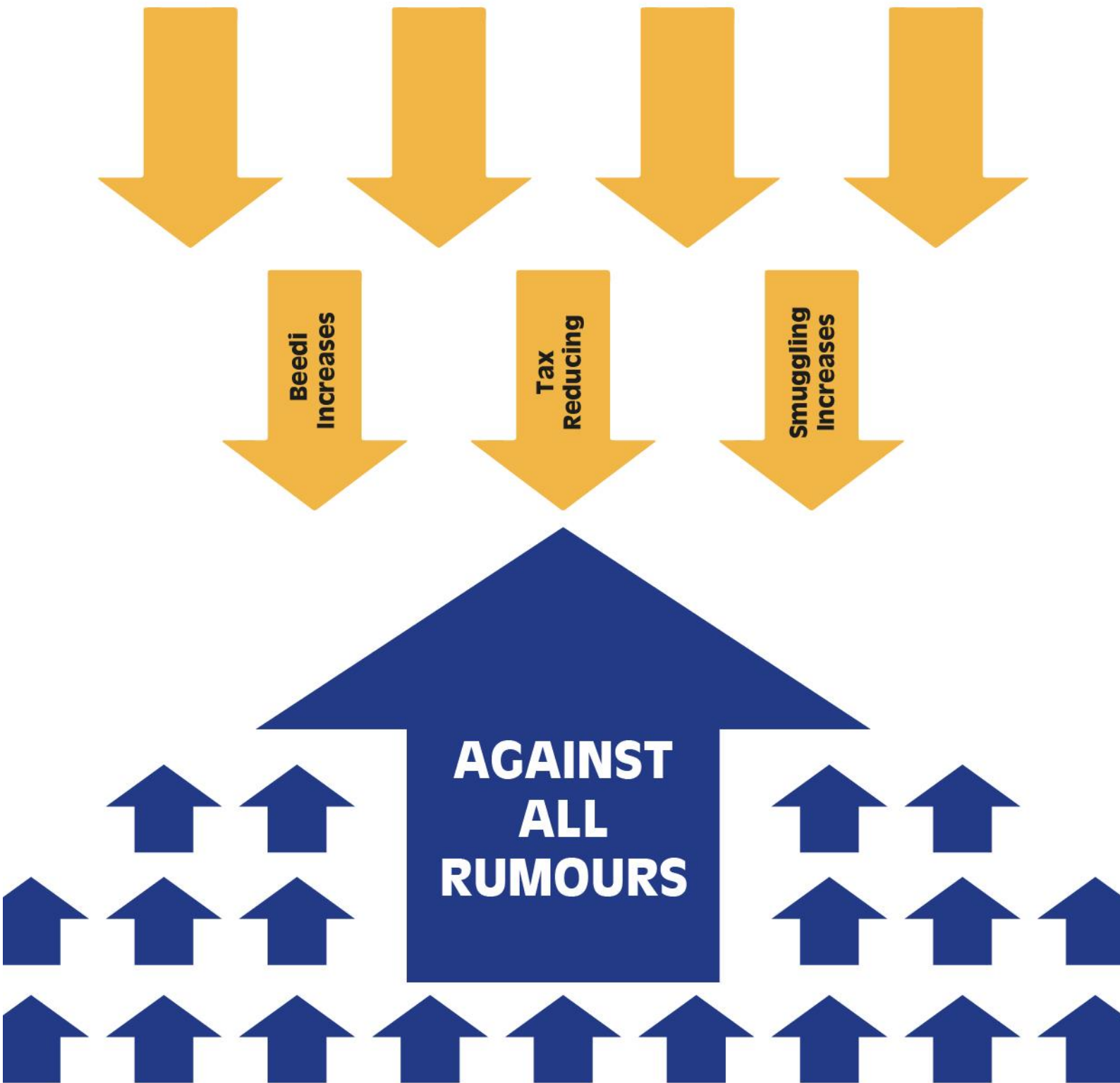


Spot Survey 2017

Report on Tobacco Smoking Trends in Sri Lanka



SPOT SURVEY 2017

Report on Tobacco Smoking Trends in Sri Lanka

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Foreword

Year 2016 marks an important period in terms of strengthening control on tobacco by the Sri Lankan government. In late 2016, significant taxes were imposed on cigarettes causing a price hike of 43%. The commitment from current President Hon. Maithripala Sirisena and Minister of Health Hon. Rajitha Senarathne is quite commendable to withstand the pressure from the opposing elements against the hike. There were many claims and threats by the industry and industry lobbyists on the proposed tax hike such as; tax hike on tobacco would collapse the industry, tax revenue for the government will be reduced and beedi consumption and smuggling of cigarettes would increase. Though industry was crying foul about the tax hike, they have actually included an additional markup on top of the increased price.

By the end of 2017, as contrary to the industry and industry lobbyist claims, 2017 financial reports confirms an increase in government revenue by 17 billion rupees compared to previous year which was twice the increase of excise revenue in 2016 on tobacco tax. Industry reports also states a Sri Lankans have smokes 700 million sticks less in that year. This proves the tax increase in 2017 made by the government was the right decision and the results were favorable to the country.

Additionally, annual SPOT survey conducted by ADIC across the country gives a better visibility on trends and patterns of smoking. 2017 SPOT Survey confirms the decreased smoking rate after the price increase and 'beedi' smokers continues to be a smaller proportion in number. Therefore the finding of this report reconfirms, imposing a significant tax on cigarettes can reduce smoking in general. However to continue this positive trend, price of cigarettes needs to be increased regularly above the inflation so the affordability remains low.

Pubudu Sumanasekara

Executive Director

Alcohol and Drug Information Centre

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Executive Summary

ADIC SPOT Survey is a trend survey developed and conducted by Alcohol and Drug Information Centre (ADIC) since 1998. It was conducted as a biannual survey until 2016 both in July and December months of each year. From 2017, the study will be conducted only once a year in July.

The 2017 SPOT survey used a two-stage cluster sample design to produce a representative sample of male population in Sri Lanka above 15 years. At first-stage sampling 11 districts are selected out of the 25 administrative districts in Sri Lanka. Colombo and Jaffna are included automatically due to the importance of these two districts to ADIC's surveillance. Other 9 districts are selected through a randomization strategy. In the next stage of sampling, three subgroups were created age wise as 15-24 years, 25-39 years and above 40 years. Participants for were randomly selected for each of these groups as per the proportionate in census. It was made possible for any male to participate the survey from the selected clusters regardless of the ethnicity, occupation, education etc.

In total 2999 males above 15 years have participated they survey. From the respondents, 23.6% were identified as current smokers (whom have smoked within past 30 days). This is a 27% reduction from previous year (32.3%). Percentages of current smokers have decreased in all three age categories compared to previous year(s). From the respondents, 49.2% have never smoked in their life. Most common reason stated by them never smoking was the dislike towards smoking (26%).

Highest age category of smoking initiation from the respondents was 16 – 20 years (59.3%). Majority of the respondents (54.4%) who smoked have initiated the usage at gatherings held with their friends. Majority 84.9% of the Smokers used "Cigarette" at initiation while 12% used Beedi. On the initial experience, only 2.7% have felt a positive experience. Majority have felt a negative experience or no change at all.

Result of this year continues to show that, significant majority of smokers are "Cigarette" smokers (96.2%). Only 5.5% of smokers were using "Beedi" which is almost same as 2016 (5.4%). Therefore this large scale scientific study confirms there is no increase in "Beedi" as repeatedly claimed by tobacco industry.

Price increase in 2016 have caused a change in majority of smokers (64.6%) and 84.6% of them have reduced smoking. Only a less than a 3% have shifted for other alternative smoking products. Therefore it proves that there is no shift for "Beedi" due to price increase of "Cigarettes" as argued by industry and commonly stated in media.

Overall results of 2017 SPOT survey results shows a significant decrease of smoking which is a good indication of the strong policies enacted by the government and effectiveness of community interventions carried out by the civil society, government and non-government organizations.

Introduction

Tobacco use is recognized as the leading cause of preventable deaths worldwide. Nearly 6 million deaths a year can be attributed to tobacco use as stated by World Health Organization (WHO, 2015). In 2030, it is expected to be 8 million deaths a year. As per WHO, number of deaths in Sri Lanka is close to 20,000 a year.

Due to the magnitude of this epidemic, there is no argument that tobacco smoking needs to be controlled. This requires effective and supportive government policies. Policies should be made on available evidence and best practices. WHO FCTC framework lays out such a guideline for countries to make effective policies in combatting tobacco. Sri Lanka has made significant steps in adopting FCTC framework since 2006. In 2015, Sri Lanka has implemented 80% of pictorial warnings on cigarette packs. In 2016, prices of cigarettes were increased by 43%. Sales data and studies on prevalence are useful in measuring the effectiveness of these policies made in controlling tobacco.

Regular surveillance of consumption plays a vital role in evaluation of prevailing controlling strategies. In this context, annual ADIC SPOT Survey on Tobacco and Alcohol trends is a very useful tool not only in evaluating the effectiveness of prevailing national policies but also as a contributor to the research literature on prevailing trends, patterns and attitudes on smoking and drinking in Sri Lanka. This is the only scientific study conducted in Sri Lanka at this scale and in this regularity.

