

Dear Editor,

Lockhart et al in their statement have very commendably reviewed about 500 scientific publications to demonstrate that periodontal interventions do not prevent heart disease or stroke or in fact modify the clinical course of Atherosclerotic Vascular Disease (ASVD). Interestingly, none of these papers reflect a typical African cohort.

We are therefore likely to use this information with caution as it may not be wise to extrapolate these findings to what is an un-studied population, where we know that aggressive forms of either disease can occur, where the mechanisms of these associations remain unclear and where long term follow up has not happened. Of course It would be useful to know what percentage of the subjects in these papers reviewed were of Afro-Caribbean or black origin.

The burden of cardiovascular disease (CVD) is increasing in the African region and current projections suggest that up to half a million people may die of CVD related causes by 2030. Considering that CVD was regarded as rare in sub-Saharan Africa barely 50 years ago, these observations are remarkable and significantly highlight this problem which may already be grossly underestimated by the lack of robust data.<sup>1, 2</sup>

The INTERHEART Africa Study suggest that risk factors contributing to cardiovascular disease are similar in Africans when compared to the rest of the world with some small exceptions especially when evaluating predominantly the black ethnic population with respect to hypertension and smoking risks. There is also suggestion that the urbanization of various parts of this region has had the downside effect of further heralding this increased prevalence.<sup>3</sup> Is it possible however, that other independent risks which may be contributory to CVD, if a more generalized African population was examined, may be found?

Periodontitis is prevalent in Africa primarily driven by a variety of socioeconomic reasons including poor oral health awareness and poor hygiene and the consequence of repetitive infections. It is also known to serve as a prelude to more severe disease<sup>4, 5</sup>.

Africa is a peculiar environment where the likelihood that a sick person would seek medical attention is dependent on literacy, availability of care and unfortunately spending power. This underpins the importance of low cost preventative education, which may sometimes involve blanket advice strategies which highlight risk factors responsible for both gum and heart disease for instance. This is crucial because these patients rarely come face to face with healthcare professionals and this opportunity has to be taken when they arise. This represents a real world approach to managing these patients which could result in a change of lifestyle choices and without misinforming them.

This review seemingly concretizes a negative 'gum-heart' *causal* relationship, but acknowledges that there is still Class A level of evidence for significant associations between the two conditions with respect to similarity of risk factors. In our unique patient group and without a robust and possibly prospective study design, involving an indigent African cohort, we certainly

do not think that it is possible to completely rule out a direct causal association in these patients.

Certainly the backbone for this review was the fact that majority of the studies claiming an association were either small numbers or had significantly flawed designs. We add that this present conclusions may not be generalisable to an African population and this may be a stimulus to correct this by investigating closer.

## References

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Yours Sincerely,

### **Dr. Henry Oluwasefunmi Savage MBBS MRCP (London)**

Specialist Registrar in Cardiology, Royal Brompton Hospital London

Corresponding Author:

[h.savage@imperial.ac.uk](mailto:h.savage@imperial.ac.uk)

Royal Brompton Hospital Sydney Street London United Kingdom SW3 6NP

02073528121 ext 2077

### **Prof. Kofoworola Savage BDS, MSc (Bristol) MPH, FWACS, FMCDS**

Professor and Dean of Dental School, College of Medicine, University of Lagos, Nigeria

[kofowowinsav@yahoo.co.uk](mailto:kofowowinsav@yahoo.co.uk)

### **Dr. Olamide Eso MbChb**

University Hospital of Wales Cardiff Wales

[esoo@cardiff.ac.uk](mailto:esoo@cardiff.ac.uk)