Pink Ribbon for Breast Cancer Control

Breast cancer is the leading site for Filipinos both sexes combined (15%) and ranks 1st among women (28%), 2010. An estimated 12,262 new incident cases will occur among Filipino women in a year, adding to the already diagnosed prevalent cases in the previous years. The incidence rate starts rising steeply at age 30. The incidence rate has been steadily rising since 1980, with an average annual percentage change of 0.9%.

Do we see the same burden in the World as in the Philippines?

IARC-Globocan in December 2013 states that since the 2008 estimates, breast cancer incidence has increased sharply by more than 20% worldwide, while mortality has increased by 14%. Breast cancer is also the most common cause of cancer death among women (522 000 deaths in 2012) and the most frequently diagnosed cancer among women in 140 of 184 countries worldwide. It now represents one in four of all cancers in women.

Breast cancer is also a leading cause of cancer death in the less developed countries of the world. This is partly because a shift in lifestyles is causing an increase in incidence, and partly because clinical advances to combat the disease are not reaching women living in these regions (IARC Section of Cancer Information). Generally, worldwide trends show that in developing countries going through rapid societal and economic changes, the shift towards lifestyles typical of industrialized countries leads to a rising burden of cancers associated with reproductive, dietary, and hormonal risk factors.

Incidence has been increasing in most regions of the world, but there are huge inequalities between rich and poor countries. Incidence rates remain highest in more developed regions, but mortality is relatively much higher in less developed countries due to a lack of early detection and access to treatment facilities. “An urgent need in cancer control today is to develop effective and affordable approaches to the early detection, diagnosis, and treatment of breast cancer among women living in less developed countries”, explains Dr Christopher Wild, Director of IARC. “It is critical to bring morbidity and mortality in line with progress made in recent years in more developed parts of the world.”

Does breast cancer also affect men?

Breast cancer usually affects women; the most significant risk factors for breast cancer are gender (being a woman) and age (growing older). A man’s lifetime risk of breast cancer is about 1 in 1,000. The lifetime risk for women developing breast cancer is 1 to 9.

Is breast cancer inherited?

About 85% of breast cancers occur in women who have no family history of breast cancer. These occur due to genetic mutations that happen as a result of the aging process and life in general, rather than inherited mutations.

About 5-10% of breast cancers can be linked to gene mutations (abnormal changes) inherited from one's mother or father. Mutations of the BRCA1 and BRCA2 genes are the most common. Women with a BRCA1 mutation have a 55-65% risk of developing breast cancer before age 70, and often at a younger age that it typically develops. For women with a BRCA2 mutation, this risk is 45%. An increased ovarian cancer risk is also associated with these genetic mutations. In men, BRCA2 mutations are associated with a lifetime breast cancer risk of about 6%; BRCA1 mutations are a less frequent cause of breast cancer in men. A woman's risk of breast cancer approximately doubles if she has a first-degree relative (mother, sister, daughter) who has been diagnosed with breast cancer. About 15% of women who get breast cancer have a family member diagnosed with it.

How can we protect against breast cancer?

By screening for early disease (early detection) followed by immediate appropriate and adequate treatment.

The term screening refers to the regular use of certain examinations or tests in persons who do not have any symptoms of a cancer but are at high risk for that cancer (e.g., family history of breast, ovary, and or colon cancer).

While all women over the age of 40 should undergo routine screening for breast cancer, women who are at a high risk for developing cancer may want to begin this process at an earlier age and with greater frequency. Increasing surveillance can increase the possibility that cancer could be found at an early stage when treatment is most likely to produce a cure.

Regular physical examination plays a vital role in the maintenance of health. An annual clinical physical examination (**CBE**) of the breasts by trained medical personnel is an important screening procedure, starting at 35 years of age, taking advantage of clinic visits done for other reasons. During this procedure, a physician physically examines the breasts to feel for any lumps or irregularities. The physician can also use this procedure as an opportunity to teach an individual how to perform a breast self exam (BSE).

