

Discussion

Prevalence

The critical importance of Prevalence, Brand Preference and other Studies on smoking among adolescents is underlined by the fact that, for decades, major tobacco companies have commissioned these studies as vital activities⁹. As far back as 1958, R. J. Reynolds Tobacco Company (RJR), one of the largest tobacco companies in the world, undertook national surveys of high school students which demonstrated smoking prevalence by brands smoked, sex, age and grade level⁹. In 1968, similar surveys were initiated by Philip Morris, the most prominent cigarette company in the USA for the past two decades⁹ and the world's largest multi-national cigarette company with global tobacco sales of over \$36 billion. Philip Morris manufactures Marlboro, the world's largest selling brand of cigarette¹⁰. Other large tobacco companies - the British American Tobacco Company, the other most dominant tobacco company in the world, Lorillard (L D) and Brown and Williamson (B & W) (in the USA) as well as Japan Tobacco have also been undertaking similar studies.

The fact that 33.8 % of students have ever smoked; the increase in the percentage of Ever Smokers to 45.2% of students in grade 10 from 33.3% in Grade 9 and the identification of 15.2% of students as Current Smokers (those who smoked on one or more days of the past 30 days—one month) indicates not solely curiosity during this period of experimentation for this age range but that smoking is a regular practice among a fairly high proportion of young people in Jamaica. The strong possibility therefore exists that there will be a significant increase in the percentage of habitual smokers over time as several of these students become grounded in the habit of smoking. This substantiates the National Adolescents' Students' Drug Survey which revealed an increase in the Lifetime Use of cigarettes (Ever Used) from 25.35 in 1987 to 27.1 in 1997 for Grade 9 students and moderately high Lifetime Prevalence for Grade 11 despite the percentage decline from 32.8 to 26.8 [Grade 11] ¹¹. However, under the GYTS, none of the Grade 11 figures were reported since the cell size was less than thirty-five³⁵. At the same time, it is interesting to note that the 1997 Adolescent Health Survey which was conducted in five Caribbean countries demonstrated that 89% of Jamaican adolescents 10-19 years ever smoked [one or two puffs]¹².

As stated previously, the current prevalence of cigarette use (smoked on one or more days of the past 30 days - one month) overall among students is 15.2% with almost an equal percentage of students in Grade 9 (15.7%) and Grade 10 (17.5%).

The 'festering' of the tobacco epidemic among Jamaican adolescents (with its ensuing health problems) is also evident in the fact that:

- a. 35.3% of students (13-15 years) initiated smoking before age 10 years and
- b. 14.8% of Never Smokers indicated that they would initiate smoking within the following year.

The National Adolescents' Students' Drug Survey conducted in 1997 revealed that the percentage of students who initiated smoking either prior to and while in high school were as follows: below Grade 7 - 12.8%, Grade 7 - 4.7%, Grade 8 - 3.7%, Grade 9 - 3.7%, Grade 10- 0.9%, Grade 11 - 0.8%, Grade 12/13- 0.3%¹⁰.

Several research studies worldwide have shown that the average age of initiation of cigarette use is 13 years and that in 90% of cases this is less than 18 years. The 1993 Risk Behaviour Survey (Jamaica) showed that 29% of males and 8% of females initiated smoking before the age of 15 years⁴. The GYTS (Jamaica) revealed that a larger percentage of students - 36.5% of males and 34.4% of females - initiated smoking (cigarettes) before age 10.

One of the major contributory factors to smoking initiation by children has been the fact that cigarettes are still being sold to adolescents without any legislative action to prevent and control this problem. This is further compounded by the single-sale of cigarettes (at J\$5.00 - J\$7:00 [US\$0.10 - US\$0.15) making this product more accessible, compared to the cost of a pack of cigarettes (20) which is \$100.00 - \$140.00 [US\$2.08 - US\$2.92].

