivery service. The institute has the potential to become a truly global brand and for this to happen, the institute needs to reinvent itself with changing times and leverage latest technologies and techniques to further improve healthcare performance and provide trust to all sections of society. The doctors also take up teaching and research duties in addition to clinical care being provided to the overwhelming number of patients. In fact, the primary mandate of AIIMS is Education and Research and the hospital is supposed to be a referral institution only, still thousands of patients reach the institute every day in search of treatment. This may hamper the primary duties of medical professionals but the doctors in AIIMS believe in helping the patients first and are trying to ease the suffering of millions of people who are dependent on them for quality patient care.

Objectives

The main objectives of the AIIMS (1956) Act are:

- To develop high standards of teaching in both Undergraduate and Post-graduate Medical Education in India.
- To establish itself as the top most healthcare educational institute for the training of medical personnel in all branches of medical education
- To attain self-sufficiency in Post-graduate Medical Education.
- To achieve top levels of research activities.

4.1.3 Teaching and Research

As per the AIIMS act of 1956, the institute conducts teaching programs in medical and para-medical courses in 42 disciplines at both undergraduate and postgraduate levels. The Institute awards its own degrees to the students and it is considered as the most prestigious institute of healthcare education in India. In the para-medical field, AIIMS runs Nursing – BSc. (Hons.) degrees at its College of Nursing.
In the recent years, AIIMS has been voted the best medical school for the consecutive eleventh year by India Today’s Medical Schools League table. The schools were rated in terms of reputation; infrastructure; student care; placement opportunities etc. The institute boasts of thirty nine teaching departments with about ten thousand personnel at various positions. There were about 724 undergraduate students and 1399 post graduate students in various disciplines in the year 2013-2014. The institute also provided postgraduate training to 675 short-term trainees and 20 long-term trainees.

AIIMS runs collaboration programs such as WHO fellowship programs with World health Organization under which 70 WHO fellows were enrolled. The institute also offered observer-ship to 63 foreign nationals (26 postgraduate and 37 undergraduates).

AIIMS is reinventing its educational system in tune with changing times and has started using the various technical aids such as animations and videos for teaching purposes. The latest Organizational Learning concepts have been introduced in the Anatomy department which has established an e-Learning facility. Similarly, a State-of-the-Art high-fidelity Human Patient Simulation system has been acquired by the Department of Anesthesia to expose students to crisis situations in real time scenarios.

The Division of Neonatology in the Department of Pediatrics have created an online teaching package for Essential Newborn Care and Sick Newborn Care. This provides an interactive platform to people ate far flung areas to improve their skills. The department is also taking advantage of mobile technology to provide latest Apps on smart phones for management of newborn care.

AIIMS hosted and organized about 188 conferences, symposia, workshops and training programs in the year 2013-2014. These conferences are organized at both national and international levels in collaboration with various agencies in healthcare sector. The institute considers research as a mission and stresses a great importance on the research activities. Lot of funds and grants are diverted towards research activities so that the institute remains at the top level of healthcare education. Because of being a premier public sector unit, research is directed towards areas that are beneficial to the society as a whole and therefore, national health issues are given more prominence in the institution.
In the year 2013-14, AIIMS professionals have produced around 2006 publications in scientific journals and abstracts. It also produced 308 books, book chapters and monographs. Even in previous years, the institute has been ranked first for consecutive seven years from 1987-1994 with about 1,630 publications which are listed in Medline. The institute has received research grants for over Rs. 70 crores in bio-medical area. Around 508 research projects were started in this year out of which, 211 have been successfully completed.

A new journal has also been launched – BMJ Innovations in collaboration with British Medical Journal (BMJ) to produce and promote innovative research in healthcare sector.

**4.1.4 Clinical Facilities**

The presence of this institute has made top quality clinical care available to the poorest sections of the society at affordable costs without compromising on the quality. The institute has been a pioneer in many areas of health care neonatal surgery; cochlear implants; heart valve surgery; multi organ transplants and joint replacements etc.

There are a total of fifty two teaching departments and centres out of which twenty nine are clinical departments and four are super specialty centres. Except for the dog bites cases, infectious diseases patients and burn patients, all other kind of disease treatment is handled in the institute. The total number of surgical operations performed at AIIMS in the year 2013-14 was over 100,000. Even after being voted as the best hospital in India, several times in previous years, AIIMS continues to strive hard to maintain its lead and reputation as the country’s premier health institute.
The hospital performance indices are shown in the Table 4.1 below.

