



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SCHOOL OF COMPUTING
Faculty of Engineering



SMOKING ISSUES

NAME: KAMALIA AMIRAH NADHIRAH BINTI KAMAL RAMLEE

I/C NUMBER: 991010-03-5742

MATRIC NUMBER: A18CS0339

PROGRAM: SCSB (BIOINFORMATIC)

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INTRODUCTION

Smoking is originally built from the word smoke which is if we refer to merriam webster it means the gaseous product produced by the burning materials especially from the organic product by the presence of small particle of carbon. Smoking is a verb or an action that is took place by the smoker by inhaling and exhaling the fumes of burning plant material, especially tobacco. In the beginning, tobacco is used widely in medicinal and religious activity. Until then, tobacco gain popularity in Europe because of its healing properties, and European believe that tobacco could cure almost everything until the incurable disease, cancer. In 1588, a Virginian named Thomas Harriet introduce the smoking of the tobacco, but then he died because, in that time, they tend to breath the smoke through their nose. In 1826, nicotine is discovered. The famous Philip Morris established, they sell hand-rolled Turkish cigarettes in 1847. Then, cigarettes became popular because of the soldier.

Bet everyone already know that in a cigarette contain too many poisonous and killer ingredient. It is said approximately 7,000 ingredients contained in a cigarettes and 69 out of 7,000 are the chemical that are known to be the causes of cancer. A part of ingredients that are found in the tobacco cigarettes are :

- ⊗ Acetone (propanone). It is organic compound that is used in the nail polish remover. It is flammable liquid.
- ⊗ Acetic acid (ethanoic acid). A compounds that is used in hair dye.
- ⊗ Ammonia is found in the household cleaner.
- ⊗ Arsenic, also found in rat poison which is if excess exposure can cause cancer.
- ⊗ Benzene is a flammable liquid found in rubber cement.
- ⊗ Butane is an alkane that is widely used in lighter fluid.
- ⊗ Cadmium generally used as component in rechargeable battery.
- ⊗ Carbon monoxide is a poisonous gas that can kill produced from a car exhaust fumes.
- ⊗ Formaldehyde (methanal) is used in building materials and household products.

- Ⓢ Hexamine actually used in medicinal to treat urinary tract infections, however, it can cause side effects.
- Ⓢ Lead is used in car batteries.
- Ⓢ Naphthalene as we know is the mothballs and insecticides.
- Ⓢ Nicotine contain nitrogen and similar to cocaine and caffeine.
- Ⓢ Tar used in paving roads.
- Ⓢ Methanol is extremely toxic to humans that are useful fuel for racing cars.
- Ⓢ Toluene is a solvent that is used in paint thinners and nail polish remover.

Basically, almost all of the ingredients above are the great causes of cancer. Either skin, nose and more other cancer which is known until today does not have any cure. The four main components in the smoke that the smoker inhaled are tar, nicotine, carbon and carbon monoxide.

ANOTHER TOBACCO PRODUCT

As the world became more advanced day by day, cigarettes have become less popular. These are the popular way of smoking device used nowadays, which are vape, hookah and E-cigarettes. Vape is the device where the smoker should apply a quantity of nicotine liquid to the heated coils of the vaporizer and it will produce a thick smoke of nicotine. Other than that is hookah. The traditional hookah is like a water pipe. The tobacco is burned in the small bowl, then the smoke is produced. The smoke will travel through the water chamber and then pass the rubber hose to reach the mouthpiece. Smoker will inhale the fume through the mouthpiece. Next is electronic cigarettes(e-cigarettes), also known as electronic nicotine delivery systems. It is battery-based operating devices that is made to deliver the nicotine with flavorings and other chemicals to the smoker in the state of vapor instead of smoke. The e-cigarettes functioning when the battery power heat the element that vaporizes the nicotine liquid in the cartridge, thus, the fume that the smoker inhale and exhale looks like a smoke but it is actually a vapor. People tend to say that

these electronic tobacco product are not dangerous because it has filter the smoke, but in scientifically study it is actually more hazardous as it contain the flavour that also might cause cancer.

