REPORT ON THE RESULTS OF THE GLOBAL YOUTH TOBACCO SURVEY IN DOMINICA 2000

REPORTED BY THE HEALTH PROMOTION RESOURCE CENTRE MINISTRY OF HEALTH & SOCIAL SECURITY COMMOMWEALTH OF DOMINICA

Prepared By JOAN HENRY COORDINATOR GYTS

Introduction

Public Health Impact

Tobacco use is one of the chief preventable causes of death in the world. The World Health Organization attributes some 4 million deaths a year to tobacco smoking and the figure is expected to raise to 10 million by the year 2030. By that time, 70% of those deaths will occur in developing countries. Recent trends indicate rising smoking prevalence rates and earlier initiation among children and adolescents.

Most people begin to use tobacco before the age of 18. If these patterns continue, tobacco use will result in the deaths of 250 million children and adolescents who are alive today, many of whom are in the developing countries.

Global Youth Tobacco Survey

In recent years, WHO, UNICEF, G8 Ministers of the Environment, ministers responsible for youth, and many national health agencies have called for concerted action against tobacco use by young people. However, comprehensive tobacco prevention control information on young people is not available for most developing countries. To address this data gap, in 1998, the World Health Organization in collaboration with the US Centre for Disease Control and Prevention initiated a global surveillance project on tobacco use among young people that would allow for cross comparison.

GYTS is school-based and self-administered; it uses common methodology and protocol for collecting data on tobacco across all countries. The purpose of GYTS was to enhance the capacity of countries to monitor tobacco use among of tobacco prevention and control programmes and policies.

Tobacco Use In Dominica

Dominica is one of the PAHO affiliated Islands and was invited to participate in the GYTS. Dominicans like other nationalities use tobacco, but information on the exact situation as it relates to public health impact of tobacco use is not available.

The following is evident:

Tobacco products are imported and sold locally. Everyone who desires to smoke has access to various brands and types of cigarettes. Tobacco was once grown and used to produce cigarettes and dried for pipe smoking. Presently, the factory continues to produce cigarettes but imports the tobacco. Cigars are imported from Cuba and Trinidad & Tobago.

In 1998, the expense for tobacco and cigarette importation was \$1,451,797. CIF Value for net weight, 97,294-product kg., and income for cigarette exports that year was FOB \$1,000,822 for net weight 13,173 kg.

There are no laws restricting age of purchase, use or media advertisement of tobacco. However, the Health Promotion Resource Centre of the Ministry of Health continues to provide prevention education on tobacco use through the media, community groups, and the Health and Family Life Education Programme for schools.

Additionally, Dominica joins the rest of the world to observe World No Tobacco Day annually. On that day, the Ministry of Health launches public awareness campaigns highlighting the dangers of tobacco, environmental tobacco smoking, and ways to combat smoking habits.

Dominica's participation in GYTS will provide the island with the opportunity to address the following issues:

- Level of tobacco use among students who are at schools in the first to fourth forms at secondary and primary schools with Junior Secondary Programs; Age of initiation of tobacco use among these students; Levels of susceptibility to become cigarette smokers.
- Exposure to tobacco advertising; ability to identify key intervention variables, such as attitudes, beliefs and behavioural norms with regards to tobacco use that could be used for non-smoking policy and creating supportive environment for planning and implementing school-based and community intervention programmes.

Twenty-three (23) selected schools participated in the survey, ten (10) secondary and thirteen (13) primary schools with junior secondary programmes (JSP).

Methods

GYTS Dominica was conducted from May 24 - June 20, 2000 among 1626 students of the first to fourth forms from 23 schools. The survey employed a two-stage cluster sample design.

Sample Description

All schools containing forms one, two, three and or four in Dominica were included in the sampling frame. A two-stage cluster sample design was used to produce a representative sample of forms one, two, three and four.

The first stage-sampling frame consisted of all schools containing students in forms one, two, three and or four. Schools were selected with probability proportional to schools enrollment size. Twenty-three (23) schools were selected -10 secondary and 13 primary schools with JSP. At class level the second sampling stage consisted of systematic equal probability sampling of classes from each school that participated in the survey. Number of eligible classes ranged from one to fifteen in schools sampled and the number of students in a class ranged from six to thirty five. All of the 23 selected schools participated; however, the students' response rate was 86.6 percent, 1626 of the 1877 eligible sampled students having completed usable questionnaires.

