

Prevalence of Breast Cancer Women in Babylon Province, Iraq

Dear Editor,

Cancer is a group of diseases that cause cells in the body to change and spread out of control. Most types of cancer cells eventually form a lump or mass called a tumor and are named after the part of the body where the tumor originates. Most breast cancers begin either in the breast tissue made up of glands for milk production, called lobules, or in the ducts that connect the lobules to the nipple. Carcinoma of the breast is the second most common malignancy affecting ½ a million women worldwide each year. It is one of the major causes of death among women between 40- and 44-year age group that has become a genuine public health problem.^[1]

Breast cancer typically produces no symptoms when the tumor is small and most easily treated, that is why screening is important for early detection. The most common physical sign is a painless lump. Sometimes, breast cancer spreads to underarm lymph nodes and causes a lump or swelling, even before the original breast tumor is large enough to be felt.^[2]

Breast cancer is typically detected either during a screening examination, before symptoms have developed, or after a woman notices a lump. Most masses were seen on a mammogram, and most breast lumps turn out to be benign (not cancerous), do not grow uncontrollably or spread, and are not life threatening. When cancer is suspected, microscopic analysis of the breast tissue is necessary for a diagnosis and to determine the extent of spread (stage) and characterize the type of the disease.^[3]

The present study was conducted at Babylon Teaching Hospital in addition to private hospitals and private clinics in Babylon Province, including the patients suffering from carcinoma of the breast, from the period of March 2018–June 2019, of 40 women with breast cancer were collected, in addition to 40 healthy women as control group. These patients were studied prospectively and clinical history of each case regarding age, sex, weight, occupation, menstrual status, marital status, parity, age at menarche, age at first childbirth, breast-feeding, familial history, and history of breast disease were also studied in details.

Exclusion criteria included all the patients of breast lump who were found to be benign after fine-needle aspiration cytology (biopsy was excluded from the study). Statistical analysis was carried out using SPSS version 21 (SPSS, IBM Company, Chicago, USA). Categorical variables were presented as frequencies and percentage. Continuous variables were presented as means with their 95% confidence interval. Pearson's Chi-square test was used.

The study was conducted in accordance with the ethical principles that have their origin in the Declaration of Helsinki.

It was carried out with patient's verbal and analytical approval before the sample was taken. The study protocol and the subject information and consent form were reviewed and approved by a Local Ethics Committee (Al-Eskandaria General Hospital, Babil Health Directorate).

The study showed that the highest incidence with breast cancer was in the age group of 36–45 (52.5%) years, followed by age ranging between 46 and 55 years. Results also showed that breast cancer is common in married women (77.5%).

Furthermore, the results of the present study confirmed that the percentage of breast cancer was 30% in educated women, whereas 70% in illiterate women.

The distribution of breast cancer women based on educational status shows that 30% of breast cancer in educated women, whereas it was 70% in illiterate women. The relatively high frequency of patients with positive family history observed in this study, also it was more frequent in women who took oral contraceptive (57.5%) as shown in Table 1.

Lump in the breast was the most common clinical feature in all patients [Table 2]. Sites of lump were almost equally in the right and left breast in the upper outer quadrant. Early breast cancer may not be noticed due to lack of symptoms.

Cancer is still one of the leading causes of death and equally prevalent all over the world. Only early diagnosed tumor with

Table 1: Distribution of breast cancer women according to demographical characteristics

Variables	Patients, n (%)	Control, n (%)
Age		
15-25	3 (7.5)	4 (10)
26-35	5 (12.5)	6 (15)
36-45	21 (52.5)	19 (47.5)
46-55	11 (27.5)	11 (27.5)
Marital status		
Married	31 (77.5)	30 (75)
Single	9 (22.5)	10 (25)
Educational level		
Educated	12 (30)	25 (62.5)
Illiterate	28 (70)	15 (37.5)
Family history		
Yes	31 (77.5)	8 (20)
No	9 (22.5)	32 (80)
Residence		
Aruban	27 (67.5)	24 (60)
Rural	13 (32.5)	16 (40)
Oral contraceptive taking		
Yes	23 (57.5)	28 (70)
No	17 (42.5)	12 (30)

Table 2: Distribution of clinical symptoms in breast cancer women

Symptoms	Number of patients, n (%)
Lump in breast	40 (100)
Lump with pain	12 (30)
Nipple discharge	2 (5)
Nipple redness	2 (5)
Ulceration of skin	24 (60)
Changed contour of breast	10 (25)

none to less metastasis can be treated either by radiotherapy, surgery, or chemotherapy. Chemotherapy is used to kill the neoplastic cells without damaging healthy surrounding tissues.^[4]

The study showed that highest incidence with breast cancer was in the age group of 36–45 (52.5%), followed by age ranging between 46 and 55, it was 27.5%; our finding was agreed with the results of Longmark^[4] who found that the peak age for incidence of breast cancer was 40–50 years, whereas the study Radaniel *et al.*^[5] indicated peak age of incidence in age group 50–55.

Our study results showed that breast cancer is common in married women. Table 1 shows that 77.5% of cancer was found in married women, whereas 22.5% was found in unmarried women. According to the study of Erhabor *et al.*,^[6] breast cancer risk is high in married women as compared to unmarried women at the same stage of age. Women with long time estrogen intake and later age of menopause increases the risk of breast cancer and also the results of the present study confirm that the percentage of breast cancer was 30% in educated women, whereas 70% in illiterate women. This finding was similar to the study of Alwan^[7] who observed the majority (37%) of the breast cancer patients had no formal education.

The distribution of the breast cancer women based on educational status shows that 30% of breast cancer in educated women, whereas it was 70% in illiterate women; these results agree with finding of Erhabor *et al.*^[6] which confirm that increasing the risk factor of breast cancer in illiterate women, early detection of breast cancer, as a major approach to controlling the disease, could be achieved by raising the awareness of the general population about its symptoms and signs, educating health personnel, and ensuring the provision of readily accessible diagnostic services.^[2]

The relatively high frequency of patients with positive family history observed in this study, also it was more frequent in women, which were taken oral contraceptive (57.5%) as shown in Table 1. Breast cancer is a multifactorial disease caused by complex interplay of genetic, hormonal, and environmental factors. It is the second leading cause of cancer-related death among women next to lung cancer.^[6]

However, when tumor grows in size, patients present with lump or swelling of breast which always was accompanying with clinical symptoms in breast. In our study clinical symptoms in breast cancer included pain (30%) of cases, ulceration of skin (60%),

redness of nipple or skin (5%), changed contour and texture of breast (25%), and discharge from nipple 2 (5%) of cases. These findings were similar to another study by Kokiwar *et al.*^[8]

From this study, it can be concluded that maximum incidence of breast cancer was observed in 40–50-year age group (40%). All the patients presented with a lump in the breast, in addition to nipple discharge and redness.

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Conflicts of interest

There are no conflicts of interest.

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