## Research paper on scholarly paper (cancer in men and women)

Technology, Development



## **Abstract:**

A number of cancer studies have maintained that the various cancer rates within successive generations and mortality shifts for purposes of explaining the prevailing prevalence rates in the country that the variations of the most kinds of cancers are largely reflective of the differences around various environmental and behavioral risk factors. This will include aspects of lifestyle and culture as well as genetic differences. In general, behavioral characteristics that will be as influential include elements of reproductive, dietary patterns, and smoking behaviors, which are known to be major risk factors causing cancer in America as well as other infectious agents in the society. However, the patterns continue to change. While the smoking prevalence consistently declines in the country, the impacts of lung cancer are constantly lowering. For example, the current smoking prevalence for adult men in the United States is around 20% compared to up to 60% in other geographical regions such as China, Indonesia and Jordan. Further, due to earlier trends in America, the consumption of calorie-dense and saturated fat foods as well as various forms of physical inactiveness are on the increase in less the economically transitioning country. This leads to rapid increment in obesity in distinct segments of the society in several states where malnutrition and poverty are still issues of concern.

## **Introduction:**

It is evident that cancers which where once rare and were considered to be the diseases of a given social segment such as breast, colon, and lung cancers are currently frequently diagnosed in the country and their respective rates are constantly on the increase. Even though these full impacts of unhealthy lifestyles vary depending on the extent of cancer burdens among the country's states, there is need to take longer times of realization while new and alarming cancer trends and rates have emerged in the society. Adding to these increasing trends, the foreseen burden of cancer in the country is probably to face exasperation by the expected increments in the levels of life expectancy, aging and the population growth elements (Corner & Bailey, 2009). Clearly, the proportion of the cases, which are diagnosed in the United States, is projected to reach an incremental rate of 46% in 2 years and up to 60% by 2030. With the current changes in behavioral trends, it is projected that the issue of cancer will eventually surpass heart disease as one of the leading causes of death in America. In this paper, a description of the various changes in national patterns of cancer mortality and incidence will be put forward.

The cancer trends progress report defines colon cancer as the type of cancer, which develops in the colon tissues (the colon is the large intestine's longest part). The colon cancers in this case are adenocarcinomas meaning that they begin in cells making and releasing excessive mucus and other fluids. The cancer forms in the last inches closest to the anus of the large intestine. The estimated number of new deaths and cases from rectal and colon cancer in the country within the year includes 51, 690 deaths as well as new cases 103, 170 colon and 40, 290 rectal (Kwabi-Addo & Lindstrom, 2011). Commonly known as bowel cancer, the develops from the uncontrolled cell increase in the or , which is both parts of the . It could also develop from the . Various genetic analyses indicate rectal and colon tumors

are rather genetically similar to cancer. The symptoms of colon and rectal cancers will typically include and that are at times linked to weight loss as well as changes in the bowel habits (Richards, 1978). Evidently, greater than 75% of all colon cancers occur to people minimal or no genetic risks. Some of the other risk factors will include male gender, older age, , lack of , or , and a high intake of fat. Approximately a considerable percentage of all the cases are associated with insufficient activity. The exposure to excessive alcohol will appear to increase at a rate greater than a drink a day. The probable preventive measures in the reduction of the burden of colon and rectal cancers for both low and high resource environments include ensuring that the population is physically active, minimal consumption of alcohol and red meat, cessation of smoking, increasing the consumption of vegetables and fruit, and maintenance of healthy body weights. High-resource regions are likely to benefit from the colorectal screening implementation, which allows removal and detection of precancerous polyps as well as early-stage cancers.

According to the cancer trends, progress report lung cancer is defined as the king of cancer that develops within lung tissues and is usually within the lining cells of the air passages. Scientists maintain that the two popular types of this kind of cancer are non-small cell lung cancer and small cell lung cancer. Diagnosis of the two types is based on how the cells appear under microscopes (Alschuler, Gazella & Alschuler, 2010). The estimated number of new deaths and cases of lung cancer (both types combined) in the country in this year alone 386, 500 which includes 226, 160 new cases and 160, 340 deaths. The cancer is characterized by the uncontrolled of cells in within the

s. If untreated, the growth spreads beyond lungs through to neighboring tissues and into the rest of the body. The cancers, which start in lung, are primarily known as lung cancers and deriving from cells. The main cause of lung cancer due to the long-term exposure, which causes between 80% and 90% of the lung cancers. On the other hand, nonsmokers are in the 10-15% bracket of lung cancer cases. These cases are usually attributed to the extensive combination of gas, , , and such as . To respond to the tobacco epidemic globalization most health care institutions on Tobacco Control as a way of providing thorough frameworks for tobacco control measures such as raising the tobacco products' prices, imposition of bans of smoking in all public places as well as restricting tobacco promotion and advertising through counter-advertising. The provision of counseling and treatment for tobacco dependence has seen the ratification of this framework in up to 168 countries (Delfino & Day, 2006). According to the cancer trends progress report on implementation of this framework on tobacco control the government also affirmed to have implemented and developed comprehensive national tobacco control programs, strategies, and plans based on the framework.

