Cancer Diagnosis Analysis in Kenya from the year 2001

PHASE ONE PROJECT

Overview and Business Understanding

Objective

- To analyze and derive insights on diagnosis and prevalence of cancer in Kenya from the year 2001
- To create value to various stakeholders in the healthcare sector, medical researchers, the Government and WHO.
- This research is important because the the better we understand this disease, the more progress we will make as a country in diminishing the tremendous human and economic toll of cancer.
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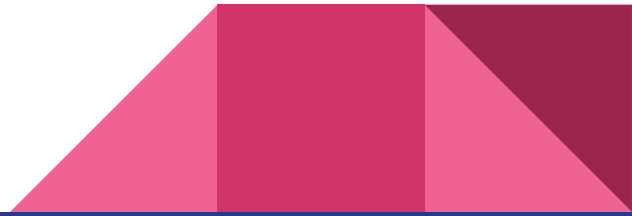
PROJECT AIM

The ultimate goal of the project is to:

Enable development safe and effective methods to prevent, detect and diagnose, treat and ultimately, cure the collection of diseases we call cancer in Kenya that is causing more and more deaths.



Data Source and Suitability

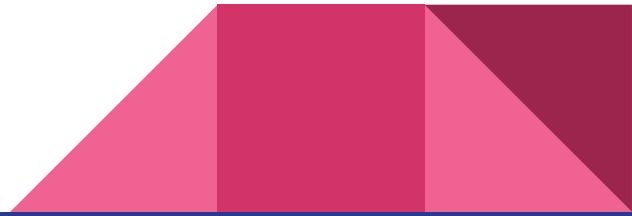
The data set can be found from the National Bureau of Statistics. It contains the necessary information, including the various regions, prevalence according to gender, nature of cancer, and total deaths. I have used the Kenyan population dataset as part of my analysis.

There were some missing values in the dataset but we could not remove these rows as it would have distorted the findings significantly.

DATA ANALYSIS QUESTIONS

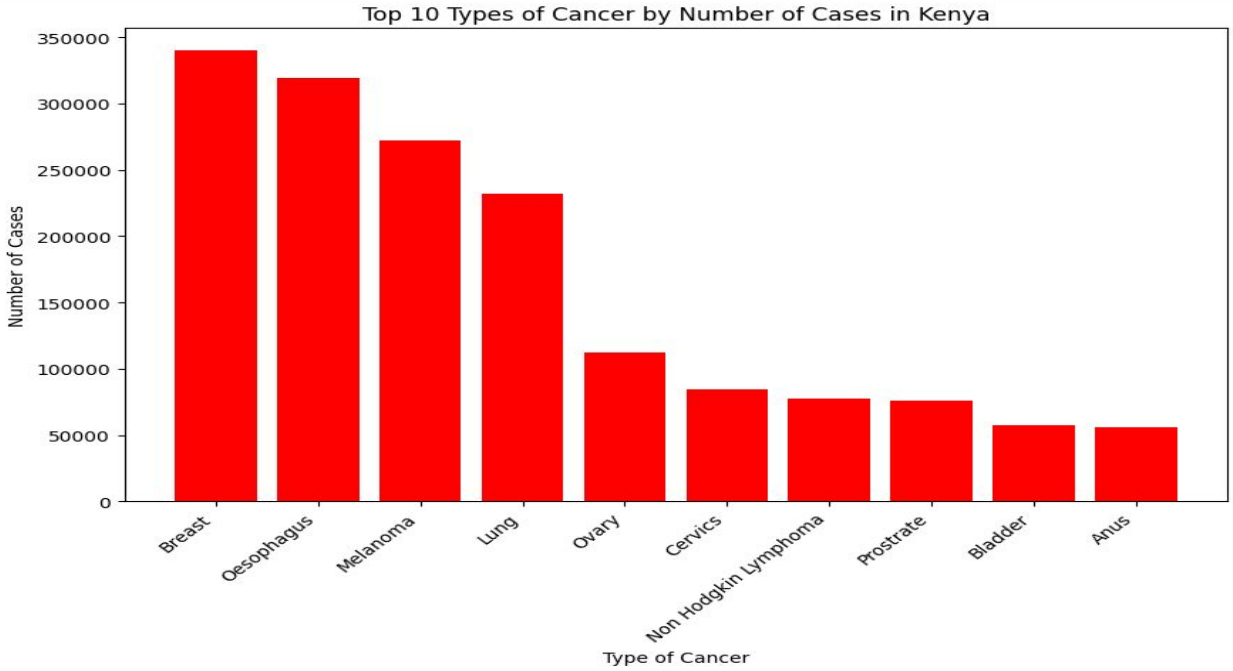
These will help me answer 5 main data analysis questions:

