## BEST PRACTICE 1: FOSTERING SCIENTIFIC AND RESEARCH TEMPER

1. **TITLE OF THE PRACTICE:** Fostering Scientific and Research Temper at M. A. Rangoonwala College of Dental Sciences and Research Centre

#### 2. OBJECTIVES OF THE PRACTICE:

- Cultivate a culture of scientific inquiry and research among students and faculty.
- Promote an environment conducive to innovative thinking and problem-solving.
- Encourage and provide opportunities to students and faculty to engage in research activities and participate at various scientific platforms.

### 3. THE CONTENT:

- Contextual features: Integration of research into academic curriculum, provision of research facilities and resources.
- Challenging issues addressed: Awareness and motivation amongst the students and faculty.

### 4. THE PRACTICE:

- **Publications**: Over 400 research publications in reputable journals covering various aspects of dental sciences.
- **Patents:** Successfully obtained 9 patents for innovative dental technologies and methodologies.
- **Research grants**: Secured a Rs. 47 lakhs grant in association with the Dental Technology Innovation Hub approved by the Department of Science and Technology and Rs. 7.45 lakhs grant from the University of Zurich, Centre of Dental Medicine.
- **Books authored and contributions:** Faculty members have authored numerous books and contributed chapters to dental science publications.

- Global collaborations: Establishing partnerships with prestigious institutions like Kings College London, University of Zurich, and Society for Oral Laser Applications, SOLA, University of Vienna, Austria.
- Nationally and Internationally recognized speakers as faculty: We have renowned global speakers as faculty to mentor students, providing exposure to diverse perspectives and cutting-edge research.
- **Awards:** Recognition received for scientific paper presentations and posters at national and international conferences.
- Scientific Conferences Organised: Hosted three national scientific conferences

   Parichay, Isthmus 1 and Isthmus 2, promoting knowledge exchange and
   networking among dental professionals.
- Continuing dental education Programmes: Keeping true to this temper our college has been conducting various CDE programmes covering all aspects of dentistry from basic to advanced. Over 94+ CDE programmes have been conducted to date.
- 5. **EVIDENCE OF SUCCESS:** [Chart displaying figures and statistics showcasing the success and impact of fostering scientific and research temper]

CATEGORIES	NUMBERS TILL DATE
Publications	1211+
Patents	9
Research Grants	Rs. 73,48,798 lakhs
Books Authored	4
Book Contributions	21
Global Collaborations	5
Nationally & Internationally recognized faculty speakers	16
Awards	17
Scientific Conferences Organized	3
Continuing Dental Education Programmes	94+

# 6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED:

- Challenges: Lack of continuous flow of funds for research activities.
- Resources required: Additional funding for research initiatives, establishment of dedicated advanced research facilities in the college.

CONCLUSION: The practice of fostering scientific and research temper at M. A. Rangoonwala College of Dental Sciences and Research Centre has been instrumental in promoting a culture of inquiry, innovation, and scholarly pursuits within the college. The success of our quest is also evident in the scientific and research pursuits and achievements of our alumni. Despite facing challenges, the college has achieved significant milestones in research publications, patents, grants, global collaborations, and academic recognition. With continued support and investment in research infrastructure and programs, the college is poised to further enhance its contributions to the field of dental sciences and research.

#### **BEST PRACTICE 2**

- **1. TITLE OF THE PRACTICE:** Advanced Implant Dentistry at M. A. Rangoonwala College of Dental Sciences and Research Centre
- **2. OBJECTIVES OF THE PRACTICE:** The primary objective of Implant Dentistry practice at M. A. Rangoonwala College of Dental Sciences and Research Centre is to equip students with comprehensive knowledge and practical skills in dental implantology, including advanced procedures. This training aims to facilitate the provision of advanced implant care for patients at an affordable cost. The underlying principles of this practice include:
  - To impart a deep understanding of dental implant procedures, from diagnostics and treatment planning to surgical placement and prostheticrestoration.
  - To ensure students can perform implant surgeries safely and proficiently, adhering to ethical and professional standards.
  - To expose students to latest technologies and research in the field of implant dentistry.
  - To prepare students for clinical challenges and ethical considerations in

**3.THE CONTENT:** Contextual features and challenging issues addressed in implementing this practice include:

- The rapid evolution of dental implant technology and the need to staycurrent.
- Ensuring that students are well-versed in-patient management and informed consent.
- Addressing ethical concerns surrounding patient selection and managing complications.
- Adapting to the specific needs and demographics of the Indian patient population.
- Ensuring proper infection control protocols are in place.

**4.THE PRACTICE**: The practice at M. A. Rangoonwala College of Dental Sciences and Research Centre stands out in the context of Indian dental health education for its comprehensive and hands-on approach to dental implantology. Students undergo rigorous training, including theoretical knowledge, simulation, and clinical exposure. They work with experienced faculty and cutting-edge equipment, ensuring that they are well-prepared for the real-world challenges of implant dentistry. On an average, 20 implants are placed every month in the implant clinic, showcasing the practical proficiency achieved

While this practice excels in many aspects, there have been constraints and limitations, including:

- Limited access to the latest implant technology due to budget constraints.
- Challenges in ensuring a diverse patient pool for clinical exposure.
- Ethical dilemmas related to the use of cadavers for simulation training.
- **5. EVIDENCE OF SUCCESS:** The success of this practice is evidenced by the consistently high performance of students in national and international examinations, as well as by the positive feedback from patients. Students have shown impressive clinical skills and have contributed to the field by publishing research papers and participating in implant-related conferences. These results indicate that the program effectively prepares students for a successful career in implant dentistry.
- **6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED:** Challenges

encountered include the need for additional financial resources to periodically acquire and upgrade with newer implant equipments. To address these challenges, the college requires increased funding and support from dental implant industry partners, as well as additional collaborations with international institutions for knowledge exchange and faculty development. Moreover, creating a diverse clinical patient pool would be valuable improvements.