Questionnaire

A group of experts on tobacco addiction from the first group of countries selected to undertake GYTS and staff members of WHO/TFI and UNICEF developed the 57 core questions. Additionally, one question was included and 27 of the core questions were adjusted and pre-tested before the corrected instrument was finalized and administered. The Health Promotion Resource Centre of the Ministry of Health and Social Security conducted the survey.

Data Collection

Permission was obtained before its launching from the Education Officer of the Ministry of Education, Sports and Youth Affairs to conduct the survey among students of the eligible schools. Thereafter the following activities were implemented:

- Principals of the eligible schools were individually informed by telephone of the survey and its content. Logistical arrangements for the administration of the survey were made. Principals were provided with detailed information on the objectives of the survey and the administration procedures that were to be employed to ensure anonymity and confidentiality for students and schools.
- Eligible students at the selected schools were given information letters to take to their parents/guardians informing them of the GYTS and dates during which the survey would be conducted at their schools.
- In-country training for three persons was conducted prior to commencement of the survey. Procedures were designed to ensure protection of the students' privacy by allowing for anonymous and voluntary participation. The self-administered questionnaire was completed in the classroom. Students recorded their responses directly on answer sheets that could be scanned by a computer. The questionnaire contained 58 multiple-choice questions and approximately 45 minutes were allowed for completion. The Survey was conducted from May 24 June 20, 2000.

Following their completion, all questionnaires were checked before leaving the school compounds. Completed questionnaries were then packaged and sent to CDC, Atlanta for analysis.

Analysis

A weighting factor was applied to each student record to adjust for non-response and the varying probabilities of selection. The programmes SUDAAN and Epi-Info were used to compute rates and 95% confidence Intervals for the estimates. A weight was associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. The weight used for estimation was completed as follows:

W=W1*W2*f1*f2*f3

Where,

- W1 = the inverse of the probability of selecting the school
- W2 = the inverse of the probability of selecting the classroom within the school
- **F1** = a school-level non-response adjustment factor calculated by school size category (small, medium, large)
- F2 = a classroom non-response adjustment factor calculated for each school
- F3 = a student-level non-response adjustment factor calculated by class
- F4 = A post stratification adjustment factor calculated by form

Results

A total of 1626 questionnaires were completed for students from 23 schools giving a response rate of 86.4%. All 23 selected schools participated giving a response rate of 100%.

Background Characteristics of Respondents

A total of 858 or 51.5% of the respondents was female students while 697 or 48.5% were male.

The ages of participating students ranged from 11 to 17 years. Of these 4.2% of the students were11 years or younger and 9.4% or 138 students were 17 years old. The majority of the respondents were aged between 12 to 15 years. The 14-year-olds accounted for the largest group of students making up 23.6% of the total. Of those surveyed. 62.9% indicated they had never smoked, whereas 37.1% indicated that they had tried to experiment with cigarette smoking. Current cigarette smokers were described as those who had smoked cigarettes on one or more days during the past month from the day of the commencement of the survey. The figure seems to be significantly high, 13.7% for males and 11.4% for females. The percentage of those who were currently using any form of tobacco product within 30 days of the survey was also high, 21.6% total with 25.3% males and 16.6% females. The percentage of those who had used any form of tobacco products in the past 30 days was higher for the fourth form students.

Fifteen and one-half percent (15.5%) of the current male smokers indicated that they smoked other tobacco products. Three percent (3%) of these indicated they were frequent smokers, including 4.4% of the fourth formers.

Category	Ever Smoked Cigarettes, Even one or Two Puffs	Current User					
or 1 wo Pulls		Any Tobacco product	Cigarette Smokers	Other Tobacco Products	Frequent Cigarette Smoking		
Value	% CI	% CI	% CI	% CI	% CI		
Total	37.1 (± 3.9)	21.6 (± 3.0)	13.0 (± 2.6)	11.6 (±1.9)	2.2 (± 0.9)		
Sex							
Male	42.7 (± 5.4)	25.3 (± 4.7)	13.7(±3.6)	15.5 (±3.3)	3.0 (±1.6)		
Female	30.9(±4.9)	16.6(±3.0)	11.4 (±2.9)	7. 2 (±1.7)	0.8(±0.7)		
Form							
One	25.7(±5.4)	17.8(±4.6)	9.0(±3.1)	11.3(±3.4)	$1.7(\pm 1.3)$		
Two	37.2(±7.6)	21.9(±5.0)	12.2(±4.1)	12.1(±3.4)	$1.6(\pm 1.7)$		
Three	39.9(±5.9)	21.4(±6.2)	13.6(±4.5)	9.8(±3.1)	$1.5(\pm 1.1)$		
Four	50.8(±9.0)	26.5(±5.9)	19.8 (±4.9)	14.0(±5.8)	4.4(±2.5)		