- Which are the top ten most prevalent type of Cancer in Kenya
- Regional Analysis of the top five most prevalent cancer
- Top five types of cancers affecting Men
- Top five types of cancers affecting Women
- Which type of cancer causes most deaths



DATA ANALYSIS FINDINGS

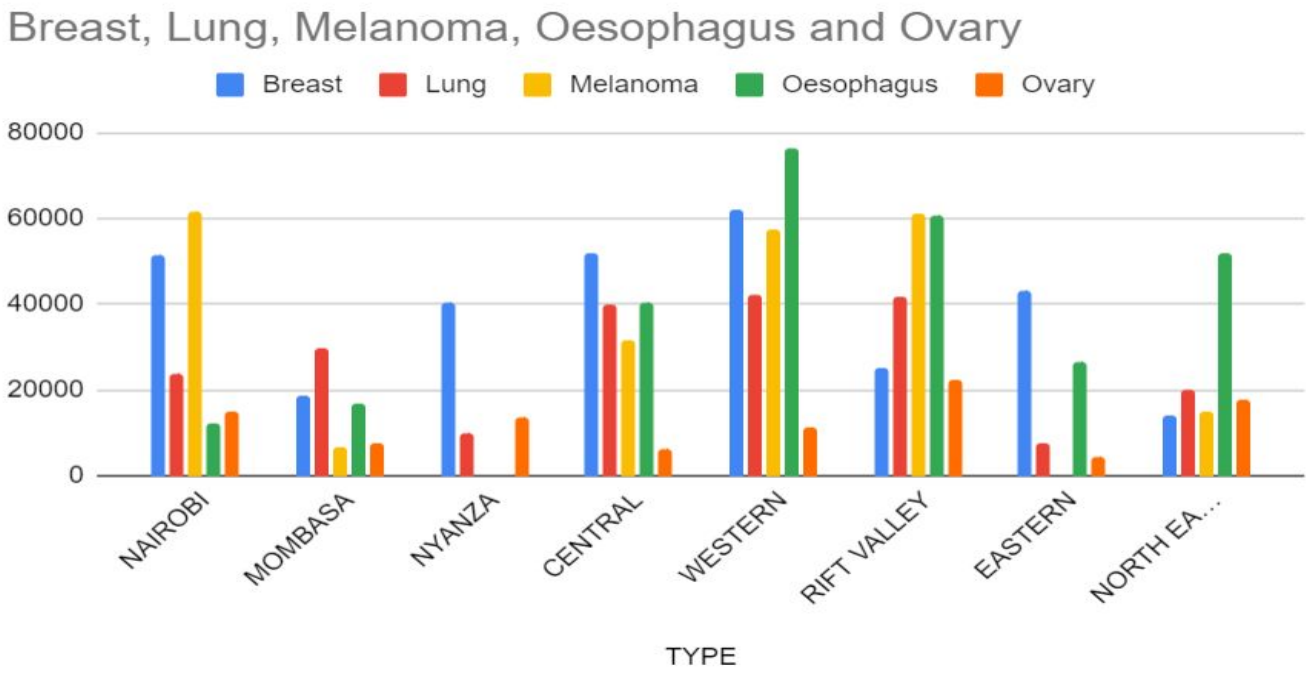
Which are the top ten most prevalent type of Cancer in Kenya



The dataset includes various types of cancers, ranging from breast and lung to cervix, non-Hodgkin lymphoma, and prostate. Breast cancer has the highest number of cases, followed by Oesophagus, Melanoma, Lung, and Ovary.

