Statistical analysis of Cancer cases in India

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Abstract: In the present paper, different kind of cancer cases have been Statistically analyzed. The estimated figure of patients with cancer in India is 1,392,179 for the year 2020.The collective 5 leading types of cancer are breast, lung, mouth, cervix uteri and tongue. Trends in cancer frequency rate indicated an increase in all types of cancer in both males and females.Data are depicted with the help of graphs and chart.

Keywords: Cancer, Statistical, Data, Graphs, Charts.

Introduction

Non-communicable diseases accounted for 71% of total deaths in the world. In India, Non-communicable diseaseswere estimated to account for 63% of all deaths, and cancer was one of the leading causes (9%). Cancer registries are recognized as vital components of national cancer-control programs. Publications from developed and developing countries provide updated information on cancer occurrence, trends, and projections. In India, the systematic collection of data on cancer has been performed since 1982 by the population-based cancer registries and hospital-based cancer registries under the National Cancer Registry Program–National Centre for Disease Informatics and Research of the Indian Council of Medical Research, Bengaluru.

Cancer is disease involving abnormal cell growth with the potential to invade to other parts of the body. Symptoms that indicate this disease are include a lump, abnormal bleeding, prolonged cough, unexplained weight loss etc. Over 100 types of cancers are found in humans likebreast, lung, mouth, cervix uteri and tongue etc.

Cancer statistics at a glance

The main cause of cancer deathsare tobacco use (22%), obesity, poor diet, lack of physical activity, excessive drinking of alcohol (10%), certain infections such as Helicobactors pylori, hepatitis B, hepatitis C, human papillomavirus infections, Epstein–Barr virus, human immunodeficiency virus (15%), exposure to ionizing radiation, environmental pollutants (15%), inherited genetic effects (10%). These are the main factors responsible for changing the genes of a cell.
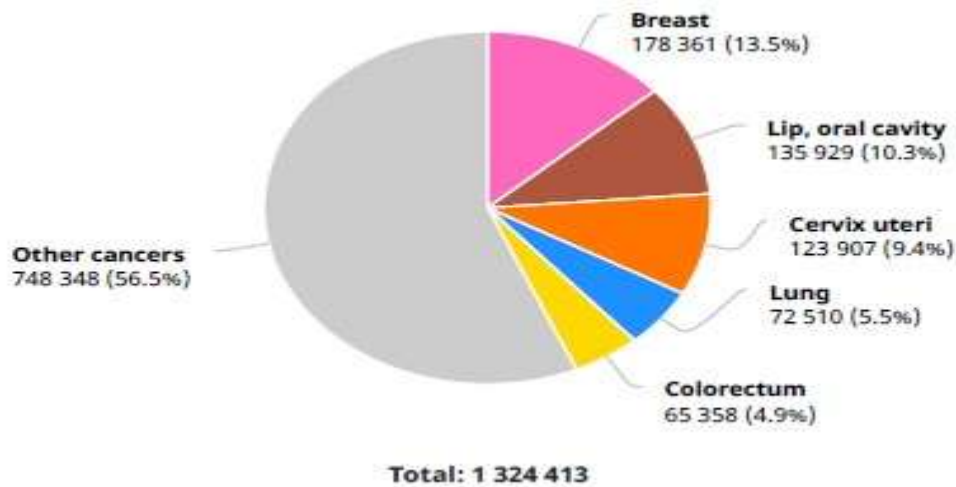
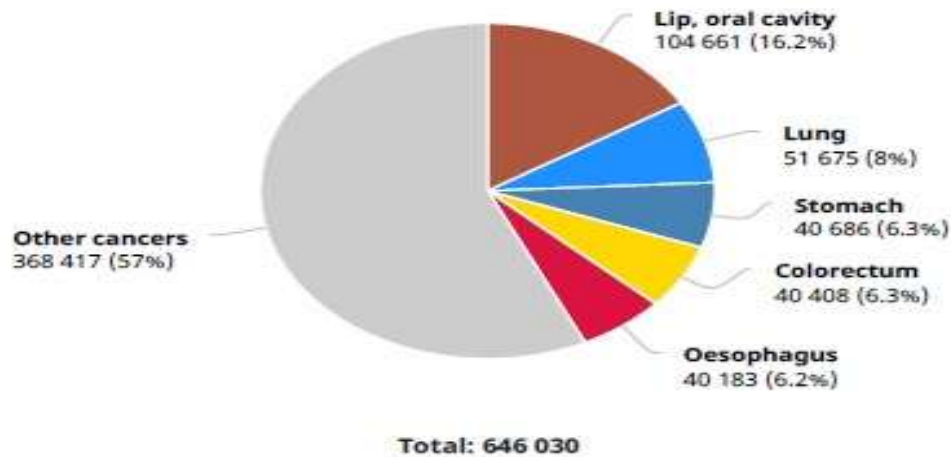*Figure 1. Number of new cases in 2020 (males and females)*

