

Impact of Alcohol Dependency on Oral Health



Made by : Mona Osama Swedik

St.Numer : 2919

Year : 2nd Year of Dentistry



Introduction

- According to the World Health Organization there are almost **two billion people** worldwide who consume **alcohol** on a regular basis . It's a common abuse and almost **80 million** are diagnosed with "**alcohol abuse disorders**" (WHO 2002, 2004). **Alcoholism** is a **chronic** and **progressive psychiatric** illness characterized by a loss of control over alcohol consumption. Consumption of alcohol inevitably affects the *oral cavity, oral mucosa* and *teeth*. Literature indicates that alcohol dependents may have increased risk of **dental caries**, probing pocket depth and mucosal lesions. With respect to oral health, alcohol is among the most important risk factors for oral cancer [6,7]. Alcohol causes a change in the rate of penetration of substances from the oral environment across the mucosa and this alteration of mucosal permeability may have a role to play in carcinogenesis [1]. Evidence suggests that the increasing incidence of oral cancer, particularly in younger people, is associated with increased alcohol intake rather than tobacco use [8]. While increased alcohol consumption has also been associated with an increased risk of oral premalignant lesions, there is a paucity of data concerning the prevalence of oral mucosal lesions in persons with a history of alcohol abuse

Aim of the study :

- To assess the impact of alcohol dependency on oral health status among **alcoholics** in comparison with **non alcoholics**

Materials and Methods

A cross-sectional clinical comparative study was conducted among **alcohol dependents** and **non alcohol subjects** visiting Narayana Medical College, Nellore district, Andhra Pradesh, **India**, during the month of **May 2015**. The study was approved by Institutional Ethical Committee of Narayana Dental College.

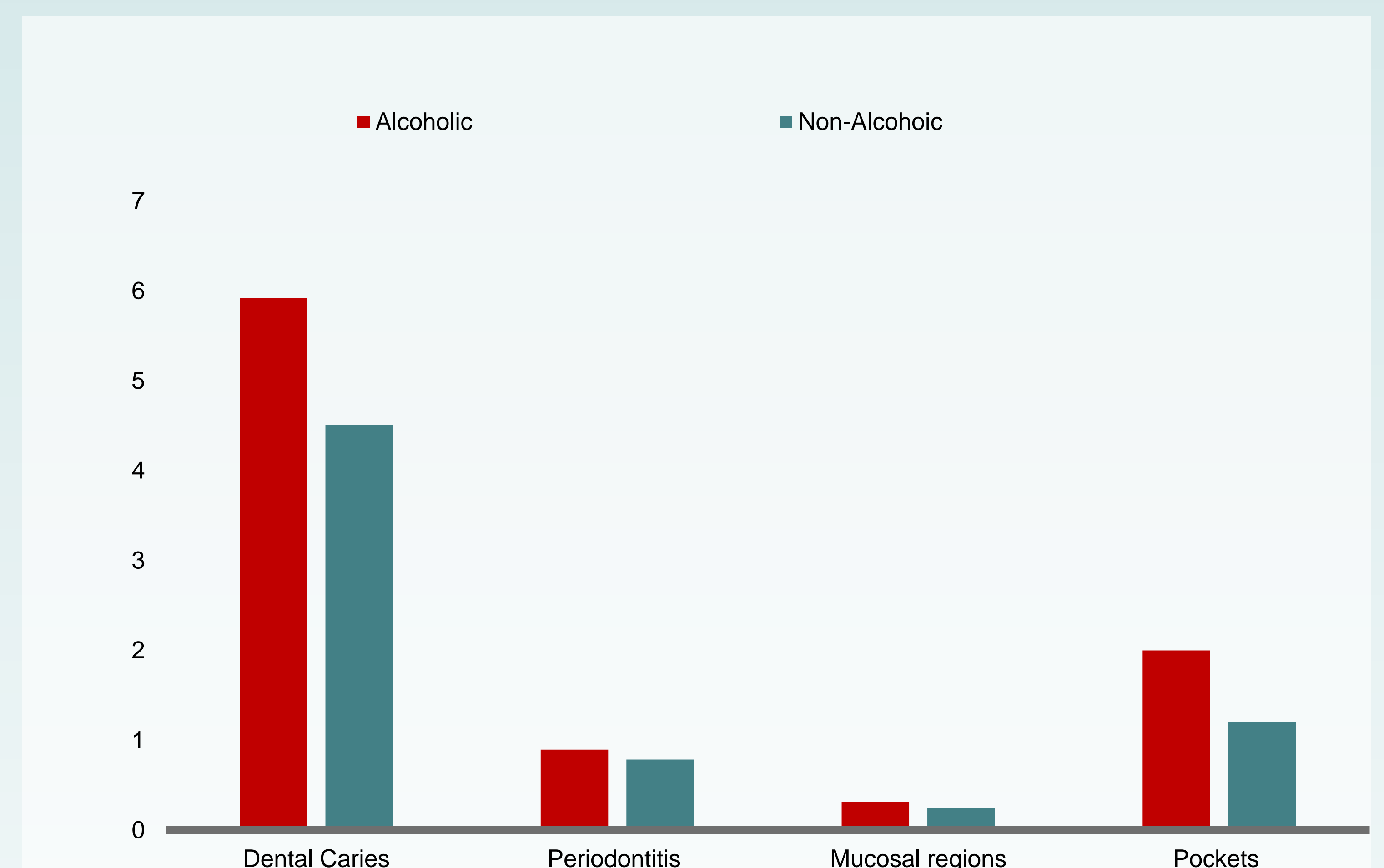
Subjects categorized as alcohol dependents by investigator based on American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders (DSM-5) diagnostic criteria [12]. Subjects who were willing to participate in the study and who gave written consent and with minimum of **20 natural teeth** were included in the study.