Table 1: Percentage of Students Who Use Tobacco

The percentage of students who had ever smoked a cigarette was very high, 37.1%. Male students were significantly more likely to have ever smoked, the highest incidence occurring amongst the fourth formers. Of the students who ever smoked cigarettes, 26.5% initiated smoking before age 10 while 24.3% initiated smoking between ages 10 and 11.

Over half (56.9%) of students who were current smokers smoked only one or two days during the month; whereas 11.5% smoked all 30 days.

Respondents' Knowledge and Attitudes

Table 2: Percentage of Total Respondents Who Knew About Tobacco and Their

 Attitudes Towards Tobacco Smoking

Category	Think boys who smoke have more friend	Think girls who smoke have more friend	Think smoking makes boys look more attractive	Think smoking makes girls more attractive	
	Total	Total	Total	Total	
Value	% CI	% CI	% CI	% CI	
Total	33.4(±2.4	17.6(±2.1	12.9(±2.0	8.4(±1.6	
Sex					
Male	29.4 ±3.6	19.4 ±3.1	15.1 ±2.9	9.9 ±2.4	
Female	36.6 ±3.3	15.1 ±2.9	10.0 ± 2.0	6.3 ±1.8	
Form					
One	34.2 ±5.3	20.3 ± 4.5	14.3 ±4.3	10.6 ±3.4	
Two	32.8 ±4.4	17.7 ±3.7	13.4 ±3.7	9.6 ±2.9	
Three	32.4 ±4.3	17.0 ±4.3	11.0 ±3.2	6.6 ±2.8	
Four	35.4 ±4.7	13.3 ±4.3	13.5 ±5.1	4.4 ±3.6	

Knowledge of the dangers of cigarette smoking was very high. Over three-fourths (76.2%) of students stated that cigarette smoking is "definitely" harmful to one's health,

while 13% believed that cigarette smoking is "definitely" not harmful. One-third (33.4%) of the students thought that boys who smoked had more friends; 17.6% thought girls who smoked had more friends. Approximately thirteen per cent (12.9%) thought smoking makes boys look more attractive; and 8.4% thought smoking makes girls look more attractive. Almost one-third (32.4%) indicated that cigarette smoking helps people feel more comfortable at celebrations, parties, or in social gatherings.

Almost half (48.6%) of the respondents indicated that whenever they saw a man smoking, they thought that the man lacks knowledge of the effects of cigarettes on the body; 15.8% thought he lacks confidence; and 18.7% thought the man was stupid. Their attitudes towards women who smoked cigarettes were similar, 41.4% thought the woman lacked knowledge of the effects of cigarettes on the body; 20.6% thought she lacks confidence; and 22.4% thought she was stupid.

Almost three-fourths (74.8%) of the respondents thought it is definitely not safe to smoke for one or two years even if one were to quit after that period. Over one-third (34.9%) of the students thought that once someone starts smoking it is definitely difficult to quit; 25.6% thought it is definitely not difficult to quit.

Access and Availability of Cigarettes

Category	Percent current smokers who usually smoke at home	Percent current smokers who purchased cigarettes in a store	Percent Current Smokers who bought Cigarettes in a store who were not refused because of age
	% CI	% CI	% CI
Total	20.6 (±6.5)	25.2 (±7.5)	70.9 (±10.8)
Sex			
Male	16.1(±7.3)	33.6(±13.7)	69.1(±14.8)
Female	28.5 (±11.4)	17.9(±10.2)	74.2(±14.0)
Form			
One	25.4(±11.3)	27.8 (±12.3)	*
Two	22.7(±13.1)	18.3(±11.5)	*
Three	29.5(±11.9)	26.0(±10.4)	*
Four	4.9(±5.6)	33.2(±22.6)	*

 Table 3: Percentage of Current Smokers and Purchase Habits

* <35 cases - unreliable estimate

Places where current smokers smoked varied: 20% stated they smoked at home; 4% stated they smoked at friend's house; 4% said they smoked at other locations; 3.8% stated they smoked at public places and parks; and 3.6% stated they smoked at social events.

