

## AN EPIDEMIOLOGICAL AND CLINICO-PATHOLOGICAL PROFILE OF ORO-MUCOSAL DISEASES AMONGST SUBSTANCE ABUSERS IN KANPUR NAGAR

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### ABSTRACT:

#### Objectives :

1. To assess magnitude of Orol Mucosal diseases in substance abusers in Kanpur.
2. Epidemiological co relates of oro-mucosal disease.
3. To study the clinicopathological profile.

**Study Design :** A retrospective study

**Study Settings :** Deptt. of Surgery, G.S.V.M. Medical College, Kanpur

**Study Subject :** 150 cases of substance abusers various

**Study Period :** January 2008

**Study Variable :** Age, Sex, religion socioeconomic status.

**Result :** In the present study, majority of the substance abusers were male (87%), from rural background (60%) and of low socioeconomic status (70%). The most common substance abused was a consination smokings alcohol intake (26.67), followed by tobacco chewing (14%) in form of guttka. Leukoplakia was most common histopathological lesion in population related to (48%).

### Introduction :

About one third of all the cancers affecting lumen oral cavity malignancy. India shows lughest found in India. The highest incidence of oral cancer patients in the world is and all of them could be related to tobacco chewing, smoking and alcohol intake. Early diagnosis of oral cancer is very difficult because there are no screening programmes for oral cancer presently. Keeping in view the high mangnitude of tobacco and alcohol conception since the incidence of tobacco consumes and alcohol is quiet high in and around Kanpur Nagar, we underteck the present study to detect the earliest change in the buccal musoca in oral

cavity cancers preventive and therapeutic measures to combat the problem of oral recomending cavity cancers.

### Material and Methods :

In the present study the substance abusers were selected from two sources about 50% were form indoor wards suffering from different diseases and remaining were taken from those attended O.P.D of department of surgery using purposive sampling technique the informations regarding type of substance abuse, duration, quantity, clinical and pathological diagnosis was obtained form the records available in the received section in case of the

indoor patients. While substance abusers attending the OPD the relevent information was obtained on prellsted and predeigned questionnaire. The clinical examination was carried out on the spot. After taking direct biopsy from oral mucosa samples were sent for

cyto histopathological examination.

# **Observation :**

The study was carried out in the department of surgery, GSVM Medical college, Kanpur.

Table I  
**DEMOGRAPHIC PROFILE OF STUDY POPULATION (150)**

1. Age (yrs)	Yrs	No.	%
	15-30	37	25%
	30-45	60	40%*
	45-60	45	30%
	>60	8	5%
2. Sex (%)	M	130	87%*
	F	20	13%
3. (%) Reglion	Hindu	105	70%*
	Muslim	30	20%
	Sikh	5	4%
	others	10	6%
4. Residential background	Rural	90	60%*
	Semiurban	35	23%
	Urban	25	17%

\* shows significant data



Table 2  
TYPE OF SUBSTANCE ABUSE

Type of substance	No. of Population	Percentage (%)
Chewing tobacco only	20	13.34
Smoking only	15	10.00
Alcoholism only	15	10.00
Smoking with tobacco chewing	20	13.34
Tobacco chewing with alcohol intake	17	11.34
Smoking with alcohol intake	40	26.67
All	23	15.34
Total	150	100.00

Highest incidence of leukoplakia was seen in group taking all the three substances.

Table 3  
ASSOCIATION OF LEUKOPLAKIA WITH DURATION OF SMOKING  
CHEWING TOBACCO AND ALCOHOL INTAKE  
(Leukoplakia was found in 50 cases only)

Duration of exposure	Total cases	Chewing & Tobacco only	Smoking only	Alcohol only	Chewing & Smoking	Chewing & Smoking	Alcohol & smoking	All
<5 yrs	4	-	1	-	1	-	-	2
5-10 yrs	10	1	1	-	2	1	-	5
>10 yrs	36	1	1	1	4	4	3	22
Total	50	2	3	1	7	5	3	29



Table 4  
FINDINGS ON HISTOPATHOLOGICAL EXAMINATION

Histopathological Findings	N=150	%
Epithelial hyperplasia	10	6.67
Mild dysplasia	14	9.33
Moderate dysplasia	30	20.00
Severe dysplasia	8	5.33
CIN	8	5.33
Submucosal fibrosis	75	50.00
Acantholysis / Keratinization	5	3.33

Sub mucosal fibrosis is the most commonly occurring change 50% of cases

#### Discussion :

Demographic data comparable to wish Vora et al and K.M. Venkat Narayan et al<sup>2</sup>. Use of various substances abused by the population in form of chewing tobacco in various forms (khaini, chuni, and beatel quid / pan gutka / pan masala). Smoking (cigarette, bidi, hukka, chilam) and alcoholism (country liquor and imported/English liquor) comparable as found by Vora et al<sup>1</sup>. The most dramatic difference is observed in the group of smoking and alcohol (26.67% vs. 3.4%). This can again be explained on the basis of cheap and easy availability of country made bidi and liquor. tobacco chewing is a very common practice in rural India and has spread its legs in urban area by advent of chuni and guthka. The marked difference in both the subsets of indian populations could be seen because of the fact that most of the cases in the present study were from rural background where chewing tobacco is a very common practice.

Chewing habits in Our study

(Daily=60%, alternate day=20%, regular=80%, weekly/occasionally=10%) this implies almost similar consumption patterns Vora et al<sup>1</sup>. Type of tobacco preparation used are almost similar expect for the fact that pan and chuni are more commonly eaten because of the popularity of these two substances in eastern India comparable to Vora et al<sup>1</sup>. Smoking is the 2<sup>nd</sup> most common addiction in this line up with cigarette and beedis being most commonly used in 63% population (80% smokes between 1-3 cigarette / bidis per day). people with low socioeconomic status (<Rs 75 per day) are more likely to develop addiction to tobacco and alcohol as well as develop premalignant conditions of the mouth comparable to Venkatnarayan et al<sup>2</sup>.

The present study showed maximum number of cases (29/50) in the population taking all the three substances followed by smoking and chewing (7/50). This theory is supported by Bhawate<sup>6</sup>, Hashibe<sup>7</sup>, Forlen<sup>3</sup>, Mehta<sup>4</sup>,



**Zacharia and Pindborg<sup>5</sup>.** The most common location for Leukoplakia in our study was buccal mucosa (48.15%) cases followed by gingivolabial sulcus (37.05%) same like **Waldron et al** this can be explained that maximum numbers of smokers in the group used to chew tobacco. Also along with smoking. This could have acted as an additive effect on the development of Leukoplakia in buccal mucosa.

To conclude there is significant association is found with oral mucosa diseases and substance abusers in kanpur region that can be reduced by education and counseling regarding avoiding the use of substances, good oral hygiene and improving socioeconomic status and awareness regarding diseases in rural areas.

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