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## Background

Cancer is a condition in which damaged body cells grow out of control, depriving normal body cells of nourishment and the ability to operate properly. According to the World Health Organization's February 2017 fact sheet, cancer is one of the leading causes of mortality worldwide, accounting for 8.8 million deaths in 2015, or one out of every six deaths [1]. In 2019, a projected 140,690 cancer cases will be reported, with the majority of these people fighting the disease for the rest of their lives.

According to a survey conducted in 2012 on cancer prevalence in Pakistan, over 63,415 males and 85,590 females were diagnosed with the disease. Lung cancers are the most common cause of cancer-related fatalities worldwide, but breast cancer continues to be the leading cause of cancer-related deaths in Pakistan [2]. Hormonal, genetic, metabolic, immunological, and other variables all contribute to cancer risk. External causes of cancer include tobacco usage, alcohol consumption, a poor diet (malnourished or obese), radiation, and infections such as the Human Papillomavirus (HPV), Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV), H Pylori, and others [3-5].

This study's goal is to identify cancer awareness and related risk factors among patients from poor socioeconomic backgrounds, as well as to highlight the most common cancers seen in this environment. This research will also look for any other causes that people typically identify with cancer and which divert their focus away from the genuine causes [6]. Furthermore, we hope that by conducting this research, we will be able to focus on the psychosocial and financial burdens that such an illness imposes in order to stimulate financial aid and behavioural therapies for cancer patients.

## Causes

Cancer has various causes, some of which are preventable. According to figures from 2014, over 480,000 individuals die in the United States each year as a result of smoking cigarettes. In addition to smoking, the following are cancer risk factors: Drinking a lot of alcohol, excessive body fat, a lack of physical activity, malnutrition.

Other types of cancer cannot be avoided. Age is currently the most major uncontrollable risk factor. Doctors in the United States diagnose 87 percent of cancer diagnoses in persons aged 50 and up, according to the American Cancer Society [7,8].

## Genetic Values

Cancer development can be influenced by genetic factors. The genetic code of a person guides their cells when to divide and when to die. Changes in the genes can result in incorrect instructions, which can lead to cancer. Proteins carry many of the instructions for cellular development and division, and genes have an impact on their creation.

Some genes alter proteins that are normally involved in cell repair. This has the potential to cause cancer. If a parent carries these genes, their offspring may inherit the changed instructions. After birth, some genetic alterations can occur, and factors like smoking and sun exposure might enhance the risk [9]. Other alterations that can lead to cancer occur in the chemical signals that control how the body uses, or "expresses," specific genes.

Finally, a person can be born with a cancer predisposition. Hereditary cancer syndrome is a term used by doctors to describe this condition. Inherited genetic mutations play a crucial role in the development of cancer in 5–10% of instances [10-12].

## Types

According to the National Cancer Institute, breast cancer is the most frequent type of cancer in the United States, followed by lung and prostate cancers. Non-melanoma skin cancers were omitted from these data.

Every year, more than 40,000 people in the United States are diagnosed [13,14] with one of the following cancers: Bladder, the colon and the rectal, endometrial, kidney, leukaemia, liver, melanoma, lymphoma (non-Hodgkin's), pancreatic, thyroid.

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cause of death in the world, with approximately 10 million fatalities expected by 2020. (1). In terms of new cancer cases in 2020, the most common were: breast, lung, colon and rectum, prostate, skin (non-melanoma) and stomach which have 2.26 million, 2.21 million, 1.93 million, 1.41 million, 1.20 million, and 1.09 million cases respectively [21]. Please see their percentage in **(Figure 1)**.

Whereas these are top types of cancer according to cause of death are lung cancer, colon and rectum cancer, liver cancer, stomach cancer and breast cancer which became cause of death of 1.80 million deaths, 935000 deaths, 830000 deaths, 769000 deaths, and 685000 deaths respectively.

## **Treatment**

Pharmaceutical medications and treatment methods have been developed as a result of innovative research [22]. Treatments are usually prescribed based on the type of cancer, its stage at the time of diagnosis, and the patient's overall condition.

Here are some examples of cancer treatment approaches: Chemotherapy uses drugs that target quickly dividing cells to kill malignant cells. These medications can also help reduce tumors, but they can have serious negative effects. Hormone therapy entails taking drugs that alter the way particular hormones act or prevent the body from producing them [23]. This is a typical technique when hormones play a substantial role, such as in prostate and breast malignancies. Immunotherapy is a type of treatment that boosts the immune system and encourages it to fight malignant cells by using drugs and other treatments. Checkpoint inhibitors and adoptive cell transfer are two examples of these therapies. Precision medicine, often known as personalized medicine, is a relatively recent concept. It entails employing genetic testing to discover the most effective treatments for a person's specific cancer presentation. However, researchers have yet to show that it is helpful in treating all types of cancer. High-dose radiation is used in radiation therapy to eliminate malignant cells. A

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