Ovarian Cancer Awareness Month

Why in News?

The **American Association for Cancer Research**, the world's oldest and largest professional organization dedicated to cancer research, has **recognized September as Ovarian Cancer Awareness Month**.

- This month is dedicated to **raising awareness** about this deadly gynecological cancer.
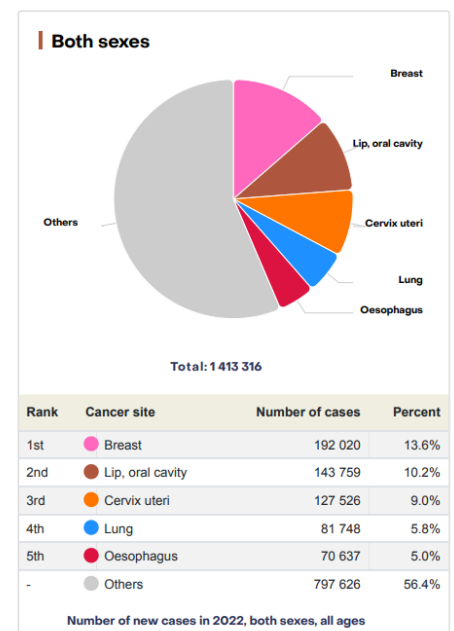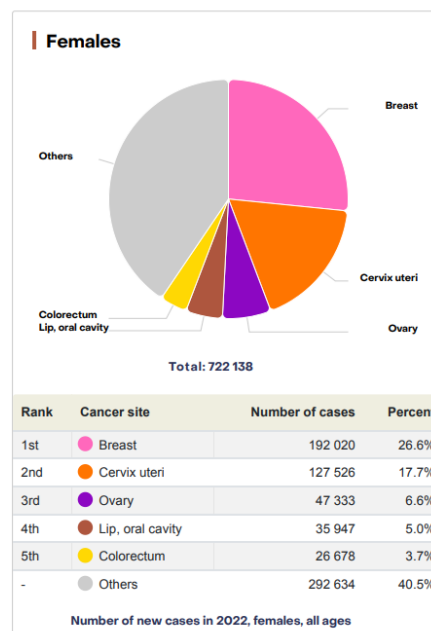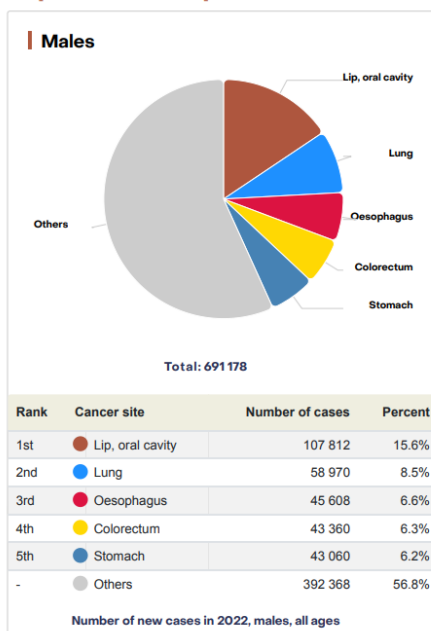
Note:

- **National Cancer Awareness Day** is celebrated in **India** on **7th November** every year to raise awareness about cancer and encourage early detection.

What are the Key Facts Related to Ovarian Cancer?

- **About:**
    - Ovarian cancer is a **cancerous tumor that forms in the tissues of an ovary**. The ovaries are a pair of **female reproductive glands** that **make eggs** and **female hormones**.
    - **Cancer** is a disease in which **abnormal cells in the body grow out of control** and form a tumor.
- **Epidemiology**: Ovarian cancer contributes to **6.6% of all women's cancers in India.** The disease is particularly problematic due to late diagnosis, which significantly impacts survival rates.
    - In India, **ovarian cancer ranks among the top 3 cancers** (after **breast** and **cervix cancer**) affecting women.
    - In 2022, India reported **47,333 new ovarian cancer** cases and **32,978 deaths.**
- **Symptoms: Common symptoms include bloating, pelvic or abdominal pain, loss of appetite, feeling full quickly, frequent urination, indigestion, constipation, back pain, persistent fatigue, weight loss, and postmenopausal vaginal bleeding.**
    - These **symptoms often lead to misdiagnosis** or delayed treatment.
- **Type of Ovarian Cancer:**

    - Type I: Less common, typically diagnosed early, and has a better prognosis.

