Nurses Knowledge toward Breast Cancer in Azady Teaching Hospital

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ABSTRACT

Background and Objectives: Breast cancer is a malignant tumor that starts in the cells of the breast. A malignant tumor is a group of cancer cells that can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body. The disease occurs almost entirely in women, but men can get it, too. The aim of the present study is to assess nurses knowledge's towards breast cancer in Azady teaching hospital as well as to find out the relation ship between nurses genders and their knowledge

Material and Method: A descriptive study of a quantitative design were carried out at Azadi teaching hospital from 1st of July, 2012, up to the 16th of April, 2013. A non-probability (purposive) sample of (100) nurses were selected from nurses who working in Azadi Teaching Hospital in Kirkuk city. Developed questionnaire was constructed for the purpose of the study which contain (42) items: the demographic data and knowledge of the nurses. The data were collected through the use of interview. They were analyzed through the application of descriptive statistical analysis (frequency , percentage) and inferential statistical data analysis (chi-square).

Results: The findings of the study indicated that most of the nurses were in age group between (23-27), female, have (1-5) years of employment, graduated from medical institute, have not taken classes about breast cancer

Conclusion: The study concluded that the nurses had good knowledge regarding general information of breast cancer, breast self examination, signs and symptoms and treatment of breast cancers while there knowledge regarding the risk factors of breast cancer were reasonable to some extent.

Key words: Breast cancer, Malignant tumor, Metastasize, Breast self-examination, cancer cells.

INTRODUCTION

Breast cancer is a malignant tumor that starts in the cells of the breast. A malignant tumor is a group of cancer cells that can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body. The disease occurs almost entirely in women, but men can get it, too (American Cancer Society, 2007). Breast cancer is the most common malignancy causing deaths and cancer related morbidity in women. It is a disease affecting both the developed and the developing nations (Antoniou et. al., 2003). Breast cancer is the most common cancer in women in the Eastern Mediterranean Region and the leading cause of cancer mortality worldwide. There is geographic variation with the standardized age incidence rate being lower in developing than industrialized countries (Smeltzer and Sharts-Hopko, 2005). Cancer is a Pan societal problem that affects 2/3 of the world population. Among them Breast cancer is the most common cancer diagnosed in women, both in developing and developed countries (Bickley and Szilagyi, 2003). Numerous risk factors are associated with breast cancer, one major risk factor is increasing age. Among the factors that increase the risk of breast cancer the most important ones include both a personal and a family history of breast cancer. Other factors that augment the risks of developing breast cancer are: an early menarche and late menopause, obesity after menopause, use of iatrogenic hormones (both oral contraceptives and postmenopausal hormone therapy have been implicated), nulliparity or 'having the first child after the age of 30, certain ethnic features, radiation, or intake of alcohol on a daily basis (American Cancer Society, 2005). A mother or a woman is the sole care taker of the well being of their family and their children, so they can pay less attention to their own health. Most of the women are afraid of cancer. There is a general feeling of hopeless and helpless if they got cancer because they believe this is non curable and there is not much they can do until wait for death (Smeltzer and Sharts-Hopko, 2005). The high incidence and mortality rates of breast cancer as well as the high cost of treatment and limited resources available require that it should continue to be a focus of attention for public health authorities. The costs and benefits of fighting breast cancer including the positive impact that early detection and screening can have need to be carefully weighed against other competing health

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needs (Pillitteri, 2012). Health care providers should also be involved in discussion of the issue and in developing programmers for the management of the disease. An important component of breast cancer education and prevention was the use of breast self-examination (BSE) to help women find breast cancer early (Brufsky, 2008).

MATERIAL AND METHODS

The present study was carried out through the application of quantitative design (descriptive study) from 1st of July, 2012, up to the 16th of April, 2013. To assess nurses knowledge toward breast cancer. The study was conducted at Azadi teaching hospital in Kirkuk city. A non-probability (purposive) sample of (100) nurses were selected from nurses who working in Azadi Teaching Hospital. Through extensive review of relevant literature, a questionnaire was constructed for the purpose of the study with interview technique. Overall items included in the questionnaire were (42) items. A pilot study was carried out for the period of August 10th to 25th, 2012 to determine the questionnaire reliability through the use of (Test – Retest). A panel of (6) experts was involved in the determination of the questionnaire content validity. The items were measured on three rating scale, I know (3), Uncertain (2), I don't know (1). The questionnaire consists of two parts, socio-demographic data which is composed of (5) items such age, gender, years of employment, level of education, taken class about breast cancer and nurses knowledge regarding breast cancer, which contain (37) items that classified as General information about breast cancer, breast self examination, risk factors of breast cancer, signs and symptom of breast cancer and treatment of breast cancer. The data were collected through the utilization of constructed questionnaire, interview technique with the nurses in Azady teaching hospital. The data collection process was performed from the period of 28th of October, 2012 up to the 20th December, 2012. Consent informed was granted from nurses for participation in the present study was obtained and the interview was carried out individually. The data were analyzed through the application of descriptive statistical analysis which include (frequency and percentage) and inferential statistical analysis which include (chi-square).

