# I.T.S CENTRE FOR DENTAL STUDIES AND RESEARCH

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DENTAL COLLEGE, GHAZIABAD (DELHI-NCR) ESTD. 2000

# **BEST PRACTICES**



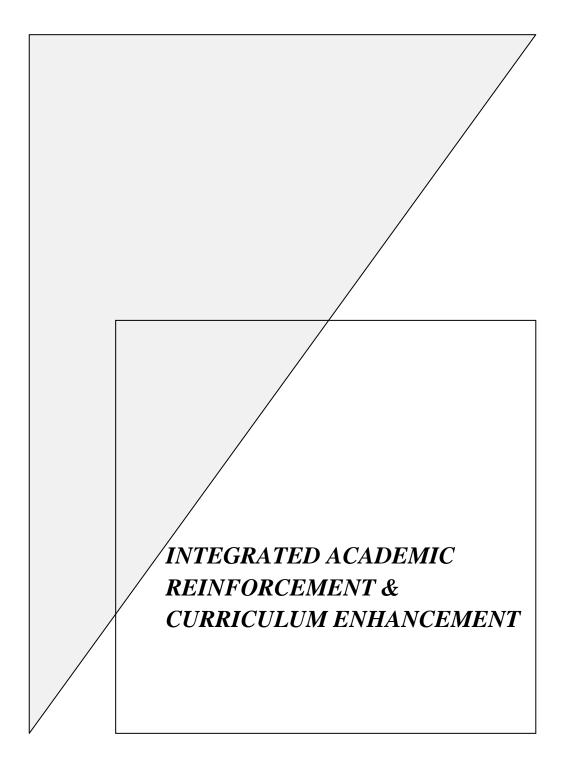
#### **PREFACE**

The I.T.S Group of Institutions under the aegis of Durga Charitable Society, was established in 1995, with a key objective of imparting quality education to students and healthcare to preponderant urban and rural population in Delhi-National Capital region (NCR). More than 8000 Students and around 800 faculty members, in fields of Dental Science, Management, Information Technology, Engineering, Biotechnology, Pharmacology and Physiotherapy, are fractions of this education group, influencing the development of our country in a worthy way.

The I.T.S Centre for Dental Studies and Research, Muradnagar, District Ghaziabad, was established in the year 2000. Located upfront on the arterial National Highway 58, with New Delhi and Meerut City at polar ends, the college is encircled by myriad of hamlets and towns, from where an enormous pool of patients is drawn. The Bachelor of Dental Surgery (BDS) course, pioneer course begun by the college, was recognized by the Dental Council of India (DCI) and Ministry of Health & Family Welfare vide letter no. V- 12017/15/2000-PMS dated 05.07.2005; affiliated to Chaudhary Charan Singh University, Meerut. Subsequently, the institute also got recognized for the Master of Dental Surgery (MDS) course, by the DCI, in all nine specialties of Dental Studies in the ensuing years. At the outset, in the quest of postgraduate training, approval for four seats each was obtained in the specialties of Prosthodontics, Conservative Dentistry, Orthodontics and Periodontics and three seats in specialty of Oral Surgery. Approval for MDS programs in the Departments of Pedodontics, Oral Pathology and Oral Medicine and Radiology followed. Owing to an inherent demand of specialty dentists coupled by expansion of infrastructure, the number eventually swelled to six postgraduate seats in each department (with exception of Oral medicine and Radiology and Public health dentistry). As on today, the CCS University has granted permanent affiliations to all the postgraduate courses. At present, a total of 150 postgraduate students are enrolled in various postgraduate courses attaining premium education.

# LIST OF BEST PRACTICES

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#### Integrated Academic Reinforcement & Curriculum Enhancement (IARCE)

The college is distinctively ubiquitous for excellence in academics, commendable patient care and highly competitive environs to meet the need of tomorrow's dentists from today's perspective. Integrated Academic Reinforcement & Curriculum Enhancement (IARCE) Practice is deemed pivotal for delivering rich-quality education to the students.