One-fourth of current smokers purchase their cigarettes from a store. Within this group, 7 in 10 (70.9%) were not refused because of their age. Students from all age ranges and gender have free access to purchasing cigarettes.

In terms of accessibility, the current smokers also indicated that they smoked other tobacco products, but it was not clear what the other products were.

Other significant information surrounding the current smokers included their parent's knowledge of their smoking habits and their parents status, other ways in which they obtain their cigarettes, the smoking status of their friends and the percentage of them who would smoke a cigarette if it is given to them.

Almost 3 in 10 students have parents who smoke (25.7%), with 19.8% of the fathers smoking. Students were asked if their closest friends smoke cigarettes, 4.1% indicated all of their friends smoked; 8.8% indicated most of their friends smoked; and 36.9% stated some of their friends smoked. Overall, 14.5% of the students indicated that if their best friends were to offer them a cigarette they would smoke it.

Environmental Tobacco Smoke

Category	Exposed to smoke from others in their homes		Exposed to smoke from others in public places		Percent who think that smoking should be banned from public places		Definitely think smoke from others is harmful to them	
	Never Smokers	Current Smokers	Never Smokers	Current Smokers	Total		Total	
	% CI	% CI	% CI	% CI	% CI	% CI	% CI	
Total	22.0 ±3.3	48.4 ±9.2	51.6 ±3.7	79.2 ±5.3	73.1 ±2.9		71.1 ±3.1	
Sex								
Male	21.9 ±4.9	48.1 ±11.9	51.8 ± 5.4	84.6 ± 8.0	66.5 ±4.2		66.5 ±4.8	
Female	21.8 ±4.3	48.1 ±11.9	51.0 ± 4.7	71.1 ±9.9	80.1 ± 3.4		77.8 ±3.3	
Form								
One	23.4 ±5.4	36.2 ± 14.8	49.4 ±6.7	62.7 ± 12.7	73.0 ± 7.2		69.2 ±7.9	
Two	23.5±6.4	52.0±19.0	52.8 ± 5.8	86.9 ± 10.0	71.9 ±6.2		69.8 ±5.9	
Three	20.1 ±6.4	63.5 ±15.8	53.6 ± 7.1	80.9 ± 19.1	75.7 ±4.2		72.4 ±6.4	
Four	19.4 ±8.4	34.2 ± 11.1	48.7 ± 11.3	81.3 ± 10.6	71.1 ± 10.7		77.5 ±6.4	

Table 4: Percentage of Respondents Exposed To Environmental Tobacco Smoke

There is a significantly high exposure by both never-smokers and cigarette smokers. A total of 22% of the respondents who were never-smokers were exposed to environmental tobacco smoke. Almost fifty percent (48.4) of the current smokers were exposed.

Over fifty percent (51.6%) of the never-smokers and 79.2% of the current smokers were exposed to environmental tobacco smoke in public places.

Students were asked several questions on tobacco exposure. The following percentages indicate their responses to these questions:

Almost eleven percent (10.7%) of the respondents had been exposed to environmental tobacco smoke at home for two days. Almost ten percent (9.2%) of them were exposed for 7 days; 22.7% of the respondents were exposed to environmental tobacco smoke 1 to 2 days in places other than their homes; 10.4% were exposed for 3 to 4 days; and 18.4% were exposed for 7 days.

The difference in exposure varied between males and females, form levels and ages. More females were exposed to environmental tobacco smoke than males. Students in forms one and two and those who were 14 years were the ones mostly affected.

When asked whether smoke from other people was considered harmful to them, 76% of never-smokers and 13% of those who smoked indicated it definitely was. Over seventy percent (71.7%) of male never-smokers and 16.6% male current smokers thought environmental tobacco smoke was harmful. Over eighty percent (82.9%) of female never-smokers and 9.1% of female current smokers thought it was harmful. Amazingly, the percentage of male current smokers who thought smoking from others was harmful was higher than the female current smokers, 16.6% and 9.1%, respectfully.

