



RANJEET DESHMUKH DENTAL COLLEGE AND RESEARCH
CENTRE, NAGPUR
Formerly known as VSPM's Dental College and Research centre, Nagpur

Board of Research Studies

Topic- Role of computers and AI in dental research

Date- 19th November 2024

Speaker- Dr Amit Nakanekar

Venue: PRIDE hall, RDDCRC, Nagpur

Brief report:

To promote the efficiency in dental research board of research studies (BORS) organized a CDE programme on this occasion.

The speaker was **Dr Amit Nakanekar** (Assoc Professor, Govt Ayurvedic College, Nagpur).

Dr Saeesh Deshpande (Member BORS, RDDCRC, Nagpur) welcomed and introduced the speaker to the audience.

Dr Amit explained how computers and artificial intelligence (AI) have become integral to modern dental research, enabling faster, more precise, and data-driven advancements across the field. High-performance computing supports complex simulations, image processing, and biomechanical analyses, while AI and machine learning algorithms enhance diagnostic accuracy by identifying patterns in radiographs, CBCT scans, and intraoral images that may be difficult for clinicians to detect. He explained that in research, AI assists in analysing large datasets, predicting treatment outcomes, optimizing study designs, and automating repetitive tasks such as data extraction in systematic reviews. He emphasized that by increasing efficiency, reducing human error, and uncovering new insights, computers and AI significantly accelerate innovation and strengthen the evidence base that guides clinical practice in dentistry.

Dr Abhay Kolte (Dean and Chairman of BORS, RDDCRC, Nagpur) and Dr Mukta Motwani (Vice Dean and Co-Chairman BORS, RDDCRC, Nagpur) felicitated the speaker.

The programme was attended by post-graduate students, and it was well received by the audience.

Dr Abhay Kolte

Dean, Chairman BORS-RDDCRC, Nagpur

