













This booklet will help you to be breast aware. Being breast aware means knowing what's normal for you so you can spot any unusual changes as soon as possible.

Most breast changes are not because of breast cancer. However, the sooner breast cancer is diagnosed, the more effective treatment may be. This is why it's important to consult the specialist as soon as possible if you notice any changes that are unusual for you.

Although the booklet is for women, men should also be aware of any changes in their chest area as a very small number of men get breast cancer each year.

Ashok K. Trivedi Chief Mentor, D. S. Research Centre

















# Breast changes throughout your life

Dr. Jayalatha Nethagani Director MNJ Institute of Oncology & Regional Cancer Centre, Hyderabad





Your breasts change throughout your life, through adolescence and the reproductive years, to the menopause when periods stop permanently. This is because levels of the hormones oestrogen and progesterone in your body change at different times in your life.

Sometimes breast changes are caused by a benign (not cancer) breast condition.

It's important to see to consult the specialist about any changes that are new for you, even though for most women these will not be cancer.











# Changes around the time of your period

Oestrogen and progesterone play a vital part in regulating a woman's periods. These hormones are responsible for the changes you may notice in your breasts just before your period.

Your breasts may feel heavier and fuller. They may also be tender or lumpy. After a period, this usually lessens or disappears altogether, although some women have tender, lumpy breasts all the time.



### During pregnancy

Breast changes can be an early sign of pregnancy. Many pregnant women feel a change in sensation in their breasts such as tingling and soreness, particularly of the nipples. This is due to increased levels of progesterone and the growth of the milk ducts.

The breast and the areola begin to get bigger. The nipple and areola become darker and remain that way during pregnancy.

















Breast cancer is the most common cancer in the india. So whatever your age, it's important to be breast aware.

Being breast aware means getting to know how your breasts look and feel so you know what's normal for you. You'll then be more confident about noticing any unusual changes that might be a symptom of breast cancer.

If you notice a change, it's important to see your GP.













### How do I check my breasts?

Get used to looking at and feeling your breasts regularly.

A good time to do this might be when you're in the bath or shower, using body lotion or getting dressed.

You don't need to feel your breasts in any special way. If you check them as part of your usual routine you won't need to worry about whether you're doing it often enough. Decide what you're comfortable with and what suits you best.



### What to do if you find a change

You know better than anyone how your breasts look and feel normally, so if you notice a change consult the specialist as soon as you can.

Most breast changes are likely to be normal or due to a benign (not cancer) breast condition rather than being a sign of breast cancer. But you need to find out what's causing the change.

If to consult the specialist is male and you don't feel comfortable going to see him, you can ask if there's a female doctor available. You can also ask for a female nurse or member of staff to be present during your examination, or you can take a friend or relative with you.















The sooner breast cancer is diagnosed, the more effective treatment is likely to be.

Breast screening can pick up breast cancer before there are any signs or symptoms.

Screening uses a breast x-ray, called a mammogram, to look for cancer that may be too small to see or feel.