TYPE OF SMOKE

First type is “first-hand smoke” which is refer to the smoke inhaled by the smoker himself. Next is “second-hand smoke” is the residual smoke exhaled by the smoker and the smoke from the burnt end of the cigarettes. The last type is the new term used which is “third-hand smoke”. This term refer to smoke left on the surface of objects after second-hand smoke have been cleared.

BEGIN SMOKING

In 2015, about 22.8% Malaysian adults are smokers and most of them are male. Statistic state that male smoker are 43% and female smoker are 1.4%. Usually, people start to smoke at age of 15. There are many factors that influence people to start smoking. First, family member are smoker, children tend to think that smoking is a grown-up behaviour that they soon must try it. It is also kind of imitation, children whose their parents are smoker are more likely to start smoking when they grow up and the intention of quitting is low. Next is peer pressure like education level, economic status and family problems. They tend to start smoking because they believe that smoking can freed them from unpleasant feeling. The last factor is advertising and media. Nowadays, smoker like to make a video of them creating the shape using the smoke they exhaled. As a teenager who still growing up, they would found it stylish and begin to smoke. This also include the curiosity of the youth smoker.

EFFECTS OF SMOKING

RESPIRATORY SYSTEM

As for the implications of smoking, there are a lot of impacts that will deteriorate your health. First of all lung cancer, everyone has risk to get it, but as for smoker, they have an extremely higher chance to get it. When the smoke is inhaled, the lung tissue including bronchioles and alveolar wall will be damaged by deleterious content of the smoke but no worry, the lung has its own mechanism in attempt to repair the damage and restore the normal function of lungs. However, if the lung tissue continuously exposed to the smoke, the repairing work will be impaired and once the cell damaged badly, they will behave abnormally. Hence, that is how the cancer cell started to take place and metastasize to the other parts of body especially brain. From the star news, it is said that 92% of Malaysian male lung cancer patient do have a smoking background. Next is asthma, smoking actually does not cause asthma, but it worsen the condition of the asthma patient. The smoke will irritate the trachea making the lining of the trachea inflamed and narrowing the airway causing obstruction of lungs. Another serious disease is chronic obstructive pulmonary disease (COPD). This disease is umbrella term for chronic bronchitis and emphysema. It usually occurred when the chronic smoker is diagnosed with emphysema, which alveolar wall are damaged causing alveolar space dilatation due to the exposure of cigarette smoke or they have chronic bronchitis which is the inflammation occur on the lining of bronchial tubes that is functioning to carry the air to the alveoli. It is appraised that about 500,000 of Malaysian suffer from this disease silently because they just assume the breathlessness and coughing comes from asthma or simple smoker's cough.

CARDIOVASCULAR SYSTEM

For cardiovascular system, smoking may lead to cardiovascular disease (CVD) and peripheral artery disease (PAD) as it contains reactive oxygen species that can cause low-density lipoprotein (LDL) to be oxidized. This thing would not stop there as it will continue causing inflammation to the arterial wall. This is because the macrophages in the bloodstream sense oxidized LDL in the vessel wall as foreign body and subsequently engulf the LDL forming so

called 'foam cells'. Accumulation of these cells will form atherosclerotic plaque and overtime narrowed the artery causing blockage of blood flow. Thus, there will be lack of blood supply to the affected tissues and in long run the tissues will die. Smoking can also lead to high blood pressure and increases the blood clot as the tobacco increase the concentration and viscosity of the blood. Last but not least, the principal cause of death is heart disease.