Never-smoker students of the higher forms also thought environmental tobacco smoke were harmful compared with never-smokers of the first and second forms.

More than 73% of the respondents were in favour of banning cigarette smoking from public places. 66.5% males and 80.1% females were in favour compared to 33.5% males and 19.9% female who were not in favour of banning cigarettes.

Cessation

Four

Category Current Smokers Percent tried to stop this year Percent desire to stop % CI % CI Total 52.4 ± 10.0 54.8 ±11.8 Sex Male 49.1 ± 17.0 50.4 ± 13.7 Female 66.4 ± 17.0 58.6±16.4 Form One Two 47.0 ±20.9 Three *

Table 5: Percentage of Respondents Who Desire To Stop Smoking

* <35 cases - unreliable estimate

When asked whether they thought they would be able to stop smoking if they wanted to, 14.46% indicated they had already stopped and another 14.49% said yes. They believe they would be able to stop if they wanted to do so.

*

Over six percent (6.36%) indicated that they have received help or advice from a program or professional to stop smoking. Twelve percent (12.13%) indicated they received help and advice from their friends to stop smoking.

Of those who ever smoked, 18.6% were not smoking at the time the survey was conducted. Of those who were currently smoking, 8.3% of them wanted to stop during the time of the survey and 6.6% did not want to stop smoking.

Over nine percent (9.42%) of those who ever smoked were able to stay away from smoking for two years. Three percent (3.16%) had stopped for less than 3 months before the time the survey was conducted. Those who stopped smoking stated several reasons for their decisions. Over twelve percent (12.59%) stated it was to improve their health; 1.90% indicated it was to save money; 2.16% indicated it was because their family did not approve; and 7.43% stated it was because their friends did not approve.

Over seven percent (7.30%) said they had other reasons when asked if they thought they could stop smoking if they wanted to. Over fourteen percent (14.26%) indicated yes and results showed that they had tried and succeeded because a similar percentage, 14.49% indicated they had already stopped.

Media and Advertising

Category	Percent saw a lot of anti-smoking media messages	Percent saw pro-tobacco messages in magazine & newspaper		Percent who had object with a cigarette brand logo on it		Percent offered free cigarettes by a tobacco company	
	% CI	% CI Never Sm	% CI Curr Smoke	% CI Nev Smoke	% CI	% CI Nev Smo	% CI
		Nevel Sill	Curr Smoke	CurSmoke		CurSmol	
Total Sex	37.5 ±2.7	43.1 ±3.3	38.2 ±8.5	17.9 ±2.4	31.1 ±7.3	8.7 ±1.8	23.5 ±7.2
Male	38.8 ±4.5	41.4 ±5.4	36.8 ±11.5	19.4 ±3.8	32.1 ±11.8	11.0 ±3.3	24.9 ±11.7
Female Form	36.8±3.2	44.5 ±3.6	42.1 ±11.2	16.0 ±3.1	30.2 ±9.5	5.8 ±1.9	21.3 ±8.3
One	40.6 ±4.7	42.4 ±4.6	46.5 ±16.5	16.9 ±3.3	20.2 ±12.0	8.2 ±3.0	24.6 ±13.5
Two	37.2 ±5.8	45.1 ±6.4	20.0 ± 14.1	19.2 ±3.3	34.4 ±12.4	9.6 ±4.2	18.4 ±11.5
Three	37.7 ±5.7	41.4 ±7.0	46.1 ±14.8	19.0±6.4	22.2 ±9.6	8.0 ±3.7	19.8 ±13.6
Four	31.5 ±7.8	44.2 ±9.9	39.2 ±20.6	14.3 ±3.6	48.5 ±21.1	6.2 ±6.3	36.0 ±20.5

Table 6: Percentage of Respondents Who Saw Media & Advertising Messages and Their

 Reactions

Information collected during the survey indicated that the respondents from secondary as well as primary schools were exposed to both positive and negative information from various media sources. Students were asked about their exposure to anti-smoking messages as well as promotion of cigarettes. Only one-third (37.5%) had seen "a lot" of anti-smoking media messages. Approximately 4 in 10 never smokers and current smokers had see pro-tobacco messages in newspapers and magazines. Almost 1 in 3 current smokers had an object with a cigarette brand logo on it compared to 17.9% for never smokers. Almost 1 in 4 (23.5%) current smokers had been offered free cigarettes from tobacco companies compared to 8.7% for never smokers.

