

## **SMOKELESS TOBACCO USE TRENDS ON TEENAGE GIRLS IN BATUKARANG VILLAGE KARO REGENCY**

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### **ABSTRACT**

According to the data Ministry of Health Republic of Indonesia, 2010, smoking in young people increased sharply. However, data about users of smokeless tobacco has been almost no recorded and lost on the public health experts in terms of habits of chewing tobacco users show an increasing trend has even become a habit or culture in some ethnic groups in Indonesia, especially among tribal girls ethnic Karo. Smokeless tobacco user among women is already started at the age adolescent. This research is descriptive study with the aim to describe the tendency of smokeless tobacco use on young girls in the village of Batukarang 2015. The population of young women who smokeless tobacco user aged 10-19 years as many as 650 peoples, samples taken as many as 100 peoples. The sampling technique used was purposive sampling. The results showed that the age of majority respondents began chewing tobacco at age 7 years as much as 28%, and 34% smokeless tobacco user started 5 – 6 years old. The length of time (duration) smokeless tobacco using every once in a majority of 15-30 minutes as much as 73% and the majority felt not stand when not chew tobacco as much as 54%. Frequency/week smokeless tobacco majority of 6-9 times/week by 50%, and frequency/day, the majority 3-5 times/day as much as 51%. The driving factors for the majority of calls to friends smokeless tobacco and 39% comes from the parent stock as much as 71%.

**KEYWORDS:** Trends of Smokeless Tobacco Use, Teenage Girls

### **INTRODUCTION**

#### **Background**

Use of tobacco in Indonesia in recent years both in the form of cigarettes or using of smokeless tobacco (smokeless tobacco use) increased sharply. According to the Ministry of Health in 2010, smoking in young people increases, parental smoking in the house and the percentage of expenditure of poor households buy cigarettes increased. However, data about smokeless tobacco user has been almost no recorded and lost on the public health experts in terms of habits of smokeless tobacco users show an increasing trend has even become a habit or culture in some ethnic groups in Indonesia, especially among tribal girls. Tobacco using among women Karo has already begun in adolescence. It has been widely proven that by consuming tobacco impact on health status. Given also that tobacco use contributes to the onset of cataracts, pneumonia, leukemia, stomach cancer, pancreatic cancer, cervical cancer, kidney cancer and other diseases like as cancer of the lung, esophagus, larynx, mouth and throat, pulmonary disease - lung, emphysema and bronchitis, stroke, heart attack and other cardiovascular diseases. Nearly 90% of lung cancers are caused by tobacco consumption.<sup>[1]</sup> Tobacco also can damage reproductive systems, contributing to miscarriage, premature birth, low birth weight and diseases in children such as hyperactivity.<sup>[2]</sup> Smokeless tobacco use is a complementary part of the culture and the structures are

usually closely related to habits that are in certain areas.<sup>[8]</sup> The quantity, frequency, and age at the start of chewing betel changed by local traditions. Frequency of smokeless tobacco use may be related to several factors such as the availability and price of tobacco use, age, occupation and socio-economic considerations associated with users of smokeless tobacco. The frequency of the habit of smokeless tobacco using and smoking began in childhood and adolescence, as well as in adults both male and female.<sup>[9]</sup>

However, there are still many who have not thought about the dangers of smokeless tobacco. People do not realize that the type of smokeless tobacco using has very harmful effects due to the very high nicotine content. Hazardous materials, also known as a carcinogenic found in tobacco causes its 4 times increased risk of developing bladder cancer than those who did not use these substances. Even his influence remains after a user completely stop consuming smokeless tobacco. Besides smokeless tobacco use can cause harmful diseases that affect the lips, tongue, throat and stomach in the form of cancer.<sup>[1]</sup>

The habit of using tobacco which is the main component of nicotine very high risk of the occurrence of health problems in the tobacco user. Nicotine is one type of stimulant drugs that can damage the heart and blood circulation. Nikotinbersifat toxic to the nervous tissue, and improve blood sugar levels, free fatty acid levels, LDL cholesterol, and increase the aggregation of blood clotting cells.<sup>[3]</sup>

Levels of nicotine when tobacco is used by chewing tobacco more than the smoke tobacco for chewing tobacco because there are about 4.6 mg nicotine levels, while levels of nicotine when tobacco is smoked about 1.8 mg. Long-term tobacco use can cause damage to the lungs, heart and blood vessels, and cause cancer. Inhaling tobacco produce the effect of nicotine on the central nervous system (CNS) in less than ten seconds. If tobacco is chewed, the effects on the CNS experienced within 3-5 minutes. Research conducted in Laubaleng Karo, 2013, starting that the habit of smokeless tobacco using mostly in younger age groups, the start of chewing betel ie at the age of 15-19 years as much as 20.29%, with a length (duration) of chewing in the mouth by women for 10 minutes as much as 95.65%, and 20 minute as much as 4.34% with an average frequency of 5 times a day as much as 66.67%, the majority of women in the area make a habit of chewing > 10 years as many as 46.38%. Women who smokeless tobacco more affected by periodontal disease (gum disease) compared with those not using.

