Our Own English High School, Sharjah (Boys' Branch)
Grade X C Bio Holiday Homework 2012

# **Smoking and its ill effects**

## **Research and Action Plan**

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Photo of school students smoking in Dubai

### Introduction

Smoking is not a rare phenomenon in cities like Dubai unlike villages in India where illiterate and few of the richer society smoke. While in Dubai, smoking can be seen from old age people to young age budding teens.

Many people are aware while some are aware of the harmful effects but they ignore them. But, here we hope this work of ours may help at least a few smokers to guit this dangerous hobby.

# Research

### **Problem:**

Cigarette Smoking and Nicotine Addiction

Cigarette Smoking is the main and primary cause for nicotine addiction and more cigarettes lead to occurrence of many diseases which include Cancer, Bronchitis, etc.

Nicotine causes addiction to cigarettes and other tobacco products that is similar to the addiction produced by using heroin and cocaine. Tobacco use is considered as mentally addictive as cocaine and as physically addictive as heroin.



#### **Nicotine**

Nicotine is the drug in tobacco that causes addiction. It is absorbed and enters the bloodstream, through the lungs when smoke is inhaled, and through the lining of the mouth (buccal mucosa) when tobacco is chewed or used as oral snuff or for non-inhaled pipe and cigar smoking. Nicotine is a psychoactive drug with stimulant effects on the electrical activity of the brain. It also has calming effects, especially at times of stress, as well as effects on hormonal and other systems throughout the body.

#### **Chain Reaction**

### Smoking is a physical addiction that produces a "chain reaction" in the body:

- Nicotine acts on receptors normally used by one of the main **neurotransmitters** in the brain and nervous system (acetylcholine). Neurotransmitters are the "chemical messengers" released by nerve cells to communicate with other cells by altering their electrical activity.
- The body responds to nicotine at these receptors as if it was the natural transmitter (acetylcholine) and the activity and physiological functions of many brain systems are altered
- ❖ With repeated nicotine dosage the body adapts to what it regards as extra **acetylcholine** in an attempt to restore normal function.

### What's in a cigarette?

Tobacco smoke is a mixture of gases and small particles made up of water, tar and nicotine. The tar is a messy mixture of hundreds of toxic chemicals, many of which are known to cause cancer. Many of the gases in tobacco smoke are harmful. These include carbon monoxide, nitrogen oxides, hydrogen cyanide, ammonia, etc. Due to the high temperatures (over 800°C or 1400°F), the burning end of a cigarette is like a miniature chemical factory. It churns out many more noxious chemicals than are found in unlit tobacco or taken in by use of smokeless tobacco (for example, snuff, which contains no tar or gases). Altogether more than 4,000 chemical compounds have been identified in tobacco smoke.



Tobacco kills more Americans than AIDS, drugs, homicides, or accidents do.

# How bad is this problem?

Smoking is the largest preventable cause of premature deaths, etc and smoking does not only impact the smoker but also the community as well.

### **FACTS AND FIGURES!!**

According to doctors of the UAE, regular Shisha smokers have also been included in the category of smokers. Now let us look to some headlines, facts, etc and classify it in magnitude.

### **UAE**

30% of UAE community are smokers

Khaleej Times

8008

Thirty per cent of the UAE population whose age group ranges 20-30 smoke shisha, two doctors at Rashid Hospital have revealed during a medical lecture held at Al Tawar Ramadan Camp.

Dubai Smokers have 15 a day

"Most of the smokers here in Dubai are 20 to 30 years old whereas the average daily consumption hit 15 cigarettes per person," said Dr Bassam Mahboob, consultant respiratory physician at the Rashid Hospital.



#### **GENERAL**

- ❖ Every day between 80,000 and 100, 000 children worldwide start smoking. And around 50% of those who start smoking in adolescent years go on to smoke for 15 to 20 years.
- Every 8 seconds, someone dies due to smoking
- Smoking is responsible for 87 percent of deaths from lung cancer, 21 percent of deaths from heart disease, 18 percent of deaths from stroke, and 80 to 90 percent of deaths from chronic obstructive pulmonary disease (emphysema and chronic bronchitis).
- ❖ 20% of teens smoke worldwide

The favourite pastime at a desert safari is Sheesha. According to doctors, Sheesha smoking is three times harmful than cigarette smoking.



### **Effect on smokers (people)**

Smoking affects each and every part of the body. Let us look to some of them below:-

#### **BREATHING PROBLEMS**

Scarring of the bronchi and holes in lung tissue result in inflammation and lower blood oxygen levels. This causes breathing difficulty known as chronic obstructive pulmonary disease, which limits exercise tolerance and general physical activity.