**Table 4.1 Hospital Statistics for AIIMS**

<table>
<thead>
<tr>
<th>Hospital performance indices</th>
<th>2013–14</th>
<th>2012–13</th>
<th>Inference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average length of stay (days)</td>
<td>4.4</td>
<td>4.9</td>
<td>6.6</td>
</tr>
<tr>
<td>Average bed occupancy rate (%)</td>
<td>86.7</td>
<td>84.7</td>
<td>84.1</td>
</tr>
<tr>
<td>Net death rate (%)</td>
<td>1.6</td>
<td>1.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Combined crude infection rate (%)</td>
<td>6.0</td>
<td>-</td>
<td>7.8</td>
</tr>
</tbody>
</table>

As can be seen from the table above, there is an effective utilization of beds with average bed occupancy of about 86% and average hospital stay of about six days. The mortality rate is good – below 2% and the combined infection rate has come down to about 6% only.

**4.1.5 Achievement and Merit**

Various achievements of AIIMS are listed below.

- The Division of Neonatology has been given recognition as WHO (World Health Organization) centre of collaboration.

- The Department of Transplant Immunology and Immuno-genetics was recognized as a Centre of Excellence in Molecular Medicine by the ICMR (Indian Council for Medical Research)

- Ministry of Health and Family Welfare, recognized the Department of Geriatric Medicine as a Regional Medical Institution which caters to the states of Punjab, Haryana, Uttarakhand, Himachal Pradesh, Madhya Pradesh and NCR Delhi (National Capital Region of Delhi)

- Ministry of Health and Family Welfare also recognized the Department of Pulmonary Medicine and Sleep Disorders as a as Centre of Excellence for Extra-pulmonary-TB (EPTB).
Five Faculty members of AIIMS were awarded Padma Shree by the President of India on January 31, 2014

4.2 THE POSTGRADUATE INSTITUTE OF MEDICAL EDUCATION AND RESEARCH (PGIMER), CHANDIGARH

4.2.1 Establishment and Growth over the years

The Postgraduate Institute of Medical Education and Research (PGIMER) Chandigarh was established as a centre of excellence in the year 1960. Its main purpose was to be one of the best education and research institute in all possible branches of healthcare education. The mission of the institute was to produce best medical specialists who would then go to different parts of the country to spread their knowledge and skills in terms of both the education and clinical care.

The institute is located centrally at about 14 km from airport and 10 km from the railway station and is accessible easily through well connected roads. Over the years, PGI has grown with new facilities and specialty centers. A new and advanced Pediatrics Centre was opened in year 1985 which added nearly 300 beds to the children’s hospital, where all the facilities were available at one place. Presently, there are a total of 1948 beds in the institute which included both indoor and observation beds.

As a brain child of then Chief Minister Sardar Partap Singh Kairon, PGI had its first patient on June 23, 1962. The first batch of postgraduate students was taken in 1963 while the clinical hospital wing – known as the Nehru Hospital was inaugurated by the first Prime Minister of India, Pandit Jawahar Lal Nehru on July 7, 1963. It was converted into an autonomous body by Act 51 of Parliament in 1966 and came under the supervision of the Ministry of Health and Family Welfare.

The Advanced Eye Centre of the institute is used as a referral point by people of neighbouring states of Jammu and Kashmir, Punjab, Haryana, western Uttar Pradesh, and Himachal Pradesh. The first ever laser treatment of glaucoma and retinal diseases was done in PGI in July 1989.

At present, further expansion is being done by the hospital in terms of facilities and infrastructure. The Sports injury management facilities are being upgraded and gait analysis lab and Body composition analyzer is expected to be added the facilities.
Similarly, the Pediatric Orthopedic division has added 11 inpatient beds in the Advanced centre. Moreover, a Tandem Mass Spectrometer has been acquired for better patient care. National Knowledge Network (NKN) has been approached to add fast speed internet connection to make the entire campus as Wi-Fi enabled.

4.2.2 Vision and Objectives

The mission of the institute is engraved on the logo of the hospital in devnagari script which means "Service to the Community, Care of the Needy and Research for the Good of all".

The major objectives of PGI are:

- To provide excellent and top quality patient care.
- To achieve Self-Sufficiency in healthcare education (specifically post graduate)
- To provide highly qualified healthcare teachers in all branches of medical education.
- To provide excellent facilities for education and training of personnel in all medical fields.
- To focus on Community based research.

4.2.3 Teaching and Research

The education wing is well maintained with enough conference halls, multipurpose halls and lecture theatres. The infrastructure also includes a fully stocked library, Computer labs with internet connections and an auditorium with a seating capacity of 1000 people at a time. There are currently around 330 highly qualified doctors as faculty members. In addition, there are 370 Junior Residents and 246 Senior Residents working in the hospital.

Research is a fundamental part of the medical education in the Institute. At present, there are more than 600 research projects and schemes that are being undertaken in the institute. PGI has attracted grants up to 24 crores from various national and international agencies.

