Academically, these studies are new for participating long-term prevention work. Let’s look at what we have.

**Dental Caries**

There are essentially 2 diseases to consider: Enamel Caries, most commonly seen in the first 30 years of life, and Root Caries, commonest in the last 30 years of life. From age 10 to 50, predominantly in the latter group.

In a recent systematic review assessing the effect of Dental Flossing on interproximal caries it was calculated that... 2) OHI + 1% CHX varnish 3/12 1.1*

Traditionally, the number of sugar exposures per day has been considered... 1.0 - 0.9*

Harada et al (2013) (16) found a mean treatment... of 3.5 times/day. The frequency of sugar intake was significantly associated with DMFT throughout the follow-up period.

They go on to confirm that there is a... significantly related to real outcomes in the long term.

**Periodontal Diseases**

Two of the main elements of a necessary ingredient in the development of periodontal disease, the factors with which the Dental and Dental Hygiene professions have focused on... caries reduction... 3) OHI + 5% NaFl varnish 3/12 0.9*

The findings confirm that fluoride... 6 times/day (4).

In a later study Hyman and Reid (2003) assessed loss of attachment – another Truth Outcome – differentiating between younger and older patients and found an OR of 18.6 of loss of attachment >2mm in Smokers age 20 to 49. Not surprisingly a Loss of attachment >2mm in Smokers age over 50 had an even greater OR of 25.6 (4).

**Bacterial Plaque**

In a systematic review examining... 2 way relationship between these 2 variables.

**Diabetes**

We have now known for over 20 years of the association between smoking and periodontal diseases. Smoking significantly increased the risk of tooth loss due to periodontal disease (Odds ratios (OR) 2.5 to 6.6). When corrected for other variables, smoking significantly increased... 3 years or 38% Ag DIammine FL 3/12 0.7*

In a recent controlled study in pre- diabetics through surgical periodontal treatment reduced the HbA1c levels of the participants by over 1% (7).

According to Diabetes UK, if such a reduction could be sustained in Diabetic patients it might result in a diabetic living 9% less likely to suffer heart failure and 43% less likely to suffer amputation or death due to peripheral vascular disease. Clearly these are enormous potential health benefits.

**Discussion**

It seems apparent that many of our traditional approaches to prevention, while clearly well intentioned, have a weak evidence base. It is challenging for any health care profession to be asked to question the veracity and benefits of a long used set of preventive recommendations without comprehensive studies progressively increase the risk of tooth loss, and that by the time they reach life, and Root Caries, commonest in the first 30 years of age. From age 10 to 50, predominantly in the latter group.

In a recent systematic review assessing the effect of Dental Flossing on interproximal caries it was calculated that... 2) OHI + 1% CHX varnish 3/12 1.1*

Traditionally, the number of sugar exposures per day has been considered... 1.0 - 0.9*

Harada et al (2013) (16) found a mean treatment... of 3.5 times/day. The frequency of sugar intake was significantly associated with DMFT throughout the follow-up period.

They go on to confirm that there is a... significantly related to real outcomes in the long term.

**Periodontal Diseases**

Two of the main elements of a necessary ingredient in the development of periodontal disease, the factors with which the Dental and Dental Hygiene professions have focused on... caries reduction... 3) OHI + 5% NaFl varnish 3/12 0.9*

The findings confirm that fluoride... 6 times/day (4).

In a later study Hyman and Reid (2003) assessed loss of attachment – another Truth Outcome – differentiating between younger and older patients and found an OR of 18.6 of loss of attachment >2mm in Smokers age 20 to 49. Not surprisingly a Loss of attachment >2mm in Smokers age over 50 had an even greater OR of 25.6 (4).

**Bacterial Plaque**

In a systematic review examining the efficacy of dental floss in adding... 2 way relationship between these 2 variables.

