A REVIEW ON HARMFUL EFFECT OF SMOKING ON HEALTH

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Abstract:
In this article, I provide a perspective on the tobacco epidemic and epidemiology, describing the impact of the tobacco-caused disease. Smoking is a cause of cancer of the lung, oral cavity, larynx, bladder, and renal pelvis and a contributing factor in the development of cancer of the pancreas, stomach, cervix, liver, penis, and rectum. Smokers are at greater risk for coronary artery disease, cardiovascular disease, and atherosclerotic peripheral vascular disease. Cigarette smoking is the single most important risk factor for chronic obstructive pulmonary disease and is associated with lower levels of FEV1 and increased respiratory symptoms and infections. Mortality rates among smokers are about three times higher than among people who have never smoked mockers are at higher risk of developing pneumonia, tuberculosis, and other airway infections.
In addition, smoking causes inflammation and impairs immune function. Ladies who smoke have a more noteworthy shot of certain pregnancy related issues or having an infant death from Sudden Infant Death Syndrome (SIDS). Women who smoke during pregnancy have an increased incidence of complications, especially intrauterine growth retardation. In research of a gathering of 1000 smokers (age 30), about one fourth of them (250) will pass on of smoking-related diseases before finishing middle age. According to estimates, approximately one third of tobacco-related deaths will be due to respiratory causes, one third to cancer and one third to cardiovascular diseases. Nicotine is chemical that cause lung cancer mainly release from smoking of Cigarette .When humans, mammals, and most other types of animals are exposed to nicotine, it increases their heart rate, heart muscle oxygen consumption rate, and heart stroke volume. These are known as pharmacologic effects.
Keywords: - Cancer, Smoking, Cigarette, Nicotine, tobacco, infection.

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INTRODUCTION:

Everyone knows that tobacco use can have disastrous consequences on your health. Nevertheless, many people decide to ignore the risk and go on smoking. According to the most recent statistics, nearly one out of every five people in Quebec is a smoker. Smoking is among the leading causes of death around the world. Every year, nearly 13,000 people in Quebec die due to the consequences of smoking. It is estimated that a smoker is three times as likely to die between the ages of 35 and 70 as a non-smoker. In addition, half the people who smoke at age 20 and don't quit die of a tobacco-related disease.

Clearly, cigarettes have a major impact on the lungs. An estimated 85% of cases of chronic obstructive pulmonary disease (COPD) and of lung cancer are caused by smoking. About a third of all cancer cases are due to smoking, including:

➢ Cancer of the esophagus
➢ Cancer of the mouth
➢ Cancer of the uterus
➢ Bladder cancer
➢ Stomach cancer
➢ Pancreatic cancer

1.1 Effects of smoking and tobacco

Smoking cigarettes can have many adverse effects on the body.
Smoking cigarette affects the following.
A) Cardiovascular system
B) Brain
C) Immune system
D) Respiratory system
E) Bones
F) Mouth
G) Reproduction system
H) Skin

A. Cardiovascular system: -

Causes an instant and long-term increase in heart rate. Reduces blood flow from the heart. Reduces the amount of oxygen that reaches the body's tissues. Increases risk for blood clots. Smoking is a major risk factor for cardiovascular morbidity and mortality, and is considered to be the leading preventable cause of death in the world. Smoking ranks among the top causes of cardiovascular disease, including coronary heart disease, ischemic stroke, peripheral artery disease and abdominal aortic aneurysm.
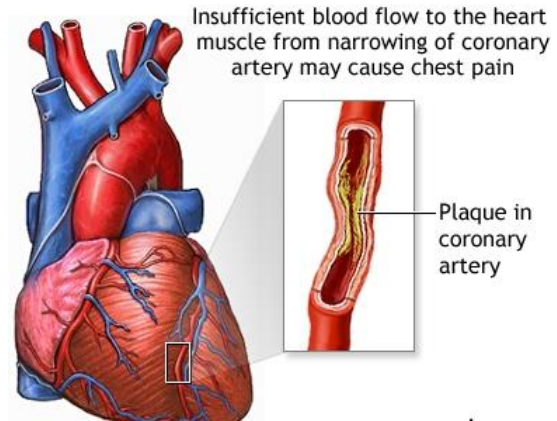

Fig 1.1 Effect on heart of smoking

A)   **Brain:-**

Smoking can increase the likelihood of having a stroke by 2 to 4 times. Strokes can cause brain damage and death. When nicotine-dependent human subjects abstain from cigarette smoking, they exhibit deficits in working memory. An understanding of the neural substrates of such impairments may help to understand how nicotine affects cognition.
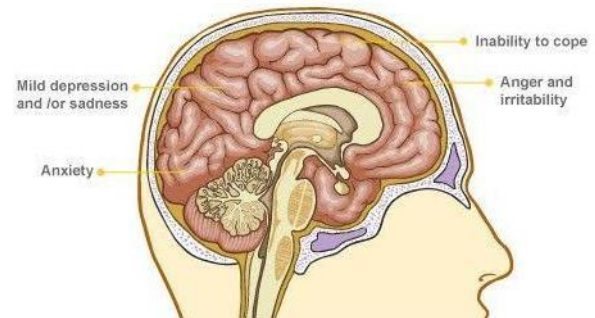

Fig 1.2 Effect of smoking on brain

C.Immune system: -

Cigarette smoke contains high levels of tar and other chemicals, which can make your immune system less effective at fighting off infections. ... Continued weakening of the immune system can make you more vulnerable to autoimmune diseases like rheumatoid arthritis and multiple sclerosis.