### HEART HEALTH PROBLEMS

Nicotine and other substances in cigarettes speed up heart rate and damage blood vessels to bring on clogged arteries, in a relatively short time. This health problem Urea, a chemical compound that is a major component in urine, is used to add "flavor" to cigarettes. combines with other factors related to cigarette smoking to cause coronary heart disease. Cardiovascular and blood clotting abnormalities may end in heart attack, aneurysm or stroke.

#### **OTHER PROBLEMS**

Smoking delays healing of **peptic ulcers** of the stomach and duodenum, many of which would heal spontaneously in non-smokers.

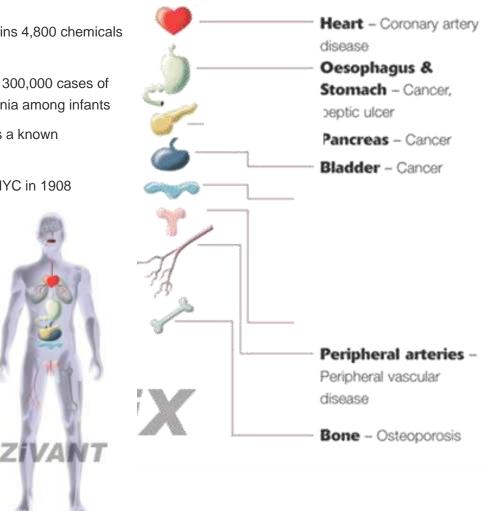
Its effects on blood vessels cause **chronic pains in the legs** which can progress to gangrene and amputations of the toes or feet.

An effect on elastic tissue causes **wrinkling of the skin of the face** to develop earlier in chronic smokers. On average they look 5 years older than non-smokers of the same age do.

Smoking **accelerates the rate of osteoporosis**, a disease which causes bones to weaken and fracture more easily.

# fun facts

- -it was brought to Europe by Columbus' sailors
- -smoking was banned in Buckingham palace by the queen
- -cigarette smoke contains 4,800 chemicals
   -69 cause cancer
- -smoking causes up to 300,000 cases of bronchitis and pneumonia among infants
- -second hand smoke is a known carcinogen
- -a law was passed in NYC in 1908 banning women from smoking
- -once inhaled smoke reaches the brain faster than drugs



Brain - Stroke

Lungs - Cancer,

Cancer

Mouth and pharynx -

emphysema, bronchitis

## **Effect on Community (others)**

Smokers are suiciders by choosing their method of dying (smoking), etc. Smokers are not only suiciders, but they are also murderers. This is through passive smoking.

### **Passive Smoking**

Passive smoking is the inhalation of smoke, called second-hand smoke (SHS), or environmental tobacco smoke (ETS), by persons other than the intended 'active' smoker. It occurs when tobacco smoke permeates any environment, causing its inhalation by people within that environment. Exposure to second-hand tobacco smoke can cause disease, disability, and death.

### **Dangers of Passive Smoking**

Let us look through some of the dangers below:-

It has been found that Passive smoking has caused lung cancers. There is also some evidence suggesting it may be linked with childhood leukemia and cancers of the larynx (voice box), pharynx (throat), brain, bladder, rectum, stomach, etc.

Secondhand smoke can cause harm in many ways. Each year in the United States alone, it is responsible for:

- An estimated 46,000 deaths from heart disease in people who are current non-smokers
- About 3,400 nonsmoking adults die of lung cancer as a result of breathing SHS
- Worse asthma and asthma -related problems in up to 1 million asthmatic children
- Between 150,000 and 300,000 lower respiratory tract infections in children under 18 months of age, and lung infections resulting in 7,500 to 15,000 hospitalizations each year.



Poster made by Vijay



Two men who appeared in the wildly popular Marlboro Man advertisements died of lung cancer, earning Marlboro cigarettes the nickname "Cowboy Killer."

The first owner of the Marlboro company died of lung cancer.

# What is an action plan?

Action plan is a set of ideas, plans, etc put together to achieve an ultimate reason. Here in this project, our goal is to work for a smoke free earth.

# **Smoke Free Earth foundation**

Instead of just interviewing a few people and only submitting it as a project, our group members decided to start a group by the name "Smoke Free Earth" (sfe.). We decided that it would be a community of people who stand against smoking and all of them can get a platform to work for a smoke free earth.

We developed a website <a href="https://www.smokefreeearth.weebly.com">www.smokefreeearth.weebly.com</a> which includes details about hazards of smoking.