The earlier the initiation of the habit, the more Adolescents and other persons find smoking cessation difficult even when they are motivated to quit. Thus, whereas cigarette companies claim that they do not want underage youth to begin to smoke⁹, they deliberately target the young. This negative motive of tobacco companies is clearly illustrated in a 1981 Philip Morris research report in which it was stated that: 'Today's teenager is tomorrow's potential regular customer and the overwhelming majority of smokers first begin to smoke while still in their teens... The smoking patterns of teenagers are particularly important to Phillip Morris.'¹³.

Moreover, prevention of the initiation of cigarette smoking or a decline in adolescent smoking such as those which occur due to price increases, additional taxation and other factors are considered to be a negative trend to be addressed by the industry. As reported in a Philip Morris document, '...the 1982-83 round of price increases... prevented 600,000 teenagers from starting to smoke... We don't need that to happen again'¹⁴. The price increase of cigarettes was due to increased excise taxes.'

Tobacco companies are also aware of the susceptibility of Adolescent Never Smokers to initiate smoking and experimenters as well as habitual smokers to increase smoking. Studies have shown that Susceptible Never Smokers have approximately twice the risk of initiating smoking as Non-Susceptible Never Smokers¹⁵. The existence of approximately 15% of Susceptible Adolescent Never Smokers in Jamaica is therefore cause for great concern as it is indicative of a grave situation in the near future.

In view of the high levels of smoking, early initiation and susceptibility of students to initiating cigarette smoking, stringent efforts should therefore be made to address these problems.

In addition, Male students are significantly more likely than female students to smoke cigarettes, use other tobacco products or any other tobacco product in terms of current prevalence as well as to be susceptible to initiating smoking within the following year. This gender difference may be attributed to the stigma still upheld within society against smoking by females.

However, the existence of almost equally high percentages by each sex in terms of the initiation of cigarette smoking prior to age ten - Female students (34.4%) and Male students (36.5%)—as well as the high percentage of female Ever-smokers 28.9%), Current Smokers (11.7%) and female students susceptible to initiating smoking in the following year (10.1%) is indicative of the shift among Jamaican female children, adolescents and adults in keeping with the worldwide trend of increasing smoking rates among females¹⁶.

It is also important to note that in terms of Lifetime Prevalence, Current Prevalence, and Initiation of Cigarette Smoking before age 10 and Susceptibility of Never Smokers, the second lowest percentage of Grade 9 students was 13% [Susceptibility to initiate smoking] and there was a slight increase in the percentage of relevant students in Grade 10 when compared with Grade 9, the exception being a decline in the case of Current Use of Other Tobacco Products.

This demonstrates the urgency of the need for the establishment of education and intervention programmes from the basic school level and their strengthening, expansion and revision from Grades 7-13 (See Section entitled School Curriculum).

The 8.3% Current Use of Other Tobacco Products is a revelation which underlines the necessity to conduct research to determine the most prominent among these products to facilitate the design of interventions for the prevention and control of tobacco use.

Knowledge and Attitudes

Various studies of young people's attitude and behaviour have been undertaken by tobacco companies in order to analyze the factors which stimulate adolescents to initiate and perpetuate cigarette use¹⁷.

As stated in a Phillip Morris document: 'It is important to know as much as possible about teenage smoking patterns and attitudes. Today's teenager is tomorrow's regular customer and the overwhelming majority of smokers first begin to smoke while in their teens.'¹⁸.

Popularity, 'sexual' attractiveness and athletic prowess are some of the principal positive images of smokers conveyed to, adopted and upheld by children and adolescents via advertising and other forms of promotion¹⁷. The fact that such a high and almost the same percentage of never smokers overall (31.7%), including those who are male (30.2%) and female (33.2%) students and in Grades 9 (32.1%) and 10 (35.9%), as Current Smokers (37.7%) are of the opinion that boys who smoke have more friends, must be viewed with grave concern.

These results indicate that smoking is a symbol associated with great popularity, particularly among boys. In the light of the significant percentage of Never Smokers who share the same opinion, the danger exists that a marked number of the Never Smokers, mainly boys, will also become Current Smokers in the effort to become popular.

