

# Can We Control The Hazard Of Cancer In Sri Lanka



## **Global Burden**

Cancer is considered as a deadly disease by everyone as the global burden continues to increase. With the trend towards smoking and exposing to unhealthy life styles and food habits, the number of new cases is expected to grow further by 50% over the next few years to reach 15 million by 2020. Even in Sri Lanka the cancer incidence have increased from 128 per 100,000 population in 1980 to 287 in 2000. Similarly the death rate has increased by 100% within these two decades.

Cancer affects all ages, both genders and all communities, although there are regional differences. The total cancer burden is highest in affluent societies, mainly due to high incidence of tumour associated with smoking and Western lifestyle. The most common cancers in the world are lung, breast and the colorectum. The pattern of cancer in Sri Lanka follows the developing countries. Cancer of the oral cavity is the commonest, followed with breast and uterine cervix cancers. It is noteworthy to mention that lung cancer and oral cavity

cancers which is the most common in the world and in Sri Lanka respectively are caused by smoking tobacco or chewing tobacco as betel. Lung cancer is the largest single cause of death from cancer with a rate over a million annually. The second and third causes of death are stomach and liver. These are all caused by smoking, carcinogenic food and by alcohol, which can be prevented.

## **Cause Of Cancer**

Cancer evolves following a pathological breakdown in the processes which control cell proliferation, differentiation and death of a cell. Although it can grow into a large deadly tumour with dissemination throughout the body, it starts as a single cell, which multiplies wildly. This pathological change within the cell nucleus occurs in the genes. There are physical, biological and chemical carcinogens (Cancer causing agents) which damages the genes to become a cancer. Ultra violet light, radiation, electro magnetic waves are some of the physical carcinogens which humans are frequently exposed.

Viruses such as human papilloma virus causing uterine cervical cancer are the main source of biological carcinogens. The most common chemical carcinogen is tobacco. There are many chemical components such as nitroamines, aldehydes, aromatic hydrocarbons and heavy metals in tobacco which acts as carcinogens. It has been highlighted that most of the chemicals produced in the US are artificially made and of the 45,000 toxic chemicals listed by the US National Institute of Safety and Health (NIOSH) in 1980, 2,500 were identified as carcinogens, 2,700 as mutagens [causing genetic change] and 300 as teratogens [causing malformation of an embryo]. Less than 7,000 had been adequately tested. The types of food we consume can lead to cancer in the digestive system. These are as a result of the chemicals in the food and food preservatives.

Use of tobacco has been identified by WHO as the major preventable cause of death of humankind. Tobacco applies for cancer too as in most developed countries it accounts for as much as 30% of all malignant tumours. In addition to lung cancer, it causes tumours of the larynx, pancreas, kidney, bladder and in conjunction with alcohol drinking, a high incidence of cancers of the oral cavity and the oesophagus.

Although there are many legislative measures taken up to combat the health hazards of smoking in Sri Lanka, it has not addressed the issue of chewing of

betel with tobacco. In 2002 courts in the northern Indian state of Uttar Pradesh banned highly-popular chewing tobacco which contains areca nut, lime and nicotine, on the basis that they could cause mouth cancer.

Avoiding these carcinogens, change of life style, food habits with regular exercise can overcome the vulnerability to cancer to some extent.

## **Screening**

There are many cancer screening programmes especially in more developed countries. These screening programmes are essential to combat the disease by identifying an early cancer and completely curing the disease. These are done on more common cancers such as the breast, prostate and colorectal. It has been reported that the death rate of breast cancers have been able to reduce by almost 30% in many countries who adopted the screening programs. In Sri Lanka as for some demographic factors of breast cancer and of economic restrains, screening programmes are not conducted. Oral cancer, breast and uterine cervical cancers screening can be done through public awareness and use of the primary health care service.

The Director General of WHO in the World Cancer Report highlighted that it is possible to prevent at least one third of the new cases that occur annually by just avoiding the carcinogens, through awareness. Further one third could be detected early and treat promptly to cure through screening programs. Hence the available resources can be utilised to palliate and relieve the pain of the balance one third who suffers from incurable disease.

Although cancer is the fifth leading cause of death in Sri Lanka, it has been predicted that it could become the first before long. Hence it is timely that Sri Lanka addresses this health burden without delay, jointly with the government, private corporate sector and by each and every citizen of this country.