



Breast Cancer Awareness Know, Care, Act

Dr.Evrim Meeuw Neurospinal Hospital Oncology Department

Breast Cancer



Most frequent non-skin cancer and cause of cancer death in women worldwide, Males can also develop breast cancer (~1% of the diagnosed cancers)

Breast cancer <u>mortality</u> has dropped dramatically since the 1980s, and both earlier detection through screening and improvements in breast cancer treatment are responsible for this reduction in mortality.

Our Mission



At NSH Dubai,

We aim to address the needs of the community we are serving. This includes pioneering methods to prevent and cure breast cancer.

After this presentation, you'll be able to share important information with your family and friends - and join the fight against breast cancer in your own community!

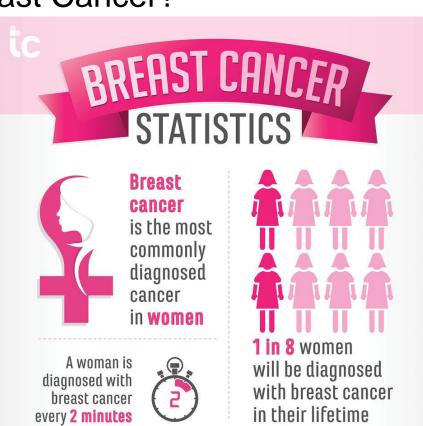
October: Pink Month



- Each October, you may notice a lot of pink popping up!
- You may have also heard about special events, like the Race for the cure, that raise money for breast cancer research and services for breast cancer patients and survivors.
- Events for SCREENING!

How Common is Breast Cancer?

Global Health Issue!





40 IS AN IMPORTANT NUMBER



All women 40 and older should get annual mammograms



Mammography can lower your risk of dying of breast cancer by 40%



The most lives are saved by yearly mammography starting at age 40

1 in 6

breast cancers occur in women 40-49

Ten year risk for breast cancer in 40 year old is

1 in 69

A Harvard study showed that

70%

of women who died from breast cancer were among 20% of women not screened*

*Harvard Teaching Hospitals statistic

What is Breast Cancer?

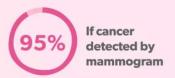


- Breast cancer happens when normal cells in the breast change and grow out of control.
- People sometimes discover that they have breast cancer because they find a lump in their breast.
- Other times, cancer is found during a routine screening test, before a lump can be felt. This is when and how we want to DIAGNOSE!

Importance of awareness and early detection



THE 10 YEAR SURVIVAL RATE











HEALTHCARE

Over 40% of women in the UAE have never conducted a mammogram, reveals survey commissioned by SSMC

SSMC commissions public survey with over 300 women over the age of 40 in the UAE

What do women in the UAE know about breast cancer*



8 in 10

women either have had breast cancer themselves or know someone who has had it

40%

have never done a routine mammogram

54%

believe breast cancer occurrence is strongly connected to family history 1<u>1</u>10

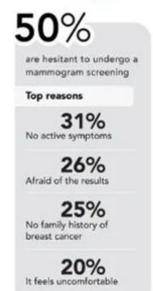
women believe breast cancer cannot be cured

1₁5

women think that breast cancer cannot be prevented

1 in 6

women think mammograms are not safe due to high level of radiation exposure





^{*} This survey was commissioned by Sheikh Shakhbout Medical City (SSMC) with over 300 women in the UAE, who are 40 years old and above.

HEALTHCARE

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Reasons for reluctance to have mammograms

State of being healthy (31%)

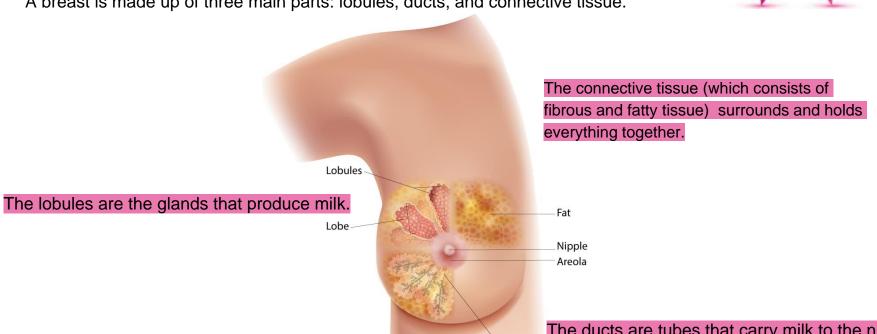
Fear of results (26%)

Not having any family member who's had breast cancer (25%)

Being embarrassed (9%) or fear of being judged (8%).

