

Common Dental Diseases - Dispelling the Prevailing Myth

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Abstract

Dental caries is generally considered to be the most common oral disease. According to the studies that have recorded the prevalence of oral diseases, periodontal diseases do not have records about its prevalence as much as dental caries. The periodontal diseases, both gingivitis and periodontitis occur due to various reasons, as they are multifactorial. Based on the correlation of the knowledge of the pathophysiology of diseases affecting periodontium and available data, it can be derived that gingivitis is also as common as dental caries. The authors speculate that sacking of gingivitis into a broader term of periodontal diseases may be the reason that hinders this fact. Hence, there is an obvious need to replace the tradition with actuality by making a deeper investigation.

Keywords: Common disease, dental caries, gingivitis, periodontal disease

THE PREVAILING NOTION

It is a well-established conception that “dental caries is the most common disease of the oral cavity” among the dental fraternity. It is also believed to be the “most infectious disease in the world” affecting humans.^[1] As an amateur dental student gradually progresses into a mature graduate and ultimately into an established clinician, he strongly impregnates in his mind that dental caries is the most common dental disease. A dental student or a graduate possessing commendable surfing skills comes up with a bold argument against those who speak otherwise. This article critically evaluates the prevalence of this idea that has already deeply crept into the minds of many dental professionals including students, academicians, and clinicians.

AN UNDERVALUED DISEASE

Gingivitis is a condition characterized by inflammation of the gingiva. Gingivitis was classified under gingival diseases according to the “Classification of the world workshop” in 1989. This classification that was revised in the year 1999 still categorized gingivitis as a disease.^[2] It is thus by nature a disease. Any individual is considered to have gingivitis, whether it is localized in relation to a single tooth or generalized in relation to all teeth present. In children, marginal gingivitis is very common. The chances of any sound gingiva to succumb to the microbial flora of plaque are more than that of a sound tooth, whether in primary or permanent dentition stages.^[3]

TRACING THE LITERATURE

Based on records, the prevalence of only gingivitis seems to be deficiently documented, apart from being documented under a wider umbrella of periodontal diseases. This may be due to the reason that there is no point in making such efforts, while a much comprehensive treatment plan is programmed for any individual, by means of performing studies focusing overall periodontal health.^[4] Whether only gingival or periodontal studies, they are apparently lesser than the number of studies that are centered on dental caries. This is very true with respect to the studies performed in India. In India, where there is a large scale of population thriving in rural areas, lacking knowledge, having noncariogenic diet patterns and suffering from deprivation of nutrition, it is wiser to state that dental caries is less prevalent in comparison to gingivitis.^[5] In this regard, it can be concluded with little confidence that the above information is true even if it generalized for the other parts of the world, as it is a proven fact that there is a large population of people lacking awareness, suffering malnutrition due to impoverishment and making livelihoods at a lower socioeconomic status.^[6] Ever since epidemiology started to play a role in dentistry, researchers have performed numerous

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community-based studies on the prevalence of dental caries on specific populations and quite a few studies focusing purely on the prevalence of gingivitis. The consolidated findings of all the studies on both diseases conclude that gingivitis is more prevalent in any community and almost all the studies pertaining to gingivitis have an average prevalence rate of at least 65%, which is not the case for dental caries.^[7-9] Although literature does not sufficiently record the prevalence of gingivitis, it has more prevalence than the actual available data. This is because, unfortunately, gingivitis mostly fails to display signs that might indicate the definite need of an expert's attention. In addition, even the highly-symptomatic diseases such as dental caries are hardly cared for, in the initial stages. As a consequence, people abstain from reporting to a professional with their self-conclusive philosophies.^[9]

A NEED FOR EARLY ATTENTION

“Periodontitis” refers to advanced version of gingivitis. It has distinct features from gingivitis and may signal the host with its definite clinical manifestations such as gingival recession, tooth mobility, etc.,. The pathophysiology has a more chronic course and it is irreversible just as dental caries. Although gingivitis is classified under periodontal diseases, it is a disease by itself, having its own distinct clinical and histopathological features. Gingivitis, on the other hand, is reversible in nature; it is a reactionary condition which occurs as a response to the local factors, predominantly plaque.^[10]

Ultimately, these problems lead to deleterious effects such as tooth loss and compromised dental health. Both dental caries and gingivitis need management at the earliest to avoid further complications. Anything that does not stand with well-grounded scientific support is considered to be a belief. This clearly indicates a future need to record the epidemiology of gingivitis and periodontitis separately, as both conditions require different approaches at a community level.

CONCLUSION

Change is constantly dynamic. Therefore, to conclude, the most common disease of the oral cavity is scientifically unproven due to exiguous data. Also, after reviewing the existing literature, it is understood that the occurrence of dental caries is based on criteria such as age, gender, locality, surrounding environment, socioeconomic status, lifestyle, food habits and so on.^[11] Hence, the available data cannot be applied globally, as the livelihood varies exorbitantly among the incalculable number of communities existing in the present world.

Any information provided should be pillared by scientific research. Dental caries might have been the most common

disease in the past century and even before; however, the current scenario mandates a definite scientific backup. Public health studies highlight the fact that diseases prevail at different percentages in different communities. Hence, the most common oral disease may vary in different communities. As people have very less awareness toward the periodontal problems, much data related to gingival and periodontal diseases are not filed, while more data on dental caries have been documented comparatively.

Therefore, from the review above, it could be concluded that both dental caries and gingivitis are common oral diseases. To the best of our knowledge, there is no sufficient documentation on the prevalence of periodontal diseases when compared to dental caries; it cannot be surmised that dental caries is the most common disease. If proper study can be conducted or data can be collected and documented in the near future, who knows, the prevalence of periodontal diseases may surpass dental caries. Thus, wider exploration is needed on a comparative basis to confirm the most common oral disease.

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Conflicts of interest

There are no conflicts of interest.

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