

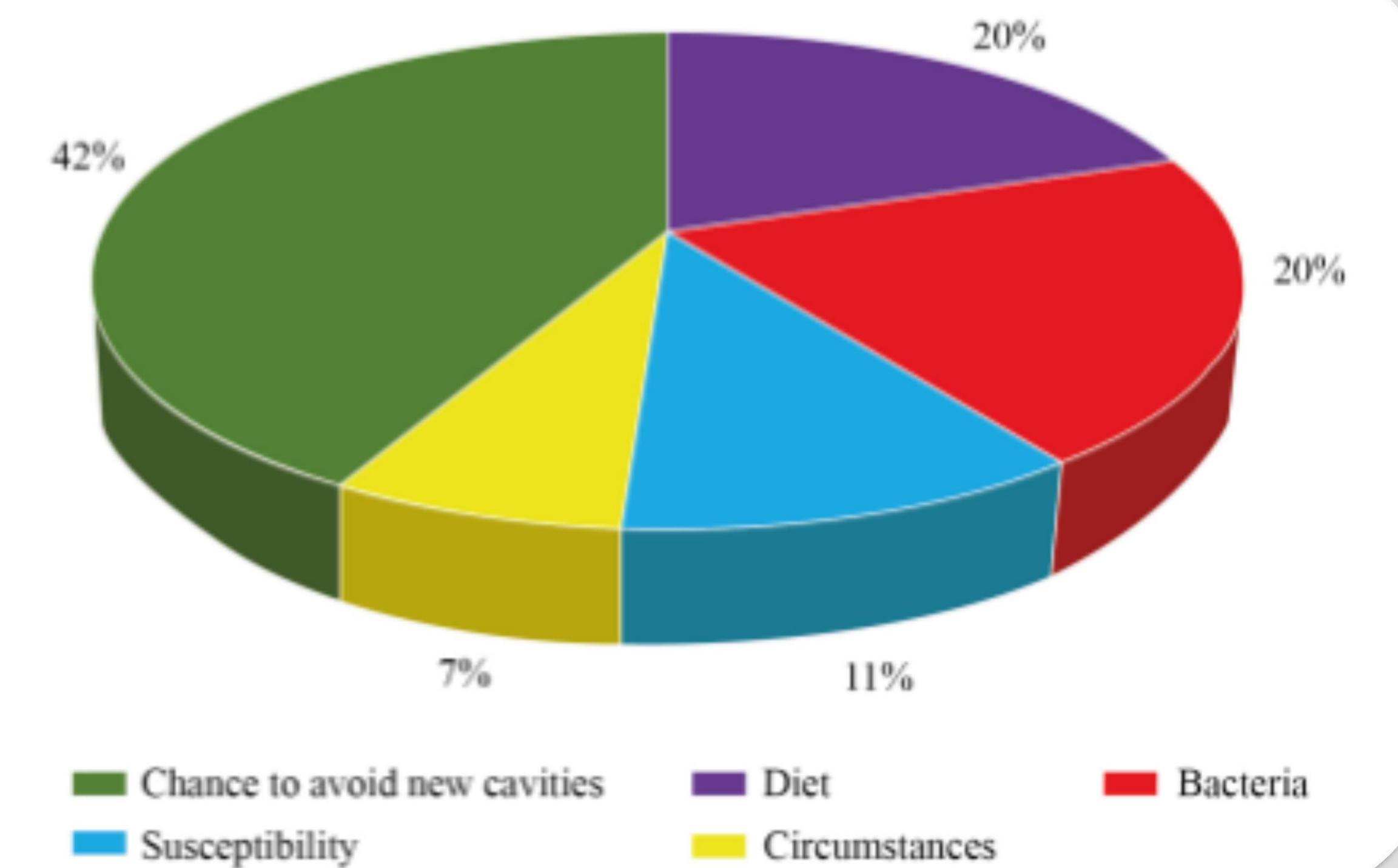
Introduction

The term "dental caries" was first reported in the literature approximately around 1634, and it originates from the Latin word "caries," which stands for decay. The term was initially used to describe holes in the teeth.

Methods

A hospital-based unmatched case-control study design was conducted in , in benghazi – libya A total of 133 cases and 266 controls participated in this study. Data were collected using pre-tested questionnaires from three hospitals. Epi-info version 7 was used for data entry and was analyzed using SPSS version 20. Frequency, proportion, mean and standard deviation were computed to summarize the data.

General Cariogram



Etiology

- The caries process occurs in the biofilm, which is permanently active with every pH fluctuation and the lesion manifests in the dental hard tissues.
- Dental caries occurs when the biofilm microbiota that normally resides in the oral cavity in homeostasis change to an acidogenic.
- Behavioral, psychological, and social factors also play a significant role in the disease process.

Result

A total of 399 adolescents were enrolled in this study, yielding a response rate of 100%. The study found that, daily consumption of sugared coffee (AOR = 2.91, 95% CI:1.62, 5.23), khat chewing (AOR = 2.90, 95%CI: 1.46, 3.15), daily consumption of bread (AOR = 2.65, 95%CI: 1.44, 4.89), daily consumption of sweet foods (AOR = 2.04, 95%CI:1.19, 3.48), living in urban areas (AOR = 1.86, 95%CI:1.09, 3.15), and daily tooth brushing using toothpaste or stick (AOR = 0.48;95%CI, 0.28, 0.81) were significantly associated with dental caries among adolescents.



Pathophysiology

- Carious lesions have a higher percentage and incidence of certain bacterial species: *Streptococcus mutans*, *Streptococcus sobrinus*, and *Lactobacilli*, isolated from advanced caries.
- caries is believed to result from the net metabolic activity of the microbiota of the biofilm.
- The ecological plaque hypothesis believes that dental caries is not caused by a specific type of microorganism acting alone but is the result of a shift in the microbiota of the dental biofilm towards more cariogenic species.

Conclusion And Recommendation

In this study, drinking sugared coffee, daily consumption of bread, khat chewing, sugary food consumption, living in urban areas, and daily tooth brushing using toothpaste were significantly associated with dental caries. Therefore, improving dietary and drinking habits and strengthening regular tooth brushing are important for reducing dental caries among adolescents.

Conclusion

Dental caries is a common public health problem in school children associated with poor oral hygiene, dietary and dental visit habits. Therefore, prevention measures such as health education on oral hygiene, dietary habits and importance of dental visit are obligatory for children.

References

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