Oral mucosal disorder-A demographic study

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Abstract

Introduction: Oral mucosal disorder (OMD) has the potential disorder than any other oral disorder. It is found in the all over would. In our country India, is also more prone area of oral mucosal disorder. People more affected in male, low educated, low socioeconomic. Areca nut consumption is more so oral mucosal disorder is more reported, this survey was undertaken in darbhanga and is surrounding to determine the demographic data of oral mucosal disorder and to identify their association with various factors. **Materials and Methods:** A total of 5620 patients of Oral mucosal disorder attending the dental outpatient clinic of the Department of Oral Medicine and Radiology in dental college and department of dentistry in darbhanga medical college over a period of 36 months were selected for the study. A detailed case history and clinical examination was done in visible light. Study was done on the basis of age group, gender, socioeconomic habit duration, frequency of habit, and type of habit. **Statistical Analysis Used:** Simple *t*- test analysis was performed. **Results:** Of the 5620 cases of OMD studied, 75.01% cases were male. 49.09% were low socioeconomic people, 36.12% graduate educated, 47.29% smokeless habit and frequency of habit more than two time 57.12%. Oral mucosal disorder. **Conclusion:** Younger populations have relatively a higher percentage of oral mucosal lesions than would older populations. Habits, like smoking and smokeless, which further increase with age, can also increase the incidence of oral mucosal disorder Prevalence of habits was more in males than females.

Keywords: Disorder, gender, socioeconomic

Introduction

Oral diseases are a major public health issue in our country. Maintaining good oral health means being free from pain in the oral and facial region, absence of oral sores and lesions, and being free from periodontal diseases, dental caries, tooth loss and many other diseases and disorders that affect oral cavity.[1]

The consequences of widespread poor oral health can be seen on the personal, population, and health systems level, as caries and periodontal disease deteriorates the individual health and wellbeing, decrease economic productivity and act as significant risk factors for other systemic health ailments.[2] Oral mucosal disorder is found in all over India because poor oral hygiene, bad sanitation, low socio-economy status of population. Oral cancer is any malignant neoplasm which is found on the lip, floor of the mouth, cheek lining, gingiva, palate, or in the tongue. Oral cancer is among the top three types of cancers in India.[3]

Pre-cancer lesion and condition is most common oral mucosal disorder in our century. The various part of our country tobacco prone area also North India is aricanut prone area. Malignant transformation rate of oral leukoplakia ranges from 0.13 to 17.5% and that of OSMF varies from 4.5%-7.6%.[4-6]

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Many studies have been done in various parts of India estimating the prevalence of oral premalignant lesions (OPML) and its risk factors. However, limited data is available regarding the same from this region. Hence this survey was undertaken in Darbhanga, and is surrounding to determine the demographic data of oral mucosal disorder and to identify their association with various factors. The objective of our study is evaluate of oral mucosal disorder in Darbhanga and its surrounding region.

Methods

A total of 21,500 patients visited the outpatient department of department of Oral Medicine and Radiology in Mithila Minority Dental College and Hospital and Darbhanga Medical College and Hospital in Darbhanga during the period of September 2015 to September 2018. Examination was carried out in each individual than 5,620 individual have oral mucosal disorder. Patients selected for the study were explained in detail about the condition affecting their oral cavity. The diagnosis of the lesion was made based on history and clinical features, according to standard guidelines and color atlas.[7]

Result

Group I –Age

Prevalence of oral disorder is higher in age group 31-50 years than more in 50 years and less than 10-30 years [Table 1] percentage prevalence value is more 50.23% in age group 31-50 years, than 31.17% in above 50 years and 18.59% in 10-30 years, respectively [Figure 1]. These value is statically (simple t –test) Significant because recorded *P* value is less than 0.0001

Group II-Sex

In sex group male Is higher prevalence [Table 2] similarly the percentage is more in male 74.0% than female 24.89% [Figure 2]. *P* value is less than 0.0001.

Group III-Socioeconomic Group

Prevalence of oral mucosal disorder in socioeconomic group less in higher class in comparison of middle class than lower

classes. Percentage value of oral mucosal disorder in higher class is 19.80%, than middle class 31.10%, than lower class 49.09%, respectively [Table 3]. *P* –value of socioeconomic group is lesser than 0.0001. Figure 3 is also represent the percentage value of socioeconomic group of oral mucosal disorder

Group IV-Basis of education

In the above Table 4, oral mucosal disorder on the basis of education is more in graduate people than school going student. The prevalence is lesser than post graduate in comparison of non-school going people. Percentage vale is more in graduate people then school going people then non-school than
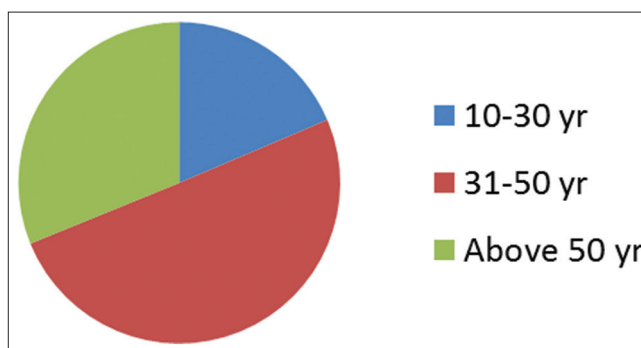
Figure 1: Shows Percentage of Age Group