The 2017 Spot survey is done as a multi-staged cluster survey in 11 administrative districts in Sri Lanka within 3 age-categories. All males above 15 years within these groups were eligible for the study regardless of their ethnicity, education or occupation. Interviews were conducted both in Sinhala and Tamil languages.

Objectives of the SPOT Survey 2017 on smoking were as follows:

1. Primary objectives:

- Determine patterns of smoking in the country with respect to different types of tobacco products, age groups and districts.
- Determine the trends of smoking with previous years.

2. Secondary objectives:

- Identify the prevailing attitudes and reasons for smoking.
- Determine the age of initiation and causes for initiation of smoking.
- Determine the effects of price increase of cigarettes in last quarter of 2016.

Methodology

SPOT survey used a two-stage cluster sample design to produce representative sample of male population in Sri Lanka above 15 years. Only males are selected since smoking prevalence among has been significantly low among women always. In 2015, prevalence of current smokers among women was only 0.1% (STEPS, 2015).

At first-stage sampling, 10 districts were selected randomly out of the 25 administrative districts in Sri Lanka. Colombo was later added to the study, making it 11 districts altogether. In the next stage of sampling, three subgroups were created as 15-24 years, 25-39 years and above 40 years. Planned allocation of participants for each of these groups were 35%, 45% and 20% respectively. This allocation was chosen based on population figures from census and statistics.

Minimum of 250 participants were planned from each district. Participants planned for each age group was as follow:

- 15 – 24 age group: 35%. i.e. a minimum of 88 per district, and 968 in total
- 24 – 39 age group: 45%. i.e. a minimum of 112 per district, and 1238 in total
- Above 40: 20%. I.e. a minimum of 50 per district, and 550 in total

It was possible for any male to participate the survey from the selected clusters regardless of the ethnicity, occupation, education etc.

Data collection

Data was collected through an interviewer administered questionnaire having 40 questions in total. There were 17 questions on tobacco smoking and 15 questions on alcohol use. Other questions were on demographic or measurements of tobacco control. Questionnaire was prepared in Sinhala and translated to Tamil. Interviewing was conducted in either Sinhala or Tamil medium depending on data collection area.

The survey was conducted in July, 2017 and completion took a period of one month.

Since some respondents did not have time to respond to all the questions, their answers were vague or incomplete. These incomplete responses were excluded from the study and 2999 respondents were left.

Statistical Package for Social Sciences (SPSS) software was used for analyzing the data.

Results

Demographic Information

Age distribution of the 2999 participants were as in table below. 35.4% of participants were from 15-24 years age category. 43% were from 25-39 years category and 21.6% of participants were above 40 years.

Age Category	Number	Percentage (%)
15 - 24 Years	1061	35.4
25 - 39 Years	1291	43
> = 40 Years	647	21.6
Total	2999	100

TABLE 1: AGE CATEGORY OF THE RESPONDENTS

Educational Level

More than 70% of the respondents have completed either upto GCE Advanced Level examination (36.5%) or the GCE Ordinary Level exam (34.4%). Respondents had 5.4% of degree holders and 2.2% who have not completed any proper education.

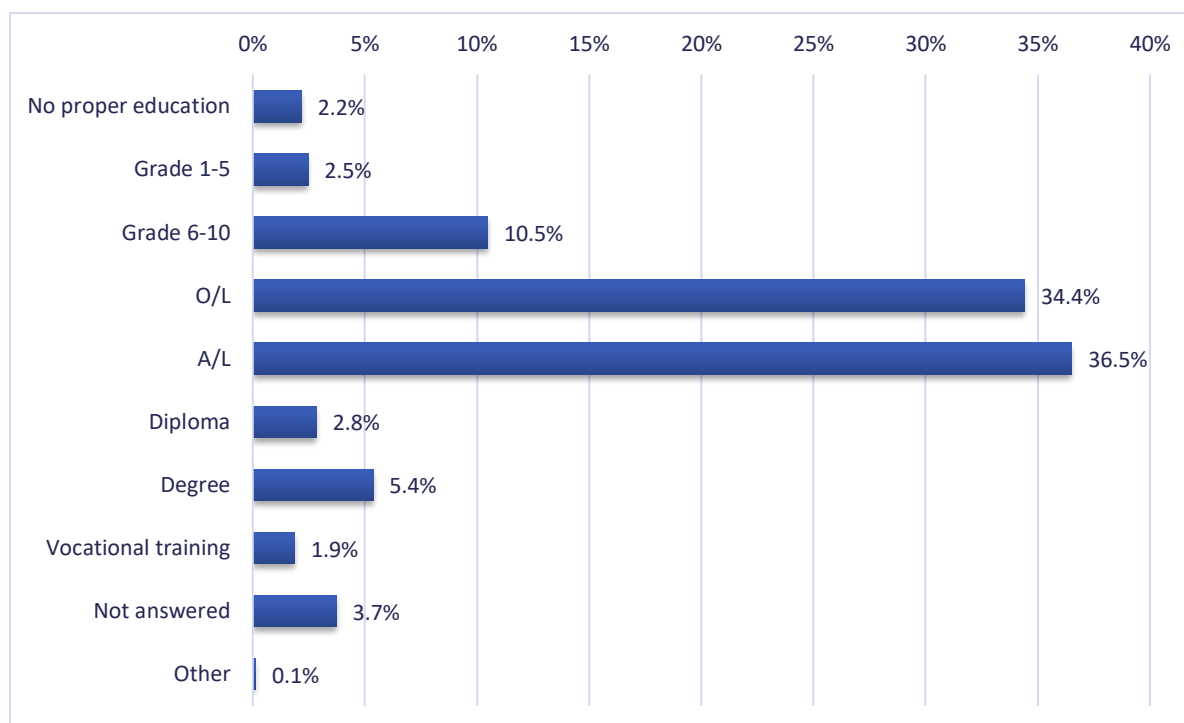


FIGURE 1: EDUCATION LEVELS OF RESPONDENTS

Occupational Categories

Job classification of the respondents were done under the Sri Lanka Standard Classification of Occupations, 2011. In addition to SLSCO category list, separate categorization was made for Students, Retired, Unemployed, and Police & Armed Forces. Distribution of respondents among each of the occupational categories are as follows.

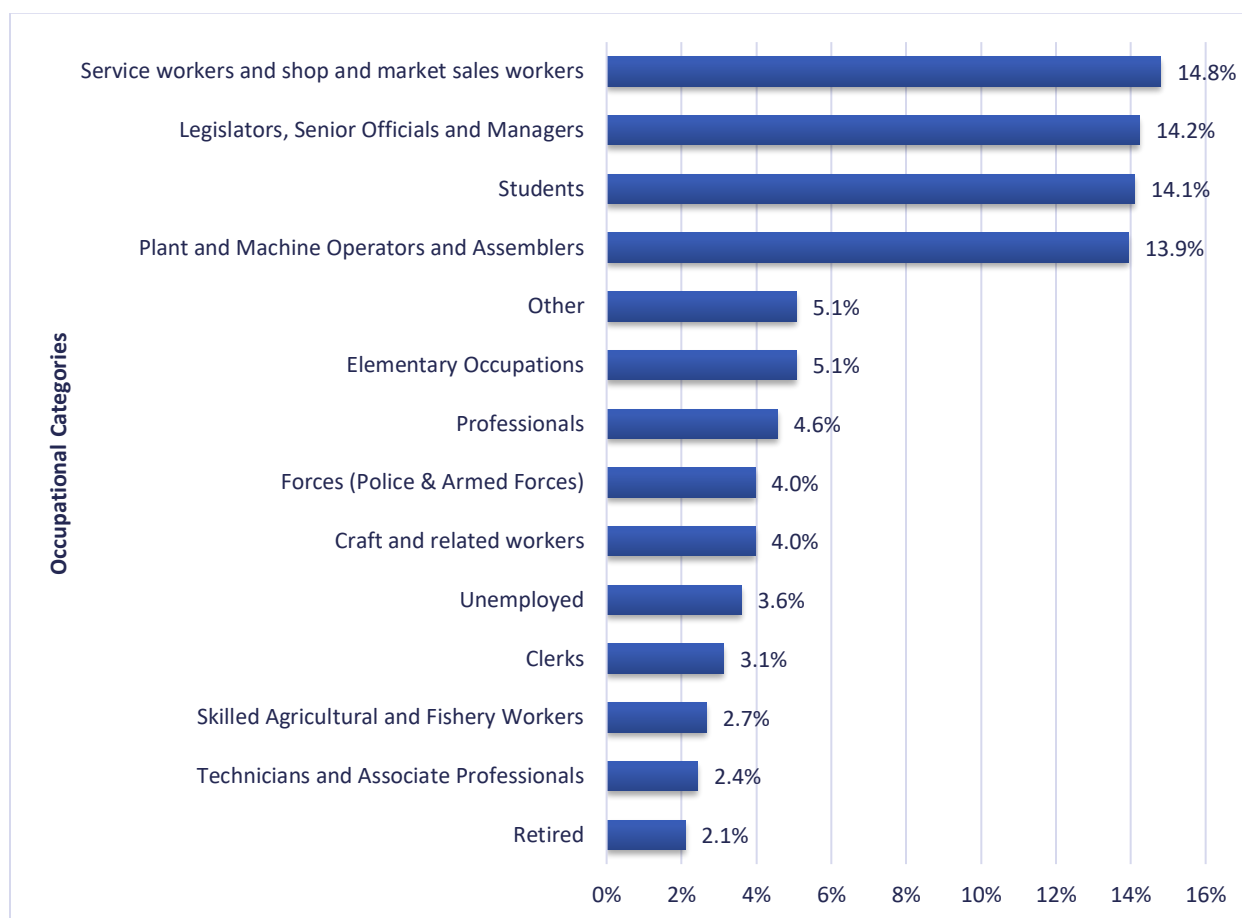
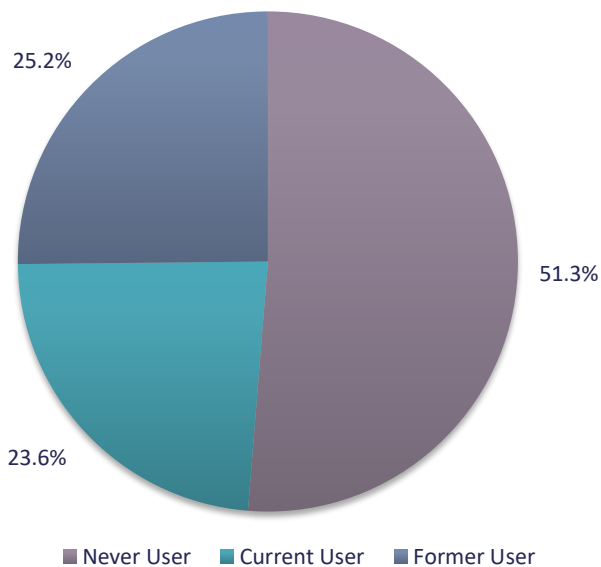