The cancer trends progress report defines breast cancer as the type of cancer, which develops within the breast tissues. The growth of these cells is especially in the ducts which are tubes carrying milk to the breast's nipple) and lobules which are the glands making milk. The cancer is prevalent in both men and women even though for aspects of male breast cancers are rare. The estimated number of new deaths and cases due to breast cancer in 2012 in the United States includes 226, 870 new female cases, 2, 190 new

male cases as well as 39, 510 female deaths 410 male deaths. This cancer originates from tissue and commonly from inner linings of various and , which supply milk to the ducts. While the cancers that originate from ducts are referred to as , those that originate from lobules are . Breast cancers are up to 100 times more prevalent in women as compared to even though men tend to indicate poorer outcomes because of the delays in the disease's diagnosis. One of the procedures of curbing these impacts include implementing population-based and organized programs for mammography screening to enable early detection even though they are rather cost prohibitive. Increasing the awareness of early symptoms and signs and the need for screening through clinical breast examinations is also a viable option in this case.

The cancer trends progress report describes prostate cancer as a cancer, which forms itself in prostate tissues, which is within a male reproductive system's gland found in front of the rectum right below the bladder. Prostate cancer is a common occurrence among older men. The cancer trends progress report estimates the totals of the new prostate cancer cases and deaths in 2012 in the United States as 241, 740 new cases and 28, 170 deaths (Delfino & Day, 2006). The incidence rates for the United States are gradually decreasing through the dramatic increase because of rapid testing dissemination of PSA even as the rates elsewhere in the world continue increasing due to increased awareness of PSA testing gradual adoption. Mortality rates due to prostate cancer are decreasing in the United States, which may be a reflection of both early detection and improved treatment. One of the common ways of curing Non-Hodgkin's lymphoma is through

chemotherapy. However, the treatment process is supplemented by medications, which seek to enhance the patient's ability of the immune system to fight cancer. These biological drugs help the body's immune system in fighting cancer. One of the drugs used for this purpose by the approval of Food and Drug Administration (FDA) is Rituximab (Rituxan) in treating B-cell lymphoma. Rituximab is monoclonal antibody, which is attached to B cells making them rather visible to their respective immune systems that can attack later. Additionally, Rituximab extensively lowers the count of B cells as well as the body's healthy B cells even though the body continues to produce new healthy B cells with the aim of replacing them. This way, the cancerous B cells will rarely recur. Further, interferons are a category of natural proteins, which are produced by the immune system's cells to respond to various challenges in which foreign agents like tumor cells are common (Mukherjee, 2010). Various types of immune cells and clones that are of single parent cells can produce monoclonal antibodies. They are responsible for binding to cancer cell-specific antigens causing immunological responses against target cancer cells. Medications, which directly deliver radiation to cancer cells, can be used as well. In this respect, radio immunotherapy drugs are composed of monoclonal antibodies, which carry various radioactive isotopes. This will allow the antibodies to eventually attach themselves to cancer cells as well as directly take radiation to the cells. Two of the FDA approved drugs for this purpose include ibritumomab (Zevalin) as well as tositumomab (Bexxar). In their application, it is important to note that chemotherapy causes different. The side effects are necessarily temporary and with time, they go away upon the treatment's stoppage. The

doctor could prescribe the above due to chemotherapy.

Strategic focus on the cancer incidence as well as the death statistics offers a revelation that various groups within the country disproportionately suffer from cancer, which is associated effects such as premature death. For instance, American Indians, Asian Americans, Alaska Natives, African Americans/Blacks, Hispanic/Latinos as well as underserved Whites are likely to have higher death and incidence statistics than the general population for various types of cancer. Interrelated and complex factors are active contributors to the observations made on the disparities in cancer deaths and incidences among underserved, ethnic, and racial groups. One of the most obvious factors is linked to lack of coverage of health care as well as low socioeconomic status. This status is often based on a person's education level, income, occupation as well as other factors like their social status within the community and the regions from which of them lives (Angelos, 2007). The general conditions indicated for the symptomatic relief of various cancers include, bone pain, rheumatoid arthritis, inflammatory arthropathies (such as and ), acute , ( pain) and postoperative pain.

Studies maintain that socioeconomic factors beyond race or ethnicity are predictions of the possibility of the individual's and group's potential access to education, various occupations, living conditions, and health insurance. This also includes the focus on conditions in which exposure to environmental is common. All of these are associated with high risks of having to develop and survive cancer incidences. In particular, socioeconomic factors appear to play majors role in potentially influencing the behavioral and their prevalence for cancer. For example, , smoking,

physical inactivity, and health status, and excessive intake will affect decision making on issues of following the recommendations on cancer. In my opinion, there needs to be introduced programs that seek to bring together more Americans to developing the system of availing high-quality cancer care and at the same time increase participation for all. The plan will also seek to eradicate the cancer health care disparities through constantly improving information sharing between respective community cancer centers (Almeida & Barry, 2011). The plan will also focus on the underserved communities and minority groups, which are disproportionately impacted by cancer through encouraging in practice within these communities into becoming more involved in approved clinical trials. Across the recent years, up to 5, 500 minority patients continue enrolling in programs that seek to treat the cancer impacts and develop prevention clinical trials. The plan will provide for unique research programs that will support the development and implementation of and oncology clinical trials for institutions, which offer health care assistance for disproportionate numbers of the low-income, medically underserved ethnic minority populations who are not traditionally involved in sponsored cancer research.

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