



A Study to Identify the Oral Mucosal Deterioration among Adult Tobacco Chewers at Thiruninravur

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Abstract

Chewing tobacco is a type of smokeless tobacco product consumed by placing a portion of the tobacco between the cheek and gum or the upper lip teeth and chewing unlike dipping tobacco it is not ground and must be manually crushed with the teeth to release flavor and nicotine. The objectives of the study are to identify the oral mucosal among adult tobacco chewers living in Thiruninravur, to access the oral mucosal deterioration among the tobacco chewers and to identify the oral mucosal deteriorating with selected demographical variable. Descriptive design was adopted for the study. Non-probability sampling technique was used to select the 100 samples. The data was collected, organized and analyzed in term of descriptive statistics. The study results show that 82% had mild oral mucosal deterioration 16% had oral mucosal deterioration and 2% had severe oral mucosal deterioration. The study findings suggest that it is important to educate Tobacco chewing predisposes to increased risk of oral cancer in an individual so all healthcare providers should assess the patients' tobacco usage habits and actively employ tobacco prevention, cessation and treatment programmes.

Keyword: Adult, Oral Mucosal Deterioration and Tobacco Chewers.

INTRODUCTION

Chewing tobaccos are product via a process of leaf curing, cutting, fermentation and processing or sweetening. Historically many American chewing tobacco brands (which were popular during the American civil war era) were made with cigar clippings the southern United States were distinctive for its production of tobacco, which earned premium prices from around the world¹.

Most farmers grew a little for their own use, or traded with neighbors who grew it. commercial sales became important in the late 19th century as major tobacco companies rose in the south becoming one of the largest employers in cities like Winston-Salem, NC, Richmond, VA, southerners dominated the tobacco industry in the united states; even a concern as large as the Helmer tobacco company².

Headquartered in new jersey was headed by former confederate officer George Washington Helmer³. In 1938 R.J. Renolds marketed eighty –four brands of chewing tobacco, twelve brands of smoking tobacco and the top-selling camel brand of cigarettes Reynolds sold large quantities of chewing tobacco, though the market peaked about 1910⁴.

Saliva is a complex and important body fluid which is very essential for oral health. Saliva plays a critical role in oral homeostasis because it modulates the ecosystem within the oral cavity. Lubrication of the alimentary bolus, protection against virus, bacteria and fungi, buffer capacity, protection and repair of the oral mucosa and dental remineralization are some of the functions of saliva. The main ingredient of tobacco is nicotine and nicotine acts on certain cholinergic receptors in the brain and other organs causing neural activation leading to altered salivary secretion.

Tobacco use is the serious health problem. In India deaths attributed to tobacco are expected to rise from 1⁵.4% of all deaths in 1990 to 13.3% in 2020, and current trends shows that tobacco use will cause more than 8 million deaths annual by 2030⁶.it is estimated that 5,500 people starting

using tobacco every day in India is one of the highest incidence of oral cancer in the world^{7,8,9}. The objectives of the study are to identify the oral mucosal among adult tobacco chewers living in Thiruninravur, to access the oral mucosal deterioration among the tobacco chewers and to identify the oral mucosal deteriorating with selected demographical variable¹⁰. The researcher has observed many people chewing tobacco with oral mucosal deterioration leading to oral cancer who are ignorant about the consequences of tobacco chewing so the researcher has identified and investigated oral mucosal deterioration among adult tobacco chewers¹¹.

MATERIALS AND METHODS:

Descriptive design was adopted by the investigator to identify oral mucosal deterioration among adult tobacco chewing. The study was conducted in Gomathipuram Thiruninravur with a sample size of 100 patients. Non-probability sampling technique was used to select the samples. The Inclusion criteria for the study are Adult who are willing to participate and Adult age group between 18-51 years. The exclusion criteria for the study are subjects suffering from systematic illness and subjects undergoing radiotherapy chemotherapy. Each day 20 samples were selected for five days. Data was collected using structured interview schedule to assess the demographical variables among adult tobacco chewers and salivary ph paper to assess the oral mucosal deterioration. The project has been approved by the ethics committee of the institution. Informed consent was obtained from the participants before initiating the study.

RESULTS:

The study results reveal that out of 100 samples, among 27 samples (27%) were in the age group of below 20 years among this sample, 21 samples (21 %) were in the age group of 21-30 years , 23 samples (23 %) were in the age

group of 31-40 years , 17 samples (17%) were in the age group of 41-50, 12 samples (12%) were in the age group of above 51 years 61 samples (61%)were male and 39 samples (39%) were female , 54 samples (54%) were uneducated ,4 samples (4%) were studied primary school , 5 samples (5%) were secondary schools ,19 samples (19 %) were studied higher secondary school and 17 samples (17 %) were degree holder , among 17 samples (17%) were skilled labor ,59 samples (59%) were unskilled labor ,6 samples (6%) were doing business and 18 samples (18%) were in other occupation in this study, 39 samples (39%)were below 5 years duration of tobacco chewing , 43 samples (43%) were in the duration of 5-10 years , 9 samples (9%) were in the duration of 11-15 years , 6 samples (6%) were 16-20 years in the duration of tobacco chewing 2 samples (2%) were above 20 years in the duration of tobacco chewing ,7 samples (7%) were used khaini ,45 samples (45%) were using pan parag ,10 samples (10%) were using gutkha ,36 samples (36%) were using super nut beta quid and 2 samples (2%) were using other type of smokeless tobacco in this study. 22 samples (22%) family history of tobacco chewers in father, 15 samples (15%) were mothers, 7 samples (7%) were used by their siblings, 56 samples (56%) were used by others in family history of tobacco chewers in this study.(Table 1)
Salivary ph. paper is used to check regarding oral mucosal deterioration among adult tobacco chewers