Research US Institute of Medicine (IOM) in India, 2001 (case control, intervention studies) shows the relationship between smokeless tobacco (ST) users with oral cancers, head and neck. Institute of Medicine (IOM) also reported a similar study in Sudan, there is value RR (Relative Risk) is high between the incidence of oral cancer among ST Users than non-ST users. But the results of research in Sweden shows the results where there is no increase in the risk of mouth cancer, head and neck between ST Users.

Results of a research in Swedish, which could affect the picture of the condition of public health is, that women give birth to babies ST Users lighter between 40 gr-206 gr compared with non-ST Users women. [5] This was also reported by Charicley and Unal, 2002, several villages in Bhopal, India, there is an increased risk and there is a relationship between the frequency of chewing tobacco with the incidence of some degenerative diseases (NCDs) such as cancer of the esophagus, cancer (mouth, gums) and other cancers and cardiovascular disorders and esophagus.<sup>[6]</sup> The tendency of increase of women ST users, as well as the tendency of an increase in teenage girls ethnic Karo at into a sort of "culture" became the reason of the research. Research conducted by Purba, 2013 in village of Sembahe, indicating that blood sugar levels were normal in women (<140 mg / dl) were more common in the habit of ST user (42.7%), than not ST user

(6.1% ). Increased blood sugar levels are abnormally low in women ( $> 140$  mg / dl) were more common habit of ST user (32.9%).<sup>[7]</sup>

Global Adult Tobacco Survey (GATS) shows the prevalence of smokeless tobacco using population by sex, the data GATS 2011 and data from the Ministry of Health, 2013. The prevalence of smokeless tobacco using tends to slightly increase in 2013 compared to 2011. The results of GATS 2011 showed the prevalence of smokeless tobacco using in men by 1.5% and in women by 2.7%, while in 2013 the prevalence of smokeless tobacco using men by 3.9% and 4.8% in women. Research by Ketaren et.al in 2013, committed in the village Sembahe showed that 30% of women ST users are young even 2% of whom was aged  $<15$  years.<sup>[4]</sup>

Young women aged 10-19 years in the village of 650 peoples, preliminary observations found in research in village of Batukarang that nearly 90% of young women aged 10-19 years is smokeless tobacco using. The tendency of chewing tobacco has become a daily habit in young girls in the village Batukarang, even becoming a trend (karo language : *jile-jile*) in adolescent girls in the village, with chewing tobacco they would look more attractive because it can make the lips become red and add self-confidence of young women.

## PROBLEM FORMULATION

The formulation of the problem in this research is how is the tendency of smokeless tobacco using on teenage girls in village of Batukarang.

## RESEARCH OBJECTIVES

### General Purpose

The general objective of this study was to describe tendency of smokeless tobacco on teenage girls in Batukarang.

### Special Purpose

- To know the tendency of smokeless tobacco users by age began chewing tobacco among young girls in village of Batukarang.
- To know the tendency of smokeless tobacco user based on the length of time (duration) that is used once chewing tobacco among young girls in village of Batukarang
- To know the tendency of smokeless tobacco user based on the frequency/week chewing tobacco among young girls in village of Batukarang.
- To know the tendency of smokeless tobacco user based on the factors driving young women chewing tobacco in village of Batukarang.