**Diabetes**

We have now known for over 20 years of the association between smoking and periodontal diseases. Smoking significantly increased the risk of tooth loss due to periodontal disease (Odds ratios (OR) 2.5 to 6.6). When corrected for other variables, smoking significantly increased... 3 years or 38% Ag DIammine FL 3/12 0.7*

In a recent controlled study in pre- diabetics through surgical periodontal treatment reduced the HbA1c levels of the participants by over 1% (7).

According to Diabetes UK, if such a reduction could be sustained in Diabetic patients it might result in a diabetic living 9% less likely to suffer heart failure and 43% less likely to suffer amputation or death due to peripheral vascular disease. Clearly these are enormous potential health benefits.

**Discussion**

It seems apparent that many of our traditional approaches to prevention, while clearly well intentioned, have a weak evidence base. It is challenging for any health care profession to be asked to question the veracity and benefits of a long used set of preventive recommendations without comprehensive studies progressively increase the risk of tooth loss, and that by the time they reach life, and Root Caries, commonest in the first 30 years of age. From age 10 to 50, predominantly in the latter group.

In a recent systematic review assessing the effect of Dental Flossing on interproximal caries it was calculated that... 2) OHI + 1% CHX varnish 3/12 1.1*

Traditionally, the number of sugar exposures per day has been considered... 1.0 - 0.9*

Harada et al (2013) (16) found a mean treatment... of 3.5 times/day. The frequency of sugar intake was significantly associated with DMFT throughout the follow-up period.
Developing healthcare professionals of tomorrow

HAMDAN BIN MOHAMMED COLLEGE OF DENTAL MEDICINE
DUBAI • UAE

APPLICATIONS NOW OPEN

MSc in ORTHODONTICS
MSc in PROSTHODONTICS
MSc in ORAL SURGERY

MSc in PEDIATRIC DENTISTRY
MSc in PERIODONTICS
MSc in ENDODONTICS

For more details, please visit: www.mbruniversity.ac.ae
to address the relationship of the various risk factors to Peri-implant diseases and implant failure. In view of the rapid increase in the use of dental implants and the self-evident truth that the vast majority of implant patients lost their teeth due to Caries or Periodontal Disease, it is equally important that dental health care professionals appreciate the relative importance of the risk factors outlined above for peri-implant diseases. In a very recent extensive retrospective study Derks et al. (16) identify moderate to severe peri-implantitis in 14.5% of implant patients examined, and report on the Odds Ratios of the various influencing factors. In a commentary on this study Tarnow (17) points out that even a modest incidence of 10% of patients with peri-implantitis equates to 1000000 new cases of peri-implants every year based on current numbers of implants being placed. It might be appropriate to consider this in a future review article.

Conclusions
Our understanding of the relative importance of the various major risk factors for Caries and Periodontal diseases should be evidence based and current. At present it is reasonable to conclude the following:

1. Recent research has indicated that the total amount of sugar consumption is more important than the number of sugar exposures per day in the development of carious lesions. There is little to support the use of a fluoride toothpaste and a power floss as a preventive measure for dental caries or gingivitis.

2. Effective toothbrushing, using a fluoride toothpaste and a power brush, is by far the most effective preventive measure to minimize dental caries and periodontal diseases.

3. To minimize the incidence of root caries in the elderly oral hygiene must be supplemented with peri-apical application of a fluoride or Chlorhexidine preparation.

4. While oral hygiene is important in controlling Periodontitis in the susceptible patient, compliance with a comprehensive Supportive Periodontal Maintenance Regimen is likely even more critical in preventing progression and tooth loss due to Periodontitis.

5. To achieve the best outcomes in peri-implantitis susceptible patients who smoke, smoking cessation programs must be closely followed by the medical clinician responsible for diabetes care. Improvements in one disease are likely to be complemented by improvements in the other.

6. To minimize the incidence of root caries being placed. It might be

7. When assessing the relevance of clinical research more credence should be given to longer term studies which use SURGICATE outcomes.

References