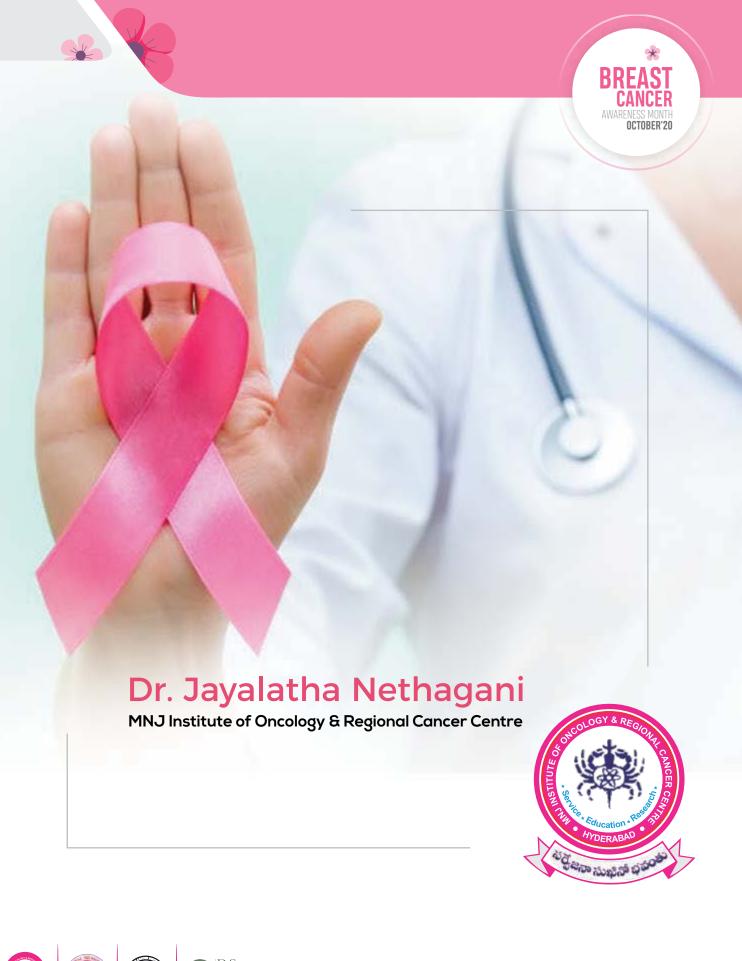
# Together Against **Breast Cancer**























### Dr. Jayalatha Nethagani

#### **Director**

MNJ Institute of Oncology & Regional Cancer Centre, Hyderabad

# BREAST CANCER PREVENTION IS A STEP AWAY FROM CURE

With being the most common type of cancer in women, breast cancer accounts for 14% of cancers in Indian population. It is reported that with every four minutes, an Indian woman is diagnosed with breast cancer. Breast cancer is on the rise, both in rural and urban India.

## Breast Cancer statistics recorded 1.8L new registered cases and 90k reported deaths.

Cancer survival becomes more difficult in higher stages of its growth, and more than 50% of Indian women suffer from stage 3 and 4 of breast cancer. Post cancer survival for women with breast cancer was reported 60% for Indian women, as compared to 80% in the U.S.

Women can self-diagnose their condition and know of the presence of lumps or masses that suggest cancerous outgrowths. The very reason for a low breast cancer survival rate of women in India accounts from its lack of awareness and poor early screening and diagnosis rates.

As the most common cancer type in Indian women, women in their early thirties till fifties

are at considerable risk to develop breast cancer, and the incidence risk increases till its peak by the time they reach 50-64 years of age. One in twenty-eight Indian women is likely to develop breast cancer during her lifetime. It is more (1 in 22) for urban women than the rural group (1 in 60).

Breast cancer is the most common form of cancer in the country, having overtaken cervical cancer. In cities like Mumbai, Delhi, Bengaluru, Bhopal, Kolkata, Chennai, Ahmedabad, breast cancer accounts for 25% to 32% of all female cancers, more than 1/4th of all female cancers.

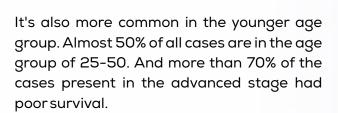












The survival rates of breast cancer in India are low because the detection takes place late. The only way to change these numbers is by increasing awareness. Breast cancer is a treatable disease and chances of survival are higher if it's detected in time. The only way to do so is by being aware of how it can be detected and early diagnosis can be done.

Prevention is a step away from cure. Be aware, be prepared.