## LITERATURE STUDY

The habit of using tobacco which is the main component of nicotine very high risk of the occurrence of health problems in the tobacco user. Nicotine is one type of stimulant drugs that can damage the heart and blood circulation. Nikotin is a toxic to the nervous tissue, and improve blood sugar levels, free fatty acid levels, LDL cholesterol, and increase the aggregation of blood clotting cells.<sup>[3]</sup>

Levels of nicotine when tobacco is used by chewing tobacco is higher compared to smoke tobacco for chewing tobacco because there are about 4.6 mg nicotine levels, while levels of nicotine when tobacco is smoked about 1.8 mg. Using of long-term tobacco can cause damage to the lungs, heart and blood vessels, and cause cancer. Inhaling tobacco produce the effect of nicotine on the central nervous system (CNS) in less than ten seconds. If tobacco is chewed, the effects on the CNS experienced within 3-5 minutes. Research conducted in Laubaleng Karo, 2013, stating that the habit of chewing mostly in younger age groups, the start of chewing at the age of 15-19 years as much as 20.29%, with a length of chewing in the mouth by women for 10 minutes as much as 95.65%, and 20 minutes as much as 4.34%, with an average frequency of 5 times a day as much as 66.67%, the majority of women in the area make a habit of chewing > 10 years as many as 46.38%. Women who ST using more affected by periodontal disease (gum disease) compared with those not ST using.

According Accortt, et al, 2012, the habit of sucking or chewing tobacco is also found others country such as Turkey, India and Sudan. In Sweden there is a habit of sucking tobacco in the mouth called "snus" in curricula at the mouth about 30 minutes before being discarded. Experience shows there is a dependency of consuming tobacco for those who chew tobacco or "smokeless tobacco users" (ST-users) ". ST users may be associated with an increased incidence of oral cancer, other cancers and diseases kardiovaskuler and diabetes mellitus. <sup>[1][4]</sup>

Institute of Medicine (IOM) also reported a similar study in Sudan, there is value RR (Relative Risk) is high between the incidence of oral cancer among ST Users than non-ST users. But the results of research in Sweden shows the results where there is no increase in the risk of mouth cancer, head and neck between ST Users.

A report in Swedish, which could affect the picture of the condition of public health is, that women ST Users having infants with milder between 40 g - 206 g compared to female non - ST Users. [5] This was also reported by Charicley and Unal 2002, several villages in Bhopal, India, there is an increased risk and there is a relationship between the frequency of chewing tobacco with the incidence of some degenerative diseases (NCDs) such as cancer of the esophagus, cancer (mouth, gums) and other cancers and cardiovascular disorders and esophagus. <sup>[6]</sup> an increasing trend of women chew tobacco or ST Users, as well as an increasing trend of young women who became ST Users Karo rate among women has become a sort of "culture" is the reason for doing this study. both the frequency and amount / big tobacco is chewed,

Research conducted by Purba, 2013 in village of Sempahe, indicating that blood sugar levels were normal in women (<140 mg / dl) were more common in the habit of chewing tobacco (42.7%) than do not chew tobacco (6.1% ). Increased blood sugar levels are abnormally low in women (> 140 mg / dl) were more common habit of chewing tobacco (32.9%). [7]

Global Adult Tobacco Survey (GATS) shows the prevalence of tobacco chewing population by sex, the data GATS 2011 and 2013. The prevalence of chewing tobacco tends to slightly increase in 2013 compared to 2011. The results of GATS 2011 showed the prevalence of chewing tobacco in men by 1.5% and in women by 2.7%, while according to the Health Ministry in 2013 the prevalence of chewing tobacco, there are men by 3.9% and 4.8% in women. Ketaren et.al, 2013, conducted in village Sempahe showed that 30% of women chew tobacco users are young even 2% of whom was aged <15 years. <sup>[4]</sup>

Young women aged 10-19 years in the village of 750 people Batukarang, observations found in research in the village Batukarang that nearly 90% of young women aged 10-19 years is chewing tobacco. The tendency of chewing

tobacco has become a daily habit in young girls in the village Batukarang, even becoming a trend (language karo: Jile-Jile) in adolescent girls in the village, with chewing tobacco they would look more attractive because it can make the lips become red and add self-confidence of young women in village of Batukarang.

Chewing tobacco is a complementary part of the culture and the structures are usually closely related to habits that are in certain areas.<sup>[8]</sup> The quantity, frequency, and age at the start of chewing betel changed by local traditions. Frequency of smokeless tobacco use may be related to several factors such as the availability and price of tobacco use, age, occupation and socio-economic considerations associated with users of chewing tobacco. The frequency of the habit of chewing tobacco and smoking began in childhood and adolescence, as well as in adults both male - male and female.<sup>[9]</sup>

People do not realize that these types of smokeless tobacco have an effect that is very dangerous because nicotine is very high, and carcinogenic 4 x bigger. Besides chewing tobacco can cause harmful diseases that affect the lips, tongue, throat and stomach in the form of cancer.<sup>[1]</sup>