PGI has focussed on the needs of the society and hence its research work is also towards national health areas such as family planning, community health, child
health and nutrition, tuberculosis, leprosy, fertility control etc. For this reason, the institute has established a Department of Experimental Medicine which focuses on research at molecular level to find newer cores and drugs for treatment of lifestyle diseases.

The research output of the institute is at par with the most advanced hospitals. More than 500 scientific research papers are published every year in National and International journals. In the year 2013-14, about 1113 scientific papers have been published while 134 medical professionals of the institute have been awarded national and international awards and fellowships.

4.2.4 Clinical Facilities

PGIMER is a referral centre for several northern states of Jammu and Kashmir, Punjab, Haryana, western Uttar Pradesh, and Himachal Pradesh. The hospital provides tertiary care, intensive care services and emergency services to the patients. There are about fifty different departments offering clinical and educational services. The Nehru Hospital is the main hospital having 1400 beds with 98 rooms. There are five private wards in the institute. The institute has made provision for giving free treatment to HIV positive patients. There are 2,06,191 outpatients and 78,568 inpatients in the year 2013-2014.
The hospital performance indices are shown in the Table 4.2 below.

**Table 4.2 Hospital Statistics for PGI**

<table>
<thead>
<tr>
<th></th>
<th>2013-2014</th>
<th>2015-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Beds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indoor (Sanctioned Beds)</td>
<td>1740</td>
<td>1740</td>
</tr>
<tr>
<td>Observation</td>
<td>208</td>
<td>208</td>
</tr>
<tr>
<td>Total Beds</td>
<td>1948</td>
<td>1948</td>
</tr>
<tr>
<td>Bed occupancy rate</td>
<td>100.9</td>
<td>100.8</td>
</tr>
<tr>
<td>Average daily Inpatients admission</td>
<td>225</td>
<td>240</td>
</tr>
<tr>
<td>Average Length of stay</td>
<td>7.8</td>
<td>7.3</td>
</tr>
<tr>
<td>Death Rate:</td>
<td>6.2</td>
<td>5.3</td>
</tr>
<tr>
<td>Operation Performed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major</td>
<td>40714</td>
<td>43373</td>
</tr>
<tr>
<td>Minor</td>
<td>149690</td>
<td>162021</td>
</tr>
<tr>
<td>Total</td>
<td>190404</td>
<td>205394</td>
</tr>
</tbody>
</table>

There is a hundred percent utilization of beds with average bed occupancy of about 100% and average hospital stay of about eight days. The mortality rate is 6 which is higher than that of AIIMS, Delhi but is showing signs of decreasing further.

**4.2.5 Achievements and Merit**

- The first DM (Neonatology) program was started in PGI. Since then, the neonatal intensive care unit saves young lives by providing artificial ventilation to about 200 babies (who weigh above 500 grams) and life support to 1000 babies every year.

- In November, 2014, the Department of Urology initiated the facility of Robotic Assisted Surgery. Besides AIIMS in Delhi, there is no such facility available in northern India.

- The first ever pancreas transplant was performed in the Department of Renal Transplant Surgery at PGIMER, Chandigarh. It is the sixth pancreas transplant done in India.
The institute received two awards for Healthcare Excellence for the year 2014. These awards are given every year by the Federation of Indian Chambers of Commerce and Industries (FICCI). The awards were conferred under Medical Technology category and Diagnostics, Pathology category.

PGI is the only public sector hospital and among the seven hospitals to be given the star rating under the Energy Star Labeling Scheme for hospital buildings. The initiative was a part of power sector initiatives taken by the Government of India.

It has been conferred the second position in the list of top medical education institutes after AIIMS, Delhi by the NIELSEN BEST HOSPITALS SURVEY 2014.

Prof. Deepak Kaul of PGI made a scientific breakthrough by discovering a microRNA (designated as miR-2909 in the international literature). The microRNAs are considered to fight microbial infections and play a role in discovering newer cures for autoimmune diseases; Coronary Heart Disease and Cancer.

Dr. Anish Bhattacharya of Department of Nuclear Medicine at PGIMER has developed a new for better PET imaging which has been selected for international innovative medical research awards.

Prof. Amod Gupta, HoD, Department of Ophthalmology was awarded Padma Sri by the President of India for the year 2014.

The National Florence Nightingale Award 2014 was awarded to Ms. Sunita Sharma who is a multipurpose worker of PGIMER

4.3 GOVERNMENT MEDICAL COLLEGE (GMC), JAMMU

4.3.1 Establishment and Growth over the years

Government Medical College, Jammu, was established in 1973 in a temporary building. The main purpose of the institute was to provide quality health care services and top class education to the people of this region. It is a premier institute of Jammu
which is located at the center of the city of Jammu and easily accessible through all parts of the city.

In the beginning, the plan was to have 50 MBBS graduates per year which has since been increased to 150 students per batch. In the next ten years of its establishment, the hospital started the postgraduate programs. At present it runs 16 MD and MS courses. It also offers six diploma courses to the students. In the next few years, the hospital plans to start six full time courses in super-specialties.

