



Prevalence of Oral Cancer in Adolescents Related to Areca (Betel) Nut Chewing, Using Tobacco and Other Additives in Saipan, Northern Marianas Islands: A Review of Literature

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# Prevalence of Oral Cancer in Adolescents Related to Areca (Betel) Nut Chewing, Using Tobacco and Other Additives in Saipan, Northern Marianas Islands: A Review of Literature

## Abstract

*Oral cancer* can involve the lip, tongue, mouth and pharynx. It is the sixth most prevalent cancer worldwide. One of the leading causes of *Oral Cancer* in the Commonwealth of the Northern Mariana Islands (CNMI) is *chewing betel nut with tobacco and other additives*. The International Agency for Research on Cancer (IARC) linked *areca nut, betel quid with tobacco and betel quid without tobacco* as *carcinogenic to humans*.

*Areca nut*, also known as *betel nut* comes from the areca palm tree. The use of areca nut is common throughout the Pacific, and is widespread in Papua New Guinea, Solomon Islands, Guam, the Federated States of Micronesia, Palau, CNMI and the Marshall Islands.

The objective of this review is to gather published data related to oral cancer in adolescents as a result of chewing betel nut, using tobacco and other additives; and whether these studies address prevalence in adolescents in Saipan, CNMI. The literature searches were done electronically on World Health Organization, Journal of Dental Research, Center for Pacific Islands Studies/University of Hawai'i, IARC websites and Google search using keywords.

A cross-sectional survey study (Oakley et al 2005) of 169 students shows 63.4% use areca nut regularly. It was more prevalent among male (73%) than females (54%). The mean age in starting to chew areca nut was 12.0, while some starting at age 10 or younger. The *betel quid mixture* included powdered lime and pepper betel leaf. Tobacco use was also widely prevalent among schoolchildren. Oral pathological lesions were noted during screening examinations. Areca (betel) nut chewing with the use of tobacco and other additives is increasingly observed among adolescents in Saipan. Further studies are needed on the prevalence of oral cancer in adolescents related to areca nut chewing, using tobacco and other additives and how to decrease oral cancer risk in this age group.

## Keywords

Oral Cancer; Areca (Betel) Nut; Tobacco; Betel Quid; Adolescents



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### **ABSTRACT**

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