The harmful effects caused by existing content in tobacco consumed by the public, either chewing tobacco and the tobacco contained in cigarettes. Effects of nicotine when tobacco is used by sucking, chewing or inhaling snuff, causing constriction of blood vessels, increased heart rate and blood pressure, decreased appetite, causing mild emphysema, partially removes the feeling of taste and smell and lung irritation. Tobacco use long term can cause damage to the lungs, heart and blood vessels, and cause cancer.<sup>[1]</sup> The difference lies in the effects on tobacco is smoked to produce the effect of nicotine on the central nervous system (CNS) within approximately ten seconds, If tobacco is chewed, the effects on the central nervous system (CNS) experienced within 3-5 minutes.<sup>[5]</sup>

### Research Variable

- Age began smokeless tobacco using.
- Age group smokeless tobacco using.
- Frequency / day smokeless tobacco using.
- The driving factors for smokeless tobacco using.

## RESEARCH METHODS

### Types of Research

Descriptive study with cross sectional design.

### Population and Sample

The population in this study were all young women who smokeless tobacco using, 10-19 years old, who live in the village of Batukarang Karo, many as 650 peoples. The sample size in this study using Slovin formula<sup>[10]</sup>, namely:

$$n = \frac{N}{(Nd^2 + 1)}$$

Where

n = Number of Samples

N = Total Population

d<sup>2</sup> = Limit the desired accuracy

Is known :

$$N = 650$$

$$d = 10\% = 0.1$$

$$n = \frac{650}{(650 \cdot 0.1^2 + 1)}$$

$$= 100 \text{ (rounded)}$$

The sampling technique used was purposive sampling. Criteria for selection of the sample that is all the young girls aged 10-19 years old, who smokeless tobacco using at least 5 times a week.

## RESULTS AND DISCUSSIONS

### RESULTS

#### Univariate Analysis

Univariate analysis is the analysis of each variable analysis on the results of research in order to determine the distribution of frequencies for each variable of the study.

#### Characteristics of Respondents

**Table 1: Characteristics of Respondents Based on Age and Education**

No.	Age Respoden	The Frequeny	Percentase (%)
1.	10 Tahun	18	18.0
2.	11 Tahun	4	4.0
3.	12 Tahun	26	26.0
4.	14 Tahun	7	7.0
5.	15 Tahun	18	18.0
6.	16 Tahun	9	9.0
7.	17 Tahun	6	6.0
8.	18 Tahun	6	6.0
9.	19 Tahun	6	6.0
<b>Total</b>		<b>100</b>	<b>100.0</b>
No.	Education	Frequency	Percentage(%)
1.	SD	22	22.0
2.	SMP	36	36.0
3.	SMA	42	42.0
<b>Total</b>		<b>100</b>	<b>100</b>

Based on Table 1, it can be seen that the majority of respondents who ST using is 12 years old and as many as 26 people (26%) and education level of most high school as many as 42 people (42%).

#### Age Started of ST Using

**Table 2: Frequency Distribution of Respondents by Age Started ST Using**

No.	Age Started	Frequency	Percentage (%)
1.	5	14	14.0
2.	6	20	20.0
3.	7	28	28.0
4.	8	8	8.0
5.	9	3	3.0
6.	10	15	15.0

7.	11	5	5.0
8.	12	2	2.0
9.	13	1	1.0
10.	14	2	2.0
11.	15	2	2.0
<b>Total</b>		<b>100</b>	<b>100.0</b>

Based on Table 2, it can be seen that the age of majority respondents began chewing tobacco at age 7 years as many as 28 people (28%).

### Duration of Chewing Tobacco

The length of time spent every once chewing of tobacco

**Table 3: Frequency Distribution Based on Duration Every Once in Young Girls Chewing Tobacco**

No.	The Frequency of Chewing Tobacco	Category	Frequency	%
1.	< 15 Minutes	Low Risk	14	14.0
2.	>15 Minutes	High Risk	86	86.0
<b>Total</b>			<b>100</b>	<b>100.0</b>

Based on Table 3, it can be seen that the length of time that respondents do every once chewing tobacco majority >15 minutes as many as 86 people (86%).

### Frequency/Week ST Using

**Table 4: Frequency Distribution Based on Frequency/Week ST Using**

No.	The Frequency of the ST Using		Frequency	(%)
1.	5 times/week	Low Risk	18	18.0
2.	6-9 times/week	Moderate	50	50.0
3.	>10 Time/week	High Risk	32	32.0
<b>Total</b>			<b>100</b>	<b>100.0</b>

Based on Table 4, it can be seen that the frequency/week ST using majority of respondents are at risk ie 6-9 times/week, were 50 people (50%), and 32% respondents with high risk category.