At the same time, however, there is a significant decline in the percentage of Current Smokers in Grade 10 (17.5%) compared with Grade 9 (49.7%) students who are of the opinion that boys who smoke have more friends. Similarly, Current Smokers in Grade 9 (18.6%) are significantly more likely than those in Grade 10 (2.9%) to think that girls who smoke have more friends.

These figures show that, although the percentage of Current Smokers in Grade 10 with the attitude that boys who smoke have more friends remains high, smoking is viewed with declining popularity, the older is the current smoker. This is particularly true of girls.

Proof of the maintenance of a gender bias in the perception of smoking being more socially acceptable for boys than girls is evident in the fact that a much lower but almost equal percentage of Current and Never Smokers as well as male and female Current and Never Smokers are of the opinion that girls who smoke have more friends.

However, it is also important to note that the percentage of students overall (by grade) who are Never Smokers - 14.9% of Grade 9 and 16.0% of Grade 10 students and sex [20.3% (male) and 16.3% (female)] who think that girls who smoke have more friends is still high.

Fortunately, a lower percentage of the total number of students think that smoking makes boys or girls look more attractive than that boys or girls who smoke have more friends while 13.5% of Current Smokers and 7.8% of Never Smokers think that smoking makes boys look more attractive. Among male students, this opinion is held by an almost equal percentage of Current Smokers (12.1%) and Never Smokers (10.9%). Among female students, Current Smokers (15.7%) are significantly more likely than Never Smokers (5.4%) to think that smoking makes boys look more attractive. Very similar to the case for boys, 13.6% of Current Smokers and 6.8% of Never Smokers think that smoking makes girls look more attractive. Among male students, 13.5% of Current Smokers and 10.1% of Never Smokers are of this opinion. However, among female students, Current Smokers (13.9%) are more likely than Never Smokers (4.5%) to think that smoking makes girls look more attractive.

Access and Availability

The fact that approximately 51% of Current Smokers (50.8%) usually smoke at home and that there is no statistical difference between male and female students as well as those in Grades 9 & 10 highlights the problem of a significant percentage of both male and female students smoking within the home environment.

It is strongly assumed that this is occurring without their parent's knowledge. This underlines the need for parents to be more vigilant in terms of their children's activities. However, equally possible is awareness by some parents that their children are smokers. In such a case, a major deterrent is the inability to control the child and make the effort to eliminate this dastardly habit by the appropriate management of the situation via counseling and smoking cessation programmes. Unfortunately, no such programme currently exists in Jamaica.

A fair percentage of parents may either be in denial and/or be ashamed of the fact that their child is smoking and not wish to divulge this problem. It is therefore imperative that the results of this survey be widely publicized, urging parents to be very vigilant regarding whether their child/children may have started to smoke and make the effort to address the problem. However, it is evident that a significant number of adolescents are cultivating the habit of smoking in their homes, apparently without their parents being aware of this problem.

The urgent need for the enactment of legislation to ban the sale of cigarettes to minors is clearly shown by the fact that a significant percentage of Current Smokers - a little over a third - purchased cigarettes in a store and at least a quarter of students in Grades 9 to 11 were involved in this activity while almost three-quarters of students, an exceedingly high percentage, who bought cigarettes in a store were not refused because of their age, with no statistically significant difference between males and females.

However, there exists a major problem in the enforcement of laws prohibiting the sale of tobacco products to minors in those countries such as even the United States in which such legislation has been enacted. It was discovered that, in the United States, there was no active enforcement of youth anti-access laws in twenty-six of its fifty-one states and the imposition of negative consequences such as fines, warnings, arrests, civil court or administrative actions for violations was only reported in six of the other twenty-five states¹⁹.

Further, an analysis of 15 studies in which minors were utilized to attempt illegal purchases of tobacco products confirmed that 73% of these feigned purchases via over-the-counter sales were successful¹⁹. Sales rates as high as 87% attributed to over-the-counter sales to minors in the USA was revealed in 13 studies published between 1987 and 1993¹⁹.