Figure 2: Show percentage of sex

Figure 3: Show percentage of Socioeconomic Group

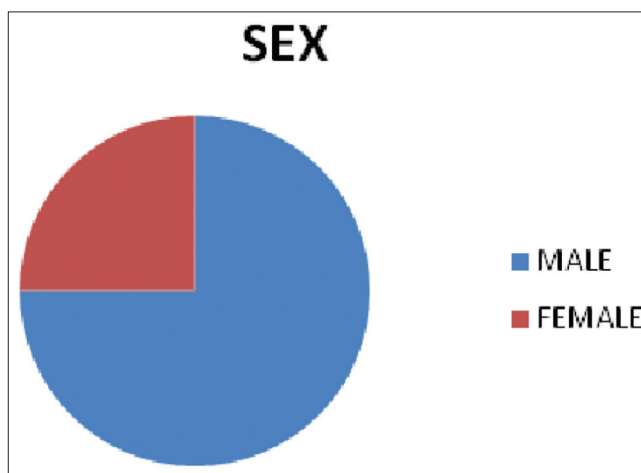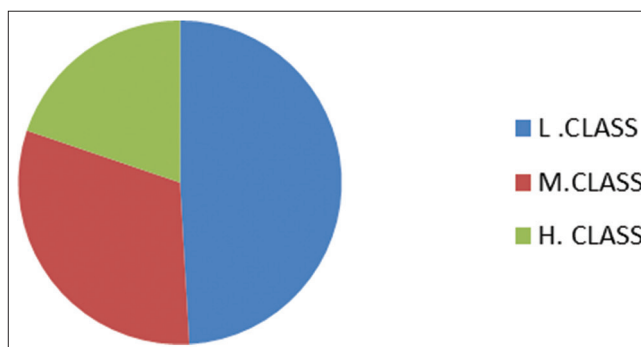| Table 1: Data of age group				
Age group	Number of oral mucosal disorder	Percentage	Mean	*P*
10-30 year	1045	18.59	1873	*P*<0.0001
31-50 year	2823	50.23		
Above -50 year	1752	31.17		
Total	5620			

Table 2: Data of gender group				
Sex	Number of oral mucosal disorder	Percentage	Mean	*P*
Male	4216	75.01	2810	*P*<0.0001
Female	1404	24.98		
Total	5620			

Table 3: Data of socioeconomic group

Socioeconomic	Number of oral mucosal disorder	%	Mean	*P*
Lower class	2759	49.09	1873	*P*<0.0001
Middle class	1748	31.10		
Higher class	1113	19.80		
Total	5620			

Table 4: Data of education group

Education	Number of oral mucosal disorder	%	Mean	*P*
Post graduate	547	9.73	1405	*P*<0.0001
Graduate	2030	36.12		
School	1543	27.45		
Non school	1500	26.69		
Total	5620			

Table 5: Data of habit group

Type of habit	Number of oral mucosal disorder	%	Mean	*P*
Smoking (bidi, cigarette, gaja)	1324	23.55	1124	*P*<0.0001
Smokeless (gutkha, betel quite, tobacco)	2658	47.29		
Alcohol + Smoking	538	9.57		
Alcohol + Smokeless	650	11.56		
No any habit	450	08.00		
Total	5620			

Figure 4: Show percentage of education

Figure 5: Show percentage of habit

postgraduate people respectively shows in Figure 4. *P* value is lesser than 0.0001.

Group V –Habit

The above [Table 5] shows prevalence value is more in smokeless habit (Gutka, beta quite, tobacco chewer) than smoker (Bidi, cigarette, ganja) than alcohol smokeless than alcohol smoking other habit. Percentage prevalence 23.55% in smokeless habit than smoking 23.55% than alcohol + smokeless 11.56% than alcohol = smoking 9.57% than other habit 8%, respectively, shows in Figure 5. *P* value is lesser than 0.0001.

Group VI –Frequency of habit

Prevalence of oral mucosal disorder is more in those people habit more than two time than two time the one time respectively [Table 6]. Percentage value is more in two time 57.12% than two time 24.44% than one time 18.39%, respectively [Figure 6]. *P* value is less than 0.0001.