### **Awareness Seminar**

Date: 20th August 2012

Venue: Maths Tution Centre, Anchal, Kollam, Kerala

George Zacharia of our group went to a Maths tuition centre situated in the city of Anchal. He gave an awareness talk to a class of more than 20 students of grades 7 and 8. He conducted the class during the interval of the maths tuition.

With the vision of "sfe.", he presented the class in simple ways without using complicated explanations, etc. He

limited the class to 10 minutes which included topics from what is smoking, what is in a cigarette, why people start smoking, harmful effects of smoking, etc. He used his laptop as an aid to show pictures, posters, etc so that the students get interested in the topic.



completely without doubts.

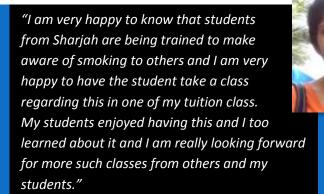


He also stressed the harmful effects of "second hand smoking" and the tendency to smoke in teenage years. He was successful in making the whole class to join Smoke Free Foundation by taking a decision to never to smoke in their life and also to prevent others from smoking.

The class was conducted in Malayalam and also English so that the students can understand talk The students enjoyed the class.

"We enjoyed the class and got know the harmful effects of smoking which we did not know till now. We will also do our best to spread this message to others"

-Donna (student)



-Ms. Lailamma

### **Posters, Animation and Comics**







We believe that the best way to spread awareness is the visual medium. We have made some hand drawn and computer made posters, animations and also comics about the harmful effects of smoking.

### Website

We also developed a website <a href="https://www.smokefreeearth.weebly.com">www.smokefreeearth.weebly.com</a> which contains the topics which we covered in the awareness talks and also some information, pictures and videos that will increase awareness.



# People and Laws to help us out

It is not possible for us only to spread the word. There are many people, organizations and also laws that can help us spread the word.

# Laws of the United Arab Emirates regarding Smoking

- Article 4: It is not allowed for any person to
  promote or advertise for any tobacco products in
  any way that encourages its consumption, as per the regulation.
- Article 5: It is prohibited to do any of the following activities: It is prohibited to do any
  of the following acts:
  - 1. Sell or attempt to sell tobacco or any of its products to those less than 18 years of age. The vendor selling tobacco has the right to request from the buyer to present evidences of his/her age.
  - 2. Sell or attempt to sell sweets and toys that look like tobacco or any of its products. Sale or attempted sale of sweets and games that is similar to tobacco products.
  - 3. Smoking while driving with the present of a child less than 12 years of age. Smoking during driving the private car in presence of child did not exceed twelve-years-old.
- Article 7: It is prohibited to smoke in closed public spaces.

### People who can help us out

### **Governmental**

- ➤ Educational officers: They can include a lesson or a reading extract regarding the harmful effects of smoking in any subject
- Commerce, etc officials: Increase the tax on tobacco products and strict enforcement of the laws in the country
- Government: Form strict laws regarding smoke to prevent teenagers from tobacco products and also banning ads, or any material advertising smoking, etc
- Establish governmental Smoking cessation centers (at least one in every state) and promote private smoking cessation centers

#### **Others**

➤ NGO's and organizations: Such people have more contact as they regularly conduct events, etc and they can also spread the awareness about the harmful effect of smoking

> Smokers itself can help us out by realizing that smoking is a dangerous habit and they themselves can take a firm decision to stop smoking and make use of various things that can help them out

### Be an example

Each and every member of our group have decided to be lifelong ambassadors for a smoke-free earth. We have counseled each and every person we have interviewed and also the people who we have worked with for this project and we are always willing to save others lives. George Zacharia became a student ambassador for "Monszone" which is a Dubai organization working for a right for everybody for a non smoking surrounding.



### Families of smokers

Many families have a smoking member in their family. They all experience passive smoking and they are in risk of many dangerous diseases. They can make understand him/her the dangers and they can pose the problems and he will understand with time. Some of the ways they can help him out:

- i) Make him understand the problems of smoking
- ii) Make him know of his smoking habits
- iii) Get awareness about the medical ways to remove nicotine addiction, etc

# **Our interactions**

We have tried our best to interview a few smokers, etc for this project to understand the problem better.

### **George Thomas (George)**

Working at Wilhelmsen Shipping services, Dubai Interviewed by George Zacharia (interviewer)

Interviewer: When did you start smoking and for how long have you

been carrying this habit?

George: Started at the age of 21 and it is 31 years now.