FIGURE 2: OCCUPATIONAL CATEGORIES OF THE RESPONDENTS

Trends of Smoking

Smoking of Tobacco



From the total valid responses (N=2865), 51.3% have never smoked even once in their life (n=1469). They are considered as never smokers. 23.6% of the respondents are current users whom have smoked within past 30 days (n=675). Another 25.2% of the respondents have smoked once but has not smoked within last 30 days whom are considered as former users (n=721).

FIGURE 3: TREND OF TOBACCO SMOKING

Comparison with Previous Year

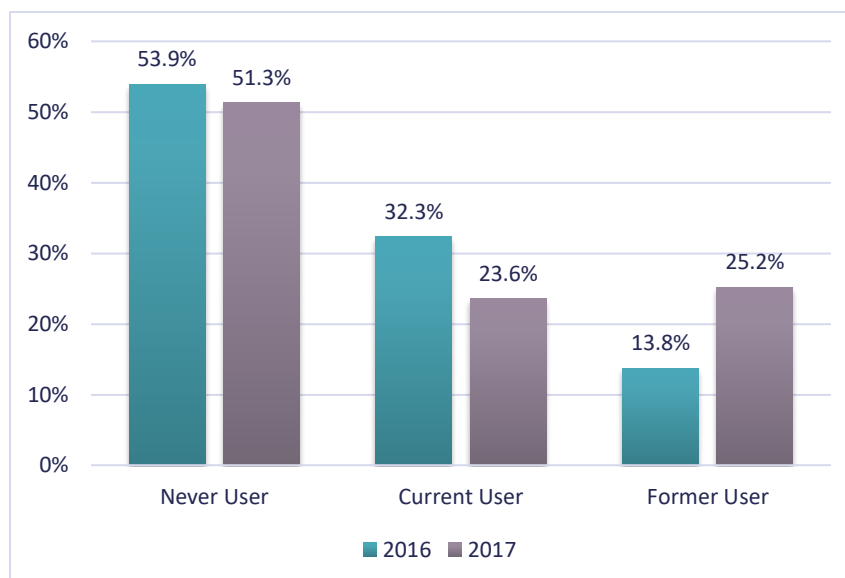


FIGURE 4: COMPARISON OF TOBACCO SMOKING 2016/2017

Current users in 2017 (23.6%) is a drop of 26.9% compared to previous year (32.3%). Number of ever smokers who have not smoked in last 30 days, have almost doubled in 2017 compared to 2016.

27%

Decrease
of smokers
in year
2017

Smoking Trends by Age

According to the responses, the highest percentage on current tobacco smoking was from the age category >40 years (26.7%). The lowest current tobacco smokers (18.3%) is from the age category (15-24) years. Comparing with year 2016, tobacco smoking is showing a considerable decrease in all three age categories.

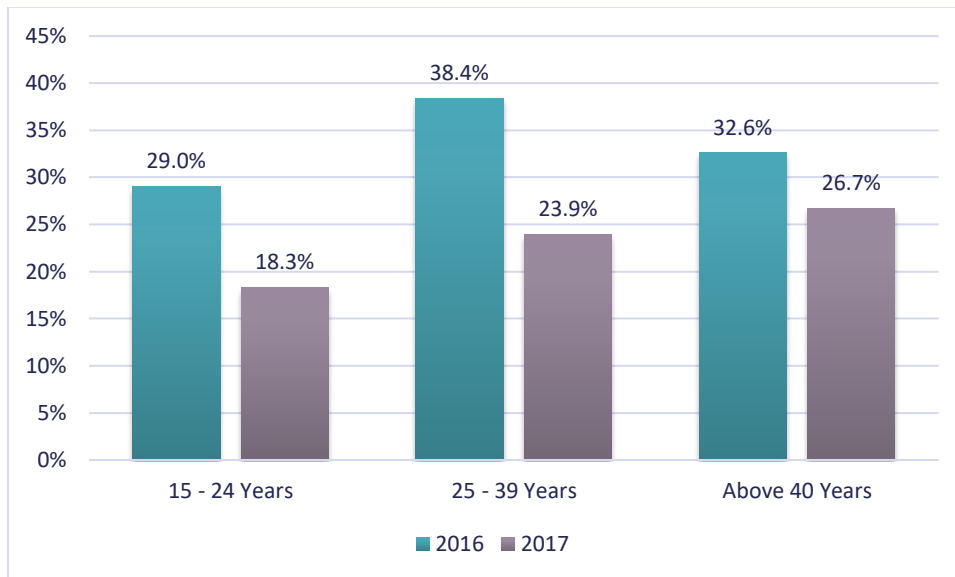


FIGURE 5: CURRENT SMOKERS BY AGE GROUPS

64.9%

Majority are daily users

Frequency of Tobacco Smoking

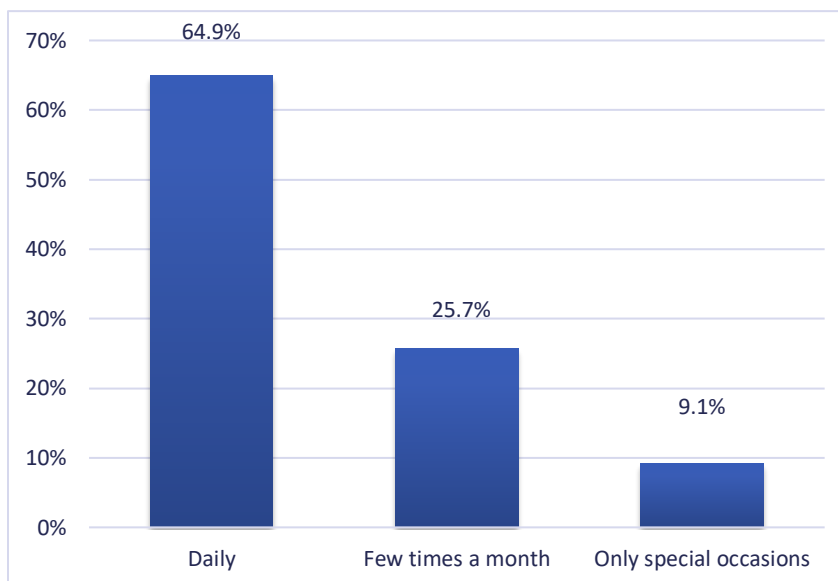


FIGURE 6: FREQUENCY OF TOBACCO SMOKING

The highest percentage of tobacco users was smoking daily (64.9%) while lowest percentage was by occasional users (9.1%). Twenty five point seven (25.7%) tobacco users were smoking few times a month. Majority of the respondents use tobacco every day.

Frequency of Tobacco Smoking by Age

Daily use of cigarettes is more common among all age groups, while it is highest (76.9%) in above 40 years age group. Daily use of cigarettes is almost half (49.5%) in 25-39 years age group.