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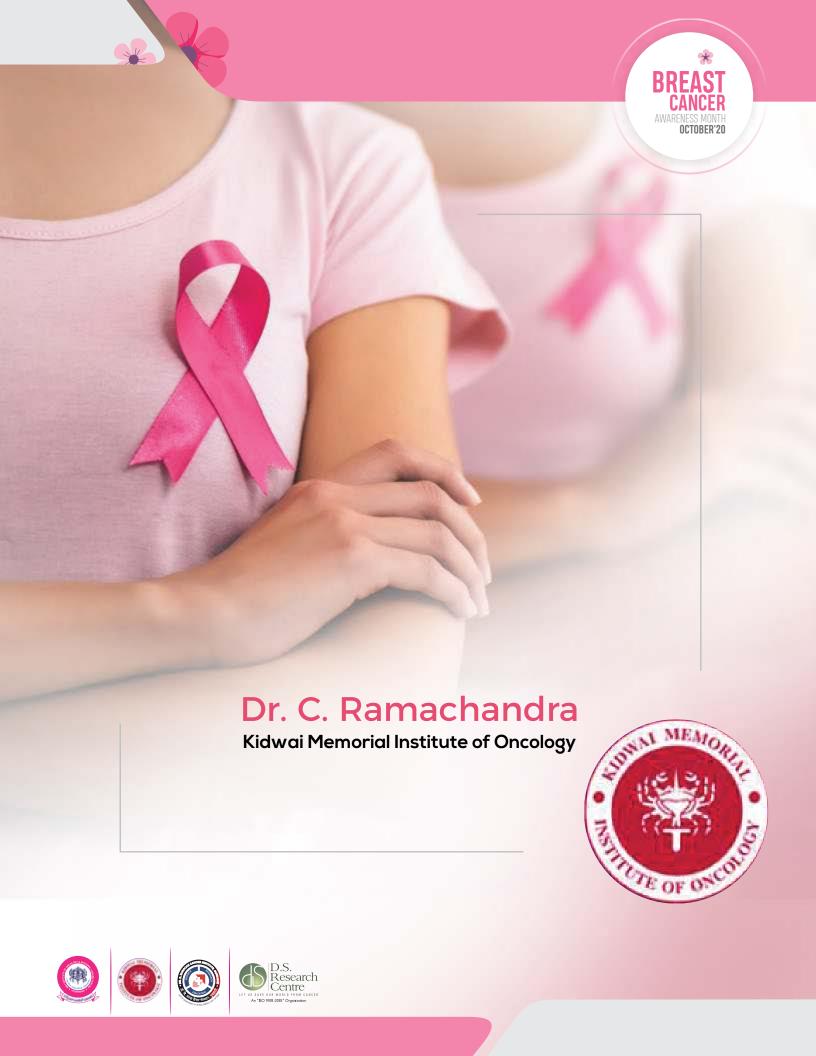
















#### Dr. C. Ramachandra

#### Director

Kidwai Memorial Institute of Oncology Cancer Research & Training Centre

# BREAST CANCER EARLY DETECTION IS THE BEST DEFENSE

Breast cancer is the most commonly diagnosed cancer among women in India. With the advent of population growth, changing lifestyles and migration from rural to urban areas, there is an increase in the incidence of this cancer in developing countries. Breast Cancer is the first and the most common cancer in women all over India with an estimated number of new cases of 2,05,424 (27.4% of all cancer in females) in 2020 and accounts for 25% to 32% of all cancers of women in Indian cities and the 2nd most common among women in rural areas as per the latest report of NCRP. This means 1 in 4 cancers in female is breast cancer. Breast cancer in Bangalore has the 3rd highest incidence in India with an AAR 40 per 100,000 after Hyderabad (48 per 100,000) and Chennai (42 per 100,000). It is estimated that about 7.000 new cases of breast cancers are diagnosed every year in Karnataka while about 2,000 cases are diagnosed in Bangalore.

Unlike in the western countries the survival rates of breast cancers are less in India with a five year overall survival around 65% to 70%

compared to USA (89%) and UK (82%). However, the survival rates in India are improving. The poor survival rates can be attributed to lack of awareness, accessibility and affordability for treatment and thus are key barriers limiting adequacy of diagnosis and treatment in India. Further most of the patients present with at least regionally spread disease which will limit the therapeutic efficacy. Breast cancers in the young tend to be more aggressive than cancers in the older population and survival in younger patients, especially in advanced stages is lower.