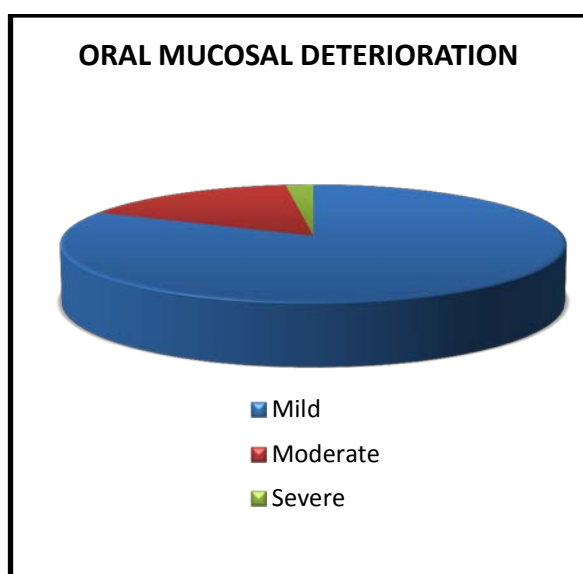
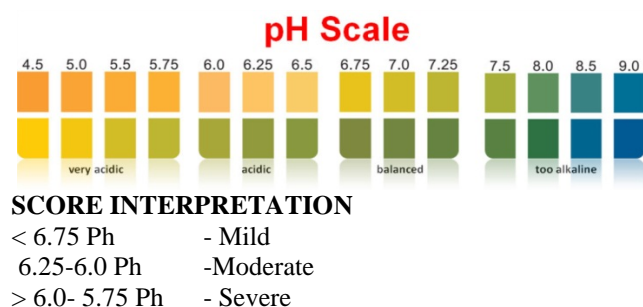


Figure- 1: Frequency and percentage distribution among oral mucosal deterioration among Adult Tobacco chewers

Table -1: Demographic Variables of Tobacco Chewers (N=100)

S.no	Demographic variables	Frequency	Percentage
AGE:			
1)	a)Below20years	27	27%
	b)21-30years	21	21%
	c) 31- 40 years	23	23%
	d) 41-50 years	17	17%
	e) Above 51 years	12	12%
GENDER:			
2)	a) Male	61	61%
	b) Female	39	39%
EDUCATION:			
3)	a) Uneducated		
	b) Primary School	54	54 %
	c) Secondary School	4	4%
	d) Higher Secondary School	5	5%
	e) Degree Holder	19	19 %
OCCUPATION:			
4)	a) Skilled Labor	17	17%
	b) Unskilled Labor	59	59%
	c) Business	6	6%
	d) Others	18	18%
DURATION OF TOBACCO CHEWING HABITS:			
5)	a) Below 5 Years	39	39%
	b) 5-10 Years	43	43%
	c) 11-15 Years	9	9%
	d) 16-20 Years	6	6%
	e) Above 20 Years	2	2%
TYPES OF SMOKELESS TOBACCO:			
6)	a) Khaini	7	7%
	b) Pan Parag	45	45%
	c) Gutkha	10	10%
	d) Super Nut Beta Liquid	36	36%
	e) Others	2	2%
FAMILY HISTORY OF TOBACCO CHEWERS			
7)	a) Father	22	22 %
	b) Mother	15	15 %
	c) Siblings	7	7 %
	d) Others	56	56 %

DISCUSSION:

The present study results show that 82% had mild oral mucosal deterioration 16% had oral mucosal deterioration and 2% had severe oral mucosal deterioration. The present study is supported by Neeraj Grover et al.(2016)conducted a study on Long-term effect of tobacco on unstimulated salivary pH. A total of 60 subjects (males and females) aged 25–40 years, were divided equally into three groups: Tobacco smokers (Group A), chewers (Group B) and controls (Group C). Saliva of each subject was collected under resting condition. Salivary pH was determined using the specific salivary pH meter. the study reveals that The mean (\pm standard deviation) pH for Group A was 6.75 (\pm 0.11), Group B was 6.5 (\pm 0.29) and Group C was 7.00 (\pm 0.28) after comparison. The significant results showed lower salivary pH in Groups A and B as compared to

controls. Salivary pH was lowest in Group B compared to Group A and Group C.

CONCLUSION

The study findings suggest that it is important to educate Tobacco chewing predisposes to increased risk of oral cancer in an individual so all healthcare providers should assess the patients' tobacco usage habits and actively employ tobacco prevention, cessation and treatment programmes.

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Conflict of interest:

The Authors declare no conflict of interest.

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