

All You Need To Know About

# BREAST CANCER



By the Global Researcher Club

### **About the Global Researcher Club**

Global Researcher Club® is an international voluntary & non-profit scientific research community for researchers worldwide. GRC® was established in August 2022 in Alexandria, Egypt, by Dr. Ramy Ghazy and Dr. Assem Gebreal. The club's origins can be traced back to September 2020, when it started as an informal group for scientists and students. Over time, the group grew in membership and scope, leading to the establishment of GRC® as a global research community.

The Global Researcher Club's vision is to establish a worldwide research community that has a constructive effect on the world by promoting research and youth to address pressing health challenges and enhance the health and well-being of people everywhere. The organization is dedicated to creating a world where research is accessible to everyone and researchers are empowered to positively impact society.

We are committed to fostering excellence, integrity, and social responsibility in research, transcending geographical, disciplinary, and cultural boundaries, and becoming a leading voice and catalyst for change in the global research landscape. We strive to promote diversity, equity, and inclusion.

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### **Burden of Breast Cancer**

Breast cancer affects women across the world and is the most common cancer among them. It accounts for a quarter of all new cancer cases in women.

**1 in 8** women will be diagnosed with breast cancer in their lifetime.



### Worldwide

In 2020

2.2 MILLION 685,000 DEATHS

7
MILLION
SURVIVAORS







Every **46 seconds**, somewhere in the world, someone dies from breast cancer. That's more than **1,876** women and men every day.

### In Asia

In Asia, breast cancer varies by country and area. Some places, particularly in **Southeast Asia**, have lower numbers of breast cancer cases compared to Western countries.

In some countries, including **India, China, and Japan**, breast cancer is the most common cancer among women. The incidence is rising, which can be linked to lifestyle changes, such as **having children at a later age, reduced** breastfeeding, and adopting Western dietary habits.

### In Africa

Breast cancer is an increasing concern in Africa, especially in **North African** countries, while **sub-Saharan Africa** has a lower prevalence compared to high-income countries.

The number of breast cancer cases is on the rise across Africa, due to factors like an aging population, Western lifestyle adoption, and better healthcare for cancer detection and diagnosis. [6] Unfortunately, breast cancer is often detected at later stages in Africa, which can lead to less favorable outcomes.



### **Breast Cancer Awareness**

Breast cancer awareness is a vital supporter in the fight against this disease, facilitating early detection when it is most treatable. It's not just about knowing the facts; it's about taking action, supporting one another, and promoting research and advocacy.

### **Anyone Can Be Affected**

While breast cancer predominantly affects women, men are not immune. Understanding that this disease can strike anyone, regardless of age, gender, or background, underscores the need for widespread awareness and vigilance.

### **Risk Factors**

Breast cancer is a complex web of risk factors. Understanding the risk factors and prevention strategies is key to reducing its impact, and empowers you to make informed decisions about prevention and screening. There are several risk factors for breast cancer, **including**:

### 1. Being female

Women are much more likely than men to develop breast cancer.



### 2. Increasing age

Your risk of breast cancer increases as you age



### 3. personal history

Personal history of breast conditions or breast cancer include having had a breast biopsy revealing lobular carcinoma in situ (LCIS), atypical hyperplasia of the breast, or a previous diagnosis of breast cancer in one breast.

### 4. Family History

A family history of breast cancer, especially in close relatives like a mother or sister



### 5. Genetic Mutations

Certain genetic mutations, such as BRCA1 and BRCA2.



### 6. Hormonal Factors

Factors related to hormone levels, such as hormone therapy or early menstruation and late menopause, Estrogen exposure over a longer period may contribute to the development of the disease.

### 7. Breast Density

Women with denser breast tissue may have a higher risk of developing breast cancer.



# 8. Obesity & Lifestyle Choices

Obesity, alcohol consumption, and hormone replacement therapy



### 9. Radiation exposure

receiving radiation treatments to your chest as a child or young adult.



### 10. Reproductive history

Having the first pregnancy after age 30, not breastfeeding, never having a full-term pregnancy, and having never been pregnant

# **Empowering Through Prevention**

Understanding the risk factors is only part of the equation. Breast cancer **prevention strategies can significantly reduce your chances of developing this disease:** 

**1. Healthy Lifestyle Choices:** Maintaining a balanced diet and regular exercise can help manage weight and reduce the risk of breast cancer. Limiting alcohol intake is also advisable.



**2. Regular Screening:** Breast cancer screening is essential for early detection. Self-exams, clinical breast exams, and mammograms are invaluable tools. Understanding your screening schedule, based on your risk profile, is vital.



**3. Genetic Testing:** For individuals with a family history of breast cancer, genetic testing can provide valuable insights. It allows you to make informed decisions about preventive measures, including increased surveillance or risk-reducing surgeries.



**4. Hormone Replacement Therapy (HRT) Awareness:** If considering hormone replacement therapy, it's crucial to discuss the potential risks and benefits with your healthcare provider. Exploring alternative treatments or lower-dose options can help mitigate the risk.



**5. Breast Health Education:** Promoting breast health education in communities and schools is essential. This includes teaching individuals about self-examinations and the importance of early detection



### **Self Examination**

- **A. Choose a Consistent Time:** Pick a time of the month when your breasts are least likely to be tender or swollen, ideally a few days after your menstrual period ends.
- **B. Visual Inspection:** Stand in front of a mirror with your arms at your sides. Look for changes in the size, shape, or contour of your breasts. Check for dimpling, puckering, or changes in the skin, and note any changes in the nipple.
- **C. Raise Your Arms:** Raise your arms and look for the same changes in the mirror.
- **D. Examine in the Shower:** Use the pads of your fingers to feel for lumps in each breast. Move your fingers in a circular motion, covering the entire breast and armpit area. You can also use a soapy hand to make it easier.
- **E. Lying Down:** Lie down and place a pillow under your right shoulder. Use your left hand to examine your right breast, and then switch sides.
- **F. Check Nipples:** Gently squeeze each nipple to check for discharge or lumps.
- **G. Consult a Healthcare Provider:** If you find any changes, lumps, or concerns during your self-exam, contact a healthcare provider for further evaluation.

**Remember** that self-exams **are not** a replacement for regular mammograms and clinical breast exams by healthcare professionals. They are, however, a valuable tool for early detection and should be done regularly.



# **Early Detection Saves Lives**

The most common symptoms of breast cancer include a lump in the breast or subtle changes in breast appearance. This underscores the importance of regular self-exams, clinical breast exams, and mammograms. By being proactive, you increase your chances of detecting cancer early, leading to improved survival rates.

Breast cancer is not a death sentence. Thanks to remarkable advances in research and treatment, **the five-year survival rate for breast cancer exceeds 90%**. Survivors are living vibrant lives, breaking barriers, and achieving extraordinary feats.

The global community's response to breast cancer is a testament to the power of collective action. By understanding the risk factors, familiarizing ourselves with signs and symptoms, advocating for regular screenings, and offering unwavering support, we can create a world where everyone affected by breast cancer feels the strength of unity.



## **In Summary**

# Here are some tips for breast cancer awareness:

- 1. Know your risk factors.
- 2. Be familiar with the signs and symptoms of breast cancer.
- 3. Get regular breast exams and mammograms.
- 4. Talk to your doctor about your risk for breast cancer and the best screening schedule for you.
- 5. Encourage your friends and family members to get regular screenings.
- 6. Support breast cancer research and advocacy organizations.
- 7. Get involved in breast cancer awareness campaigns.



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