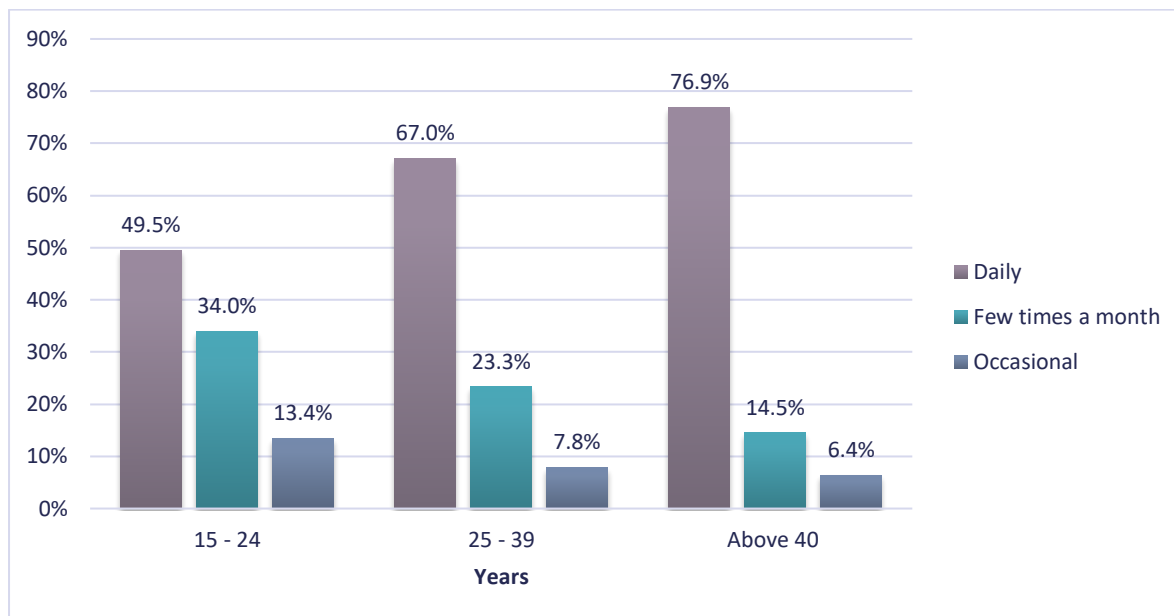


FIGURE 7: FREQUENCY OF TOBACCO SMOKING BY AGE

Trend of Smoking by Type

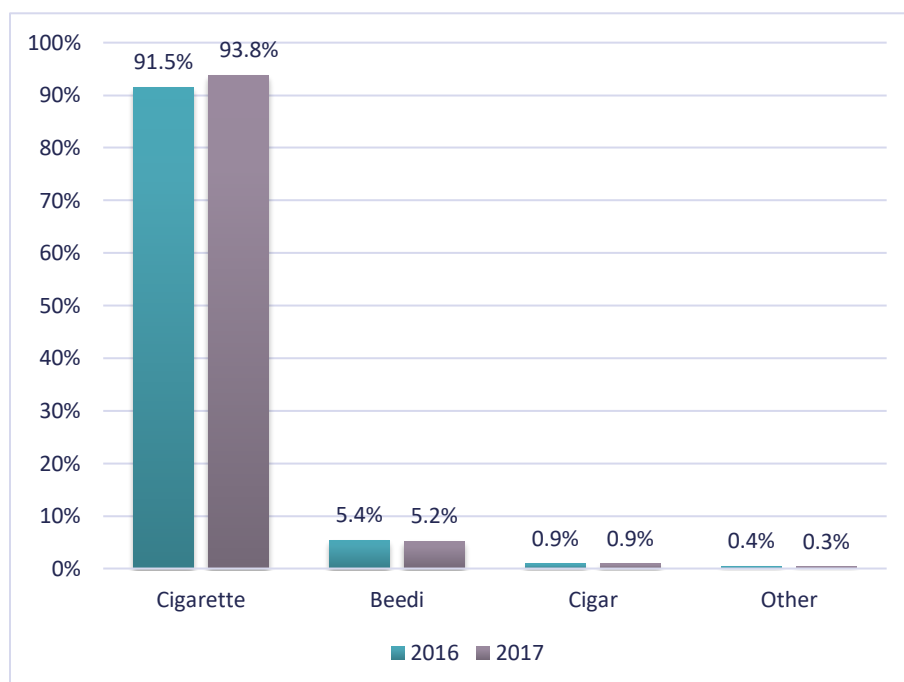


FIGURE 8: TYPE OF TOBACCO PRODUCT SMOKED BY CURRENT SMOKERS

Only
5.2%
Smokers
use Beedi

The most common type of smoking tobacco used by the current smokers were cigarettes (93.8%). Only 5.2% of current smokers were smoking Beedi. And less than one percent (0.9%) of current smokers were using Cigar.

Economics of Smoking

Amount of sticks smoked by current users

The average number of sticks smoked by the daily users was 5 sticks per day. The average number of sticks smoked by the non-daily users of tobacco was 12 sticks per month.

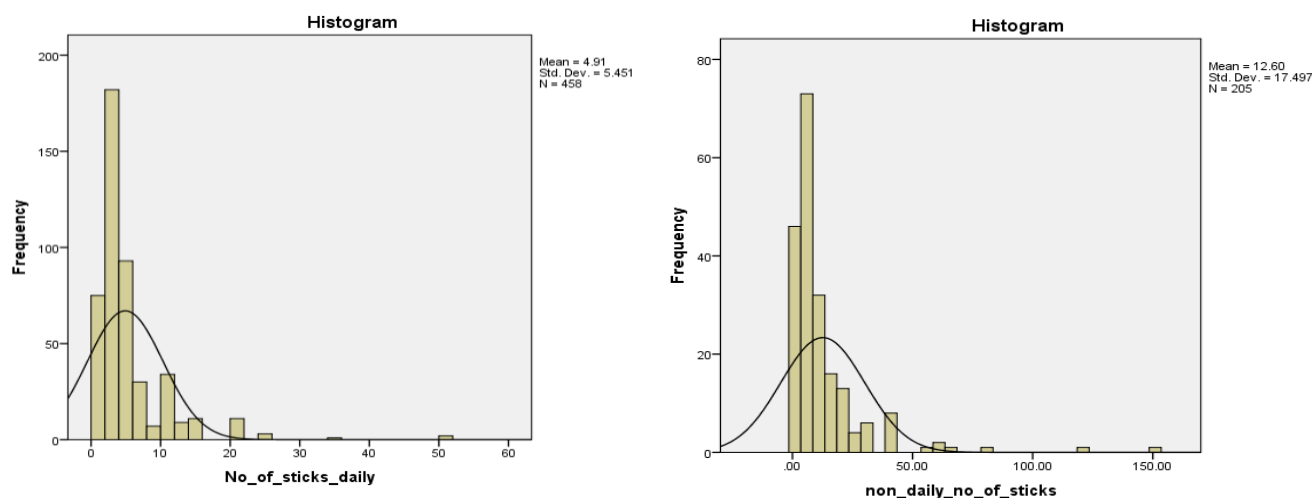


FIGURE 9: AMOUNT OF TOBACCO STICKS SMOKED BY DAILY USERS PER DAY (LEFT) AND NON-DAILY USERS PER MONTH (RIGHT)

Monthly Expenditure on Tobacco Smoking

On average, current smokers of tobacco have spent 5271.55 (+/- 262.3) rupees monthly on smoking. 48.1% of current smokers have spent more than 3,000 rupees a month on smoking.

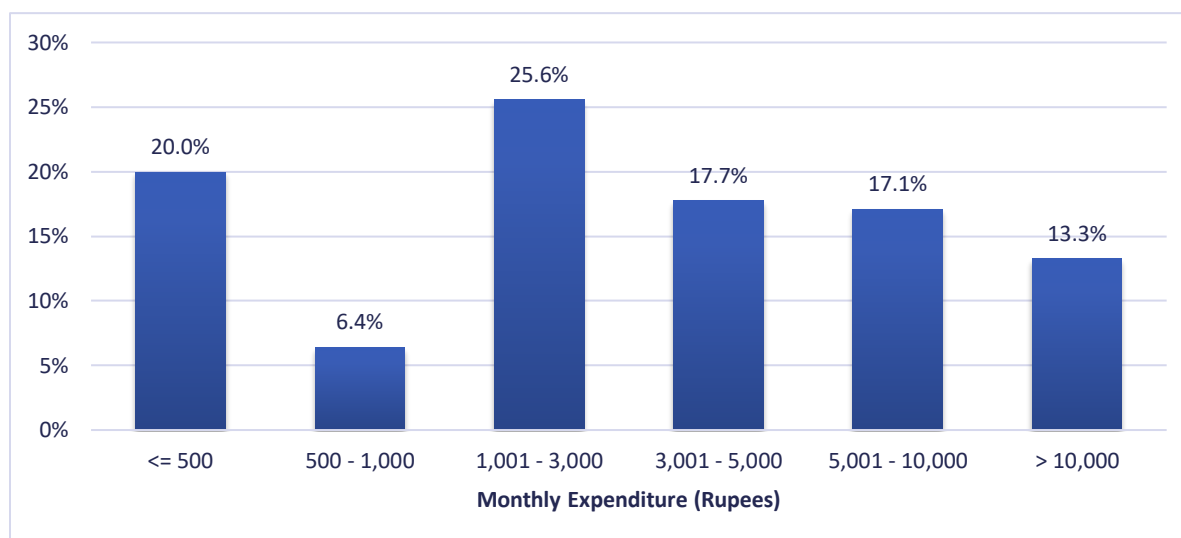
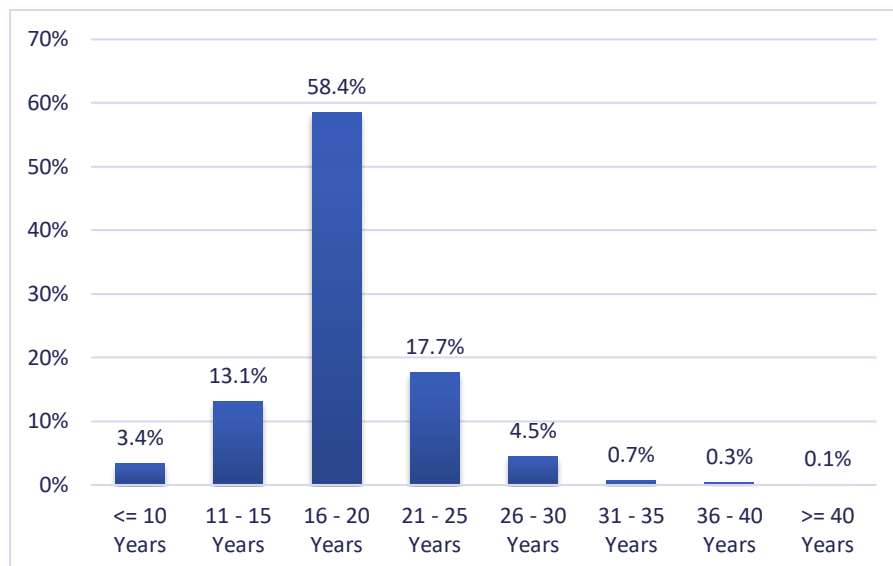