#### Objective

- To fortify and rejuvenate existing methodologies of teaching-learning process by continued innovation, focused primarily to actively involve clinical as well as non-clinical departments for exhaustive dissemination of evidence based knowledge.
- To promote exchange of interdisciplinary ideas.
- To keep students updated with latest Trends and advancements in Clinical Dentistry and also familiarize them with molecular and genetic aspect of oral disease.

#### **The Practice**

- The Concept of IARCE is based on core philosophy of integrated learning via consistent upgradation of existing syllabi and incorporating newer facets of educational learning techniques such as Medical Education Technology (MET) in form of MS Powerpoint Presentations.
- Curriculum enrichment is ensured in form of a minimal 5% addition of new Study material every academic year. Simultaneously, **Personality development** and English language classes are held at regular intervals to help weak students cope up with essential communication and interpersonal skills.
- **Integrated teaching** is duly practiced in form of Clinical Grand Rounds, Interdepartmental meetings viz. Ortho-OS, Clinico- pathological meet and Ortho-Pedo seminars, Tumor board meetings of OOO.



**Integrated teaching** 

• Advanced treatment modalities like CBCT, Oral Implantology, Lasers and PCR are open for learning to students of all departments, which results in a collaborative educational experience.

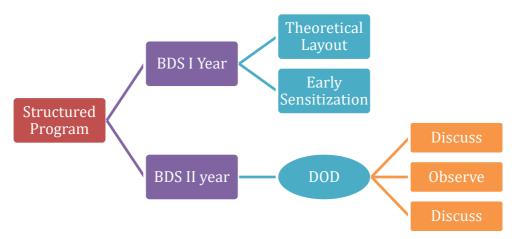


**Lasers** 



**CBCT** 

• 'Early Induction of Undergraduate Students' is a unique concept, wherein first year and second year BDS students are posted on rotational basis in dental clinics. The key objective of this scheme is to accustom the fresher students with the world of clinical dentistry, by letting them closely discern the day-to-day proceedings of patient management.



• White Coat Ceremony is organized wherein the students of BDS 3<sup>rd</sup> year are awarded white coats as a part of the responsibility they will be having as they enter the clinics and start working on the patients.



• **Practice Management Seminars and Workshops** are conducted at the institute to help learn students regarding various nuances of building a sturdy practice. Reputed National Faculty conducts these workshops.



I.T.S Centre for Dental Studies and Research - Best Practices

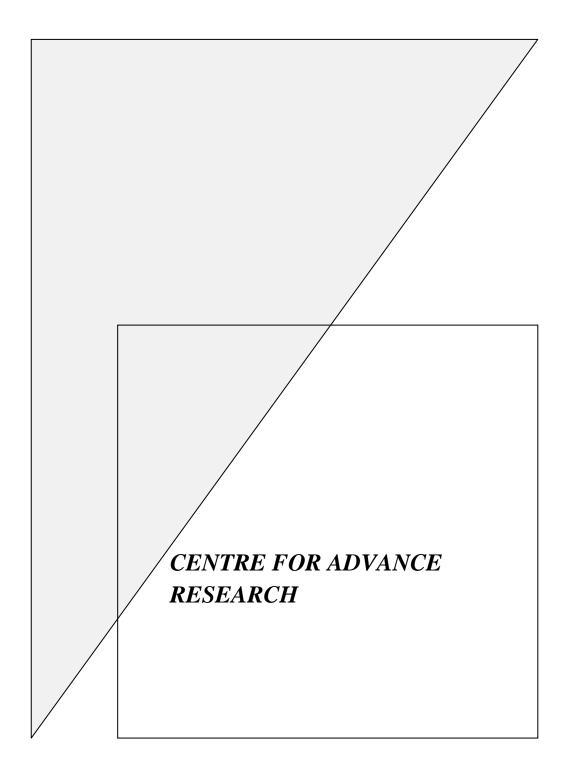
• The Interns are thoroughly guided to prepare for higher education i.e. MDS, as they are given the facility to appear for Mock Online MCQ examination on pattern of MDS entrance examination, at no additional cost.