### Frequency/Day ST Using

**Table 5: Frequency Distribution Based on Frequency/Day ST Using**

No.	Frequency/Day	Frequency	Percentage (%)
1.	< 3 times/day	34	34.0
2.	3 – 5 times/day	51	51.0
3.	>5 times/day	15	15.0
<b>Total</b>		<b>100</b>	<b>100.0</b>

Based on Table 5, it can be seen that the frequency/day ST using majority of respondents 3-5 times/day were 51 people (51%).

## Incentives Chewing Tobacco

The driving factor of chewing tobacco by reason of first responders once chewing tobacco

**Table 6: Frequency Distribution of Driving Factor Reason For ST Using**

No.	The Reason Chew Tobacco	Frequency	Percentase (%)
1.	Family Enviroment	37	37.0
2.	Call Friends	39	39.0
3.	The neighbour association	24	24.0
<b>Total</b>		<b>100</b>	<b>100.0</b>

Based on Table 6, it can be seen that the reason the majority of respondents chewing tobacco invitation of friends as many as 39 people (39%).

**Table 7: Frequency Distribution Based Source of Tobacco Consumed**

No.	Tobacco Consumption	Frequency	(%)
1.	Parent Stock	71	71.0
2.	Buy itself	29	29.0
<b>Total</b>		<b>100</b>	<b>100.0</b>

Based on Table 7, it can be seen that the majority of tobacco consumption derived from parent stock as many as 71 people (71%), and 29% by Buy itself.

## DISCUSSIONS

### Starting Age Smokeless Tobacco Using

The results of research that has been done to the 100 people who ST user young girls aged 10-19 years in village of Batukarang Karo shows that the majority of young girls who ST user 12 years old and as many as 26 people (26%), age of the respondents began ST using age 7 years old. Total as much as 28% of young girls aged 10-15 years old who start ST using by 62%. Chewing tobacco is a complementary part of the culture and the structures are usually closely related to habits that are in a particular area. The quantity, frequency, and age at the start of chewing tobacco is transformed by local traditions. The habit of using tobacco which is the main component of nicotine very high risk of the occurrence of health problems in tobacco users. Because the nicotine contained in tobacco leaf is a kind of toxic chemical element. One type of stimulant drugs that can damage the heart and blood circulation.

Long-term tobacco use can also cause damage to the lungs, heart and blood vessels and can cause cancer. Effects of nicotine when tobacco is used by sucking, chewing and inhaling snuff, causing constriction of blood vessels, increased heart rate and blood pressure, appetite tomb is reduced, causing emphysema is mild and the incidence of cancer of the esophagus.<sup>[6]</sup> Some removes taste and smell as well as irritation of the heart. Research conducted by Ketaren, 2013 in village of Sembahe showed that age start chewing tobacco on the majority of young women > 15 years old of as much as 95%.<sup>[4]</sup>

### Duration of Smokeless Tobacco Using

The results of research that has been done to 100 young girls who chew tobacco in village of Batukarang Karo showed that the duration of time that respondents do every once chewing tobacco are at risk as much as 73% majority is

15-30 minutes and is very risky as many as 13% ie> 30 minutes every once chewing tobacco. Good habit of using tobacco snuff or smokeless tobacco using has long been linked with increased periodontal disease. Although this association remains unclear, it is reasonable that any habits that increase the irritation of the gingival tissue, or decreasing its durability may act as a predisposing factor / factors driving or secondary factor in causing periodontal disease. Analysis of the results of the survey NHANES I showed that adults with habits using both tobacco snuff and smokeless tobacco using, including groups with the highest levels of periodontal disease. Instead of adults who do not use tobacco, including groups with the level of periodontal disease. Effects on nicotine smokeless tobacco using produce effects on the CNS (central nervous system) experienced within 3-5 minutes.

Carcinogenic substances most frequently found in the tobacco-specific nitrosamines and nitrosonornicotine substances. Both of these substances derived from nicotine and some tobacco alkaloid derivatives are formed during processing, fermentation, and the establishment in the mouth with the help of the salivary enzyme system. Chewing betel nut with tobacco can stimulate increased saliva, changing the pH of saliva, decrease the sensation of taste and sensory perception change buccal mucosa after prolonged use. In some research had been observed association with diseases of the teeth, such as disease periodontal and other diseases related to tobacco use betel with a relatively long time. Issues high rates of oral disease is strongly influenced by several factors such as the behavior of the people who made a culture or habits of one of them is the habit of chewing betel nut with tobacco.