Discussion

In this study prevalence of oral mucosal disorder in age group is more in older population than younger. The overall prevalence of OMLs was found to be higher in older individuals than younger individuals, and it can be related to different habits acquired with age. Chewing, smoking, and consumption of alcoholic beverages have become a common social habit in these
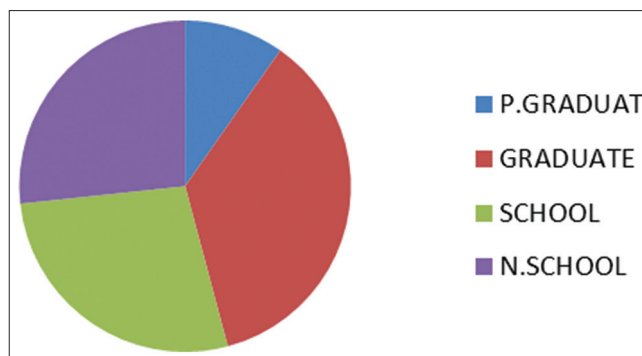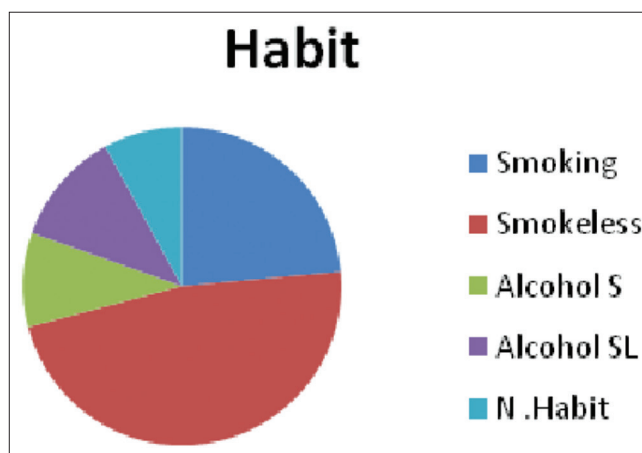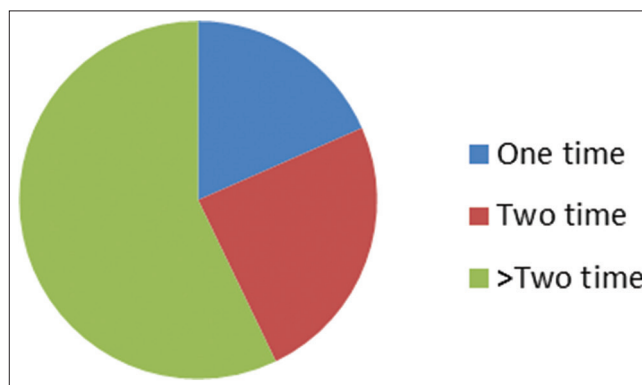

Figure 6: Show percentage of frequency of habit

reason[8,9] The prevalence of oral mucosal lesions has been found to be higher in older patients than in the younger population.[9-11]

Patil *et al.*[12] showed males were more affected than females, and this difference was clinically not significant (*P* > 0.05). Mobeeriek *et al.*[13] the prevalence of oral lesions in females was higher than males, but in the Corbet *et al.* study in 1994.[14] Sami *et al.*[15] also notice male is more prevalence the female in our study also suggested male is more effected than female. In our study male are more prevalence than female. The percentage of male was 71.01% and of females was 24.98%.

Table 6: Data of frequency of habit/day group				
Habit frequency/day	Number of oral mucosal disorder	%	Mean	P
One time	1034	18.39	1873	P<0.0001
Two time	1374	24.44		
More than two time	3212	57.12		
Total	5620			

In our study, low socioeconomic people are more (49.09%) oral mucosal disorder due to poor oral hygiene. The higher socioeconomic people is very less (19.18%) oral mucosal disorder in compression of middle class (31.10%). Prevalence of oral mucosal disorder in post graduate people is lees (09.73%) in compression of graduate (36.12%) educated similarly school educated (27.45%) and uneducated people (26.69%) because higher educated people get more information of oral hygiene and oral mucosal disorder. similar study was done Saraswathi TR *et al.*,[16] KV.V. Parsad *et al.*[17] and Kamble KA *et al.*[18]

Bhowate *et al.*,[19] Maher *et al.*[20] and Kamble KA *et al.*[18] their study reported prevalence of oral mucosal disorder is less in single habit individual in compression of multiple habit. In our study also shows multiple habit of individual are more oral lesion in compression of single habit. Smokeless is more (47.29%) oral disorder in compression of smoker (23.55%). Oral mucosal disorder is less (18.39%) in compression of more habit of frequency (57.12%) in this study.

Primarily, this study is helpful for the proper diagnosis and good prognosis of oral mucosal disorder. This study also helps in figuring out the demographic of oral mucosal disorder in this region.

Conclusion

Our study was the first epidemiologic study in Darbhanga and it's surrounding about the prevalence of oral mucosal lesions and their relation to many factors. Younger populations have relatively a higher percentage of oral mucosal lesions than older populations would. Habits like smoking and smokeless, which further increase with age, can also increase the incidence of oral mucosal disorder Prevalence of habits was more in males than females. Programs to improve oral health should be conducted regularly to promote oral health care in the population.

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Conflicts of interest

There are no conflicts of interest.

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