

PREVALENCE AND PATTERN OF SMOKELESS TOBACCO USE, AMONG GOVERNMENT OFFICERS IN URBAN SRI LANKA; IN- HOUSE SURVEY IN SETHSIRIPAYA

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Introduction

Smokeless Tobacco (ST) is tobacco that is not burned and these include chewing, sniffing, placing the product between the teeth and gum, or skin application. Certain countries such as North America, Northern Europe, India and other Asian countries, and parts of Africa, have a long history of using ST products (National Cancer Institute, 2017). More than 300 million people are using ST globally and use of ST is one of the leading public health problems among people around the world. (National Cancer Institute and the Centres for Disease Control and Prevention, 2014). Approximately, 250 million adults consume ST in the South-East Asia Region and is also one of the largest producers of tobacco products in the world (WHO, 2017a). Even though, Sri Lanka is one of the foremost performers in the World Health Organization South-East Asia Region, at the national level, 24% among males, and 6% among females, use ST in Sri Lanka (WHO, 2017b). Many types of ST products are used in Sri Lanka. Betel chewing is a deeply rooted lifestyle habit in Sri Lanka. Betel chewing ingredients such as betel leaf, tobacco, areca-nut and lime are available in the open market and most of homes. Commercial preparations namely, Gutka, Pamparag, Mawa and Hans which are imported from neighbouring countries are also used by Sri Lankans. Not only that, they use some brands called Babul and Beeda which are also produced in Sri Lanka. Health hazards of ST are well documented and the highest burden

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of related co-morbidities reported in South East Asia. Among them, cancer of the lip, oral cavity and pharynx is the highly devastated disease resulted from use of smokeless tobacco. Apart from that, cardio vascular diseases, reproductive out comes and dependency issues are highly associated cases with ST use (Hatsukami et. al., 2014).ST products present a multifarious and widespread challenge to public health that has so far received inadequate attention from researchers and policymakers. In Sri Lankan context, limited studies on ST can be identified among community groups. Based on this background, the overall objective of the study was to determine the prevalence and pattern of ST use among government officers in urban, Sri Lanka.

Methods and Procedures

A descriptive cross sectional study was conducted in Sethsiripaya, Stage II, Sri Lanka to *determine the prevalence of ST use*. Study population were government officers (male and female) who work at various institutions including ministries, departments in Sethsiripaya premises. Those who were not Sri Lankans or who were terminally ill were excluded from the study. The study participants were selected based on convenience sampling method and sample size was 442 (n=240 for female and n=202 for male). Well-designed self-administered questionnaire was used as the data collection tool. *The questionnaire was developed based on World Health Organization-Steps wise approach to Chronic Disease risk factor Surveillance*. Data analysis was performed using the Statistical Package for the Social Sciences (SPSS) version-20 statistical software package.

Results

Various ST products are chewed, sucked (dipped), applied to the gums and teeth, snuffed, or gargled. Various ST products are chewed, sucked (dipped), applied to the gums and teeth, snuffed, or gargled.

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Table 1. Distribution of participants' occupation (male)

Occupation	Frequency (n=202)
Tertiary and Seniority Level	11.90%
Secondary Level	35.60%
Primary Level	52.50%

Table 2. Distribution of participants' occupation (female)

Occupation	Frequency (n=240)
Tertiary and Seniority Level	7.90%
Secondary Level	85.80%
Primary Level	6.30%

Table 3. Distribution of participants by period of use of ST

Smokeless Tobacco use pattern	Male (n=202)	Female (n=240)
Ever use		
Yes	56.9% (115)	37.5% (90)
No	43.1% (87)	62.5% (150)
Within past 30 days		
Yes	33.67% (68)	7.91% (19)
No	66.33% (134)	92.09% (221)

More males (56.9%) than females (37.5%) have used ST any day during their life time (ever use of ST). Study found that 33.67% males and 7.91% females have used ST during the previous 30 days.

Table 4. Distribution of initiation age of ST use among ever users

Initiation age	Male (n=115)	Female (n=90)
7 years old or Younger	7.82%	6.67%
8 years old 10 years old	13.05%	13.33%
11 years old 13 years old	21.74%	22.23%
14 years old 16 years old	23.47%	20%
17 years old 19 years old	24.35%	24.44%
20 years or older	9.57%	13.33%

Table 5. Average usage of ST during previous month in terms of times per day

Number of times	Male (n=68)	Female (n=19)
1 time per day	41.17%	47.37%
2 times per day	32.35%	36.85%
3 times per day	10.29%	15.78%
4 times per day	11.77%	-
More than 4 times	4.42%	-

As shown in table 5, 59.83% males and 52.63% females used ST more than one time per day, during the previous month.

Table 6. Usage of ST in terms of number of days during previous month

Number of days	Male (n=68)	Female (n=19)
1-2 days	2.94%	26.31%
3-5 days	10.3%	36.85%
6-8 days	27.94%	26.32%
9 to 19 days	26.47%	5.26%
20 to 29 days	20.58%	-
All 30 days	11.77%	5.26%

As shown by the table 11.77% male and 5.26% of female participants used ST all 30 days of the previous month.

Table 7. Distribution of types of ST used, among users during last month

Types	Male (n=68)	Female (n=19)
Betel chewing with tobacco, areca-nut and lime	58.82%	100%
Gutka	-	-
Pamparag	-	-
Hans	10.30%	-
Mawa	2.94%	-
Babul	13.23%	-
Beeda	-	-
Other	-	-
Betel chewing, Pamparag	10.30%	-
Betel chewing, Mawa	4.41%	-

Female participants used only the betel chewing while males tend to use other types of ST.

Table 8. Distribution of neediness of quitting ST use among users

Variable	Male (n=68)	Female (n=19)
Attempt to quit		-
Yes	61.77%	10.52%
No	38.23%	89.48%
Neediness of quit		-
Yes	61.77%	47.36%
No	38.23%	52.64%

Discussion

More than 30 carcinogens have been identified in ST products and these carcinogens have serious impacts on health among people. According to the present social context, ST use has been becoming a popular social activity. Much of the advancement in Sri Lanka comes from its pledge towards a tobacco-free goal and the matching significant measures including policies, regulations and prevention programs in tobacco control. Recently certain policies are introduced to reduction of ST use. However, it is essential effective implementation of policies regarding ST use. This study was conducted in an urban setting and this result should not be applied to other sub-urban or rural settings. Therefore, further studies among deferent settings, including sub-urban and rural should be implemented.

Conclusion

In summary, nearly 33.67% males and 7.91% females use ST in this study group. Preventive activities focusing on this group should be implemented. At the same time non-users must be routinely addressed to sustain their status.

Keywords: Public Health, Smokeless Tobacco, Urban Sri Lanka, Government Officers

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