Environmental Tobacco Smoke

Environmental Tobacco Smoke (ETS), Second-Hand Smoke or Passive Smoking may be defined as emissions from a tobacco product smoked by another individual. It is a complex mixture of over forty⁴⁰ substances which are human carcinogens such as Arsenic, Asbestos, Coke Oven Emissions, Radon and Mustard Gas, Benzene, 1, 3 - Butadiene, Cadmium, Vinyl Chloride, 2-naphthylamine, Chromium VI and 4-aminobiphenyl²⁰. Environmental Tobacco Smoke (ETS) has been classified as a Group A carcinogen under the United States Environmental Protection Agency (EPA) carcinogen assessment guidelines^{21 22}.

Cancers and eighteen other major disease groups or conditions have been shown by scientific evidence as being either definitely caused or strongly indicated as possibly being caused by Exposure to Second-Hand Smoke/ETS (See Appendix I for the Summary of the Conclusions of six major Scientific Reviews and three additional studies on the health effects of Exposure to Second-Hand Smoke/ETS)²³.

The ten conditions which are caused by such exposure are, in adults, Cancers - mainly Lung and less prominent - Nasal Sinus in addition to Coronary Heart Disease and in children, Fetal Growth Impairment - Low Birth Weight and Small for Gestational Age, Sudden Infant Death Syndrome (SIDS), Respiratory Symptoms, Decreased Pulmonary Function, Lower Respiratory Tract Infections (Acute - Bronchitis and Pneumonia as well as Chronic - Asthma Exacerbations) and a major Upper Respiratory Tract Infection - Middle Ear Disease (Otitis Media) which frequently results in the hospitalization of children world-wide²⁰.

The nine conditions which are strongly indicated to be possibly caused by Exposure to Second-Hand Smoke/ETS are, with regard to children - Developmental Defects - Spontaneous Abortion and an Adverse Impact on Cognition and Behavior; Respiratory Effects, specifically Asthma Induction and Decreased Pulmonary Function; Exacerbation of Cystic Fibrosis and in adults: Breast and Cervical Cancer and Cerebrovascular Disease (Stroke)²⁰. There also exists the possibility that Tobacco Use may also be associated with an increased risk of Osteoporosis²⁴.

The risk of development of new cases of Asthma (a major chronic Lower Respiratory Tract Infection) in children and infants who have not previously displayed symptoms as well as the frequency and severity of asthma exacerbations/attacks in these vulnerable youngsters are also significantly increased by Passive Smoking. It has been estimated by the EPA that the condition of 200,000 to 1,000,000 asthmatic children in the USA is aggravated due to this adverse exposure^{25 26}.

The dominance of Asthma among chronic childhood illnesses in Jamaica is revealed by hospital morbidity patterns and primary care data. Asthma among children (0-14 years old and mainly, the 0-4 year olds in Jamaica is the major condition with which patients registered to be seen at the Casualty/Accident and Emergency Departments of hospitals from 1995-1998 was diagnosed²⁷. In 1999-2001, this was also the situation with respect to asthmatics (all age groups) at these health facilities.

The problem of exposure to Environmental Tobacco Smoke is therefore of critical importance. The fact that almost 60% of Current Smokers as against 23% of Never Smokers

are exposed to smoke from others in their home not only indicates that many more parents or other family members of Current Smokers smoke at home but that many of these children and adolescents may have become smokers because of the negative influence of their parents, other family members and other persons in this regard. This is apparently a major contributory factor to the high%age of children and adolescents who initiate smoking at an early age.

In addition, a fairly high%age of Never Smokers (23%) are exposed to smoke from family members in their home. It is little wonder, therefore, that 15% of Never Smokers are susceptible to initiating smoking (see Table 1:% of Students who Use Tobacco). The strong possibility exists that some of these Never Smokers will succumb to the negative influence of their elders and other family members and become regular smokers. In total, however, an exceedingly high%age of students are exposed to smoke from family members/others in their home. This indicates that a high%age of family members/others in the home are either so addicted to Nicotine and consequently, the smoking habit, that they are insensitive to or in denial regarding the negative health consequences for the children and adolescents within their particular household or oblivious to the negative health effects of smoking or aware and conveniently in denial regarding these dangers.