**Interviewer**: What were the reasons for you to take this habit?

George: I did this to show others that I am matured and I believed to accept as a genius among

others those times when started

**Interviewer**: Have you had an ardent desire to stop this habit?

George: Yes, of course.

Interviewer: Do you face any difficulties or facing any problem after starting smoking?

George: Yes, I have reduced appetite when compared to others and also continuous breathing problems, lung diseases and snoring.

**Interviewer**: What is your message to the student community about smoking?

George: Do not smoke and do not promote smoking

### Mr. Dhayanand Working at Petrofac, Interviewed by Guru

**Guru**: How long you have been smoking and when did you start smoking?

Dhayanand: Since 20 years and I started at 21 years during my final year at engineering college.



Guru: What are reasons for you to get into this habit and did anybody force you?

Dhayanand: Through friends after college and Yes, my college friends have forced me.

Guru: Why are continuing to smoke and have you ever felt to stop this habit?

Dhayanand: it started as fun and then it became as habit. I have tried 3-4 times to stop this habit.

Guru: Are you suffering from heart problems, breathing problems etc. after smoking?

Dhayanand: I am suffering from a high cholesterol problem

Guru: How many packets of cigarettes do consume for smoking?

Dhayanand: 2 cigarettes a day and occasionally 4-5 cigarettes per day

# Mr. Alim Interviewed by Jitesh and Ibrahim

JI:- HOW LONG U ARE Smoking?

**ALIM:- FOR PAST 4 YEARS I AM SOMKING.** 

JI:- WHY ARE U SMOKING?

ALIM :- I AM SMOKING BECAUSE TO GET RELIEF FOR MY TENSIONS .



### Mr. Siraj

Interviewed by Jitesh and Ibrahim

JI:- HOW LONG U ARE SOMKING?

SIRAJ: FOR PAST 2 YEARS I AM SOMKING.

JI:- WHY ARE U SMOKING?

SIRAJ:- I AM SMOKING BECAUSE I AM ADDICTED TO **SMOKING** 



A wonderful interview from a person who has stopped smoking

## Mr. C.B. SURESH

Working at Wilhelmsen Shipping Services, Interviewed by George Zacharia

George: Respected sir, When did you start smoking and for how long have you been smoking and when did you stop?

Suresh: Started smoking in year 1973 and stopped smoking in year 2004.

**George**: How did you stop smoking?

Suresh: Tune your thought process to realize that Smoking is not a solution

to your problems...

**George**: What are the benefits that you enjoyed after smoking?

Suresh: Increased appetite for food.... No more "smoker's cough"... Better

breath control... Frequency of Head-aches reduced drastically...

**George**: What is your message to the student community about smoking? Suresh: Smoking kills your personality... your performance.... and finally YOU....



### Some anti smoking tips

To quit smoking a person must be mentally strong. When you want to quit smoking you must first reduce the damage that nicotine has caused. So the first few days, drink LOTS of water and fluids to

help flush out the nicotine and other poisons from your body

The second step is to control the urge to smoke. The urge to smoke only lasts a few minutes and will then pass. The urges gradually become farther and farther apart as the days.

To control the there are several ways-

- Get some picture of those who are severely affected by smoking. This will create a fear in your mind and can control the urge to smoke.
- Don't drink alcohol, coffee, or any other drinks you used to have with cigarette. Try something else instead - maybe different types of waters, drinks or fruit juices.
- Find new habits, indulge in some work which will reduce stress like painting, etc. and create a non-smoking environment around you.

Regular sleep, exercise will help reducing stress.



SINGAPORE CANCER

Third step is to join some anti smoking organization .participation in some organization will really help quitting.

### A follow up and case study

We have enjoyed doing this project and we do hope that people may benefit from this. We did follow up on some people we looked and we did see them understand the hazards they have faced due to the problem and they also got awareness. We are sure that the students we had taught in Kerala will spread the message to the friends and peers.

This habit can be easily wiped out from the young generation by strictly following the federal laws and also making more strict laws in other countries. Students should be taught the hazards and also public smoking should be banned to prevent passive smoking. Warning notices with pictures should be put on all cigarette packs and the prices should increase. Same thing should apply to Sheesha, beedi, etc.

Also smoking scenes in TV programs and movies should be blurred with warning notice.

Families can help a lot in the process to eradicate smoking in families. Teachers too can be a part of this by raising this issue in debates, talks, discussion, etc. With participation from everyone we can help make a earth that is smoke-free.

We thank the people who have encouraged us and helped us especially our parents, teachers, friends and well wishers. We also thank those who discouraged us as their suggestions helped us make it better.