    - **Type II:** More aggressive, usually **diagnosed at an advanced stage,** and responsible for the majority of ovarian cancer deaths.
- **Survival Rates:** The survival rate is heavily **dependent on the stage at which the cancer is detected**.
    - Research indicates that about **20% of patients with advanced ovarian cancer** who receive optimal treatment can be disease-free at 10 years.

- **Screening Challenges:** Unlike breast or cervical cancer, there are **no effective screening tests** for ovarian cancer.
    - The **CA125 blood test,** while useful for monitoring diagnosed cases, is not recommended for routine screening due to **its limited specificity and potential for false positives.**
        - The CA 125 test measures a **blood protein** to diagnose or monitor ovarian, fallopian tube, or primary peritoneal cancer.
- **Genetic Factors:** Ovarian cancer has a **strong hereditary component,** with **65-85% of hereditary cases linked to mutations** in the **BRCA1** and **BRCA2 genes**.
    - Women with these mutations face significantly higher risks of developing ovarian cancer.
    - BRCA1 and BRCA2 genes help repair **DNA** and **regulate cell division.** Mutations in these genes **raise the risk of breast, ovarian, and other cancers**.
- **Lifestyle Factors**: Certain lifestyle choices, including **talcum powder usage and exposure to chemicals in hair products**, have been discussed as **potential risk** factors for ovarian cancer.
    - Additionally, **Hormone Replacement Therapy (HRT)** has been associated with an increased risk.
    - HRT is commonly used to **treat menopausal symptoms** like hot flashes and vaginal discomfort.
- **Reducing Risk:**
    - Genetic counseling is crucial for women with a **family history** or **genetic mutation (BRCA1/BRCA2) linked** to **ovarian or breast cancer,** providing tailored guidance on **risk management and preventive measures**.
    - A **diet rich in fruits, vegetables, whole grains**, and antioxidants may help reduce ovarian cancer risk.
    - Maintaining a **healthy weight** through diet and exercise may lower the risk.
    - **Regular gynecological check-ups** can help monitor reproductive health and detect potential issues early.

Top 5 most frequent cancers**

Males

Rank	Cancer site	Number of cases	Percent
1st	Lip, oral cavity	107 812	15.6%
2nd	Lung	58 970	8.5%
3rd	Oesophagus	45 608	6.6%
4th	Colorectum	43 360	6.3%
5th	Stomach	43 060	6.2%
-	Others	392 368	56.8%

Total: 691 178

Number of new cases in 2022, males, all ages

Females

Rank	Cancer site	Number of cases	Percent
1st	Breast	192 020	26.6%
2nd	Cervix uteri	127 526	17.7%
3rd	Ovary	47 333	6.6%
4th	Lip, oral cavity	35 947	5.0%
5th	Colorectum	26 678	3.7%
-	Others	292 634	40.5%

Total: 722 138

Number of new cases in 2022, females, all ages

Both sexes

Rank	Cancer site	Number of cases	Percent
1st	Breast	192 020	13.6%
2nd	Lip, oral cavity	143 759	10.2%
3rd	Cervix uteri	127 526	9.0%
4th	Lung	81 748	5.8%
5th	Oesophagus	70 637	5.0%
-	Others	797 626	56.4%

Total: 1 413 316

Number of new cases in 2022, both sexes, all ages

What are the Government Initiatives Related to Cancer Treatment?

- National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke
- National Cancer Grid
- National Cancer Awareness Day
- HPV Vaccine

Read More: [Rising Cancer Concerns](#).

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UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q. With reference to the treatment of cancerous tumours, a tool called cyberknife has been making the news. In this context, which one of the following statements is not correct? (2010)

(a) It is a robotic image guided system

(b) It delivers an extremely precise dose of radiation

(c) It has the capability of achieving sub-millimetre accuracy

(d) It can map the spread of tumour in the body

Ans: (d)

Q. 'RNA interference (RNAi)' technology has gained popularity in the last few years. Why? (2019)

1. It is used in developing gene-silencing therapies.
2. It can be used in developing therapies for the treatment of cancer.
3. It can be used to develop hormone replacement therapies.
4. It can be used to produce crop plants that are resistant to viral pathogens.

Select the correct answer using the code given below.

(a) 1, 2 and 4

(b) 2 and 3

(c) 1 and 3

(d) 1 and 4 only

Ans: (a)

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PDF Refernece URL: https://www.drishtiias.com/printpdf/ovarian-cancer-awareness-month