#### Impact

- The practice has been in continuation for a substantial amount of time now and has shown a vast improvement in clinical skills and academic records of students while delivering comprehensive oral health care.
- The students during the course of their formal education elicit better patient care, improved diagnostic skills, better confidence and greater control over their treatment plans. The university rank holders, number of students participating in foreign exchange programs and receivers of extramural grants are a clear indication of the successful IARCE Practice.

#### **Problems Encountered and Resources Required**

• The institute has encountered problems in relation to curriculum enrichment only in those areas where crucial decisions pertaining to revision and inclusion of additional courses are called for. This is attributed to the very fact that the institute lacks autonomy, since it is governed by rules and regulations of the Chaudhary Charan Singh University and the Dental Council of India.



## **Centre For Advanced Research**

A state-of the-art research Centre has been established in the institution to facilitate research activities by the name of '**Center for Advanced Research'** in the year 2015. An array of research equipment is available in the research center to support research in dynamic fields of Microbiology, Genomics, Biochemistry and Metallurgical sciences.

#### Objective

• To enable young researchers to test and compare different theories and approaches, explore different methods, develop and discover new materials & techniques for patient care.

#### **The Practice**

• Research in the field of life sciences including microbilogy, genomics (PCR and gel documentation sysytem), ELISA, Spectrophotometer and Metallurgical sciences are catered for in the Centre.



Microbiology





PCR

Gel Documentation

Universal Testing Machine

- Well-designed and clearly written protocols with supporting articles, duly approved by the head of the department are received at the office of research.
- These proposals are carefully analysed for feasibility and appropriate information and advice is provided and approved by the Research Coordinator and Dean Academics prior to commencement.
- All projects before commencement have to be agreed upon by atleast 4 members of the institutional research committee.
- Research techniques are aimed to not violate established professional ethics pertaining to the health, safety, privacy, and other personal rights of human beings.
- **Our Consultancy services:** The Institute also provides consultancy services for research facilities, which are of interest to other organisations and students at minimal charges.

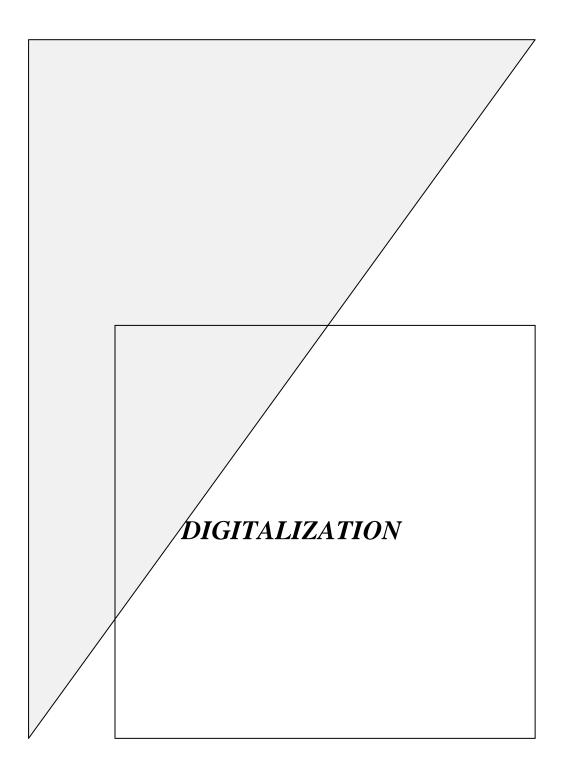
#### Impact

• The availability of research facilities in the premises of the institute motivates more research programs to be undertaken by ensuring easy accessibility for the students as well as patients.

Total Number	Completed	Ongoing	Consultancy	Publications
of projects	Projects	Projects		
enrolled				
103	45	24	34	11

#### **Problems Encountered and Resources Required**

The ever-changing nature of research methodologies requires installation of sophisticated equipment, which makes it difficult to keep abreast due to financial constraints. Scope and limit of the research that can be carried out in the Centre has been defined and for further advanced researches appropriate collaborations are made.