Logically, an even higher%age - a little over three-quarters - of Current Smokers (77.9%) are significantly more likely than Never Smokers -a little over 50% - to be exposed to smoke from others in public places. The more negative situation for Current Smokers is again explained by the fact that they will more likely be in the presence of other smokers than non-smokers. However, the high%age of Never Smokers exposed to Environmental Tobacco Smoke (ETS) is indicative of the wide scale of the problem.

This underlines the critical importance of banning smoking in public places including schools (at the early childhood, primary, secondary and tertiary levels), Government and quasi-Government buildings and properties throughout Jamaica. Overall 72% of Never Smokers and 64% of Current Smokers are of this opinion.

More explicitly, emphasis on the development of smoke-free environments /prohibition of the smoking of tobacco products and any other form of substance abuse in schools at the pre-primary (basic school), primary, secondary and tertiary levels is critical as, despite the fact that students -children and adolescents (0-17 years old) and even young adult students (18+ years old)-are prohibited from smoking, teachers/lecturers are still permitted to smoke. By smoking, teachers/lecturers are thus poor role models, negatively influencing the pliable young and endangering other teachers and their students by Exposure to Second Hand Smoke.

Naturally, Never Smokers (78.4%) are significantly more likely than Current Smokers (67.3%) to think that smoke from others is harmful to them. However, it is evident that a high%age of both students who are Current Smokers and Never Smokers in secondary schools are aware that Exposure to Environmental Tobacco Smoke (ETS), that is Second-Hand Smoke or Passive Smoking yields very negative health effects and should be banned from public places. It would be interesting to see whether this opinion would be upheld if a query were to be made whether these students are of the opinion that smoking in homes should be eliminated.

Cessation

In keeping with international trends among smokers, a very high proportion of students in Grades 7-11 want to stop smoking (73.3%) and attempted to quit (68.1%) in 2000, thus demonstrating a major effort and high self-efficacy to stop smoking^{28 29 30 31}. Moreover, surveys have revealed that approximately 70% of current tobacco users in the United States and 87% of current users in the Dominican Republic reported a major interest in the cessation of tobacco use²⁸.

It is interesting to note that the GYTS revealed that, in Jamaica, male students demonstrate a higher propensity to desire to quit and attempt to do so, although there was no statistically significant difference between males and females in this regard.

The Addictive Nature of Nicotine

Despite the strong desire and major effort to quit smoking, the Current Prevalence of 15.2%, Lifetime Prevalence of 33.8% among Jamaican students and the fact that 35.3% of them initiated smoking before age 10 should be treated with major concern as these statistics are proof of the gravity of the smoking problem among Jamaican adolescents. Moreover, much empirical evidence exists to prove that the earlier the age of initiation, the greater the difficulty experienced to quit smoking due to the strong addictive nature of Nicotine evident in pharmacological and behavioural processes similar to those which determine addiction to other psycho-active drugs such as heroine and cocaine^{32 33 34 35}.

Nicotine is delivered to the brain within seven seconds of a puff, quicker than by intravenous injection. Its peripheral effects are the increase in the blood pressure, heart rate and Serum Adrenaline. Cutaneous Vasoconstriction occurs when it is administered at rest.

Exposure to Risk

Moreover, deliberate exposure to Risk is a characteristic of Adolescents and young adults which yields very negative consequences. Despite the common knowledge that tobacco smoking is a major cause of Lung/other cancers, Coronary Heart Disease and other major disease conditions, adolescents and young adults persist in smoking as they have difficulty in appreciating these health effects since tobacco-related diseases usually become evident fifteen (15) or more years after smoking has been initiated.

Smoking Cessation Programmes

Unfortunately, no smoking cessation programme is being provided at any institution in Jamaica. Substance Abusers are admitted, of their own volition, into a four-week residential detoxification programme at the Detoxification and Rehabilitation Unit at the University Hospital of the West Indies and Richmond Fellowship (Patricia House) for treatment of addiction to a drugs such as Cocaine or Marijuana, not Nicotine. However, patients are not permitted to smoke any substance (including tobacco products) from the inception of their treatment programme.