DATA ANALYSIS FINDINGS

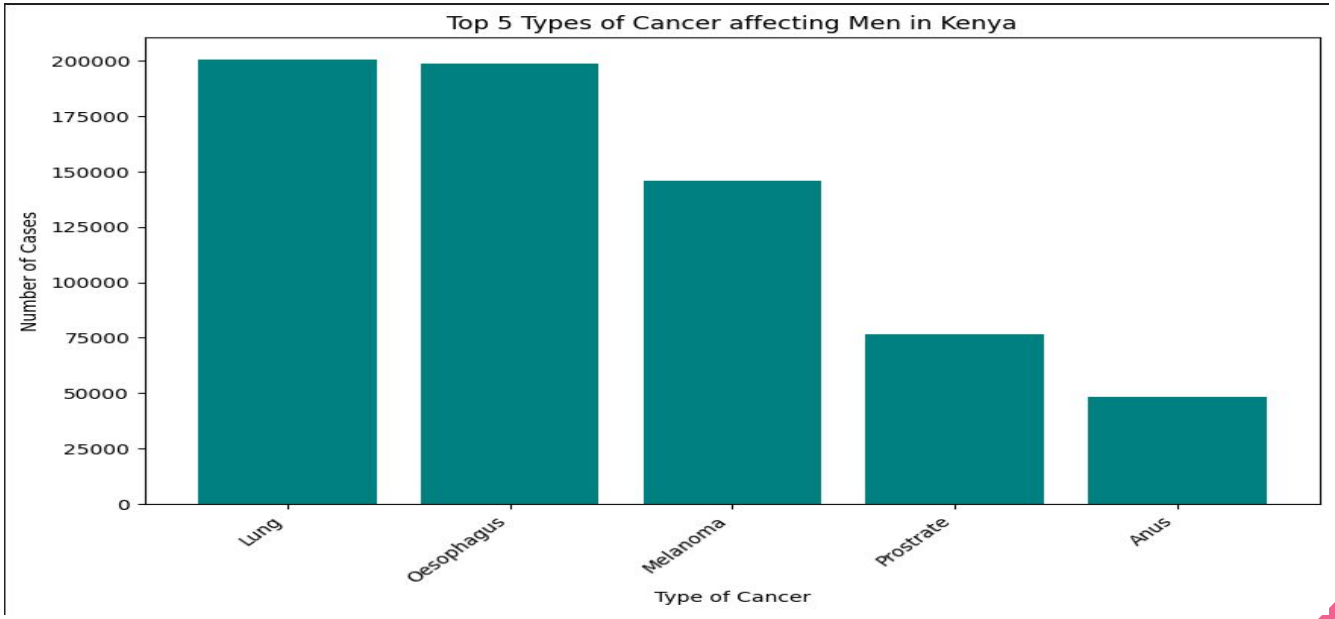
Regional Analysis of the top five most prevalent cancer



Each type of cancer has varying distributions across different regions. For example, Breast cancer has the highest incidence in Nairobi and Central regions, while Melanoma is more prevalent in Nairobi and Rift Valley.

DATA ANALYSIS QUESTION

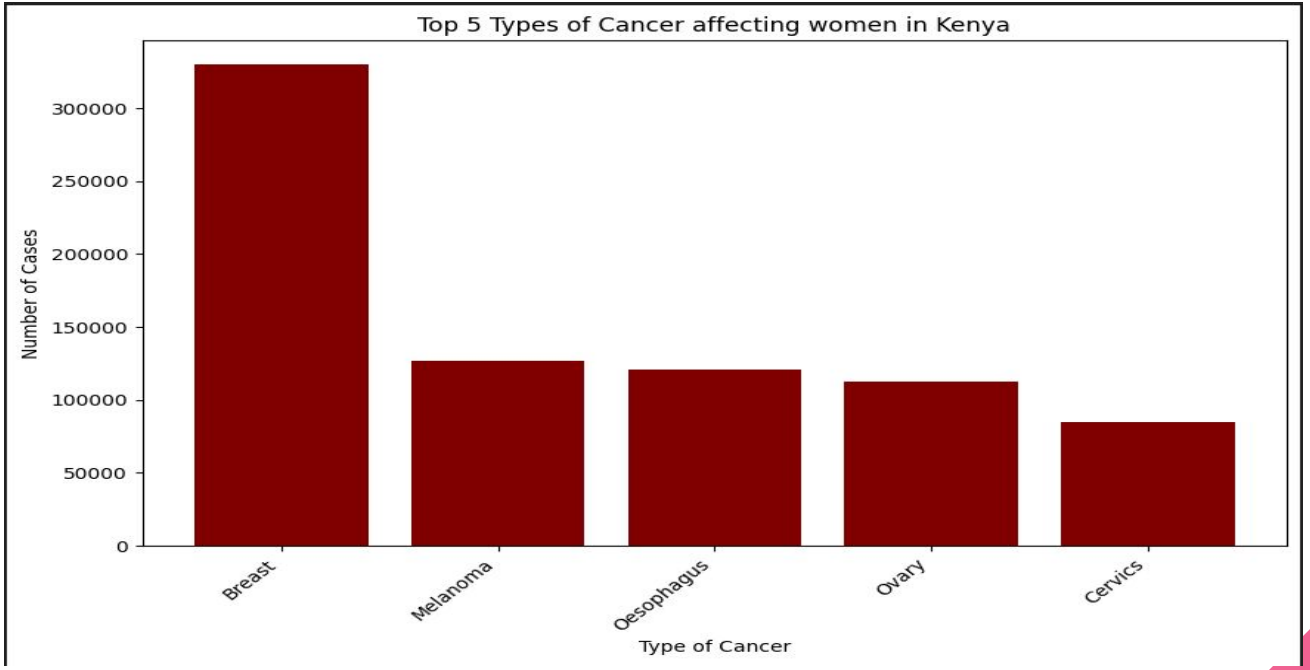
- Top five types of cancers affecting Men



The data indicates that certain types of cancer have a higher incidence among males compared to females. For example, Lung cancer has the highest incidence among males, followed by Oesophagus, Melanoma, Prostate, and Anal cancers.