# **DIGITALIZATION**

Over recent years, several actions have been initiated to improve and augment the working efficiency of the institute. Routine operations of the institute are facilitated lately by incorporation of high-end software programs. These software programs have not only improved functioning but have also render the system more transparent.

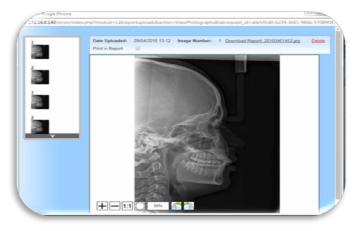
#### Objective

- To improve efficiency, manage time and reduce waste.
- To streamline overall Patient Management including Outdoor and Indoor Admissions, Appointment Scheduling, Departmental Referral and Billing, reduce Patient Waiting Time and record maintenance.
- To improve Transparency

#### **The Practice**

#### Orion Software:

Patient management software is now being used extensively to improve patient care, reduce waiting times and monitor work output of the students. All diagnostic and treatment records of the patient are uploaded in the software and can be viewed and accessed from all the departments. Requirements as well as consumption of consumable and non-consumable items are uploaded through the software. The software has made the functionality of the institute eco friendly, since the records are retained online. The software is a major step towards the institution's effort to go paper-less.



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#### • <u>Employee Management Software:</u>

The software is used to manage salary and leaves of employees. Login ID is generated for each employee through which they can access their leave records, apply for leaves and check the status of approval of the leaves by higher authorities. This software also generates e-salary slips for the benefit of the employees.

#### <u>Twak.to Software:</u>

The software is a chat portal through which online chatting is done to provide college information to the students as well as their parents. It has dedicated portal for interaction between student teacher, teacher-parent and patient-doctor platforms. The software is designated to solve the problems of students, related to both academics and as well as hostels. Parents are endowed with the information of the activities of their wards and equally about their progress. Patients can communicate with the doctor also via this software and solve their queries pertaining to dental treatment.



#### • <u>Almighty Help Desk:</u>

All complaints regarding maintenance matters of the institution are lodged through this software. The software has a time bound escalation system for unresolved complaints, which ascend, up to the highest levels of management in case of complex issues.

#### <u>Library Automation Software- Alice For Windows</u>:

This software is installed for effective management of the central library. Circulation of books, i.e. book issue and return is done through Alice software. Upon scanning the identity card of the user, the software displays the user's information page, which is then used to issue the book. The return date is also displayed automatically.

• Online Public Access Catalogue - for quick and convenient retrieval of listing in the books available in the central library. The

user can search for books by the name of the author, subject or publisher. The system provides information about the availability of books, number of copies available and also precise location of the book in the library.

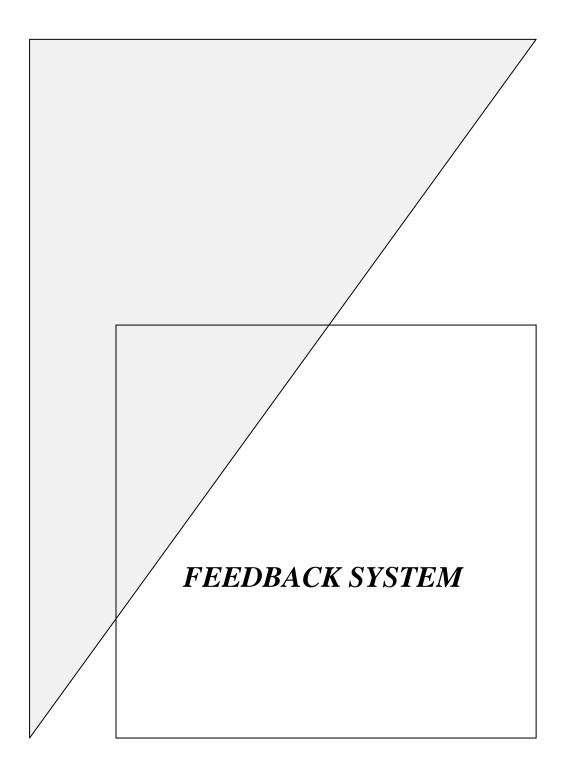


#### Impact

- The ORION Software has regulated the Patient Management in an organized pattern. The Patient waiting time has been drastically reduced and this has in turn increased the daily output as well as better patient record maintenance.
- EMS facilitates easier and effective management of the workforce decreasing manual labor of maintaining individual records.
- The online chat portal tawk to has led to convenient discussions between parents and the institute and steered faster problem resolution.
- The online complaint system has not only decreased the time for problem addressal but also improved and increased operational efficiencies.
- Digital Library has enhanced and simplified information retrieval.