It is important to note that there is an increasing demand for the establishment of a smoking cessation programme at the Detoxification and Rehabilitation Unit of the University Hospital of the West Indies indicated by requests and the significant number of Current Smokers in Jamaica. Collaboration between the various public and private entities engaged in the prevention and treatment of substance abuse for the development and implementation of appropriate Smoking Cessation programmes for adolescents is critical.

Tobacco Promotion/Advertising

The far-reaching and very negative impact of tobacco advertising and promotion, in general, is evident in the fact that although the majority of students (74.4%) have seen anti-smoking media messages, a significant percentage of Never Smokers (58.4%) and Current Smokers (71.4%) have seen pro-tobacco messages in the print media (newspapers and magazines) and a fairly high percentage of Never Smokers (11% and 6.1% respectively) and naturally, an even higher percentage of Current Smokers (23% and 15% respectively) possess a promotional item and have been offered free cigarettes.

The susceptibility of 15% of Never Smokers to initiate smoking (within the following year), fact that 35.3% of students initiated smoking before age 10 and 15% of students are Current Smokers is proof of the dastardly effect of tobacco advertising and other forms of promotion in Jamaica and the rest of the world.

Several studies have shown that Advertising, Sponsorship and other forms of Promotion/diverse Marketing Strategies by the tobacco industry including pro-tobacco messages in the media, the distribution of free cigarettes and provision of free items with a cigarette logo are causally associated with the susceptibility to smoking and above all, the onset of smoking by children and adolescents [0-17 years] ^{36 37 38 39}.

In Jamaica, there was no gender difference between students in terms of the percentage of male and female students who initiated smoking before age 10. At the same time, however, it should be noted that male students demonstrated a higher propensity to smoke than female students among Ever Smokers (Lifetime prevalence), Current Smokers, current use of any and other tobacco product as well as susceptibility to initiate smoking within the following year.

However, a moderately low to moderately high proportion of female students are susceptible to initiating smoking in the following year (10.1%) and are Current Smokers (11.7%) and Ever Smokers (28.9%).

This affinity to smoke demonstrated by female students is in keeping with the worldwide trend among girls - 10 to 17 years old - of a significant increase in smoking initiation among this group due to the production and promotion of specific brands of cigarettes focusing on the image of emancipation, independence and individuality combined with glamour, slimness, sophistication and sexuality targeted at young and impressionable girls and women⁴⁰. Among adolescent girls in the USA, smoking initiation rose steeply in about 1967 when tobacco advertising started to focus on specific brands of cigarettes for women, the principal ad being the 'You've come a long way, baby' campaign for Virginia Slims, the prototypical cigarette targeting women and was most prominent in 1973 when sales of these brands peaked.

Moreover, adolescence is a period in which there is a major search for identity via experimentation. Smoking among children is one of the risk behaviours stimulated by cigarette advertising to a significant degree as it has the powerful effect of associating cigarette smoking with athletic prowess, sexuality, success, sophistication, adventure and self-actualization¹⁷ and is recognized as a 'rite of passage'⁴¹.

As such, despite the common argument held by tobacco companies that the objective of advertising is to stimulate adult smokers to switch brands¹⁷, advertising and other forms of promotion/diverse marketing strategies by the tobacco industry including sponsorship by Tobacco companies via the media and other means such as on billboards and a one-to-one/individual basis has resulted in an overall increase in the consumption of cigarettes by children and adolescents [0-17 years], in particular.

Evidence of this is contained in studies and reports by tobacco companies. A 1996 study showed that teenagers are three times as sensitive as adults to advertising⁴². A survey showed that 86% of children and adolescents who smoke prefer the three most heavily advertised brands - Marlboro, Camel and Newport. Another study showed that 91% of six (6) year old children surveyed identified Joe Camel cartoon character as being associated with cigarettes, approximately the same %age who recognized Mickey Mouse.

