INTRODUCTION: Oral Submucous Fibrosis (OSMF), is a condition that is mostly associated with tobacco and areca nut chewing and find it prevalence to be higher in rural populations.

AIM: To assess the prevalence of OSMF among rural shop owners in Panchkula district, Haryana, India.

METHODOLOGY: A total of 321 shop owners in rural Panchkula were interviewed and examined for OSMF and associated lesions with the help of a preformed, pre-tested questionnaire. The population was divided into six strata according to age (15-24 years, 25-34 years, 35-44 years, 45-60 years and >60 years). Data was entered into Microsoft excel, Descriptive statistics were applied and statistics was done using SPSS 21.0.

RESULT: Tobacco consumption in any form was seen in 197 (61.4%) shopkeepers, with OSMF being diagnosed in 49 (15.3%) of them comprising of 42 males and 7 females. The majority of subjects having OSMF (17, 34.7%) were seen in the age group of 45-54 years.

CONCLUSION: It is highly advised that health education regarding tobacco consumption and its ill-effects be provided to rural population in Panchkula district.

KEYWORDS: Prevalence, Oral Submucous Fibrosis, Arecanut, Tobacco
MATERIALS AND METHODS

In a Cross-sectional study conducted among rural shopkeepers of Panchkula district, Haryana, India from January 2017 to 15th March 2017, and a total of 321 rural shopkeepers were examined and interviewed with the help of a preformed, pre-tested questionnaire that enquired the shopkeepers about their habits and their sign and symptoms. The factory workers were divided according to six age strata, that were, 15-24 years, 25-34 years, 35-44 years, 45-60 years and > 60 years. Patients having any systemic disease were excluded from the study. We took an informed, written consent in hindi from the rural shopkeepers after explaining them about the aims and objectives of the study. Panchkula district is divided in four blocks (Barwala, Pinjore, Morni, Raipur Rani), and efforts were made to include a homogeneous, convenient sample from all the four blocks of Panchkula District, Haryana, India.

The examinations were carried out by six examiners with four recording clerks who entered the data in the questionnaire. The examiners and the instruments were standardized and calibrated according to the current norms. A diagnosis of OSMF was made when the subject showed tell-tale signs of OSMF, with those being blanching and stiffness of the oral mucosa, any presence of palpable bands in buccal and/or labial mucosa, and having discomfort in mouth opening and tongue protrusion. The armamentarium used for this were sterile mouth mirrors, explorers, tweezers, kidney trays, instrument pouches, disposable latex gloves, disposable mouth masks and questionnaires. Statistical analysis was done using SPSS version 21.0.

RESULTS

The total study population comprised of 321 individuals, out of which 91% (293) were males and 9% (28) were females. (Figure 1.) Tobacco-related habits (in any form) were seen in 197 shop owners (61.4%), and out of them, a total of 49 (15.3%) of the subjects were found to have OSMF in which, 42 were males and 7 were females (Figure 2).

DISCUSSION

In the present study, the prevalence of OSMF among rural shopkeepers of Panchkula District, Haryana, India is 15.3% which is lower than Amiya Agrawal et al. (34.1%), in agreement to Neufled et al. (16.2%). However, various authors report a lower prevalence of OSMF in their studies, ranging from (4%) to (3.4%) respectively. Such variations could be attributed to geographical variations and differences in patterns of tobacco consumption among people.

In the present study, it was found that OSMF was common in 45-60 year olds. These findings are in disagreement by various authors who document a higher prevalence of OSMF in the age groups of 36-40 year olds followed by 21-25 year age group. This could be attributed to the fact that in a rural setting, most of the young population has migrated to urban areas in search of jobs and/or education and do not prefer to use tobacco products in front of their elders due to fear. The male female OSMF predilection in the present study was 6:1. This is in agreement to various authors who document a similar male: female predilection in their studies.

CONCLUSION

It is highly recommended that efforts be directed towards health education of the entire rural population of Panchkula District, Haryana, India.
be carried out to motivate them to quit tobacco and educate them about the ill-effects to tobacco consumption.

REFERENCES


Cite this article as:

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Source of support: Nil, Conflict of interest: None declared

PREVALENCE OF OSMF AMONG PANCHKULA SHOPKEEPERS

Figure 1. Distribution of study population

Figure 2. Prevalence of OSMF with respect to gender

LEGENDS
**Figure 3.** Percentage population suffering from OSMF (age-wise)

<table>
<thead>
<tr>
<th>AGE (In years)</th>
<th>SMOKELESS TOBACCO</th>
<th>SMOKED TOBACCO</th>
<th>BOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td>5</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>25-34</td>
<td>16</td>
<td>23</td>
<td>10</td>
</tr>
<tr>
<td>35-44</td>
<td>21</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>45-60</td>
<td>12</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>&gt;60</td>
<td>19</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>73</td>
<td>87</td>
<td>37</td>
</tr>
</tbody>
</table>

**Table 1.** Different kinds of habits in the study population.