#### **Problems Encountered and Resources Required:**

Although Software have been a backbone of management since implementation, inevitable errors in form of software update pertaining to information reports have been encountered which are rapidly resolved by The IT Team of I.T.S-CDSR. A gradual channelization of records was a subtle hurdle since paper based records were in continuation simultaneously, which is eventually streamlined now. Additionally, because of the lack of adequate technical proficiency of staff, there has been short lag in training manpower for acquainting them with nuances of software functioning.



#### FEEDBACK SYSTEM

Student Feedback Software is implemented to address student grievances. Students are instructed to give feedbacks regarding the faculty and also about the problems they are facing, so that necessary action can be taken to resolve the problem in an appropriate manner. Student feedback is an integral part of teaching learning evaluation and forms an important basis for teacher quality evaluation.

#### Objective

- To evaluate the quality of teaching and improve teaching effectiveness.
- For assessment and up gradation of student facilities

#### **The Practice**

The procedure involves online assessment of didactic lecture's using a grading system on the basis of

- 1. Knowledge base of the teacher (as perceived by students)
- 2. Communication skills (in terms of articulation and comprehensibility)
- 3. Sincerity/Commitment of the teacher
- 4. Interest generated by the teacher
- 5. Ability to integrate course material with environment/other issues, to provide perspective
- 6. Ability to integrate content with other courses
- 7. Accessibility of the teacher in and out of the class
- 8. Uses of AV aids by the teacher
- 9. Motivation to learn

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with environment/other issues, to provide a broader perspective	Select
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ence work and require further reading in library	Select
	60
	with environment/other issues, to provide a broader perspective ar courses ut of the class ence work and require further reading in library reay be helpful in teaching/learning process

Once the form is submitted, it is assessed by Dean academics and any adverse report is conveyed to respective Head of the departments. The problem is discussed with the concerned faculty and improvement measures are undertaken.

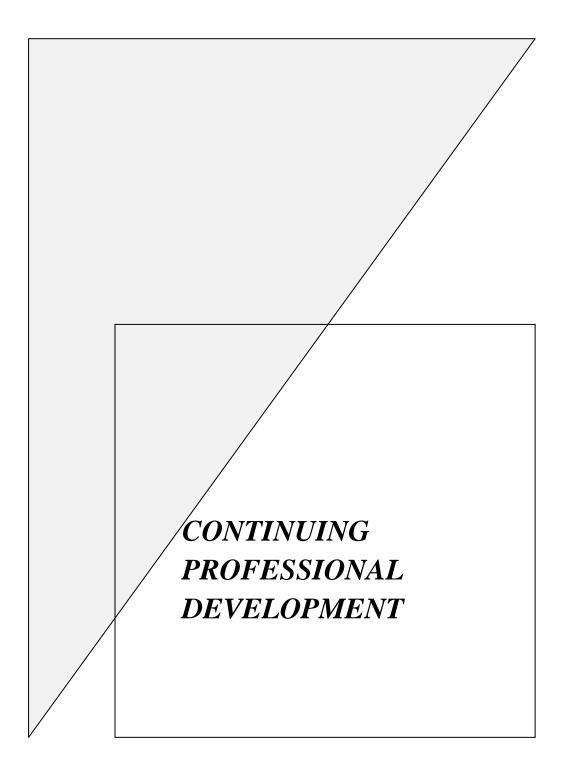


#### Impact

- Feedback used to counsel faculty has improved the standards of teaching and made it more interactive and student friendly.
- Students have a medium to express subject related grievances and appreciation towards the faculty.