The tobacco company - Phillip Morris - highlighted the success of the image of the Marlboro Man cowboy among underage youth in the following manner—"Marlborohit a responsive chord among post-war baby boom teenagers with the theme from the Magnificent Seven and an image uncalculatedly Marlboro thus became the most popular brand among children and adolescents and subsequently, adults⁴⁴.

In this regard, it is important to note that Marlboro, the most heavily advertised brand, is consumed by 60% of Youth Smokers in comparison to 25% of adult smokers⁴⁴. Empirical evidence of this direct link between advertising and increased cigarette consumption is found in at least twenty (20) other studies including eighteen (18) [seven (7) from the United States, seven (7) from the United Kingdom, two (2) from New Zealand and one (1) from the then West Germany and Australia] which were reviewed by the British Department of Health in 1992⁴⁵.

The two other studies included a 1989 study by the Government of New Zealand which examined data from thirty-three (33) countries in which the conclusion was drawn that "Advertising is directly related to the number of cigarettes smoked and less advertising means fewer smoked"⁴⁶ and a 1996 study by the University of Cape Town's Economics of Tobacco Control Project.

Promotion by tobacco companies results in Cigarette consumption being increased in four ways:

- encouragement of experimentation with tobacco products and initiation of smoking on a regular basis by children, adolescents and young adults
- increase in the daily consumption of tobacco by current users
- reduction of the motivation to quit by Current Smokers/users and
- encouragement of the resumption of smoking/tobacco use/relapse by quitters/former regular or frequent smokers.

However, there has been a decline in tobacco promotion to mainly advertising on billboards and the sponsorship of events.

It is therefore critical that legislation be introduced in Jamaica in the very near future to prohibit all forms of advertising, sponsorship, distribution of free cigarette samples and products as well as other means of promotion by cigarette/tobacco companies and the structure established to ensure that those measures are enforced.

School Curriculum

The fact that only 41% of students (Grades 7-11) were taught the dangers of smoking and even a smaller percentage (27%) were involved in discussions on the reasons why people their age smoke may be attributed to deficiencies in the current Prevention Education Programme (PEP).

The objectives of the Prevention Education Programme (PEP) are:

- a. to equip students from the pre-primary to the secondary school in Jamaica with appropriate refusal, problem-solving, coping and other Life Skills for the development and practice of positive attitude and behaviour to deter the initiation of the use of addictive substances on exposure to them;
- b. ensure that experimental use does not become habitual use and
- c. prevent psychological or physical dependence on psychoactive substances, thereby reducing the demand for such substances⁴⁷.

The process involves ensuring the availability of appropriate information to school personnel, students and parents as well as utilizing modes of communication with the most modern form of information technology possible.

A limited number of students have benefited from the programme as it is taught in only 30% of schools due to financial and resource material constraint and overworked Guidance Counsellors.

The vital importance of school-based tobacco use prevention programmes in reducing the prevalence and incidence of tobacco use among adolescents has been proven in the USA by more than ninety (90) controlled trials of such interventions which have been published since the mid-1970s⁸. The most successful of these programmes have 2-4 year follow up periods (longer periods having not been proven to be beneficial) and focus on the teaching of life skills to withstand social pressures to use tobacco as well as the short and long-term effects of tobacco use.

School Curriculum

Table 7: School Curriculum [Jamaica] GYTS, 2000

Category	Percent taught dangers of smoking	Percent discussed reasons why people their age smoke
Total	40.8(±5.9)	26.7(±4.5)
Sex		
Male	40.5(±7.1)	24.6(±4.8)
Female	41.7(±6.8)	28.5(±5.6)
Grade		
9	39.2(±9.5)	24.8(±8.0)
10	46.2(±10.0)	34.3(±8.3)
11	**	**

** - Less than 35 cases in the denominator

Overall 40.8% of students have been taught the dangers of smoking. There was no significant difference by gender nor grade but a larger percentage of Grade 10 (46.2%) than Grade 9 students (39.2%) have been taught these dangers. However, the reasons why people their age smoke have only been discussed among 26.7% of students comprising 24.6% of male and 28.5% of female students. The difference was also not significant by gender nor grade.