Breast 101 Anatomy & Functions

A breast is made up of three main parts: lobules, ducts, and connective tissue.



Duct

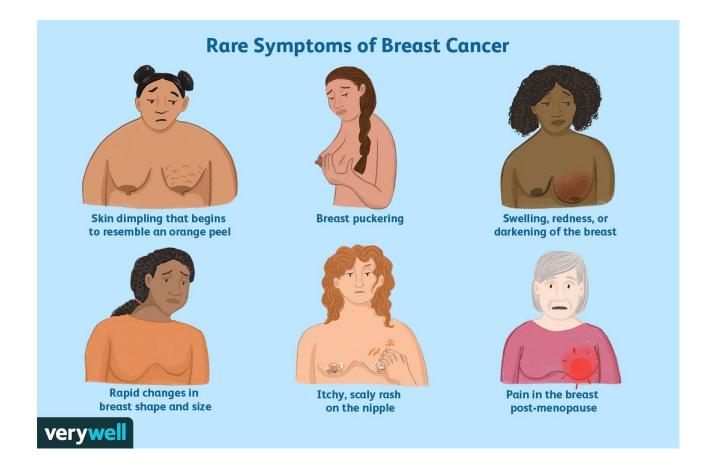
The ducts are tubes that carry milk to the nipple.

Signs of Breast Cancer





Breast and Axilla



Breast Self Examination

https://www.breastcancer.org/screening-testing/breast-self-exam-bse





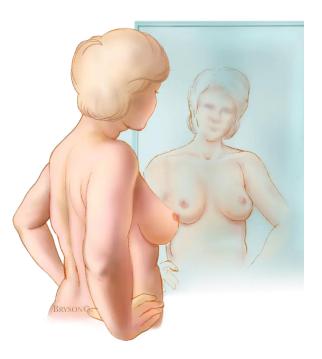
About you

Learn

Community

BSE is not a substitute for Screening Mammograms

- Several studies have shown a lack of benefit and a higher rate of breast biopsies that showed benign disease with routine BSE.
- Women should receive careful instruction to differentiate normal tissue from suspicious lumps and understand that <u>BSE is an adjunct, but not a substitute, for mammography.</u>
- They should be encouraged to bring abnormal breast findings promptly to the attention of their clinician.
- While some expert groups don't support BSE, many do recommend educating women about breast self-awareness, overall breast health, and the pros and cons of BSE.
- The WHO recommends BSE as a way to empower women and raise awareness among women at risk, rather than as a screening method



Step 1: Examine Your Breasts in a Mirror With Hands on Hips

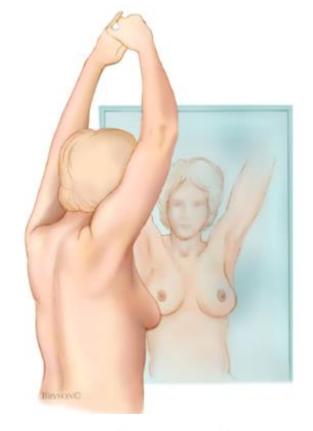
Begin by looking at your breasts in the mirror with your shoulders straight and your arms on your hips.

Here's what you should look for:

- Breasts that are their usual size, shape, and color
- Breasts that are evenly shaped without visible distortion or swelling

If you see any of the following changes, bring them to your doctor's attention:

- · Dimpling, puckering, or bulging of the skin
- A nipple that has changed position or an inverted nipple (pushed inward instead of sticking out)
- Redness, soreness, rash, or swelling



Step 2: Raise Arms and Examine Your Breasts

Now, raise your arms and look for the same changes.