School Curriculum

Category	Percent taught dangers of smoking	Percent discussed reasons why people their age smoke			
	% CI	% CI			
Total	58.3 ±4.7	42.4 ±4.4			
Sex					
Male	53.3 ±6.2	37.6 ±5.4			
Female	63.7 ± 5.0	46.9 ±5.3			
Form					
One	62.9 ±8.7	42.7 ±9.1			
Two	53.3 ±8.8	40.7 ±8.1			
Three	60.8 ± 8.7	49.7 ±8.1			
Four	54.5 ±11.6	32.4 ±9.0			

Table 7: Percentage Taught Dangers of Smoking At School

Health and Family Life Education has been a component of the primary school curriculum for many years. However, this component is only now being officially implemented in the secondary schools. Nevertheless, sporadic sessions on drug prevention through the Drug Awareness Resistance Education (DARE) programme have been conducted at the secondary schools.

Students' exposure to education sessions on tobacco smoking was higher for the respondents from the primary schools. Over half (58.3%) of the respondents were taught the dangers of smoking and (42.4%) of them had discussed why students their age smoked. 43.43% did not discuss that topic. 54.44% were taught the effects of smoking.

Discussion

The Dominica GYTS provided data on prevalence of cigarette and other tobacco use as well as information on five determinants of tobacco use. These include: access in terms of price and availability; environmental tobacco smoke exposure; cessation; media awareness and advertisement and school curriculum.

Analysis of data has revealed valuable information that could:

- Give guidelines for a comprehensive school and community based intervention programme.
- Inform policy makers of the true tobacco picture among youth who are at school and the need to make every effort to provide the necessary political will and resources to address the situation in order to deter the use of tobacco among youth.
- Inform parents/guardians of the tobacco use among their children and the way their smoking habits influence the children's tobacco habits and attitude.

- Allow students to recognize their situation and to consider their practice and its long-term effects on their health.
- Enable teachers to recognize the need to more forcefully use the anti-tobacco curriculum
- Enable media workers to recognize the negative influence they facilitate by creating a glamorous picture of tobacco smoking.

Prevalence

Tobacco use among the surveyed youth is quite high. Over one-third of the students (37.1%) had ever smoked cigarettes. A total of 11.6% of these are currently using other tobacco products. Further research will be required to be sure what the young persons are smoking.

While 63.8% of the respondents indicated they had never smoked cigarettes, those who had ever smoked one or two puffs started doing so as early as age10 years. This age group seems to be indicating that this is the most vulnerable age group for the youth. Past surveys conducted by Pan American Health Organization (PAHO) on adolescent health indicated that sexual activity started as early as 10 years. These two indicators are significant for programme assessment and intervention. Adequate attention is not given to the social issues that affect the youth at that early age. Due to modernization and social needs, young children are usually left as the responsibility of other siblings who themselves need guardians and are not capable to provide the level of supervision that is required by younger siblings. Adults usually do not understand that children do not think like adults and most times underestimate the care and supervision children that age group require to help them take less risks. In the advent of modernization, behaviors that were considered wrong for children to practice have become a matter of choice.

Smoking has become a regular activity particularly among certain cultural and religious groups. This may create a false picture to the younger ones indicating it is all right to smoke.

The frequency of smoking amongst the respondents was also alarming. The majority of them smoke between 2 to 5 cigarettes a day, with just under 1% smoking 20 cigarettes daily. When one considers the fatality of cigarette smoking both to the smoker and the non-smoker, our youth are exposed to the risk of developing serious health related conditions in the early years of life.

Studies also show that the younger a person is when they are exposed to smoking, the greater their chances are of contracting cancer in life. Given the above prevalence among the under 12 to 16 plus youth, there is a risk of them developing not only lung cancer but heart disease, strokes and other respiratory diseases before their 35th year of life.

Knowledge and Attitudes About People Who Smoke

In Dominica, knowledge on the dangers of tobacco smoking among youth is quite high. About 77% of the respondents have been exposed to information at school and other information dissemination formats. However, at least half of them have been exposed to negative information.