For BSE, use the pads of your fingers examining palpating for irregularities of the entire breasts and armpit areas, while on a supine position sleep at night or while having a shower in the morning. Women are encouraged to perform a **BSE** every month (for premenopausal women 5-7 days after a menstrual period; post-menopausal women can do this every end of the month),

because with regular examination they have a greater chance of finding a lump early in its development. Start BSE at age 25 years.

Upon positive BSE, a second opinion CBE follows; a positive CBE calls for **core needle biopsy** for definitive diagnosis.

Usually, negative/equivocal result BSE/CBE in a high suspect case of breast cancer demands a **mammogram** and a wire-loop-guided biopsy as needed. Usually an ultrasound of the breast is requested to ascertain cystic nature of the mass. Digital mammography is not painful as is the older mammography machines. If funds allow, mammography can be a screening method of choice starting at age 50 years; this is done yearly and if negative for 3 years, then this can be done every 3-5 years thereafter. Mammography has to go together with BSE and CBE.

Increasing surveillance in women with a family history of breast cancer might increase the possibility that cancer could be found at an early stage when treatment is most likely to produce a cure. The following are candidates for mammography based on their elevated risk of breast cancer: women with a BRCA1 or BRCA2 mutation, women who have a first-degree relative (parent, sibling, child) with a BRCA1 or BRCA2 mutation, even if they have yet to be tested themselves, women who have a 20–25% or greater risk of breast cancer based on risk assessment tools, women who had radiation to the chest between the ages of 10 and 30 years, or women who have Li-Fraumeni syndrome, Cowden syndrome, or Bannayan-Riley-Ruvalcaba syndrome, or may have one of these syndromes based on a history in a first-degree relative.

The Philippine Cancer Society recommends against breast mammography screening in women with a lifetime risk of breast cancer of less than 15 percent. The optimal approach to the screening of women with an intermediate risk of breast cancer (lifetime risk between 15 and 20 percent) remains uncertain, and these women are encouraged to discuss their options with their physician. Risk for developing breast cancer can be calculated – see the following link http://breastcancer.about.com/od/riskfactorsindetail/p/risk_tools.htm .

Should all women then be tested for BRCA1 and BRCA2 / genetic testing?

Since most breast cancers are not the result of known inherited mutations, not all women would benefit from genetic testing.

However, women who appear to be at a high risk may benefit from undergoing a test to determine if they do carry the BRCA1 or BRCA2 gene. An accurate genetic test can reveal a genetic mutation, but cannot guarantee that cancer will or will not develop. At this point, genetic tests are used to identify individuals who are at an increased risk of developing cancer, so that these individuals may have the option of taking preventive measures.

How can we best treat breast cancer?

The best way to treat breast cancer is to detect it early. The disease would be at least at an early stage.

Upon diagnosis of primary breast cancer, treatment depends on the disease stage, hormonal receptor/ HER2neu receptor profile, disease pathologic profile, the performance status of the patient, co-morbidities (e.g., heart/ pulmonary/ kidney disease, allergies), age… The hormonal and HER2neu profile is very important and must be requested by the surgeon on every first breast specimen taken. The pathological profile must include at least specific histology, grade, size of mass, number of lymph nodes positive to total lymph nodes taken, resection margins.

Multidisciplinary team approach to the treatment will benefit outmost the patient. After a positive diagnosis, the collaborative effort of the surgeon, medical oncologist and radio-oncologist is needed – Should surgery (done by the surgeon) come first prior chemotherapy (done by the medical oncologist)? Should chemotherapy come first prior radiotherapy (done by radio-oncologist)? What surgery should be done? What drugs should be given? Should radiotherapy be given at all? Not one doctor is sufficient to come up with the proper treatment decision for a breast cancer patient.

Other health care providers complete the multidisciplinary team – pathologist, counsellor, nutritionist, rehabilitation specialist among others…

Data Source: Philippine Cancer Society,
IARC-Globocan, NFCR.ORG