Step 3: Look for Signs of Breast Fluid

While you're at the mirror, look for any signs of fluid coming out of one or both nipples (this could be a watery, milky, or yellow fluid or blood).



Step 4: Feel for Breast Lumps While Lying Down

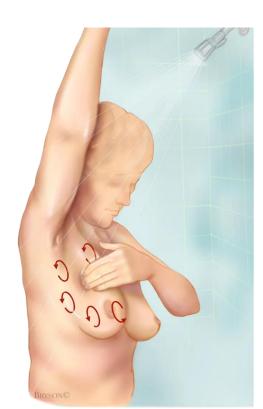
Next, check for breast lumps or abnormalities by feeling your breasts while lying down, using your right hand to feel your left breast, and then your left hand to feel your right breast. Use a firm, smooth touch with the first few finger pads of your hand, keeping the fingers flat and together. Press down with your fingers and move them in a circular motion that's about the size of a quarter (or an inch around).

Cover the entire breast from top to bottom, side to side — from your collarbone to the top of your abdomen, and from your armpit to your cleavage.

Follow a pattern to be sure that you cover the whole breast. You can begin at the nipple, moving in larger and larger circles until you reach the outer edge of the breast. You can also move your fingers up and down vertically, in rows, as if you were mowing a lawn. This up-and-down approach seems to work best for most women. Be sure to feel all the tissue from the front to the back of your breasts: for the skin and tissue just beneath, use light pressure; use medium pressure for tissue in the middle of your breasts; use firm pressure for the deep tissue in the back. When you've reached the deep tissue, you should be able to feel down to your ribcage.

Step 5: Feel Your Breasts for Lumps While Standing or Sitting

Finally, feel your breasts while you are standing or sitting. Many women find that the easiest way to feel their breasts is when their skin is wet and slippery, so they like to do this step in the shower. Cover your entire breast, using the same hand movements described in step 4.



What should I do if I notice a breast lump or abnormality?

- Do not panic.
- Contact your doctor.

Breast Imaging



Screening vs Diagnostic imaging

Types of breast imaging (Mammograms, Ultrasound, MRI)

Mammogram compared to air travel: A few transatlantic travels

Breast Tomosynthesis

- Advanced form of mammograms that may result in:
- Detection of smaller lesions not seen on conventional mammograms
- Clearer images for patients with dense breast tissue
- Less biopsies- more specific, therefore reducing false positive results



Risk Assessment

Everyone has some risk for developing breast cancer, but some are at higher risk and they will have different screening recommendations.

- Previous history of radiotherapy to chest
- A previous breast biopsy with a pathology of Atypical Ductal Hyperplasia or Lobular Carcinoma in situ or Atypical LH
- Family history, genetic testing
- A Genetic mutation that predisposes to breast cancer (BRCA1, BRCA2)
- Age of menarche, age at first live birth, number of pregnancies, and menopausal status
- Dense breast on mammogram, history of hormones

Breast Cancer Risk

- The women are considered average risk if there are no risk factors,
- An average lifetime risk of being diagnosed with breast cancer estimated at 12.4 percent.
- Many women who have a family history of breast cancer still have an average risk.

High Risk

- Personal history of breast cancer
- A confirmed or suspected genetic mutation known to increase the risk of breast cancer (BRCA1 or BRCA2, PTEN, TP53)
- A history of previous radiotherapy to the chest between 10 and 30 years of age
- Women with a BRCA1 mutation have ~60% absolute risk of developing a breast cancer by the time they are 70 years old
- However, because a BRCA1 or 2 mutation is relatively rare in the general population (1 in 300 to 500), mutation carriers account for only between 5 to 10 percent of all breast cancer cases.

High Risk

- Candidates for genetic screening
- Prophylactic strategies: Chemoprevention and surgeries
- MRI Screening
- Annually

Who should have breast cancer screening?

Age-related screening approach: Average risk women aged >40 years old are recommended to have mammogram every two years in UAE.