RESULTS

Table (1): Distribution of the samples regarding demographic data with frequency and percentage

No	Age(years)	Frequency	Percentage
1	18-22	9	9
2	23-27	27	27
3	28-32	19	19
4	33-37	22	22
5	≥ 38	23	23
Total		100	100
	Gender	**Frequency**	**Percentage**
1	Male	35	35
2	Female	65	65
Total		100	100
.	**Years of employment**	**F**	**%**
1	< 1 years	8	8
2	1-5	38	38
3	6-10	18	18
4	11-5	12	12
5	16-20	10	10
6	≥21	14	14
Total		100	100
	Level of Education	**F**	**%**
1	Secondary nursing school	33	33
2	Medical institute.	46	46
3	College of Nursing	19	19
4	Post graduate (Msc, PhD) in nursing	2	2.0
Total		100	100
	Taken classes about breast cancer	**F**	**%**
1	Yes	43	43
2	No	57	57
Total		100	100

Table (2): Distribution of the nurses knowledge regarding general information of breast cancer with frequency, percentage and mean of scores.

No	General information	I know		Uncertain		I don't know		MS	Severity
		F	%	F	%	F	%		
1	Usually non-tender	56	56	32	32	12	12	2.44	HS
2	Early diagnosis is the key to surviving breast cancer	94	94	4	4	2	2	2.92	HS
3	Breast Cancer is the 2nd leading cause of cancer-related deaths in women, after lung cancer	56	56	35	35	9	9	2.47	HS
4	Breast cancer is the most common cancer among women	85	85	9	9	6	6	2.79	HS
5	Approximately 77% of women with breast cancer are over age 50 at time of diagnosis	41	41	42	42	17	17	2.24	MS
6	One out of every seven women will be diagnosed with breast cancer	60	60	32	32	8	8	2.52	HS
7	Nearly 97% of women who are diagnosed with breast cancer at an early stage survive for more than 5 yrs	52	52	37	37	11	11	2.41	HS
8	Later menopause (after age 50) slightly increases risk of breast cancer	50	50	28	28	22	22	2.28	MS
9	Three-pronged approach to screening: Mammogram, Clinical breast exam, Breast self-exam.	88	88	7	7	5	5	2.83	HS

Table (3): Distribution of the nurses knowledge regarding breast self examination with frequency, percentage and mean of scores.

No	Breast self examination (BSE)	I know		Uncertain		I don't know		MS	Severity
		F	%	F	%	F	%		
1	Use pads of your fingers to touch every part of your breast	78	78	12	12	10	10	2.68	HS
2	Feel gently for any lumps or changes under the skin	85	85	9	9	6	6	2.79	HS
3	Place arms behind your head Look for: unusual discharge, dimpling, changes in skin texture, changes in shape	73	73	11	11	16	16	2.57	HS
4	Squeeze both nipples & look for discharge	75	75	15	15	10	10	2.65	HS
5	Move fingers in an up & down pattern	70	70	14	14	16	16	2.54	HS

Table (4): Distribution of the nurses knowledge regarding risk factors of breast cancer with frequency, percentage and mean of scores.

No.	Risk factors of breast cancer	I know		Uncertain		I don't know		MS	Severity
		F	%	F	%	F	%		
1	Woman is at great risk for breast cancer	95	95	1	1	4	4	2.91	HS
2	Age 55 years or older	48	48	46	46	6	6	2.42	HS
3	Having had breast cancer before	65	65	22	22	13	13	2.12	MS
4	Family history of breast cancer	66	66	17	17	17	17	2.55	HS
5	Family history of ovarian cancer	38	38	26	26	36	36	2.02	MS
6	Are obese	37	37	21	21	42	42	1.95	MS
7	Drink alcohol	38	38	36	36	26	26	2.12	MS
8	Take birth control pills	49	49	29	29	22	22	2.27	MS
9	Long menstrual history	44	44	27	27	29	29	2.08	MS
10	Gets pregnant for the first time after age 30	29	29	47	47	24	24	2.05	MS
11	Post menoposual hormone therapy with estrogen and progesterone therapy	38	38	35	35	27	27	2.11	MS

Table (5): Distribution of the nurses knowledge regarding signs and symptom of breast cancer with frequency, percentage and mean of scores.