Although the exact risk factors for breast cancer are still elusive many factors have been implicated as highly suggestive of increased risk for breast cancers. This includes menstrual factors (early age at menarche, late age at menopause), reproductive factors (Nulli parity, late age at first birth), exogenous hormone factors (use of oral contraceptive and Hormone replacement therapy), nutrition and alcohol intake and anthropometric factors (obesity, weight gain during adulthood and body fat distribution). Thus the risk factor can be grouped into two broad categories such as non-modifiable factors such as age, height, personal history of benign breast disease, early age at menarche, parity, late at menopause, genetic risk factors such as inherited mutations in BRCA1 or BRCA2 are the most common cause of hereditary breast cancer (40% - 80% increased risk), family history of breast cancer. The other category consisting of modifiable factors such as overweight, obesity and change in body weight, age at first full term pregnancy, breastfeeding, use of HRT.

Early detection can identify cancers at an early stage which can be cured with optimal treatment. The early detection of breast cancer is further compounded by the problem that there is no organized screening program for breast cancer in India and it is only opportunistic as of now. Mammography screening which can be easily done even at District Hospitals will ensure early diagnosis of this cancer. Awareness about signs and symptoms of breast cancer, lifestyle modification, imparting knowledge of breast self examination, periodical clinical breast examination by the physician (especially above the age of 35 years)and mammography starting at the age of 40 years and above will go a long way for prevention and early detection of Breast Cancer.

#### Dr. C. Ramachandra

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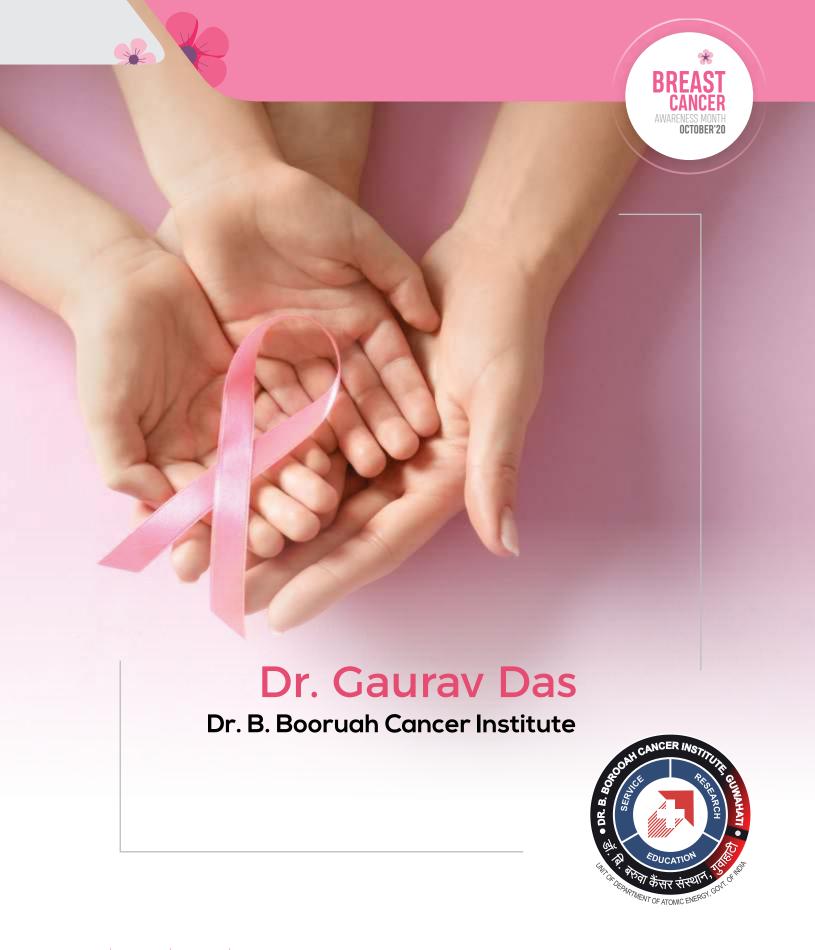
























#### Dr. Gaurav Das, MS, MCh

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# BREAST CANCER AN OVERVIEW FOR THE GENERAL POPULATION

#### It is indeed a menacing problem!

Breast cancer is the most common cancer affecting women with more than 2 million new cases per year worldwide. In India, about 2 lakh new cases occur per year among females, with the cumulative risk being 1 case out of every 29 women. It is worth mentioning that about 5000 new cases of breast cancer occur per year in men too. Although it is less than developed nations, a high incidence is seen in India in the metropolitan cities and overall the rate of increase in breast cancer cases is about 0.5 to 2 % per year. The peak incidence in India occurs a decade earlier and almost half of affected women are premenopausal. Breast cancer in younger women is generally a more aggressive disease.