D.Respiratory system:-

The effects of tobacco smoke on the respiratory system include: irritation of the trachea (windpipe) and larynx (voice box) reduced lung function and breathlessness due to swelling and narrowing of the lung airways and excess mucus in the lung passages.

Smoking causes fatal diseases to develop in many parts of the body including cancers of the upper and lower respiratory tracts.
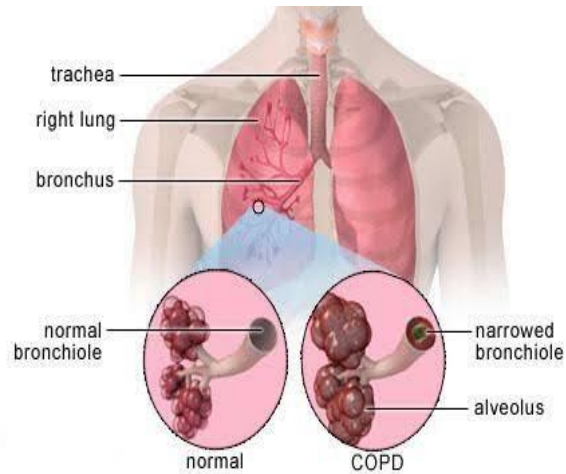

Fig 1.3 Effect of smoking on Respiratory system.

E.Bones:-
Smoking reduces the blood supply to the bones and to many other body tissues. The nicotine in cigarettes slows production of bone-producing cells, called osteoblasts. Smoking decreases the body's absorption of calcium, which is necessary for vital cellular functions and bone health. Cigarette smoking was first identified as a risk factor for osteoporosis decades ago. Studies have shown a direct relationship between tobacco use and decreased bone density.
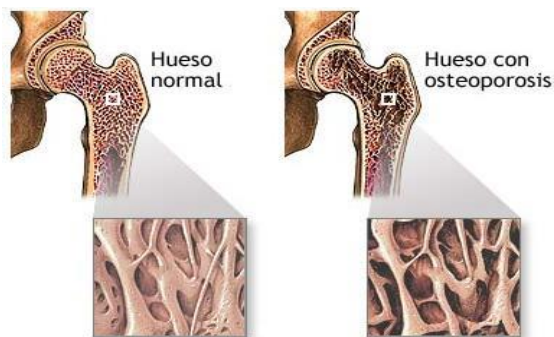

Fig 1.4 Effect of smoking on bones

E.Mouth: -
Smokers can also have more tooth decay than non-smokers. The nicotine in tobacco reduces saliva flow and some smokers can get dry mouth symptoms. Smoking can also cause or worsen gum disease (also called periodontal disease) and increase your risk of mouth and lip cancer. Smoking and other tobacco products can lead to gum disease by affecting the attachment of bone and soft tissue to your teeth.
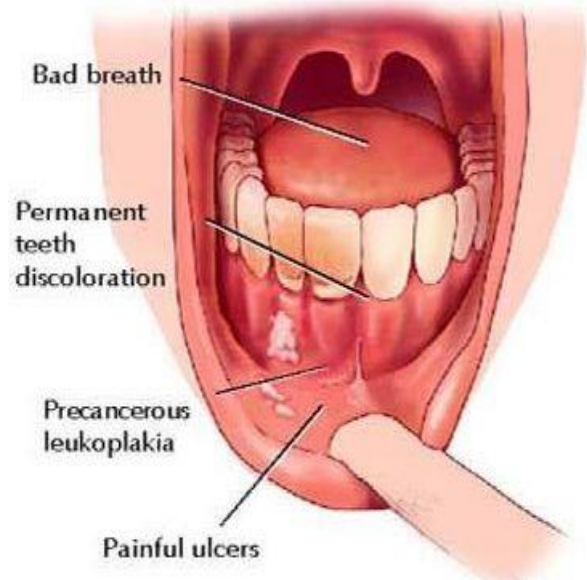

Fig 1.5 Effect of smoking on mouth

Reproduction system: -
Female reproductive system damage. Smoking can cause problems for virtually all aspects of the reproductive system. Women who smoke are more likely to have difficulty conceiving, may not respond as well to treatment for infertility, experience earlier menopause and have an increased risk of cervical cancer.