FIGURE 10: MONTHLY EXPENDITURE ON TOBACCO SMOKING

Initiation of Tobacco Smoking

Age of Smoking Initiation



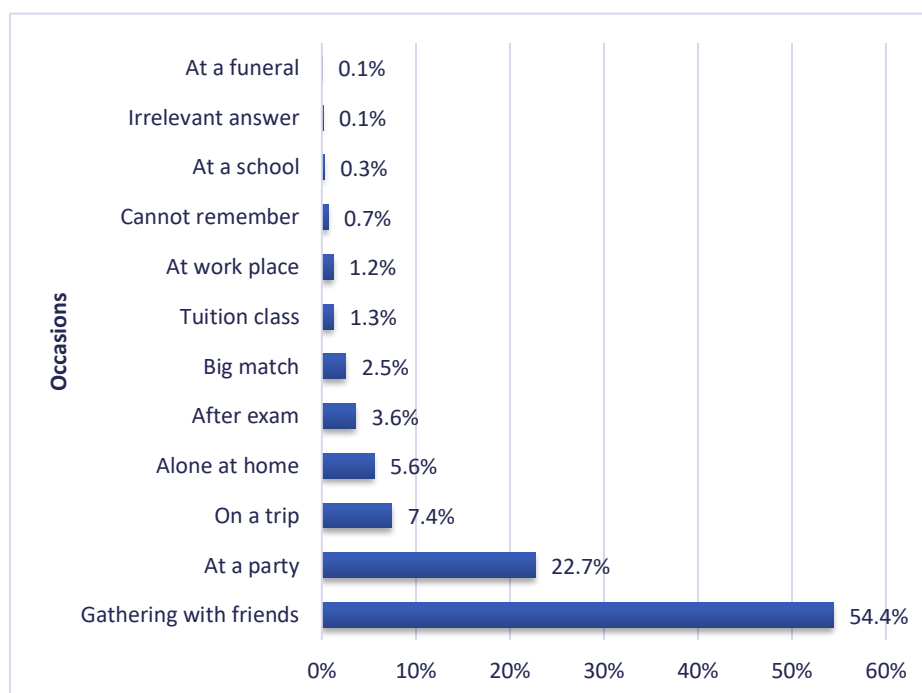
Among the respondents, the highest percentage of respondent has initiated tobacco during the age range of 16 - 20 years (58.4%). 74.9% of initiation have occurred below 21 years of age.

FIGURE 11: INITIATION OF TOBACCO SMOKING

Initiation within Last Year

In 2017, 7.3% (n=111) of ever smokers (n=1518) have initiated smoking within last year. In 2016, 7.7% (n=84) of ever users (n=1087) have initiated within last year.

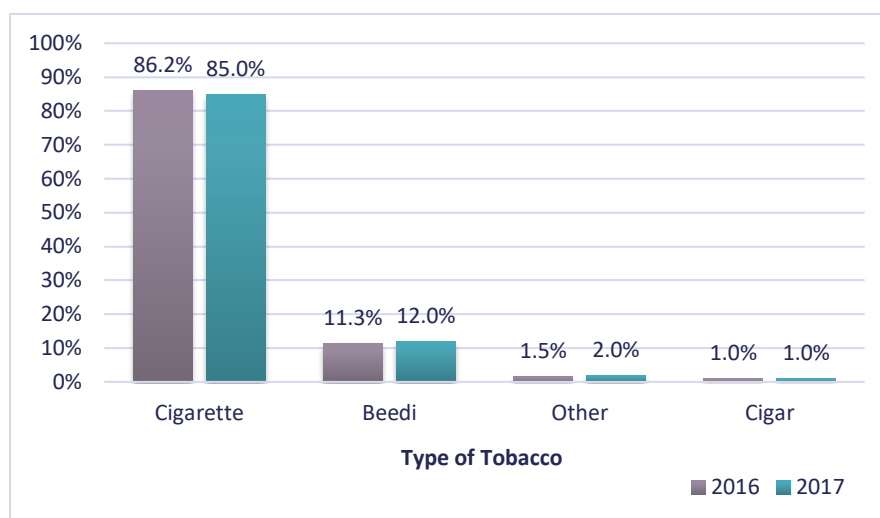
Occasions of Initiation of Smoking



The most of the respondent stated that they initiated tobacco with friends (54.4%). Twenty two point seven percent (22.7%) of the respondents have initiated the tobacco use when they were in parties.

FIGURE 12: OCCASIONS OF INITIATION OF SMOKING

Type of Tobacco at Initiation



The most common type of tobacco product used at smoking initiation was Cigarette. It was the first tobacco product smoked by 85% of ever smokers. Initiation of smoking is with beedi for only 12% of ever smokers.

FIGURE 13: TYPE OF TOBACCO SMOKING AT THE INITIATION

First Experience

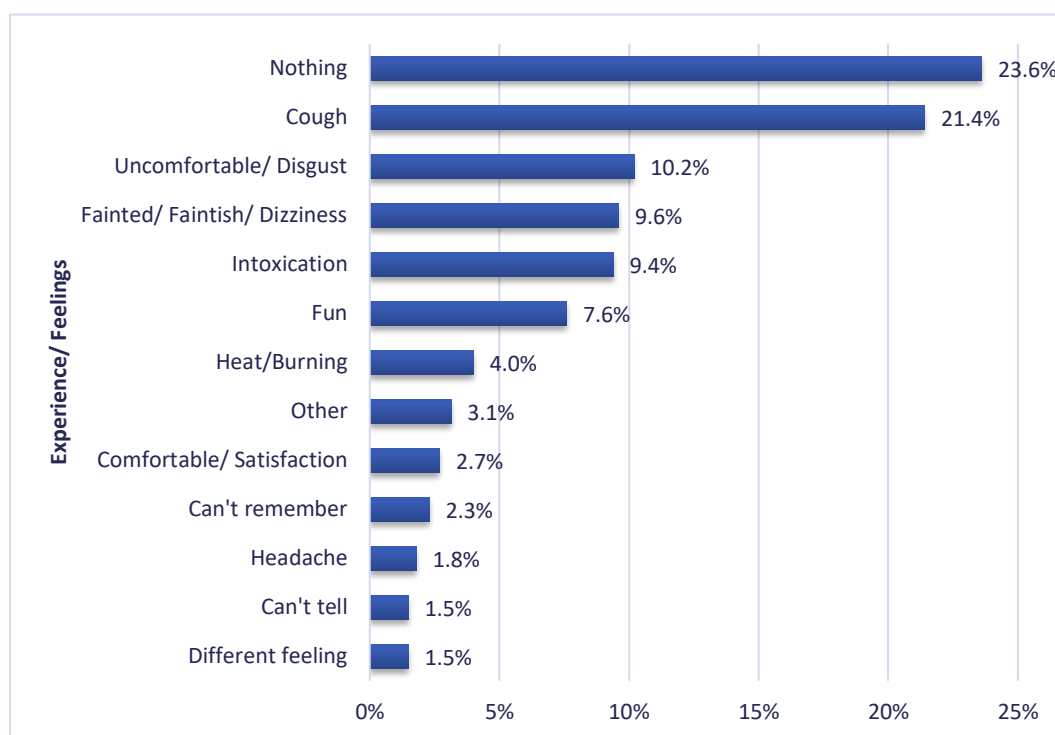


FIGURE 14: FIRST EXPERIENCE AT SMOKING INITIATION

Most of the respondents (23.6%) have told that they have not felt anything or any difference at their initiation. 21.4% have felt a coughing feeling and for 10.2% feeling was uncomfortableness / disgust during their initiation.