- Risk is lower for women <40 years old
- Sensitivity and specificity of mammography are also age-dependent,
 being higher in >40 yo
- If there is a family history or genetic mutation, the screening can be recommended to start earlier, and usually breast MRIs are recommended.

US Preventive Services Task Force (2016) ^[1]	2	Individualize*	Yes	Yes, to age 74
Canadian Task Force on Preventive Health Care (2018) ^[2]	2 to 3	Recommend against*	Yes	Yes, to age 74
National Health Service, United Kingdom (2018) ^[3]	3	Yes, start age 47	Yes	Yes, to age 73
Royal Australian College of General Practitioners (2018) ^[4]	2	No	Yes	Yes, to age 74
Medical societies				
American College of Obstetricians and Gynecologists (2017) ^[5]	1 to 2*	Individualize*	Yes	Yes, to at least age 75¶
American College of Physicians (2019) ^[6]	2	Individualize*	Yes	Yes, to age 74

Frequency of

screening (years)

Initiation of screening for women at average risk

50 to 69 years of age

Yes

Yes

Yes

≥70 years of age

Yes∆

Yes

40 to 49 years of age

Individualize* through

Yes

Yes

* Women should be counseled about the harms and benefits of mammography; individualized decisions should include shared decision-making based on risks, benefits, patient values and

1 year age 45 to 54

American College of Radiology and Society of Breast Imaging (2021)^[8]

Group (date)

Government-sponsored groups

American Cancer Society (2015)[7]

National Comprehensive Cancer Network (2018)[9]

Coalitions

age 44 1 to 2 years age ≥55 Yes, start age 45 Yes*

Screening- Life expectancy, mortality and other statistics

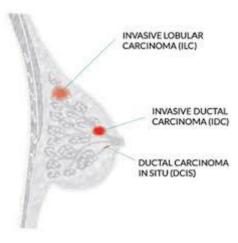
- The primary benefit of screening with mammography is a decrease in breast cancer mortality. Meta-analysis and Systematic reviews, included multiple randomized trials that involved over 600,000 women from several countries screening mammography was estimated to reduce the odds of dying of breast cancer by approximately 20 percent
- We suggest that women age 75 years and older be offered screening only if their life expectancy is at least 10 years.
- Randomized trials have found that screening every two years achieves reduction in <u>breast cancer mortality.</u>
- Ultrasound be mentioned to patients as a potential adjunct to mammography in women with increased breast density

Key Points about Breast Cancer

- Breast Cancer is COMMON... but not all cancer is the same
- Treatment should be PERSONALIZED based on each patient's characteristics
- Most women with breast cancer will have EXCELLENT SURVIVAL
- Therefore, it is important to use treatments only effective against the specific cancer

Key Points about Breast Cancer

- Breast cancer diagnoses (biopsy, imaging)
- Staging and its importance in treatment planning



SO



Breast Cancer in the United Arab Emirates

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Breast cancer (BC) became the most commonly diagnosed cancer type in the world in 2020. It is estimated that there were more than 2.26 million new cases of BC and almost 685,000 deaths from BC worldwide in 2020. BC was the most common cause of cancer death in women and the fifth most common cause of cancer death overall. BC is the most common cancer in the United Arab Emirates (UAE), with the majority of cases characteristically occurring in women younger than 50 years. In this work, we review available literature from the UAE on characteristics and outcomes of BC, and fill data gaps with our own expert opinion and experience in major treating centers across the country. We hope this status review will be useful for all stakeholders involved in the care of women or men with BC. We will also highlight persisting unmet needs to inform resource allocation and guide future clinical and research directives.

Breast Cancer Multidisciplinary Team

- Breast Surgical Oncologist
- Radiologist
- Medical Oncologist
- Radiation Oncologist
- Plastic Surgeon

Take Home Messages

- It is important to increase breast cancer awareness and report any breast concerns
- Regular Self breast exam
- Screening vs diagnostic mammograms
- Family history and risk assessment
- Breast Cancer is curable but early diagnosis is the key!
- It should be treated by a multidisciplinary team.

THANK YOU!



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