GMC, Jammu is a referral hospital for Jammu and Kashmir State with referrals from Kathua, Udhampur, Katra, Rajouri, Poonch etc. The College building was inaugurated in 1993 with about nine hundred beds. At present, the hospital has 1700 beds which include associated hospitals such as SMGS hospital in Shalamar; Dental Hospital in Rehari and Sir. Col. R.N. Chopra Nursing Home.

At present, Govt. Medical College, Jammu is getting patients from neighboring states of Punjab and Himachal Pradesh, besides Jammu province and part of Kashmir valley. There are a total of Five Teaching Hospitals with Medical College Hospital as the main campus. The rest are distributed across the city -- CD Hospital, Psychiatry Hospital, SMGS Hospital and Dental Hospital. There are around 800 doctors out of which about 350 are faculty members; 1000 Paramedical Staff which includes, nurses, ward boys and other supervisory staff; and around 1500 Class-III & IV employees in the group of five hospitals. There are three affiliated blocks for teaching purposes in R.S.Pura, Dansal and Kot-Bhalwal.

Government Medical College, Jammu is governed by the college council which is headed by the Principal and Dean. This College Council consists of all the Associated Professors and Professors of the hospital. The College Council serves has an advisory role to the Principal.

**4.3.2 Vision and Objectives**

The Vision Statement

The hospital was set up to provide good quality medical education to undergraduates in the region.

The major objective was to produce competent, skilled and quality healthcare professionals to serve the medical needs of the people of this state.
4.3.3 Teaching and Research

The hospital offers both undergraduate and post graduate courses. The batch capacity for undergraduate MBBS course is now 150. There are 110 seats for post graduation (MD courses) in 15 disciplines. Besides these courses, diploma courses are also being offered in six disciplines with 33 available seats. An ancillary medical training program for paramedical staff is also provided under the aegis of Government medical college.

The education infrastructure includes thirteen lecture halls and one examination hall with a capacity of 200 seats. A world class library with 329 subscribed journals, a photocopying machine and internet facility is provided for the research work. There is an auditorium with 830 seat capacity for holding seminars and conferences in the hospital.

Research work is given great importance in the hospital with about 300 research papers being published every year in international and national journals of repute. As this is a public sector hospital, the focus of research is directed towards solving the health related issues of the society.

Around 30-40 workshops; conferences and seminars are organized by the hospital each year.

4.3.4 Clinical facilities

There are twenty eight clinical and teaching departments in the Govt. Medical College, Jammu. There is a established Coronary care unit with facilities like ECG -- Echocardiography, Image Intensifier, Holter test etc. It also has facilities for implantation of Pace makers for heart diseases.

The hospital has added a state of art Dialysis unit with provision for Haemodialysis and an EEG machines for Neurology patients. A special burns ward has been set up for critically burnt patients. Another addition is the Neurosurgery Unit which has the facility for conducting Spiral CT Scan and an intensive care unit for head injury cases.

The Diagnostic facilities have also been upgraded with latest technologies such as Cardiac Cath Lab, MRI and Spiral CT Scan. An open heart surgery is also being performed in the hospital.
The hospital performance indicators are presented in Table 4.3 below.

### Table 4.3 Hospital Statistics for GMC Jammu

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Beds</td>
<td>1700</td>
<td>1700</td>
</tr>
<tr>
<td><strong>Operation Performed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major</td>
<td>9387</td>
<td>10434</td>
</tr>
<tr>
<td>Minor</td>
<td>4515</td>
<td>5618</td>
</tr>
<tr>
<td>Total</td>
<td>13902</td>
<td>16052</td>
</tr>
<tr>
<td><strong>Average Patients</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out patients</td>
<td>407347</td>
<td>455584</td>
</tr>
<tr>
<td>Admitted Patients</td>
<td>42511</td>
<td>46536</td>
</tr>
</tbody>
</table>

### 4.3.5 Achievements

- The Department of Medicine has recently started providing super-specialty care in the field of Cardiology, Neurology, Nephrology, Endocrinology and Gastroenterology.
- The Department of Surgery has also started providing super-specialty care in Pediatric Surgery, Thoracic Vascular Surgery, Urology Surgery Cardio, Neuro Surgery, Plastic Surgery.
- New facilities for Arthroscopy in Orthopedics Department has been added.
- New Endoscopy facility for the Gastroenterology Department has been started.
- Laser facilities for Ophthalmology Department has been recently introduced.
- A Disaster ward and ICU has been added to the Emergency Wing of the hospital.
References


Annual Report for AIIMS, Delhi 2014-2015


GMC Jammu Annual Statistics for 2015-2016

Hospital Statistics for PGI Chandigarh, 2014-2015