Youth Initiation of Smoking

Respondents between ages 15 – 24 years are considered as youth. Smoking initiation age is calculated by the mean initiation age of ever youth smokers (n=424). Calculated initiation age of smoking for youth is 17.29 years (SD = 3.41). In 2016, youth mean initiation age was 17.21 years (SD = 2.68).

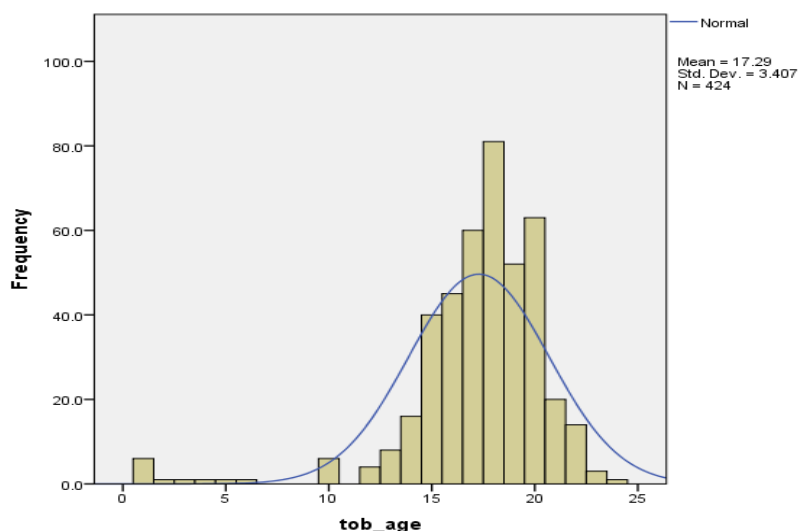


FIGURE 15: TOBACCO SMOKING INITIATION AGE OF YOUTH

Initiation within last year

From ever smokers in youth category (n=424), 7.8% have initiated smoking within last year. In 2016, 8.3% have initiated within previous year from youth respondents (n=301).

Initiation within last Year	Frequency	Percentage
No	391	92.2
Yes	33	7.8
Total	424	100.0

TABLE 2: INITIATION OF SMOKING WITHIN LAST YEAR BY YOUTH

90.4%

Cigarette was the main type smoked by youth at initiation

In the youth category, who have initiated smoking within last year, **90.4% of youth have used cigarette for initiation**. Only 8% have smoked beedi at initiation.

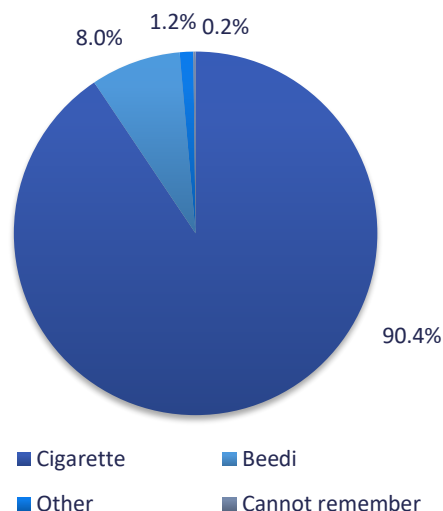
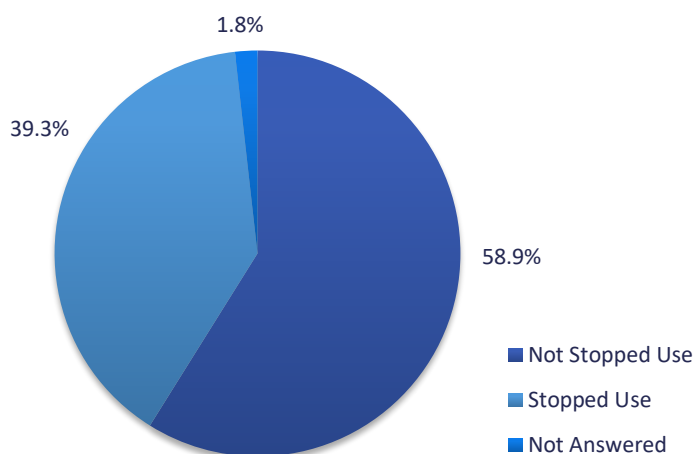


FIGURE 16: INITIATION TYPE OF YOUTH EVER USERS

Smoking Cessation

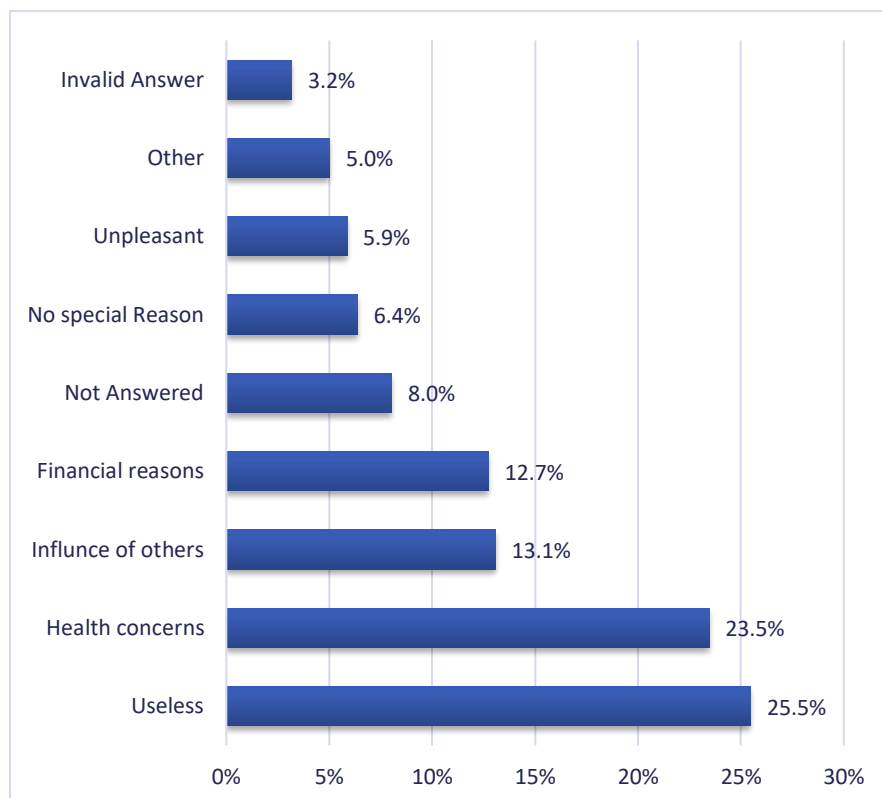
Quit from Tobacco Smoking



Out of ever smokers (n=1518) of tobacco, 39.3% (n=597) have quit use while 58.9% (n=894) of ever smokers have not quit smoking.

FIGURE 17: QUIT FROM TOBACCO SMOKING

Reasons to Quit Smoking



More than a quarter of the respondents (25.5%) who had quit smoking, have done it considering it as a “Useless” practice. Next highest reason to quit smoking was health concerns (23.5%).

FIGURE 18: REASONS TO QUIT SMOKING

Effectiveness of Tobacco Control

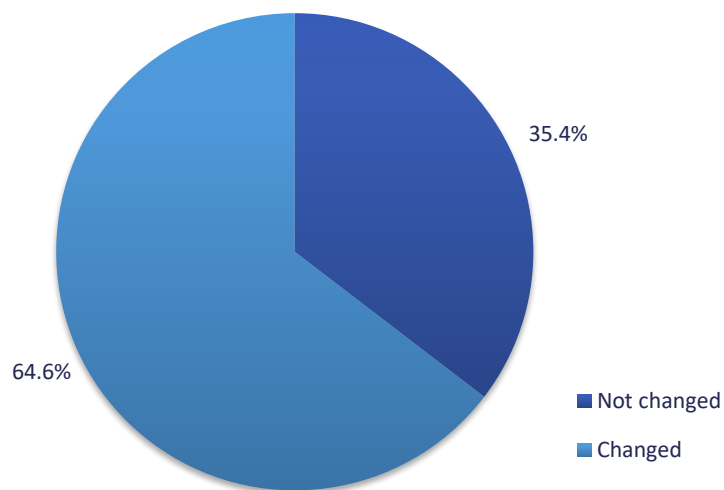
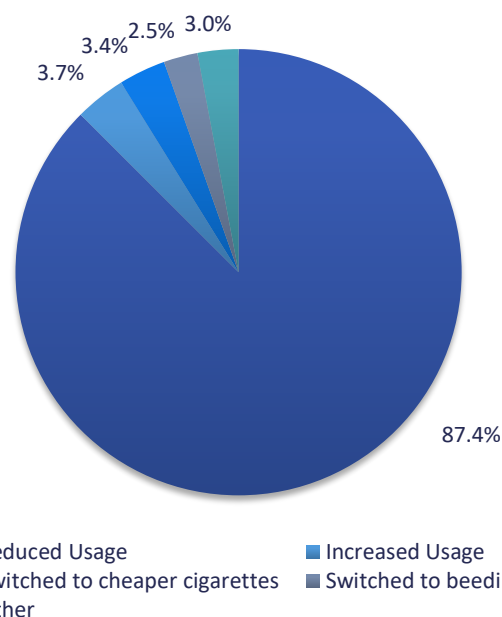


FIGURE 19: EFFECTIVENESS OF TOBACCO CONTROL

Price of cigarettes was increased from 35 rupees a stick to 50 rupees a stick in the most popular brand of cigarettes (43% increase) by November, 2016. When asked from the respondents, 64.6% of current smokers have said this price increase have caused them to change the way they are smoking.

