

Cancer Science 2020: Oncology cancer science and therapy is the major tools for the development health as well as to control the different types of cancer diseases in the world, Pakistan

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The aim of presentation consist of oncology, Cancer Science, therapy, health different types of cancer were studied and reported that Oncology Cancer Science and Therapy is the major tools for the development health as well as to control the different types of cancer diseases in the world. The study reported that the world oncology consist of two parts i.e “onco” means bulk, mass, or tumor while “logy” means study. Therefore oncology is known is the study of tumors or different type of cancer diseases. In other words, oncology is the branch of science that deals with the tumor and cancer diseases. The study also reported that oncology is the study of cancer and it treatment in medical science. The study further reported that cancer is a group more than 100 different disease. Cancer is very serious disease as it can developed almost anywhere in the body. The most important oncology diagnostic remains the clinical history of the patient. Common symptoms that point towards cancer include fatigue, weight loss, unexplained anemia, fever of unknown origin etc. Oncology depends on diagnostic tools like biopsy or removal of bits of the tumors tissue and examining it under the microscope. Other diagnostic tools include endoscopy for the gastrointestinal tract, imaging studies like X-rays, CT scanning, MRI scanning, ultrasound and other radiological techniques, Scintigraphy, Single Photon Emission Computed Tomography, Positron emission tomography and nuclear medicine techniques etc. The oncologist’s role including explaining the cancer diagnosis and stage to the patient. Discussing all the relevant treatment options and the oncologist’s recommendations. In other words Cancer Science a disease caused by an uncontrolled division of abnormal cells in a part of the body. Further reported that a malignant growth or tumor resulting from an uncontrolled division of cells. Similarly Cancer therapy describes the treatment of cancer in a patient, often with surgery, chemotherapy and/or radiotherapy. Targeted therapies are also available for some cancer types.

The study reported that the total countries available in the world are 225, consist of (Developed countries = 49, developing countries = 150, observer state = 4, state without partial recognition = 8, unrecognized state = 14).

Similarly, South Asia comprises the countries of Pakistan, Bangladesh, India, Bhutan,

Maldives, Nepal and Sri Lanka. In the light of above study, it is proposed that Cancer Science and Therapy should be commercialized for the development of health, basic need of daily life, create employment, generate income, stronger economy, reducing financial crises, global Poverty and hunger in the developing countries of the world particularly in south Asia

Cancer imposes a major disease burden worldwide, with considerable geographic variations in incidence; mortality; survival; overall disease burden; causative environmental factors; and mix of prevention, detection, treatment, and palliative programs that make up a country's cancer control strategy. Unless cancer prevention and screening interventions effectively reduce the incidence of cancer, the number of new cancer cases will increase from an estimated 10 million cases in 2000 to 15 million in 2020, 9 million of which would be in developing countries. By 2050, the cancer burden could reach 24 million cases per year worldwide, with 17 million cases occurring in developing countries (Parkin, Bray, and Devesa 2001).

Researchers have made numerous efforts to quantify the global burden of cancer and to estimate site-specific cancer mortality and morbidity (see, for example, Ferlay and others 2004; Parkin, Bray, and Devesa 2001). A recent report from the International Agency for Research on Cancer provides estimates of cancer incidence for Africa by site and country (Parkin and others 2003). In general, however, data on cancer incidence, prevalence, and mortality are less complete and less accurate in developing countries than in developed countries, because the latter have more resources to invest in population-based cancer registries and the infrastructure to maintain such registries.

Despite the limitations of current data for developing countries, the epidemiology of cancer in developing countries clearly differs from that in developed countries in some important respects. Developed countries often have relatively high rates of lung, colorectal, breast, and

prostate cancer because of the earlier onset of the tobacco epidemic, the earlier exposure to occupational carcinogens, and the Western diet and lifestyle in such countries. In contrast, up to one-fourth of cancers in developing countries are associated with chronic infections. Liver cancer is often causally associated with infection by the hepatitis B virus (HBV), cervical cancer is associated with infection by certain types of human papillomavirus (HPV), and stomach cancer is associated with *Helicobacter pylori* infection.

This chapter focuses on interventions for controlling seven cancers that impose a particularly heavy burden of disease on developing countries: cervical cancer, liver cancer, stomach cancer, esophageal cancer, lung cancer, colorectal cancer, and breast cancer. In 2000, these seven types of cancer accounted for approximately 60 percent of all newly diagnosed cancer cases and cancer deaths in developing countries (Ferlay and others 2001). Four of the seven cancers—cervical, liver, stomach, and esophageal—have elevated incidence and mortality rates in developing countries. The other three—lung, colorectal, and breast—have lower incidence and mortality rates than the other four cancers, but they nonetheless impose a heavy disease burden and are increasing because of demographic and industrial transitions. Pediatric cancers and HIV-related cancers, two topics that are of great importance and concern, are beyond the scope of this chapter.