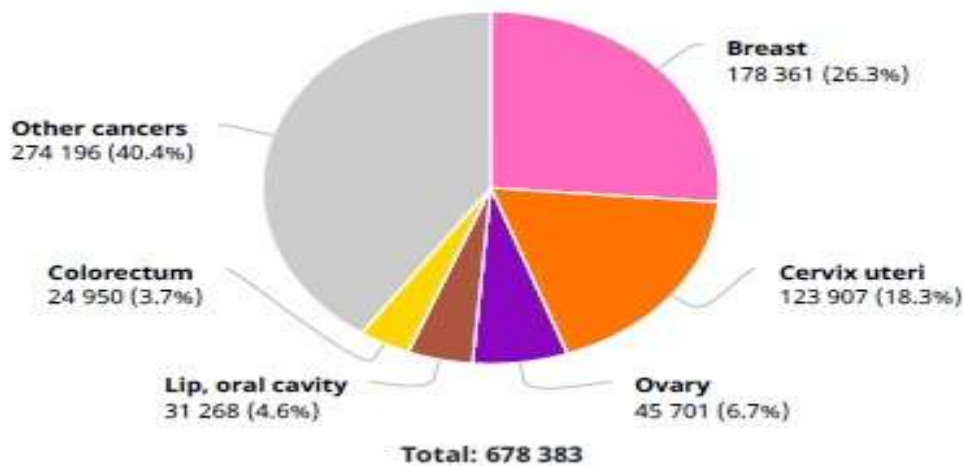*Figure 2. Number of new cases in India in 2020 (males)*

Figure 3. Number of new cases in India in 2020 (females)

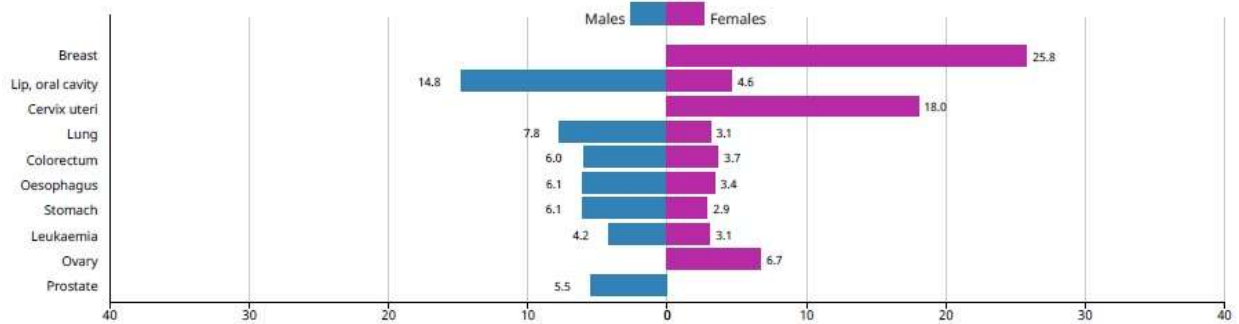|	Males	Females	Both sexes
Population	717 100 976	662 903 415	1 380 004 378
Number of new cancer cases	646 030	678 383	1 324 413
Age-standardized incidence rate (World)	95.7	99.3	97.1
Risk of developing cancer before the age of 75 years (%)	10.4	10.5	10.4
Number of cancer deaths	438 297	413 381	851 678
Age-standardized mortality rate (World)	65.4	61.0	63.1
Risk of dying from cancer before the age of 75 years (%)	7.4	6.7	7.1
5-year prevalent cases	1 208 835	1 511 416	2 720 251
Top 5 most frequent cancers excluding non-melanoma skin cancer (ranked by cases)	Lip, oral cavity Lung Stomach Colorectum Oesophagus	Breast Cervix uteri Ovary Lip, oral cavity Colorectum	Breast Lip, oral cavity Cervix uteri Lung Colorectum

Figure 4. Statistics at a glance

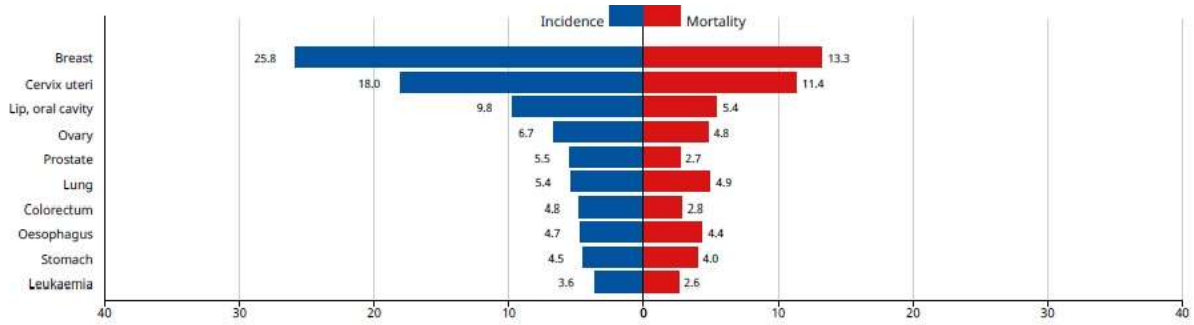*Figure 5. Incidence rate of top ten cancers per 100000 populations.Incid*

Figure 6. . Incidence and mortality rate of top ten cancers per 100000 populations

Discussion

In the present paper, it is analysed that breast, lung, mouth, cervix uteri,Colorectum, Oesophagus, stomach, Leukaemia, ovary, Prostate cancer are the significant kind of cancers. Incidence rate and mortality rates are high in these kind of cancers.The risk of developing certain cancers can be reduced by not smoking, maintaining a healthy weight, limiting alcohol intake, eating plenty of   vegetables, fruits, and whole grains, vaccination against certain infectious diseases, limiting consumption of processed meat and red meat, and limiting exposure to direct sunlight. Early detection through screening is useful for different kind of cancers.

References

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