Changes due to cigarette price increase

From the smokers who changed their usage, **87.4% have mentioned change due to price increase was "reduction of usage"**. Only **2.5% of the users have made a switch for beedi**. This 2.5% includes both who switched to beedi completely or reduce cigarettes and use beedi as a filler. Another 3.4% of smokers have shift to low price cigarettes.



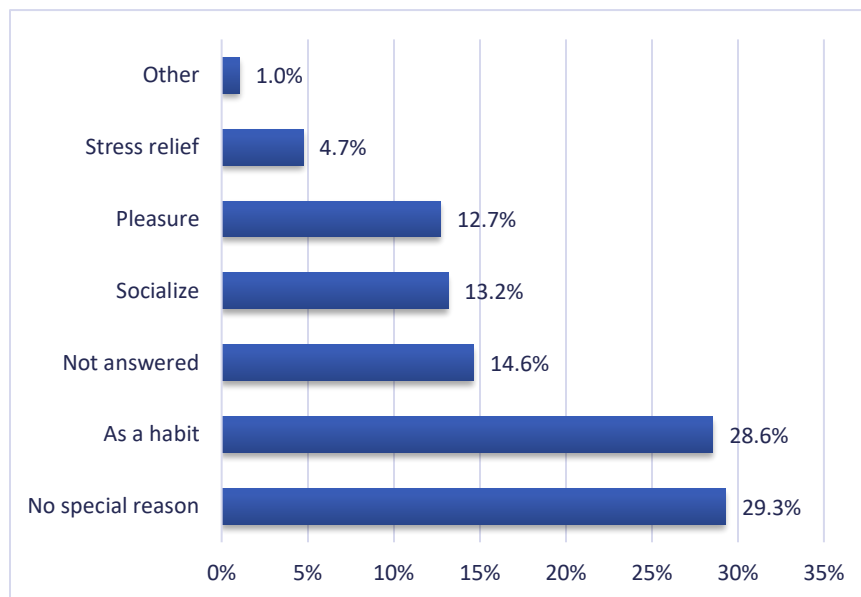
87.4%

Smokers have reduced the usage due to price increase in 2016.

FIGURE 20: SPECIFIC CHANGES AFTER THE PRICE INCREASE

Miscellaneous

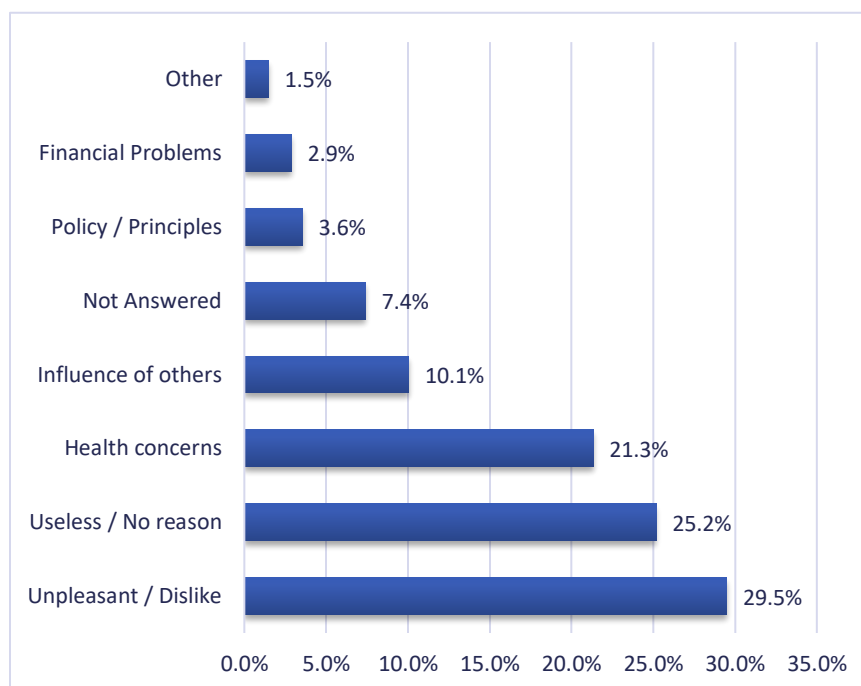
Reasons for Smoking



From current smokers of tobacco, 29.3% have not stated any specific reason smoking while 28.6% of the respondents have mentioned that do it as a habit. 13.2% of current smokers are doing it to socialize with friends and relatives. Only 12.7% of users are doing it for pleasure.

FIGURE 21: REASONS FOR SMOKING

Reasons for not Smoking



From never smokers, most of the respondents (29.5%) have stated "Dislike" or "Unpleasantness" as the reason for not smoking. 25.2% of respondents do not smoke considering it as an "useless" or there is "no reason" for them to smoke. Another 21.3% have stated "Health concerns" as the reason for not smoking.

FIGURE 22: REASONS FOR NEVER SMOKING

Smoking Trend (Across Years)

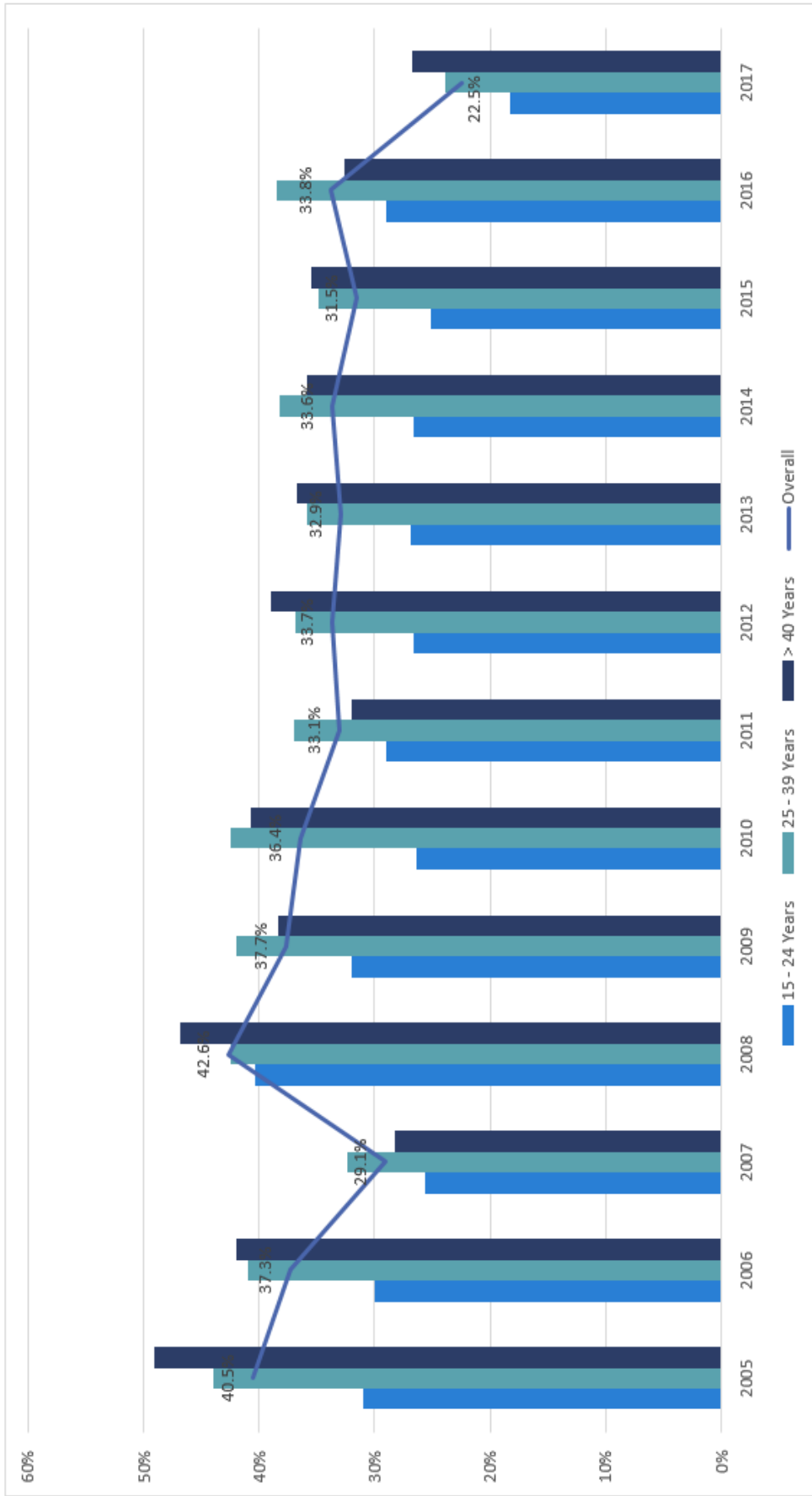


FIGURE 24: SMOKING TRENDS OVER THE YEARS (CURRENT USERS)

Source: ADIC SPOT SURVEY (2005 – 2017). Values are standardized for 2017 distribution among age groups.