It is important to note that while 33.4% of current smokers think that boys who smoke have more friends, 78.3% of the total respondents think that smoking makes girls look more attractive. A little over eighty percent (81.6%) of that number were females. This information indicates that girls who were not smoking during the time the survey was administered are at risk of becoming smokers because of the glamorous image they perceived female smokers have.

This has great implications for the need to reinforce correct messages on the effects of tobacco in forms that will counteract the glamorous images that are projected by the print and electronic media.

These images are projected through advertisements from the print and electronic media channels. Efforts that are made and channels that are used to disseminate anti-smoking messages to the youth are not as attractive and impressive as those that are used to portray the negative messages. Several factors influence the situation. Because of this, it has implications for several interventions to be initiated at various levels of society. As the discussion continues, they will be mentioned under the legitimate sections. For this section, reference is made for the need for improvement of message content, channel used to disseminate information, legislation for sale, advertisement and public place restriction.

The survey explored other communication methods that are used to disseminate information on tobacco use. Students were asked whether they were taught about tobacco, the effect of smoking and reasons why young people their age smoked. More than half of the respondents were taught the dangers of smoking and 42.4% of them discussed reasons why people their age smoked. Again the percentage, which expressed the fact that they were taught about the dangers of smoking in school, was much less than those who are exposed to anti-smoking messages heard on the media. This indicates that although the school curriculum contains components of Life Skills For Drugs Abuse Prevention, the section on Tobacco Harmful Effects are under utilized. Measures should be made to use the channels that are readily available at schools for a wider dissemination of information. Where there is no programme, every effort should be made to implement this topic through the school-based Health and Family Life Education Programme.

Coupled with this poor information dissemination is the easy access that students have to obtain objects with cigarette brand logos on them and the availability of free cigarettes from tobacco companies.

It was also observed that the level of discussion students have with their parents about tobacco use and the effects was very high, 65.9% However, exposure to information on tobacco effects differs at various other levels. There is need to purposely assess the

information dissemination status with every intent to make improvements for more effective results.

It is encouraging to note that 67% of the students who responded to the survey indicated that none of their parents smoked.

It was also recognized that there are some areas in tobacco prevention that are beyond the control of the programme implementers. Reference is made to the percentage of students who identifies with cigarette brand logos and the difficulty with which they source their supply. Several students have family members who live out of state who usually supply them with clothing. When these items are received the students may not have control over whether they wear it or not. This situation provides opportunities for more parent and guardian involvement in the intervention programme. This would not only provide information for management of student's tobacco behaviour but it would create greater awareness for parents to learn of the dangers for themselves and to apply or use the information to make adjustments in their smoking habits.

Access and Availability

According to data collected, there seemed to be easy access to obtain cigarettes and other tobacco products.

Seventy percent (70.9%) of the present current smokers indicated that their age did not prevent them from purchasing cigarettes. There could be several reasons for this:

- Lack of legislation and control for purchasing cigarettes or tobacco products largely contributes to the situation.
- Secondly adults from an early age use children to purchase tobacco products. Purchases by youth are quite common within the Dominican society.
- Thirdly, the percentage of current smokers who smoke at home was very high, particularly among the female students, 28.5%. The availability and having to purchase for adults could be a contributing factor.

This situation requires the implementation of regulations regarding the age of purchase for students. Measures such as penalties for shopkeepers who do not adhere to the legislation should be instituted to ensure strict control.

Environmental Tobacco Smoke

The data revealed that exposure to environmental tobacco smoke by non-smokers at home was much lower than exposure at public places. Exposure from others in public places was quite high by non-smokers. A little over half, 51.6% of them are exposed to environmental tobacco smoke.

It was also observed that current smokers' exposure was high both at home and in public places. It could be that they are exposed to their own smoke.

This means that there are significant differences between current smokers and nonsmokers. There is also high exposure by current smokers. These are maybe the reasons why never smokers desire a ban on smoking in public places.

The effort that is made by public service providers to ban smoking at their business places should be commended and strengthened by cessation legislation.

One of the questions asked was whether smoking should be banned from public places. 73.1% of never-smokers responded that smoking should be banned. Eighty percent (80%) of these respondents were females. For the question on harmful effects of cigarette smoke to non-smokers, 76% never-smokers indicated that smoke from others is definitely harmful to them. The current smokers, which are 13% of the respondents, indicated smoke from others is definitely harmful to them. 8.3% of the current smokers said they wanted to stop smoking at the time of the survey, 17.69% of those who ever smoked said they were not smoking for at least 2 years when the survey was conducted. Their main reasons for stopping were to improve their health, family members objected to it and their friends don't like it.

