Where Indian dentistry stands for the subject of oral biology? What should be a direction for the subject?

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OVERVIEW ON ORAL BIOLOGICAL STUDIES

It needs not to be mentioned that the subject of oral biology has an essential role in exercising the integrated scientific knowledge in today's dentistry. It has a legitimate and fundamental importance toward contemporary and updated dental education in terms of application and exercises of the subject. All developed countries have a subject of oral biology today. Although the incorporation of the subject in undergraduate dental education has got a slower pace, but a considerable change has been taken place in postgraduate studies and research over the countries, especially in Europe, America, and many Asian countries except India. Anyway, the widespread adoption of oral biology into dental curricula will not only enhance the biological orientation (enhancing conceptual knowledge) of dental students, but also help academicians for a brainstorming effect, and this plays a pivotal role to harnessing the research exercises all through. Along with, this helps develop a good sourcing of the advanced scientific knowledge and evidence-based clinical skill that symbioses in all the subjects of dentistry. In India, the

subject of oral biology has not been taken up to help develop broadening up of the globally comparable dental science nationally; on the contrary, it has been overlooked by the regulatory bodies deliberately. Unfortunately, the process of inception of oral biology is largely downplayed by a number of people involved in regulating the Indian dentistry. Having said that, if we need to incorporate this subject in Indian dentistry, probably we need to think intelligently, and, this way, we must be active and astute enough to get our voice heard by the concerned authority loudly.

A method of implementation, application, and adaptation (within Indian context) of the subject is needed urgently. In order to do this, generically we shall focus on the following:

- How to engage the senior academicians of dentistry in the country, and informing them about the importance and needfulness of the subject at a national level.
- How to employ the strategic actions and communicate with the peers and policy makers to streamlining these efforts effectively.
- How to make the dental community understand the underpinning issues of comprehensive learning in terms of grasping up of the applied objectives of oral biology.
- How to help organize the efforts to bring oral biology into the mainstream of dental education—as the subject keeps on changing to meet the demand of the hour, and that should not be overlooked.

How oral biology is run in USA, Europe, and Australia?

The majority of university faculties in the countries teaches the subject in a structured undergraduate curriculum and established a strong foundation for postgraduate students and this leads to a qualification, such as master's and doctoral degree (PhD). There are different models of operations of the subject, but the common objective of

learning in all the universities is the same, and details could be provided.

How the subject is run in Asian countries?

Many of the dental schools in Korea, Japan, China, Taiwan, Indonesia, and Thailand including some of the Middle Eastern countries run the subject as a standalone unit for undergraduates and postgraduate speciality subject in the graduate dental school of the countries.

Where India stands for oral biology?

India as an emerging global economy, and one of the countries having the largest number of dental colleges, does not have the subject of oral biology as a structured subject in the undergraduate studies and postgraduate specialty that leads to a qualification.

What Indian dentistry needs to introduce the subject?

Indian dentistry needs to review the decision and discussion that have been taken earlier. A workshop through a working-group meeting could be convened to discuss regarding the introduction of the subject in the country. The workshop

should come up with a recommendation on the following outline:

- *Curriculum development:* Consulting the pattern of curriculum of other universities. This will help define the subject, staffing pattern, and help establish a dialog on the rationale for an inclusion of oral biology as a structured subject, both for (i) undergraduate and for (ii) postgraduate curriculum. The curriculum will have detailed course contents, method of teaching, assessment, appraisal, and evaluation.
- *Faculty development:* How the faculty will be developed of the subject.
- *Strategic goal:* Development of a model (based on Indian need) of oral biology with a strategic goal of future learning and research, such as multicentric clinical studies incorporating the bio-regulation of the various oro-cranio-maxillofacial diseases and conditions.
- *Operations—interlinking of oral biology:* The basic sciences (bio-medical, medical, bio-physics, bio-science, and medical engineering, statistics, and Health promotion and population research) will be closely interlinked with the subject.
- *Operations—essential application/integration:* The department of oral biology must integrate and collaborate closely with the clinical dental/medical departments in order to develop the need-based teaching and learning, conducting research, and that helps develop solving of the clinical problems in the oral and cranio-maxillofacial health (in the light of evidence-based medicine/dentistry).