No.	Signs and symptom of breast cancer	I know		Uncertain		I don't know		MS	Severity
		F	%	F	%	F	%		
1	Lump or swelling in the armpit	83	83	14	14	3	3	2.80	HS
2	Changes in breast size or shape	81	81	15	15	4	4	2.74	HS
3	Thickening and dimpling of the skin	68	68	20	20	12	12	2.56	HS
4	Redness, swelling and increased warmth in the affected breast	68	68	23	23	9	9	2.59	HS
5	Inverted nipple	58	58	27	27	15	15	2.43	HS
6	Crusting or scaling on the nipple	40	40	39	39	21	21	2.19	MS
7	Usually non- tender	54	54	35	35	11	11	2.43	HS

Table (6): Distribution of the nurses knowledge regarding treatment of breast cancer with frequency, percentage and mean of scores.

No	Treatment of breast cancer	I know		Uncertain		I don't know		MS	Severity
		F	%	F	%	F	%		
1	Breast-conserving (lumpectomy)	80	80	13	13	7	7	2.73	HS
2	Mastectomy:	81	81	12	12	7	7	2.74	HS
3	chemotherapy	81	81	12	12	7	7	2.74	HS
4	radiation therapy	50	50	34	34	16	16	2.34	MS
5	hormonal therapy	36	36	37	37	27	27	2.09	MS

Table (7): Relationship between nurses gender and their knowledge regarding breast self examination

No.	Scores / Gender	I know	Uncertain	I don't know	Total
		F	F	F	
1	Male	122	42	25	189
2	Female	250	35	26	311
Total		372	77	51	500
X^2obs= 15.876	df= 2	X^2 Crit= 5.991	P < 0.05		

df= Degree of freedom; P-value= Level of Probability; χ2 crit. = Chi-square critical; χ2 obs. = Chi-square Observed

DISCUSSION

The findings in table (2) reveals that nurses have a good knowledge regarding general information, the study supported by Rosenman (2010) who mentions that healthcare professionals are a direct source of information for the patients and for the general public at large and since they hold such a pivotal role it is imperative that the information they convey is accurate and helps in building additional awareness (Rosenman, 2010).

Concerning nurses knowledge regarding breast self examination in table (3) , the results reveals that all of the sample have good knowledge. The study supported by Knutson and Steiner (2007) who mentions that Nurses and midwives are ideal health professionals who can increase public knowledge of breast cancer and encourage the practice of monthly breast self-examination (Knutson and Steiner, 2007).

Nurses knowledge regarding risk factors of breast cancer in table (4) indicate that the samples had good knowledge regarding items (Woman is at great risk for breast cancer, Age 55 years or older, Family history of breast cancer) while the samples had moderate knowledge regarding items (Having had breast cancer before, Family history of ovarian cancer, Are obese, Drink alcohol, Take birth control pills, Long menstrual history, Gets pregnant for the first time after age 30, Post menoposual hormone therapy with estrogen and progesterone therapy). the researcher's explanation for such result is that the nurses do not focused on the risk factors or they do not take much information in their class that take it about risk factors of breast cancer. A study done in the UK where 240 nurses precipitate in the study, they indicated that the nurses did not fully understand the risk factors of breast cancer (Lavelle and Charlton., 2008).

Concerning the signs and symptoms of the breast cancer illustrated from the knowledge of the sample, table (5) also indicated that the samples had good knowledge regarding items

(Lump or swelling in the armpit, Changes in breast size or shape, Thickening and dimpling of the skin, Redness, swelling and increased warmth in the affected breast, Inverted nipple) while the samples had moderate knowledge regarding the item (Crusting or scaling on the nipple). The study supported by Spittle and Morgan (2009) who states that in their study the nurses were very knowledgeable in several aspects of breast cancer. They were able to recognize all symptoms better than non-professionals (Spittle and Morgan, 2009).

Regarding nurses knowledge about the treatment of breast cancer , table(6) reveals that the samples had good knowledge. Pe´rez et. al. (2004) mentioned that healthcare providers not only play an important role in treating patients but are also responsible for improving patient behaviors and screening, as yearly mammography and clinical breast exam is the single most important step that clinicians can take to reduce suffering and death from breast cancer (Pe´rez et. al., 2004).

CONCLUSIONS

The result of interpretation and the discussion of the study revealed that most of the nurses were in age group between (23-27), female, have (1-5) years of employment, graduated from medical institute, not taken classes about breast cancer. The nurses had good knowledge regarding general information of breast cancer, breast self examination, signs and symptoms and treatment of breast cancers and there knowledge regarding the risk factors of breast cancer were reasonable to some extent. The study concluded that there is significant relationship between nurses gender and their knowledge regarding breast self-examination.

RECOMMENDATIONS

The study recommends that educational programs should be designed to increase nurses and people knowledge About breast self examination and especially risk factors of the disease**.** Basic knowledge about breast cancer and breast self examination be imparted to all the nursing students. Specify a modern center for dealing with breast cancer**.** Providing scientific booklet, publication and journal about breast cancers**.** Advertisements and some health educational programs regarding breast cancer should be encouraged through mass media. Further study has to be conducted in all Kirkuk regions regarding breast cancer.

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