These responses show that the condition is right for a tobacco cessation programme. Before the study was conducted, the general population consensus was that cigarette smoking is not a problem in Dominica. Without current studies, that assumption seemed true, but with information that is gathered from this data the assumption is proven wrong. Truly, evidence is needed for any effective intervention or prevention programme to be developed.

Considering the wide cross section of the society that the survey covered, smoking habits or behaviours are well recorded among that particular target group. Therefore, programs can be developed for the concerned groups, for students who are in lower grades as well as those who are out of school and those who are in the various communities can also benefit greatly.

IN CONCLUSION

It must be reiterated that, tobacco use among the surveyed youth is quite high. Over onethird of the students ever smoked cigarettes, most initiated smoking before age 10, and 13% were current cigarette smokers. This evidence is adequate to cause concern among policy makers, programme implementers, parents, guardians and young people themselves.

It is frequently said that young people experiment with new and risky behaviours. They do not always consider long-term effect or consequences of such behaviours. The glamorous picture that is created by advertising companies usually cause them to underestimate the addictiveness of nicotine and the difficulties associated with quitting, nor the harmful effects that are related to smoking and exposure to tobacco smoke. Besides lung cancer, there are many other diseases that studies have shown to be caused by smoking; they include heart disease, stroke and other respiratory problems.

Several initiatives such as yearly media campaigns on World No Tobacco Day, schoolbased education sessions among students within the primary school level and to a minimal level at secondary and tertiary levels, and also several (private sectors that provide public services) business places declaring their property no-smoking areas, are interventions that are undertaken to create greater awareness of the dangers of smoking. The situation warrants more than awareness now. It requires action for deterrents and reduction in the prevalence of tobacco smoking.

RECOMMENDATIONS

Tobacco contributes to the foreign currency in Dominica, however the cost that the use of tobacco will have upon the youth in years to come if no intervention is considered for implementation will not be adequate to meet the cost of health care for smokers and those exposed to environmental tobacco smoke.

Considering the information the survey has provided, priorities and realistic implementable strategies must be developed if we are to record any long term and sustainable results.

Four broad strategies are recommended:

- Legislation
- Education
- Services
- Repeat survey after two years to evaluate

These must be implemented for success to be realized. Legislation without education will be ineffective and legislations with education without services will cause the programme to stagnate and be short-lived.

- 1. Legislation to include:
 - Age for teen to purchase cigarettes (include a fine for shopkeepers who do not adhere to the law)
 - Ban on advertisement on print and electronic media, including bill-boards
 - No smoking at public places to include:
 All government buildings, particularly hospitals, health centers and grounds, school building and grounds, seaports and airports
 All sporting events
- 2. Education inform responsible parties of survey results
 - Provide resources to have specially trained teachers to facilitate the school-based Health and Family Education Programme.

- Upgrade or reinforce the program component on Tobacco Prevention that is already prepared in the school program incorporated topic: The Drug Prevention Life Skills.
- Incorporate parents or guardians in sessions at Parent Teachers Association meetings and parenting programmes.
- Adult Education programme to incorporate topics to the existing programme
- Health Education activities at health centers, communities and youth programmes and adolescent programmes
- Continue media campaigns annually
- Continue in-service training for Education Facilitators
- 3. Services: Community Empowerment:
 - Conduct cessation programme in collaboration with Seventh Day Adventist and Drug Prevention Unit
 - Provide counseling services at health centres and other community centres in collaboration with Social Workers, Drug Prevention and Youth Division.
 - School debates and sporting competitions
 - Information meetings with media professionals
 - Obtain current information from international agencies for dissemination to facilitators and researchers
 - Screening by District health Teams as required for early detection and treatment of diseases or consequences

The programmes that are suggested should be directed under the supervision of the National Health and Family Life Education Committee. This Committee consists of stakeholders from government as well as private sectors or NGO's who are directly involved; pre-schoolers, adolescents and youth programmes.

Fourthly, the survey should be repeated 2 years after the intervention programme is implemented for effective programme evaluation for reporting on programme status and achievement.

Information will also be used for making adjustments to future programmes.