Comment & Analysis

Can We Prevent Breast Cancer?

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Abstract
Breast cancer is the second most common cancer in the world and the most common cancer in females accounting to 23% of all cases. Between January 1998 and December 2004-2004, 6,882 cases were reported from all GCC states accounting to 11.8% from all cancers and 22.7% from cancers in females. An ASR/100,000 woman was 46.4 from Bahrain, 44.3 from Kuwait, 35.5 from Qatar, 19.2 from UAE, 14.2 from Oman and 12.9 from KSA. Breast cancer is the most frequent cancer in Arab women constituting 14-42% of all women cancers. Breast cancer in Arab countries presents almost 10 yrs younger than in USA and Europe. Median age at presentation is 48-52 and 50% of all cases are below the age of 50 where as only 25% of cases in industrialized nations are below the age of 50 yrs. What we need to fight this deadly disease is opening of screening centers with trained physicians equipped with ultrasound, x-ray unit, a pathology lab and most of all a system where a patient is seen urgently on referral to a secondary level care. Health education campaigns should be organized, female medical students should be encouraged to be general surgeons in a community where social customs still have value.

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Cancer is the second most cause of death in majority of developed countries. It's emerging as a major public health problem. The International Agency for Research on Cancer (IARC) estimates show that globally nearly 11 million new cases of cancer and more than 6 million deaths occurred from this disease during 2002. More than half of the cases were in developing countries where resources for screening, treatment and prevention are scarce. Cancer remains of the leading causes of morbidity and mortality worldwide. It is predicted that by 2020 the number of new cases of cancer in the world will increase more than 15 m and deaths increasing to 12 m and most of the burden of cancer incidence, morbidity and and mortality will occur in developing world.

Breast cancer is the second most common cancer in the world and the most common cancer in females accounting to 23% of all cases. It is estimated that approximately one million cases of female breast cancer are diagnosed worldwide. It is the most frequent cause of death in females. And estimated 410,712 breast cancer deaths occurred in 2002. Between January 1998 and December 2004-2004, 6,882 cases were reported from all GCC states accounting to 11.8% from all cancers and 22.7% from cancers in females. ASR/100,000 women was 46.4 from Bahrain, 44.3 from Kuwait, 35.5 from Qatar, 19.2 from UAE, 14.2 from Oman and 12.9 from KSA.

Breast cancer accounts for 22% of all new cancers in women worldwide making it by far the most common cancer in females. Though the increase in incidence and mortality was observed until early 1980s all over world, significant improvement in survival was observed in Western countries over the last 20 years, and the reason being early detection through screening, SBE and prompt treatment. Recent data from National Health Breast screening programme in UK indicates that women diagnose with early stage breast cancer detected through screening who then go on to receive treatment have *Same* life expectancy as the UK female population as a whole. The programme also demonstrates that survival rates are improving for women with more aggressive types of breast cancer detected through screening and over all 15 years survival rates is 86%. Survival from breast cancer in under developed countries is poor because of late presentation and lack of specialist care.

Breast cancer is the most frequent cancer in Arab women constituting 14-42% of all women cancers. Breast cancer in Arab countries presents almost 10 years younger than in USA and Europe. Median age at presentation is 48-52 and 50% of all cases are below the age of 50 where as only 25% of cases in industrialized nations are below the age of 50 yrs. The incidence is rising in Arab countries and the change may be due to westernized life style including dietary habits, lack of exercise, delay of age of marriage, first pregnancy from late teens and early 20s to the late 20s and early 30s, decrease in the practice of breast feeding. Young women have there diagnosis of breast cancer delayed because of decreased awareness, social customs and most important is low index of suspicion from primary care physicians.

Risk factors include personal and family history of breast cancer, prior history of dysplasia on a breast biopsy, prolonged exposure to estrogens, early menarche, late menopause and no pregnancy. Early childbearing below the age of twenty and prolonged breast feeding are known to decrease breast cancer risks. Prolonged exposure to birth control pills in premenopausal women and especially HRT in post-menopausal women increase the risk of breast cancer. Other risk factors include radiation exposure; pollution and exposure to carcinogenic compounds such as pesticides and even smoking are suspected. Westernized dietary habits, increase consumption of animal fats and decreased fibres, fruits and vegetables, overweight, and lack of exercise are known to increase breast cancer incidence among Asian immigrants to USA, Europe and Australia. Many of these factors apply to Arab women. Only scattered studies on genetic mutations of BRCA-1,BRCA-2 are available. The most common presentation in our countries is a breast lump or nodule, usually non painful. Size of the lump depends on whether it was accidentally noted or whether the women examine her breasts regularly. Women may be shy are afraid and not present to a physician until the lump has become larger. The patient may present with redness of skin or ulceration. Early breast cancer may also present with asymmetry or nipple retraction. A bloody discharge may be the presenting complains. Inflammatory breast cancer patients present with a inflamed, red and thickened overlying breast skin. Almost 60-80% of women present with advanced disease in Arab countries. However with massive campaigns and efforts at screening, a number of patients are presenting with small lumps or abnormal mammography findings.

Our goal of prevention is to decrease incidence of breast cancer and to reduce breast cancer associated mortality. My main aim and target of this article is prevention of breast cancer and how to achieve it. The prevention can be broadly divided into primary and secondry prevention. Primary prevention reflects to the methods aiming to reduce incidence by eliminating causes and carcinogens either through dietary changes, exercise, reducing obesity, by offering surgery to BRCA carriers, chemo prevention by Tamoxifen or Raloxifen to high risk women. The use of HRT should be regulated and well controlled.

Secondary prevention may reduce incidence and mortality of breast cancer by efficient screening and early detection. Screening is designed to discover small tumors before they manifest clinically and treat those successfully. Improving quality of diagnosis and treatment should be an essential part of a national plan.

Population screening should be advocated which includes BSE (breast self examination), CBE (clinical breast exam), and annual screening mammography starting at 40 yrs of age and aided by ultrasound if need be. Locally advanced cases should be detected and promptly treated. Reason for delay in presentation includes shyness, fear of cancer, social implications for e.g. family restrictions, dearth of female General Surgeons, lack of health education and lack of access to adequate oncology centers. Delay in diagnosis by primary care physicians.

Advanced breast cancer is devastating to a woman as she is a wife and a mother. Husbands should be targeted to encourage their wives to go for screening and early detection campaigns. The social workers have a great role to support such patients and should have access to support groups in the community.

Where there is a will, there is a way. We can achieve what we want with help from Allah (Subhan Wa Taala). What we need to fight this deadly disease is opening of screening centers with trained physicians equipped with ultrasound, x-ray unit, a pathology lab and most of all a system where a patient is seen urgently on referral to a secondary level care. Health education campaigns should be organized, female medical students should be encouraged to be general surgeons in a community where social customs still have value. We must train social workers and female nurses to perform home visits and examine as well as teach women to do SBE in security of their homes.

Cancer prevention and early detection are the most effective ways to control disease, alleviate suffering, prolong survival and eventually cure patients. Cancer prevention and early detection of breast cancer is considered part of prevention of disease. Cancer is a national health priority according to WHO and we have noticed that incidence of breast cancer is on a rised and is considered one of the most important health problems for women.

In the end I would like to say that everything is possible to a willing mind and will conclude with following lines by Erik H. Erikson *"Hope is both the earliest and the most indispensible virtue inherent in the state of being alive. .If life is to be sustained hope must remain, even where confidence is wounded, trust impaired."*

Further Reading

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