#### Understanding Breast Cancer: Symptoms, Risks, and Myths

Bridging Clinical Insight and Public Awareness

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#### **Excerpt**

Breast cancer remains one of the most common cancers affecting women worldwide, yet awareness, early detection, and timely management continue to save countless lives. Despite major advances in diagnosis and treatment, social stigma, fear, and myths still delay help-seeking behaviors. This article aims to clarify the science behind breast cancer, recognize early symptoms, identify risk factors, and dispel common misconceptions. It presents a balanced perspective blending public awareness with clinical insight to empower both women and health professionals in preventing and managing this disease.

#### **Keywords**

Breast cancer, pink ribbon, early detection, mammography, breast health, women's health, awareness, risk factors, self-examination, oncology, prevention, myths, Pakistan.

#### Introduction

October is internationally observed as **Breast** Cancer Awareness Month, symbolized by the pink ribbon a global emblem of courage, hope, and solidarity. Breast cancer affects millions of women every year and stands as the leading cause of cancer-related deaths among women worldwide. In Pakistan, it is estimated that one in nine women will develop breast cancer during her lifetime one of the highest rates in Asia.

Despite being a curable disease when detected early, countless women present at advanced stages due to lack of awareness, delayed diagnosis, social stigma, and limited access to screening. Understanding the early warning signs, risk factors, and myths surrounding breast cancer is essential not only for health professionals but also for every woman who values her health and dignity.

## **Understanding Breast Cancer**

Breast cancer occurs when abnormal cells in the breast grow uncontrollably and form a lump or mass. Most cases arise from the lining of milk ducts (ductal carcinoma) or the lobules that produce milk (lobular carcinoma). Though predominantly affecting women, men also account for about 1% of all cases.

Medical research has proven that early detection saves lives if diagnosed in Stage I or II, survival exceeds 90%. This underscores the

need for regular self-examinations, professional screening, and public education.

# Recognizing the Symptoms: Common and Atypical

Early detection begins with awareness of symptoms yet many cases are missed due to misconceptions or atypical presentations.

### **Common signs include:**

- A lump in the breast or underarm.
- Nipple discharge (especially bloody or clear).
- Skin changes such as dimpling, redness, or scaling.
- Breast pain or swelling.

#### Atypical signs may involve:

- Persistent itching or rash around the nipple.
- Sudden asymmetry in breast shape.
- Enlarged lymph nodes without a palpable mass.

Clinical Insight: Dense breast tissue, common in younger women, can obscure mammographic findings. Health professionals must consider adjunct imaging such as ultrasound or MRI and maintain a high index of suspicion in symptomatic patients even with normal scans.

Awareness of both typical and atypical signs ensures that subtle cases are not overlooked. Timely referral to a specialist can make the difference between a curable and an advanced disease.

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### Risk Factors: Modifiable and Non-Modifiable

Understanding risk factors allows both individuals and healthcare providers to focus on prevention and personalized screening strategies.

#### **Modifiable risks:**

- Obesity and sedentary lifestyle.
- Alcohol consumption.
- Long-term hormone replacement therapy.
- Late childbirth or no childbirth (nulliparity).

#### Non-modifiable risks:

- Age (especially above 50 years).
- Family history of breast or ovarian cancer.
- BRCA1 or BRCA2 gene mutations.
- Early menarche or late menopause.

**Public Message:** While genetics influence risk, lifestyle choices have a significant impact. Regular physical activity, balanced nutrition, maintaining healthy body weight, and limiting alcohol intake can lower the incidence of breast cancer.

**Professional Note:** Risk assessment tools like the Gail Model and Tyrer-Cuzick algorithm are valuable in stratifying patients for appropriate screening frequency and genetic counseling.

# Screening and Early Detection: A Shared Responsibility

Breast cancer detected early is highly treatable, often with breast-conserving approaches. Screening and vigilance are shared responsibilities between the public and healthcare professionals.

#### For the public:

- Begin annual mammograms at age 40 (or earlier if high-risk).
- Perform monthly self-examinations beginning at age 20.
- Report any new breast changes promptly to a healthcare provider.

#### For professionals:

- Stay updated on evolving international guidelines (e.g., USPSTF, NCCN, WHO).
- Advocate for accessible and affordable screening, particularly in underserved and rural communities.
- Use culturally sensitive communication to build trust, especially in societies where discussing breast health is taboo.

Karachi Context: In Pakistan, access to mammography remains limited and social stigma still deters many women from seeking care. Mobile screening units, lady health workers, and awareness sessions in schools and workplaces can play transformative roles in saving lives.

## Myths and Misconceptions: What We Must Unlearn

Even in the age of modern medicine, misinformation continues to cloud public perception.

Myth	Fact
Breast cancer only affects older women.	It can occur at any age, even in younger women.
A painless lump is harmless.	Many malignant lumps are painless initially.
Wearing underwire bras or using deodorants causes breast cancer.	No scientific evidence supports this claim.
If no one in my family has cancer, I'm safe.	Most breast cancer cases occur without family history.
Mammograms cause cancer due to radiation.	Mammograms use very low radiation and are lifesaving tools.

Clinical Responsibility: Physicians must address misinformation during consultations, particularly in communities with low health literacy. Correcting myths is a professional duty that strengthens trust and encourages timely screening.

# Bridging the Gap: Dialogue and Empowerment

True awareness is not a one-month campaign it is a continuum of care and communication. Health professionals must listen, educate, and empower, while the public must engage, question, and prioritize health.

Empowerment comes when women understand that early detection gives them control, not fear. Survivors' stories, community outreach, and open dialogue about breast health can break stigma and inspire proactive behavior.

#### **Suggested Actions:**

- Host joint seminars for clinicians, nurses, and community members.
- Publish bilingual infographics (Urdu and English) explaining self-examination techniques.
- Feature survivor stories in local media to humanize awareness.
- Encourage medical students and young doctors to volunteer in community outreach drives.

**Public Health Vision:** Every woman regardless of socioeconomic status deserves access to accurate information, affordable screening, and compassionate care. The fight against breast cancer begins not in hospitals, but in homes, schools, and conversations that encourage women to take charge of their health.

#### Conclusion

Breast cancer awareness must evolve beyond ribbons and campaigns into sustained action and empowerment. For healthcare professionals, it means practicing evidence-based, empathetic care. For the public, it means vigilance, openness, and courage to seek help early.

When communities unite knowledge with compassion, breast cancer becomes not a death sentence but a treatable condition with hope and dignity. Together, we can turn the pink ribbon from a symbol of awareness into one of victory over silence, stigma, and fear.

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