#### **Problems Encountered and Resources Required**

Student feedback on teaching falls short of a complete assessment of a faculty's teaching contribution and is likely to be misinterpreted and misused. So a careful evaluation from the feedback is a necessity.



# CONTINUING PROFESSIONAL DEVELOPMENT

To keep pace with the current rate of scientific advancement in the field of dentistry it is mandatory for the academic fraternity to keep updating their knowledge and skills in accordance with the best practices available in the field. The faculty and students need to stay in tune with the current concepts and technologies to aid in patient management.

#### Objective

- To provide an environment for professional development.
- To update knowledge of faculty and students.
- To encourage teamwork and leadership.
- To provide best healthcare to patients and quality education to the students.

#### **The Practice**

• Host conferences, guest lectures, workshops, CDE programs, Webinars and other national and international events.



• **Implantology sensitization course-** Oral Implantology sensitization course in association with Bioner Implants who have tied up with UCAM university, Murcia, Spain.



#### • Student Appreciation:

- Meritorious students are awarded after each professional examination, which includes medals, cash prizes and certificates.
- Academic improvement awards for students showing marked improvement in their relative academic performance compared to previous year are also awarded.



• **Teacher training program** is conducted regularly to improve teaching methodologies.



• Leadership programs are other noticeable efforts of the institute to improvise the curriculum and services provided.



• For persistent and reinforced learning the institute also organizes **staff training** programs for para-dental staff.



• Student exchange programs with University of Tufts, USA and Leeds University, UK.



• Young researcher award: A novel initiative taken by the institute, is a Dental Innovative Award to encourage students with ground breaking innovation ideas in the field of dentistry.



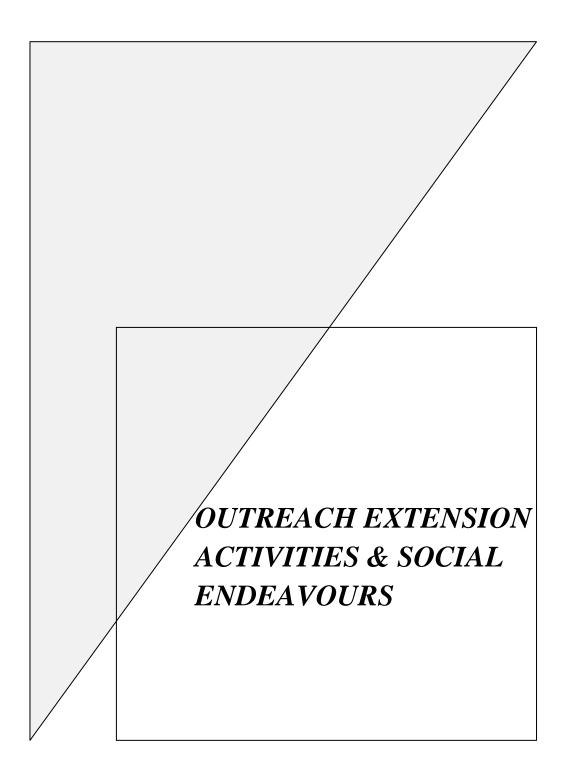
• The institute organizes lectures on **practice management** by renowned practitioners and well-known senior faculties regularly to share their experiences with the budding dentists.

• Outstanding Association Scheme- The college has a special scheme under which members of "I.T.S - Parivar" those who have completed 5 yrs / 10 yrs association with the college are given Cash Benefits and leaves for travel with family.

• **Comprehensive Dentistry program-** Under the ambit of this program, students from the Departments of Oral and Maxillofacial Pathology, Oral Medicine and Radiology & Public Health Dentistry, are rigorously up skilled in General Dentistry regimen, so that they learn techniques and procedures deemed essential for rendering treatment at basic level.