Research conducted in Laubaleng Karo shows that the length of time ST using that women do in village of Laubaleng and Lau Perangunen every once ST using were 10 minutes by 95, 65%, and 20 minutes as much as 4.34% shows that women who have a habit of chewing betel longer have periodontal score higher. The same study also conducted by Fatlolona, et. al, 2013 in Manado length of time spent on each student once ST usingl in Papua, 15-30 minutes as much as 21.4%, and > 30 min 9.5% shows that respondents 15-30 minutes of chewing tobacco poor periodontal health status as much as 21.4% and 7.1% very poor, people who chew tobacco > 30 minutes of poor periodontal health status as much as 9.5% and 2.4% very bad.

### **Frequency/Week Chewing Tobacco**

The results of research that has been done to 100 young women who ST using in village of Batukarang suggests that the frequency/week carried a majority of respondents are at risk as much as 50% ie 6-9 times/week and are highly at risk for periodontal disease by 32% > 10 times/week. Frequency of smokeless tobacco use may be related to several factors such as the availability and price of tobacco use, age, occupation, and socio-economic considerations associated with smokeless tobacco user. Frequency habit of smokeless tobacco using began in childhood and adolescence, as well as in adults, both men and women. There are still many who have not thought about the dangers of smokeless tobacco use. Types of smokeless tobacco use have an effect that is very dangerous because nicotine is very high and is also known as a carcinogenic found in tobacco users tend to 4 times increased risk of bladder cancer than those who did not use these substances. Besides smokeless tobacco using can cause harmful diseases that affect the lips, tongue, throat, and stomach in the form of cancer.<sup>[5]</sup>

Frequency/day smokeless tobacco use at the majority of respondents 3-5 times / day as much as 51%. Smokeless tobacco using can be said to have become the daily needs of the people in village of Batukarang especially in adolescent girls. Smokeless tobacco using became common in adolescent girls even become a trend (Karo language : *jile-jile*) on the respondent. But there are still many who do not think about the dangers of smokeless tobacco use. People do not realize

that the type of smokeless tobacco using has very harmful effects due to the nicotine high, so that can cause diseases that harm affecting the lips, tongue, throat and stomach in the form of cancer.<sup>[5]</sup> Research conducted by Ketaran, 2013 in village of Sembaha suggests that the frequency/day smokeless tobacco using majority of > 6 times/day as much as 42%. Research conducted concluded that women are more often the habit of betel smokeless tobacco using has a higher influence on periodontal compare with rare diseases make a habit of smokeless tobacco using.<sup>[4]</sup>

### **Incentives Smokeless Tobacco Using**

The results of research that has been done to 100 young girls who using tobacco in village of Batukarang Karo showed that the majority of tobacco responden reason for the invitation of friends as much as 39%. This may occur because of the environment in which respondent has become a very reasonable thing if young girls use tobacco, and apart from calls to friends are also encouraged from family environment that has the same habits so it was difficult for respondents to distinguish whether this practice because the invitation of friends or for the environment family who also use tobacco, and result is not much different that reason respondents smokeless tobacco using is first of all due to the family environment as much as 37%. Smokeless tobacco using adolescent behavior is a function of the environment and the individual.<sup>[11]</sup> This means that the behavior of smokeless tobacco using besides resulting factor of the self is also caused by environmental factors (parents and friends who using the smokeless tobacco).

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusions**

The teenage girls began to smokeless tobacco using majority at the age of 7 years as much as 28%, even 14% of them starting from the age of 5 years, length of time (duration) used by the respondent every once smokeless tobacco using majority of 15-30 minutes as much as 73%. Frequency/week smokeless tobacco using majority of 6-9 times/week as much as 50%. The driving factor for young girls to began smokeless tobacco using is due to the invitation of friends as much as 39%, tobacco is consumed mostly from parent stock as much as 71%, the majority can stop chewing tobacco but difficult to perform as much as 37%. The effects of the nicotine contained in tobacco that causes addiction, so that respondents who had started chewing tobacco is difficult to stop smokeless tobacco using.

### **Suggestions**

For the Respondents

Suggested to the teenage girls who smokeless tobacco user in order to reduce the frequency of smokeless tobacco using or quit smokeless tobacco usnig for long-term use can lead to periodontal disease, damage to the lungs, heart and blood vessels, and even cause cancer.

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