

A Caries-free World: Dream or Reality?

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Generally, most time of a dentist's life is spent in restoring dental cavities. As we had always focussed our time and energies in "restoring" these cavitated lesions we have collectively failed in controlling the disease process leading to an enormous disease burden globally. In fact, a cavitated lesion impacts the quality of life in many ways while at tooth level the implication is that, tooth enters the repeat-restoration spiral mandating

the need for deeper cavities and more intensive treatments with the passage of time.

Today, with the improved understanding of the disease process, we are clear that caries occur in a continuum; hence our management plan should be comprehensive and aim to arrest early lesions, and prevent the formation of newer lesions while simultaneously providing the restorative care. This is the only way by which we can envision a caries-free generation. To achieve this in a clinical scenario, dentists had been eyeing on researcher's community to provide them with a structured framework that can guide them to manage the complete spectrum of carious lesions.

In this editorial, I wish to highlight one of the recently launched "Structured Framework"- **CariesCare 4D**; which aims to help the dentists in planning and providing optimal caries care to their patients.¹ As the name suggests it has **Four "D" Components; Determine Caries Risk, Detect and Assess Lesion, Decide A Personalized Care Plan, Do Patient and Tooth Level Care.**

Determine Caries Risk

The first component directs us to assess the patient's caries risk. Clinicians usually miss this step in their day-to-day clinical practice due to which patients are devoid of optimal care and in turn reports with the new carious lesions on their recall visits. In one of my previous editorials on caries, I pointed about the need of caries risk assessment and I strongly believe that we should include the use of a formal caries risk assessment tool in our daily practice.² These tools directs us to assess the individual's caries-causing and caries-protective factors which in turn help us to formulate a customized caries management plan, suitable enough to curb the disease process, and prevent the formation of new lesions. It is also important to assess the disease risk of a patient on a regular basis since the risk may change, necessitating us to readjust our strategies.

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Detect and Assess Lesion

We should unquestionably change from our conventional approach of using a sharp probe to detect a "catch" and start detecting and recording caries in its all stages including noncavitated lesions. This can be done by adopting ICDAS and/or using modern detection tools in our daily clinical practice. ICDAS visual scoring method allows us to detect and record caries in its complete spectrum and the scores are also considered to be histologically validated. In addition to this, CarieCare also advocates us to assess the caries activity of the lesions. The information about the activity of the lesion when analyzed in preview of the patient's caries risk dictates us to manage the lesion in different ways for patients with different baseline risks.

Decide a Personalized Care Plan

This involves formulating a personalized care plan which includes both patient-level and tooth-level care. The personalized care plan is based on the information gathered during the above two steps. In addition to the professional work required by the dentist, the care plan should also emphasize on patient's active involvement as personal home-care is always required for optimal oral health and for preventing new caries.

Do Patient and Tooth Level Care

The last component of this system is "DO" component. It involves the implementation of "our plan" as theorized in the above component. This involves patient-level care including the use of fluorides, education about oral hygiene, dietary modification, etc. while the tooth-level care includes the use of sealants, resin infiltration, high concentration fluorides for managing the early noncavitated lesions, and tooth-preserving restorative care for cavitated lesions.

Unfortunately, dentists have always been busy in "doing" restorative care only and the gap between the ideal care that should be given and that is being provided had been widening all these years. But now with an improved understanding of the caries process, common goals and agendas set by different organizations, availability of better statistical tools for curating the evidence, acceptance of newer evidence-based strategies and guidelines by

academicians and policymakers, and better percolation of updated knowledge amongst clinicians—has led us to see this dream of caries-free generations. I opine that if we all join our hands together and start using this CariesCare framework in our daily practice the day is not far when we will be able to perceive the “control” of the disease process which will surely be one step ahead toward caries-free generation. I believe that caries-free generation is not a myth and also urge you all—don’t stop envisioning the dream of a caries-free generation.

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