DIGESTIVE SYSTEM

Smoking the cigarettes also known to be the cause of pancreatic cancer. The ingredient in the cigarettes which is carcinogenic enough to destroy the pancreatic tissue. The star news estimate that 109.8 out of 100,000 people suffer from cancer but only 1.3 of them suffer from the pancreatic cancer. The intake of tobacco can increase the glucose levels in the blood and therefore, lead to resistance of insulin, as the result it will cause diabetes mellitus type 2. Diabetes mellitus Type 2 is where the cells over all of body develop resistant to the action of insulin and the pancreas. Smokers are more likely to get the risk of diabetes highly than the non-smokers. Health director, General Datuk Dr Noor Hisham Abdullah revealed a survey in 2017 where the number of diabetes patient in Malaysia are 1.8 million out of 3.5 million people. Smoking will just make it hard to control the disease. Beside the use of tobacco will cause mouth cancer which is initially affect the squamous cell. Based from data published by World Health Organization (WHO) in 2011, total of death by mouth cancer in Malaysia are approximately 1587 or 1.55%.

INTEGUMENTARY SYSTEM

Integumentary system involved our nail, hair and skin. Smokers have a high possibility to get skin cancer because they are exposed to the arsenic in the cigarettes. It is proved that arsenic and skin cancer are connected because most of the patient who have Bowen's disease, basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) are long-term exposed to the arsenic. The data from Dermatology Clinic, Hospital Kuala Lumpur, Next is fungal nail infection. This infection actually did not caused by smoking but it occur to the diabetes patient. So it is basically

the next stage when the smoker face the diabetes. Lastly, smoking the cigarettes will damage the hair follicle and will increase the hair loss and quicken graying.

REPRODUCTIVE SYSTEM

For the male's reproductive system, smoking will contribute to aneuploidy in sperm which is insufficient in normal diploid number of chromosome (46). The exposure to the chemical substance will trigger the occurrence of oligospermia (the condition in which the sperm are low than 200 millions). For female smoker, smoking will speed up the menopause for the smokers compared to non-smokers. The tobacco will accelerates the depletion of ovarian follicular. Young smokers tend to have a high follicle stimulating hormone (FSH) level than non-smokers and passive smokers. It is said that smokers have 66% higher than non-smoker and 39% higher than passive smoker. The function of FSH is to stimulates the growth of follicles in ovary before the oocyte is release from the follicle during the ovulation. While the effect on pregnancy, it may lead to premature birth, pregnancy loss and other. It is because the baby will exposed to various of harmful chemicals and lessen the supply of oxygen and nutrients. While nicotine, will damage the baby's brain and lungs.

QUITTING?

Quitting from smoking is difficult and harder for the smokers as the smoker are highly depend on the nicotine intake which is functioned in triggering the addiction of smoking. An United State study published in September 2000 revealed that nicotine in the cigarettes caused a serious addiction compared to addiction by heroin and alcohol. Based on the study, 32% of smokers become addicted while 23% are heroine users, 16% are cocaine users and 15% are alcohol drinkers. While quitting from smoking, smoker will experience some withdrawal symptoms such as anxiety, cravings and restlessness. Some medication to quit from smoking is by using nicotine replacement therapy. This treatment will replace the cigarettes wit nicotine

gum, lozenge or inhaler which is provided in a small dose. Another treatment is, non-nicotine medication, which is using Bupropion (antidepressant drug) and varenicline. Those medication also known as pharmacological treatment. An alternative way or non-pharmacological treatment are by doing acupuncture, hypnotherapy, acupressure and behavioral modification therapy.

SELF REFLECTION

As what I can conclude while studying this case, smoking is an unhealthy habit that we should keep away from our routine because it can cause many unwanted disease. Quitting from smoking also make it harder for smoker since they are highly depend to the nicotine. However, they can overcome the withdrawal symptoms with their common awareness. It is their own choice, either they really want to stop or not. While studying this case, I found that the number of death in male are higher than female, it might be caused from smoking habit. I also discovered that there are many kind of tobacco product manufactured these days and it also attract smoker with many kind of flavour like strawberry and vanilla. Smoker will found that e-cigarettes easy to use because it use electronic system.