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PREVALENCE TOBACCO ASSOCIATED HABITS **OF** MIGRANT CONSTRUCTION SITE WORKERS IN CHENNAI

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ABSTRACT

To study the prevalence of tobacco associated habits among migrant construction site workers in Chennai. This is a descriptive study and the study population includes migrant construction site workers in Chennai. Each study participants demographic details and tobacco related habit history, and frequency of use were recorded. Total of 702 subjects, of which 642 were men and 60 were women examined in the age group ranging from 17 to 60. In total of 702 subjects, the individuals in the age group of 19-24 years, 25-34 years and 35-44 years constitutes 30.6%, 27.5% and 27.6% respectively in the this study. Males were more common, 642 out of 702 with 91.5 % comprised the predominant gender group in this study. 38.8% of the individuals (272 out of 702) reported with habit of chewing tobacco, 5.3 % of the individuals (37 out of 702) reported with habit of only smoking and 12.5 % of the individuals (88 out of 702) reported with habit of both smoking and chewing tobacco.43.4% (305 out of 702) of the individuals reported with no history of any tobacco related habits. More than 50 % of the population were found to be with any of the tobacco related habits among the migrant construction site workers in this study. Smokeless tobacco usage being a strong risk factor for precancerous and cancerous lesions of oral cavity and since the use of tobacco, especially smokeless tobacco is high in the north Indian construction site workers, it is expected that the prevalence of tobacco associated precancerous lesion may be more in these study population. Hence this group should be potential target for periodic screening that will help in early diagnosis of potentially malignant disorders of oral mucosa that might lead to appropriate intervention which will reduce the morbidity and mortality associated with oral cancer. Also periodic oral health education program regarding cessation of tobacco habits to create awareness should be conducted for this largely uneducated, neglected population.

INTRODUCTION

India is the largest producer of tobacco only next to China and ranks first in consumption among all nations. Tobacco is consumed in various forms which are broadly classified as smokeless or chewed tobacco and smoked tobacco. History reveals that the American Indians were

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the first to use tobacco before 1st century B.C. during ceremony and as medicine. It was introduced to the Indian subcontinent by the Portuguese traders at around the 16th century [1]. It is used by about 150 million people all around the world and the International Agency for Research on Cancer has confirmed that smokeless or chewed tobacco as a single major cause for oral and pancreatic cancer [1]. In India, oral cancer accounts for more than 50% of all cancers among the men and 25% in female, predominantly in the lower socioeconomic and



illiterate group [2].

The alcohol – tobacco synergism accounts for about 75% of all oral cancers [2]. Tobacco consumption habit is a major concern and in the present scenario may lead to a cancer epidemic. The Global Tobacco Surveillance System (GTSS) reports a high prevalence rate among the young population between 13 – 15 years. There are about 182 million smokers in India and the World Health Organization projects tobacco related fatality in India to cross 1.5 million per annum by the year 2020.It also states about 65% and 35% of the Indian men and women respectively use tobacco. [2]

It is used in various forms, chewable tobacco like khaini, zarda, kiwam, bajjar or tapkheer, masheri, gul, gudhaku pan, pan masala, tobacco flakes with or without lime, gutkha, mava and naswar or snuff. The smoked tobaccos are bidi, cigarette, hookah, chillum, chutta (reverse smoking), cherrot, dhumti and cigar. Others include tobacco tooth powder (mishiri) and tobacco water [3, 4]. Bidi is more affordable and so a major cause for oral cancer, but smokeless tobacco is more potent to cause oral cancer because of its direct contact on the oral mucosa. [5] The prevalence of chewing tobacco of chewing tobacco is high in the central, east and northeast region of India. It is common among the poor and illiterates who may be due to their ignorance on the ill effects of tobacco [3, 4].

The influencing factors of tobacco use are as part of community culture or habit acquired from parent or grandparent. Many men get to the habit in order to present themselves dominant or as mark of authority. Other reasons include developing friendship, peer pressure, to keep engaged, to relieve tension, improve concentration. Tobacco consumption among unskilled workers is common due to the fact of extended work time, hard jobs and to reduce hunger [6].

MATERIALS AND METHODS

This is a descriptive cross sectional study and the study population included is men and women migrant construction site workers with or without chewing or smoking habit. Subjects not willing to participate were excluded from the study. Institutional ethical committee clearance was obtained before proceeding with the study. After obtaining informed consent, each study participants demographic details and tobacco related habit history, and frequency of use were recorded. A total of 702 subjects, 642 men and 60 women were examined in the age group ranging from 17 to 60 years. The collected data were analyzed using SPSS (version 17.0) statistical software package and frequency tabulation was done.

RESULTS

Table 1. Distribution of Study subjects according to age group

Age Group	n	9/0
< 18 Years	27	3.8
19-24 Years	215	30.6
25-34 Years	192	27.5
35-44 Years	194	27.6
45-54 Years	62	8.8
>55 Years	12	1.7
Total	702	100

Table 2. Distribution of study subjects based on gender

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Gender	n	%
Male	642	91.5
Female	60	8.5
Total	702	100

Table 3. Distribution of study subjects according to tobacco type

Tobacco type	n	%
No Habit	305	43.4
Smoking Tobacco	37	5.3
Chewing Tobacco	272	38.8
Both Smoking & Chewing Tobacco	88	12.5
Total	702	100

DISCUSSION

Smoking and chewing tobacco habits accounts for one of every ten adult deaths worldwide. The continuation

of current trends will lead to premature death of about 500 million people alive today with one billion deaths in this century as result of all forms of tobacco use [7].



With 82% of smokers residing in the low and middle income countries the impact of tobacco related mortality is high in these countries. The last two decades has seen reversal of upward trend in the prevalence of smoking and other tobacco related habits in the most high income countries. In contrary to that increase in income and trade liberalisation resulted in increase in the prevalence of smoking and other tobacco related habits in many low and middle income countries [8].

Of the total 702 subjects, the individuals in the age group of 19-24 years ,25-34 years and 35-44 years constitutes 30.6%, 27.5% and 27.6% consecutively in the this study and formed the major population group in this study.

Males were more common, 642 out of 702 with 91.5 % comprised the predominant gender group in this study which can be attributed to large migration of male workers from north India migrating to south India for construction related works.

38.8% of the individuals (272 out of 702) reported with habit of chewing tobacco, 5.3 % of the individuals (37 out of 702) reported with habit of only smoking and 12.5 % of the individuals (88 out of 702) reported with habit of both smoking and chewing tobacco.

43.4% (305 out of 702) of the individuals reported with no history of any tobacco related habits. More than 50 % of the population were found to be with any of the tobacco related habits among the migrant construction site workers

in this study which is significantly more compared to the general Indian population.

CONCLUSION

Smokeless tobacco usage being a strong risk factor for precancerous and cancerous lesions of oral cavity and since the use of tobacco, especially smokeless tobacco is high in the north Indian construction site workers, it is expected that the prevalence of tobacco associated precancerous lesion may be more in these study population. Hence this group should be potential target for periodic screening that will help in early diagnosis of potentially malignant disorders of oral mucosa that might lead to appropriate intervention which will reduce the morbidity and mortality associated with oral cancer. Also highlighting the prevalence of tobacco habits and related lesion by systematic approach will catalyze the more healthcare institution to conduct periodic screening and oral health education program regarding cessation of tobacco habits to create awareness among these largely uneducated, neglected populations.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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