#### Most patients present late!

In the place where I work, only 1 out of every 5 women with breast cancer present in the early stages (I and II) whereas the others present with locally advanced (stage III) or metastatic disease (stage IV). More or less, a similar trend may be observed across our country. The reasons for this scenario in India are manifold, including social taboos, lack of awareness, lack of access to healthcare delivery systems etc. Much work needs to be done to alter this scenario. What needs to be understood is that the 5 year overall survival of a













women who presents with early stage disease is more than 90% whereas those with metastatic disease have less than 30% survival!

# The symptoms of breast cancer should be known to all people!

These include presence of a lump or swelling in the breast or the armpit (axilla), abnormal nipple discharge, recent onset inverted nipple, nipple ulceration, redness or thickening (change in texture) or puckering of the skin overlying the breast or any change in the shape or size of the breast.

Any patient with symptoms suspicious of breast cancer should have a prompt consultation with a doctor and the evaluation and treatment (management) of breast cancer should ideally be done in a dedicated cancer centre which has all the treatment facilities (and this is true for any cancer).

## So, what are the treatment modalities for breast cancer?

The treatment of breast cancer involves surgery (including mastectomy or complete removal of breast, conservative surgery wherein the breast is largely preserved and reconstructive or oncoplastic surgery which takes care of the cosmesis of the breast), systemic treatment (this includes chemotherapy,

hormonal therapy and targeted therapy) and radiation treatment in various combinations. In the setting of metastatic disease, basically systemic treatment is received by the patient. In any condition, the treatment should be done without unplanned treatment gaps and as advised by the team of treating oncologists. The duration of a "complete treatment" can vary according to the disease stage and type.

# So, what will be an effective counter strategy against this menace?

This needs to be a multi-pronged weapon to slay the colossal "demon"!

Increased awareness programmes: the universal dissemination of information related to breast cancer (symptoms and signs and treatment related information) to the general public and the grass-root level health care workers. We have to do our utmost to dispel common fears and taboos. Eg: Doing a biopsy does not spread cancer.

Preventive measures: Change in lifestyle and habits (especially in the urban setting) with conscious avoidance of alcohol and smoking, promotion of exercise, decrease of obesity and judicious use of HRT. A social enigma is the change in reproductive characteristics of the "modern" woman (delayed childbirth, nulliparity) and all women should be educated about the risks to make an informed choice.











Screening programmes for early detection: community-level and opportunistic screening at hospitals for women who are at average risk, with annual mammograms starting from 45 years of age, and for those with high risk with appropriate imaging modalities, will help us in detecting the disease at an early stage, when it is "most curable". There is enough body of evidence to suggest that screening of breast cancer decreases breast-cancer related deaths.

Availability of treatment facilities: The universal access to health care is a big challenge for a densely populated developing nation like India and a robust system has to be in place for identification and referral of cancer cases to dedicated cancer treatment facilities. Increasing the existing number of facilities (developing infrastructure),

along with generation of human resource (cancer specialists and cancer care providers) is the prerequisite in our war against this disease.

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# SELF-BREAST EXAMINATION



Begin by looking at your breasts

Raise your arms and look for any changes



03

Feel your breasts while lying down

Feel your breasts while you are standing of sitting



# CAN I BE SCREENED FOR BREAST CANCER?

Testing for breast cancer when you have no symptoms is called screening. All women aged 50 to 64 are need to mammogram in every 2 years.











#### **TOGETHER AGAINST BREAST CANCER**









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