H. Skin:-
The nicotine in cigarettes causes narrowing of the blood vessels in the outermost layers of your skin. This impairs blood flow to your skin. With less blood flow, your skin doesn't get as much oxygen and important nutrients, such as vitamin A. As a result, skin begins to sag and wrinkle prematurely because of smoking.
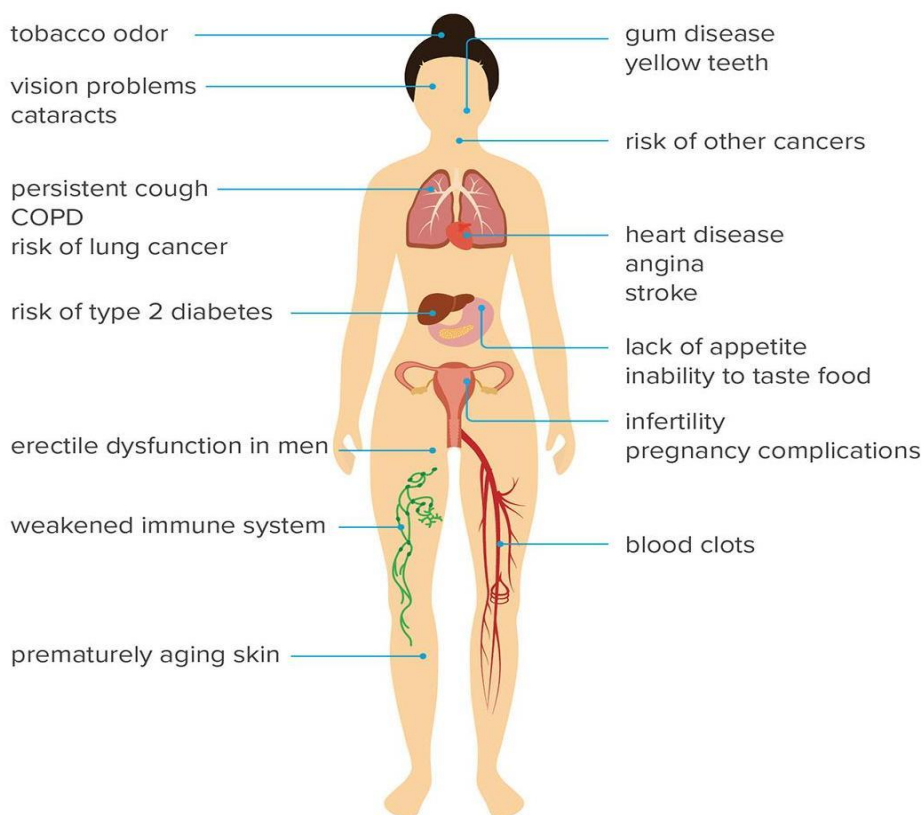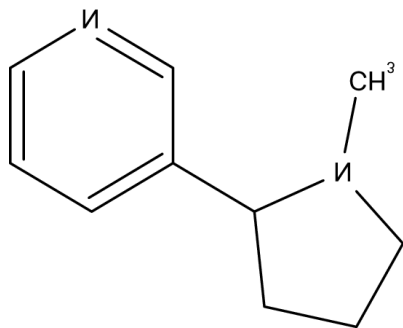
Effects on the Body
Smoking

tobacco odor

vision problems
cataracts

persistent cough
COPD
risk of lung cancer

risk of type 2 diabetes

erectile dysfunction in men

weakened immune system

prematurely aging skin

gum disease
yellow teeth

risk of other cancers

heart disease
angina
stroke

lack of appetite
inability to taste food

infertility
pregnancy complications

blood clots

Fig.1.6 Effect on Body

Structure of nicotine:-

1.2 Epidemiology of tobacco related disease:
The aim of the study is to present the epidemiology of tobacco-related diseases in province of Lower Silesia and to determine needs and tasks of medical service at this area. Smoking causes a wide range of diseases, including many types of cancer, chronic obstructive pulmonary disease, coronary heart disease, stroke, peripheral vascular disease, and peptic ulcer disease. Smoking-related mortality is set to rise from 3 million annually (1995 estimate) to 10 million annually by 2030, with 70% of these deaths occurring in developing countries. Tobacco use is the leading preventable cause of death in the world, resulting in approximately 4000000 deaths each year. During the past few decades, the number of people who consume tobacco has increased worldwide because of an overall increase in the global population. The epidemiologic evidence on the effect of smoking on health is vast and well summarized in authoritative reports and historical accounts. In the 50th anniversary report of the US Surgeon. Epidemiologic research also motivated a series of actions by the tobacco industry that has had both positive and negative impacts on the field. The initial etiological studies on lung cancer were of the case-control design, although this design had been little used in the first half of the 20th century.

CONCLUSION:
Cigarette smoking by youth and young adults has immediate adverse health consequences, including addiction, and accelerates the development of chronic diseases across the full life course. The number of

people killed each year by tobacco will double over the next few decades unless urgent action is taken. Tobacco is unique among today's leading public health problems in that the means to curb the epidemic are clear and within our reach. If countries have the political commitment and technical and logistic support to implement the MPOWER policy package, they can save millions of Lives.

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