SMOKELESS TOBACCO AND ORAL CANCER

The Principal risk factors for Oral Cancer are alcohol & tobacco especially in combination with the degree of risk proportional to the extent of use.

These risk factors can be of greater effect if found among the homeless, unemployed & the very poor as they have lower use of dental services, therefore there will not be early detection of pre cancerous and cancerous lesions which could be dealt with.

Smokeless tobacco is very worrying because of the appeal to young people in certain countries.

Pathological effect of Smokeless tobacco:

It is available in several forms, the snuff a powdered tobacco placed or dipped between the cheek & the gums. Dry snuff contains high concentration of nitrosamines known to be carcinogenic especially oral cancer.

Nicotine is also absorbed systemically through smokeless tobacco causing same illness as by smoking. Continuous use of snuff leads to localized tissue changes & development of leukoplakia this can be cancerous in 3-5% of cases.

This condition can be reversed if ST is stopped.

Gingival recession at the site of the dip is common.

Relative risk of developing cancer of the gums and buccal mucosa was 4.6 time higher for smokers than non smokers. For user of ST it was 13 – 48 times more especially in those with greater length of ST use.

Prevalence of Smokeless Tobacco use:

Marketing is especially for young adults. The decline in smoking is faced with increase of ST use:

- Prevalence & frequency of use varies by geographic region and metropolitan are size.
- Women use of ST is generally lower than males.
- Used widely in the military in certain countries United States survey shows its prevalence is higher among adolescent and young adult white males.

Remarkable high occurrence of Oral Cancer in India is due to high prevalence of tobacco chewing in several forms. Although it is used in a mixture with betel leaf and however they have not been found to have any carcinogenic effect on the oral mucosa.

Preventing Smokeless Tobacco Use:

Public & individual education to drop or preferably not to begin is the best prevention.

A legislation was passed in 1986 in the US

- Development & implementation of health education program to inform the public about risks.
- Inclusion of health warning labels on the products.
- Prohibition Radio & Television advertising. Voluntary breaking of ST habit is not easy due to nicotine addiction. Thus programs should be directed to prevent the young from beginning the habit.

A legislation was passed in the U.S. CDC identified six indictors for evaluating the impact of legislature:

1. Prevalence of ST current use, i.e. survey to show the number of ST users within seven day.
2. Perception of safety use, i.e. whether users and non users are aware that ST is not a safe alternative to smoking.
3. Amount of ST sold.
4. Prevalence of ST ever used.
5. Incidence of ST – induced leukoplakia (*also referred to as Snuff – dippers keratosis)* i.e. the number of newly diagnosed cases in the population.
6. Curricula on ST i.e. the number of schools at all stages with curricula covering health hazards of ST use.

Dental Professionals have a potential major *role* in the education. They have to identify the lesion and educate the patient on this life and death matters.