Inclusion criteria for controls (non-alcoholic subjects) were Subjects who were not categorized as alcohol dependents based on American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders (DSM-5) diagnostic criteria.

Subjects with systemic diseases who were edentulous and who were using antibiotics were **excluded** from the study.

Results

- Prevalence of **pockets** were significantly **high** among alcohol dependents (2.31 ± 1.68) compared to non alcoholic subjects (1.39 ± 1.22)
- Prevalence of **dental caries** was **higher** in *alcohol dependent* subjects with a mean of **5.92** compared to nonalcoholic **4.51**
- Prevalence of **periodontitis** was **higher 89.61%** in *alcohol dependent* subjects compared to controls **78.67%** (prevalence of **loss of attachment** up to 4-8mm was significantly **high**)
- Prevalence of **mucosal lesions** among *alcohol dependent* subjects was **31.5%** which was **higher** than the controls **25%** , subjects who were categorized as alcoholics showed a **lower plaque** and **salivary pH** compared to non alcoholics



Conclusion

Subjects categorized as alcoholic dependent subjects had slightly **lower** mean **plaque** and **salivary pH** and a **higher** prevalence of **dental caries**, **periodontitis** and **mucosal lesions** compared with non alcoholic subjects.

References

- 1-Priyanka K. Impact of Alcohol Dependency on Oral Health – A Cross-sectional Comparative Study. JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH. 2017;
- 2-Pinto-Filho J, Ribeiro L, Sartori L, Dos Santos J, Ramalho L, Cury P. Association between alcohol dependence and both periodontal disease and tooth loss: a cross-sectional study
- 3-Harris N, García-Godoy F, Nathe C. Primary preventive dentistry. Upper Saddle River, N.J.: Pearson; 2009
- 4-Alcohol & Oral Health | Effects Of Alcohol On Teeth, Gums & More | Covington Center For Family Dentistry [Internet]. Covington Center for Family Dentistry.