Discussion

Year 2017 follows a year with a significant price increase of cigarettes (43%). It was the only time in history the price of cigarettes increased this significantly in a short span of time. Therefore, 2017 Trend survey results is a good reflection of how this increase was felt by the consumers. As per the results, current smokers were only 23.6% in 2017. This is a deduction of 27% compared to 2016. Reducing trend can be seen across all age groups. This reduction indicates that smokers in Sri Lanka are sensitive to significant price increase and it is effective in controlling use. In fact 87.4% of smokers who have changed their smoking after price increase, have stated they have reduced their smoking.

Though youth initiation show a decreasing trend in 2017, youth initiation within last year does not show a significant drop when compared with 2016. This could be due to availability of cigarettes in vicinity of schools and ability to purchase loose cigarettes. This is further evident by 90.4% of the youth who initiated within last year have used "cigarette" at initiation. Therefore it is recommended to enforce more stringent control to limit the availability of cigarettes closer to schools and banning of selling loose cigarettes.

In contrast to tobacco industry argument that price increase of cigarettes is causing an increase in beedi usage, this large scale study shows otherwise. Only 5.5% of users were using beedi in 2017 while it was 5.4% in 2016. The difference is a mere 0.1% which does not explain the drop of 27% cigarette smokers in 2017. Also from the 64.6% of smokers who changed usage after price increase, only 2.5% have switched to beedi. 87.4% have reduced usage. Therefore beedi substitution by the industry is an invalid argument.

Results also suggests that the compulsive smokers continue to smoke even with price hikes, though they want to quit. Therefore necessary support and awareness creation should continue for smoking cessation programs.

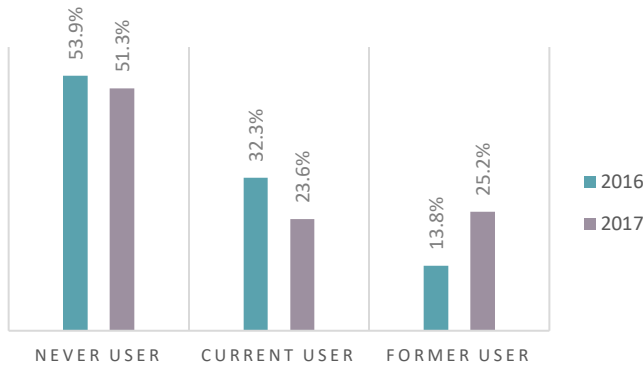
Tax revenue for the government in 2017 from cigarette was 107 billion rupees. This is nearly an 18 billion rupee tax increase which is a 20% hike compared to 2016. Therefore government was able to reduce the cigarette consumption by 27% and at the same time increase the revenue by raising the taxes on cigarettes in end of 2016. However, since the cost of living continuously increases which lower the real price of commodities, it is recommended to increase the price of cigarettes at an appropriate rate regularly. Best way of achieving this is to introduce a price formula for cigarettes.

And in the backdrop of contracting sales it is evident that the industry continue to secure and improve their sales by employing diverse strategies. Therefore while the policy control remains stringent, prevention programs and surveillance conducted by the government and non-government institutes should be further strengthened and continued.

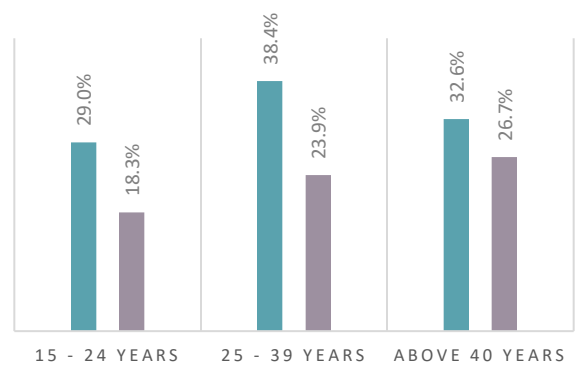
Annexure 1: Tobacco Fact Sheet (SPOT 2017)

Sample size 2999 respondents | 11 Districts | Males above 15 years (15+)

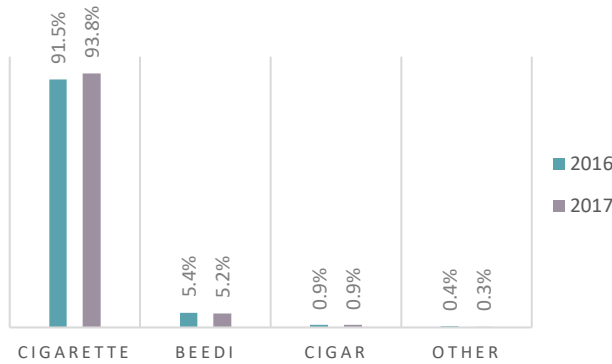
Trends of tobacco smoking



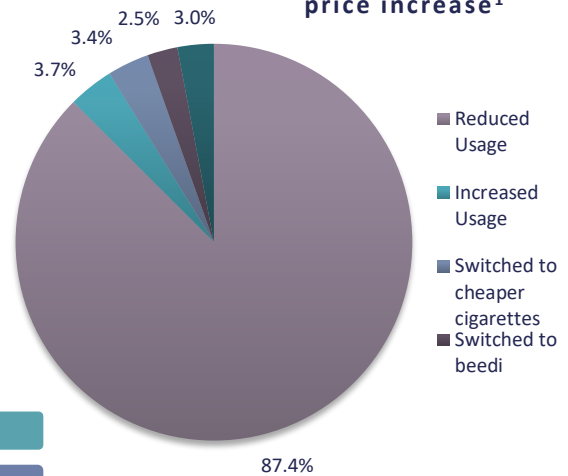
Trends of tobacco smoking by age



Trend of tobacco smoking by type



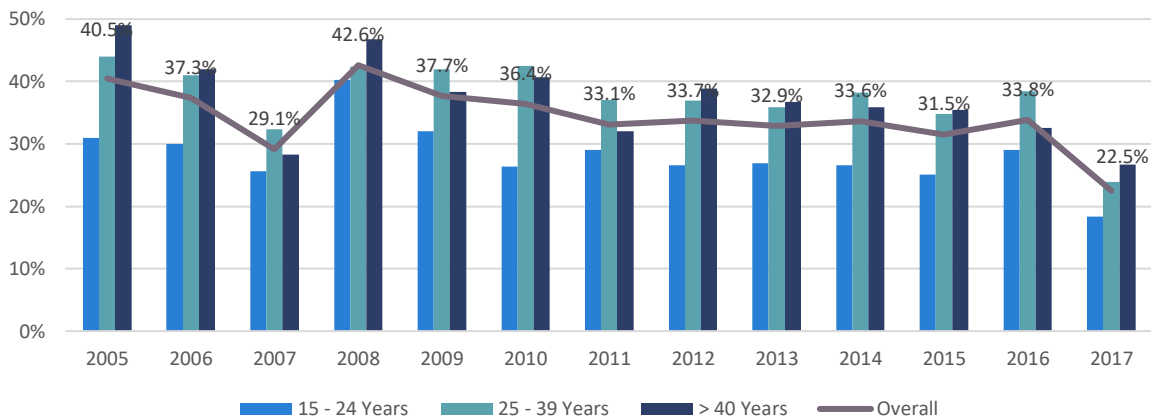
Specific changes of smoking due to price increase¹



- Mean age of initiation of tobacco smoking for youth (15-24) is 17.29 years.
- 90.4% of smoking initiation within last year in youth group is with cigarettes.
- 58.9% of the ever users are not able to quit.
- 64.6% of the current smokers have changed smoking due to price increase.

¹ Price of most popular brand of cigarette increased by 43% by November 2016.

Age standardized trend of tobacco smoking (2005-2017)



Annexure 2: Questionnaire

1. What is your age?
2. Have you ever smoked?
3. If you have never smoked, what was the reason for it?

Questions 4 – 11 are only for who have ever smoked

4. At which age you smoked for the first time?
5. What was the occasion you smoked for the first time?
6. What was the type of smoke tobacco product you used at first instance?
7. What is your experience at first use?
8. Have you quit smoking now?
9. What is the reason for your answer above?
10. If you have quit smoking, when was it?
11. When was the last time you smoked? (Within last month or Beyond last month)

Questions 12 - 19 are only for who have smoked within last month (current users)

12. What are the type of tobacco products you smoke?
13. What is the brand name of cigarettes you smoke?
14. How often do you smoke? (Daily/Weekly/Monthly)
15. How many sticks are being smoked by you (as per the frequency)?
16. How much did you spend on smoking in last month?
17. Is there a difference in your smoking after price increase of cigarettes?
18. What are the changes if there are any?
19. What are the reasons for you to smoke?

Questions 20 – 38 are on alcohol use. These questions are available on 2017 SPOT Survey – Report on Trend of Alcohol Use in Sri Lanka - 2017.

39. What is your highest level of education?
40. What is your occupation?

Note: Questionnaire is developed in Sinhala language and then translated to Tamil language. Translation for English is done for documentation purposes.