#### Impact

- The continuing professional development programs encouraged continuous learning and enabled the professional.
- Student awards have been a crucial mechanism of enhancing student output. The improvement award recognized the efforts of students lagging behind and motivated them to do better next year.
- The Young Researcher Award has bestowed clinical management skills to raise the standard of clinical practice of the students as well as faculty members.
- The exchange program gave our students a first hand experience and exposure on international platform. This has strengthened the student network of the institute and also enriched the quality of interaction amongst the student community.
- Practice Management programs have tangibly improved learning outcomes of the students and produced better clinicians.
- The success of the **Comprehensive Dentistry program** can be gauged from the mere fact that other institutes in the region have also adopted this pioneering concept for their postgraduate students.



# **Outreach Extension Activities and Social Endeavours**

The institution also acknowledges that it has a Corporate Responsibility to the society, which is giving so much to the institution.

#### Objective

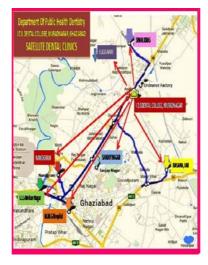
- To examine, educate and motivate the masses regarding oral health care needs.
- To provide holistic oral health care to the masses
- To provide all round development of the students through extracurricular activities.

#### The practice

• In addition to up grading and increasing the number of satellite centers, the institute has adopted Sultanpur Village. Free dental and medical check up camps along with free treatment to residents of this village is also provided.



• There is an existing provision of **Seven Satellite Centers** where the students and faculty members provide treatment to the patients at highly subsidized rates.



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• Recently acquired a "**Hi-Tech Mobile Dental Van**", fitted with two ultra modern dental chairs, with intent to reciprocate similar treatment facilities to rural masses as practiced in the clinical settings.



- **Evening Clinic** is available for patients who have shortage of time. Their treatment is facilitated on priority basis.
- "Public health camps" organized for community health and cater to oral health care necessities, by providing basic dental treatments along with awareness on oral hygiene.



• Celebration of special days such as "No Tobacco day, Oral health day, Elderly day, and Children's day" have also been organized at nearby schools and community centers, where the masses are educated about maintenance of hygiene, and proper hand washing techniques.



• The institute has successfully organized "Vocational dental camp" for the students of class 8th to 12th studying in various schools in Ghaziabad, wherein the school students shall also explore dentistry as a career option.



• The institute has also started a fully functional "**Tobacco cessation clinic**" to provide counseling to tobacco users. The institution maintains a strong belief that through these programs, students can be motivated for the need of oral health care in the community and a sense of empathy is infused in them for the suffering masses, thus enhancing gross quality.



Students are encouraged to actively participate in various inter and intra college events. Note worthy events conducted in the college for promotion of cultural activities include Euphoria, Occlusion, Hostel Day Celebrations, PG Day, Women's Day, celebration of Northeast festival, Fresher's event for BDS first year batch and farewell events for BDS outgoing batch.

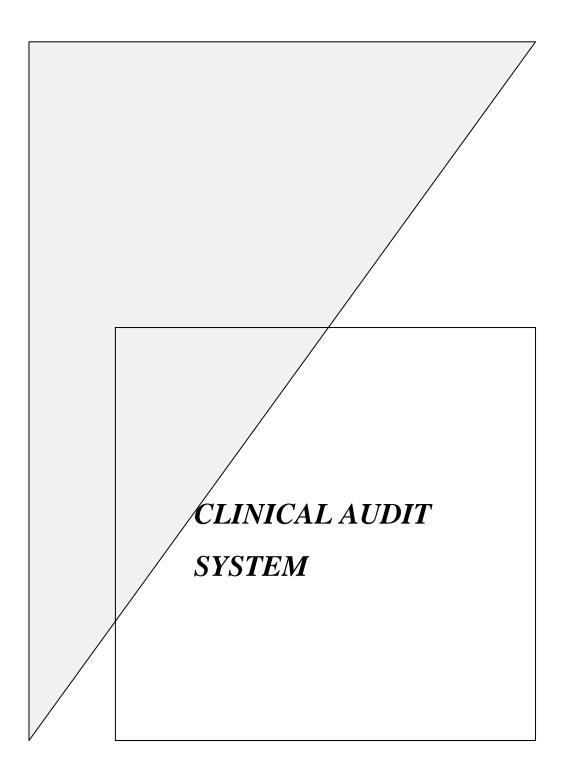


• Efforts towards Carbon neutrality – As part of social responsibility the institute has installed solar panels and LED's. There are efforts towards rain water harvesting and the institute has its own sewage treatment plan. In efforts to have a green campus there are regular tree plantation drives.