DATA ANALYSIS QUESTION

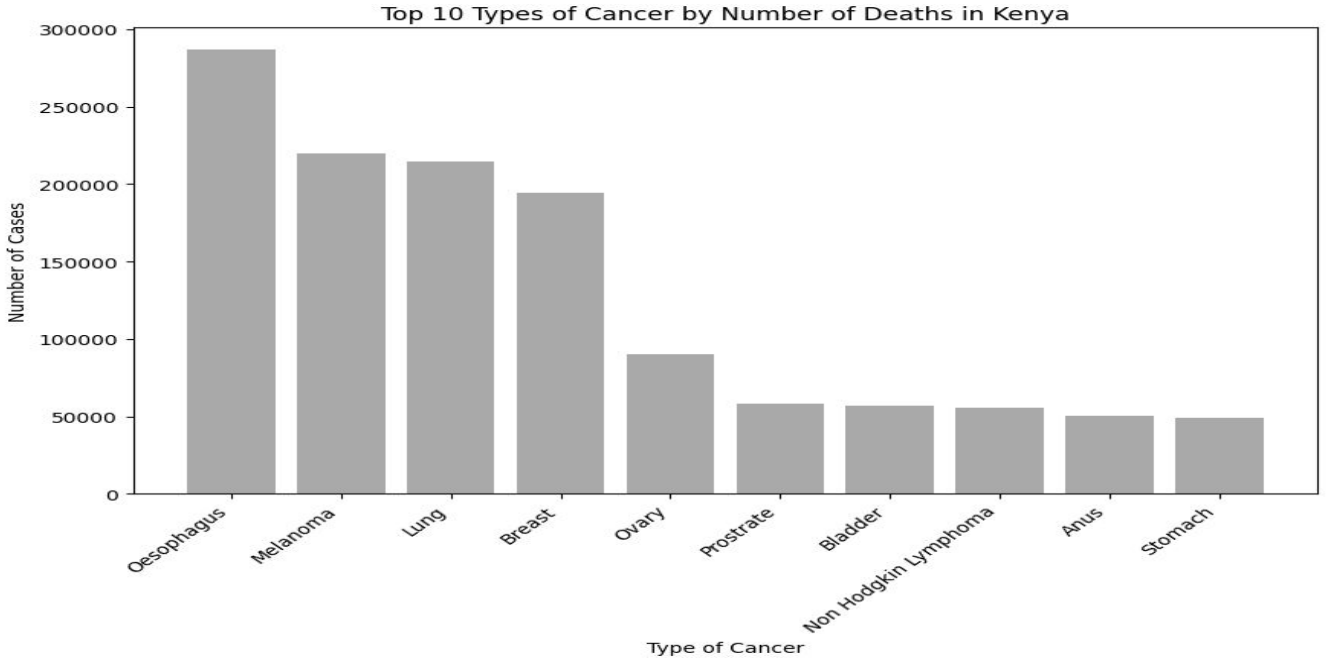
Top five types of cancers affecting Women



The data indicates that certain types of cancer have a higher incidence among females compared to males. For example, Breast cancer has the highest incidence among females, followed by Melanoma, Oesophagus, Ovary, and Cervical cancer.

DATA ANALYSIS QUESTION

Which type of cancer causes most deaths



The data on cancer-related deaths provides valuable insights into the burden of different types of cancer on mortality rates and underscores the importance of multifaceted strategies for cancer prevention, early detection, and treatment to reduce the impact of cancer on public health.

CONCLUSION AND RECOMMENDATIONS

There is need for:

- Implementing evidence-based strategies for cancer prevention, promoting healthy lifestyle behaviors, increasing access to cancer screening and early detection services, and ensuring timely and appropriate treatment for individuals diagnosed with cancer.
- Healthcare Access and Awareness
- Identification and mitigation of lifestyle and environmental factors contributing to the prevalence of cancer in Kenya
- Identification of Potential Risk Factors for various cancers and creation of awareness.
- Tailored Approaches to Cancer Care