#### Impact

- This practice has delivered oral health information at doorstep and provided more intense support to those who needed it. Thus helped to link people to oral health care provider and identify the kind of problems suffered by the people of that area.
- Plethora of extra-curricular activities in the college has led to overall student development and aids as a stress buster in their everyday life.



#### **CLINICAL AUDIT SYSTEM**

With the growth of the institution there has been an exponential rise in the number of patients reporting to all the departments. Thus it has been felt that with this growth there may be a compromise in the quality of treatment being provided to our patients. Considering our mission towards the patients any shortfall in treatment quality is unacceptable.

#### Objective

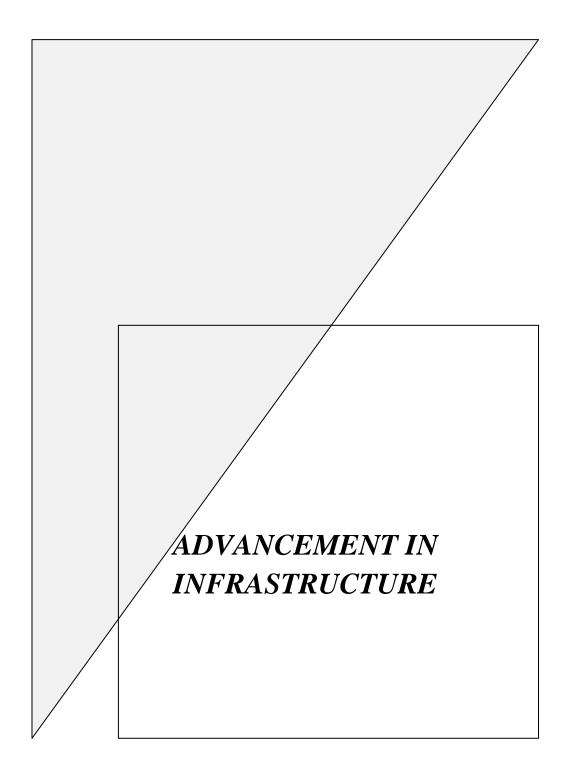
To ensure proper treatment is being provided to the patients through regular quality checks.

#### The practice

The audit team follows internationally accepted guidelines for treatment procedures, which may be modified by respective departments based on the treatment protocols being, followed in their department. These guidelines form the basis for **patient treatment quality evaluation by the audit team**. The audit team will evaluate the cases through the Orion software. They can request for any further diagnostic/ treatment records of the patient from the treating doctor and clarify any doubts. The committee checks for completion and appropriateness of case history, diagnosis, and treatment plan, treatment protocol, number of appointments and time taken for completion of treatment procedure, ensuring quality treatment.

#### Impact

There has been increased compliance and filling of case sheets. The number of cases, which were going undiagnosed, has reduced. This has also led to an increased patient exposure for postgraduates as the number of patients being referred to different departments has also increased subsequently.



## **ADVANCEMENT IN INFRASTRUCTURE**

The institute possesses an impressive infrastructure with state of the art equipment, well-equipped laboratories, lecture theaters, seminar halls and library. The library is spacious and well equipped with all modern facilities and resources.

The college has taken specific measures in terms of infrastructure and equipment to facilitate research work in the institution, which includes:

- Establishment of Centre for Advanced Research.
- Establishment of Centre for Implantology
- ECHS Clinic
- Establishment of Centre for Advanced Imaging (CBCT imaging).



• Equipment infrastructure in form of CAD-CAM,



• Deca-head Microscope



• Pre –Clinical Lab & Work Precision



#### Impact

• Not only are advanced treatment modalities given to patient under one roof but also high precision quality care is provided to the patient.