



A comparison of rural and urban women's knowledge and attitudes toward breast cancer

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Submitted: 11 November 2022; Accepted: 10 December 2022; Published: 16 January 2023

ABSTRACT

Background: According to the WHO, cancer ranks as the second most common cause of death worldwide. In 2015, 8.8 million people died from cancer worldwide, accounting for nearly 1 in 6 fatalities. After cardiovascular illnesses, infectious diseases, and injuries, cancer is the fourth leading cause of mortality in the Eastern Mediterranean region.

Method: A quantitative, a descriptive cross-sectionals designs was used, and 200 participants were chosen using a convenience sampling technique. Participants' rights were protected in accordance with ethical considerations. Following that, data were collected from December 10, 2022 to January 15, 2023.

Results: The study concluded that there is a difference in the social demographic characteristics between women in urban and rural areas. So that 30% of urban women between the ages of 30-39 years, 45% of them are married, 44% of them have a secondary education level, while 46% of them are rural women between the ages of 30-39 years, 68% of them are married, and 38 % of them had primary school as their level of education.

Conclusion: There is a statistical significant deference between women's Knowledge about breast cancer according site of life that mean the both (urban and rural) women have not high level of knowledge about breast cancer and have negative attitudes about breast cancer.

Keywords: *Breast cancer, urban women, rural women*

INTRODUCTION

According to the latest reports The World Health Organization states that breast cancer is the most common malignancy worldwide, diagnosed in 154 out of 185 countries around the world. This type of tumor is also considered the leading cause of cancer-related deaths in over 100 countries. The most prevalent form of cancer in women is breast cancer, which had 2.1 million fresh reported cases in 2018 alone. Differences in infection rates are often attributed to a higher prevalence of risk factors specifically between regions of transmission in South America, Africa and Asia (Alwan, et al., 2019).

According to the WHO, cancer ranks as the second most common cause of death worldwide. In 2015, 8.8 million people died from cancer worldwide, accounting for nearly 1 in 6 fatalities. After cardiovascular disease, infectious diseases, and injuries, cancer is the fourth leading cause of mortality mostly in Eastern Mediterranean region. In industrialized nations, the average incidence of cancer in 2008 was over 80 per 100,000, whereas it was under 40 per 100 000 people in developing world. According to the Iraqi Cancer Registry, out of an estimated 32,500,000 people, 21,101 new cancer cases were recorded in 2012. Of those instances, 9,268 males and 11,833 women were diagnosed with cancer (Mutar, et al., 2019).

With age, the chance of breast cancer rises. The condition is more common in elderly women than in younger women, who are less likely to contract it. More than 80% of breast cancer incidences involve women over 50, and 40% of breast cancer patients are over 70. (AL-Ganimi, 2020). Approximately 10% of the all the breast cancers have been hereditary, most often caused by autosomal dominant genetic variations. The most important risk factor for the development breast cancer is simply being a woman. Men can get breast cancer, but women get it 100 times more often. Swelling of a breast, skin scarring, nipple pain, secretions, discolouration, or skin

abandoning of the nipple and breast are the initial symptoms of tumors (Jalil, et al., 2019).

METHODOLOGY

A quantitative, descriptive cross-sectional design study was carried out in the Breast cancer early detection unit “at Imam Al Hussein Medical City in Holy Karbala, Iraq”, the study was initiated “from the period of 10th Dec, 2022 to 15th Jan, 2023, to identify the deference in rural and urban women's knowledge and attitudes toward breast cancer. A convenience sampling technique was employed to select 200 participants were included in this study as urban and rural women, 100 women for each group. The researchers created a questionnaire form with three main sections to collect all the pertinent information about the study sample. The first section includes participants' socio-demographic information; the second section assesses the women's knowledge of breast cancer; and the third section include a scales to assess they women's attitudes toward breasts cancer”.

The researchers used the interviewing technique to collect data directly from patients. “Finally, the data was analyzed with (SPSS) Version 26. which used both descriptive statistical analysis procedures (frequency, percentage) and inferential statistical analysis (2-tailed t test) to analyze and assess the study's results. A p-value of 0.05 was considered statistically significant. Participants' rights were protected using ethical considerations”.

RESULTS AND DISCUSSION

Knowledge and attitudes are critical in the prevention and treatment of tumors. Women's knowledge and attitudes toward breast cancer screening methods seem to be important determinants of their patients' use of these methods. As a result, this study was carried out to assess rural and urban female's knowledges and attitudes toward breasts cancer.

TABLE 1: Socio demographic characteristics of women

Socio Demographic Characteristics		Urban Women n=100		Rural Women n=100	
		F	%	F	%
Age	20-29 years	35	35	31	31
	30-39 years	30	30	46	46
	40- 49 years	20	20	22	22
	50-59 years	14	14	1	1
	60 years and above	1	1	0	0
Marital status	Married	45	45	68	68
	Single	31	31	8	8
	Widow/Divorced	24	24	24	24
Occupation	House wife	59	59	78	78
	Self Employed	41	41	22	22
Education level	Read and write	0	0	40	40
	Primary School	30	30	38	38
	Secondary School	44	44	14	14
	College	21	21	8	8
	Postgraduate	5	5	0	0

TABLE 2: Woman’s Knowledge about breast cancer

No.	Question	Correction answer						Sig. (2-tailed)
		Urban Women n=100			Rural Women n=100			
		F	%	M.s	F	%	M.s	
1.	Does breast cancer risk increase with advancing age?	66	66	1.52	44	44	1.75	.000 S
2.	Does positive family history decrease risk of breast cancer?	45	45		43	43		
3.	Does breast feeding increase risk of breast cancer?	48	48		38	38		
4.	Is first childbirth at age more than 30 years a risk factor?	42	42		36	36		
5.	Is poor personal hygiene risk factor for breast cancer?	39	39		28	28		
6.	Does obesity not increase the risk of breast cancer?	51	51		29	29		
7.	Is breast cancer attributable to menarche before the age of 12?	47	47		38	38		
8.	Does breast cancer risk increase with advancing age?	48	48		41	41		
9.	Does positive family history decrease risk of breast cancer?	55	55		47	47		
10.	Does breast feeding increase risk of breast cancer?	40	40		32	32		

TABLE 3: Levels of woman knowledge about breast cancer

Level of knowledge	Urban Women %	Rural Women %
Low	35	62
Moderate	48	36
High	17	2

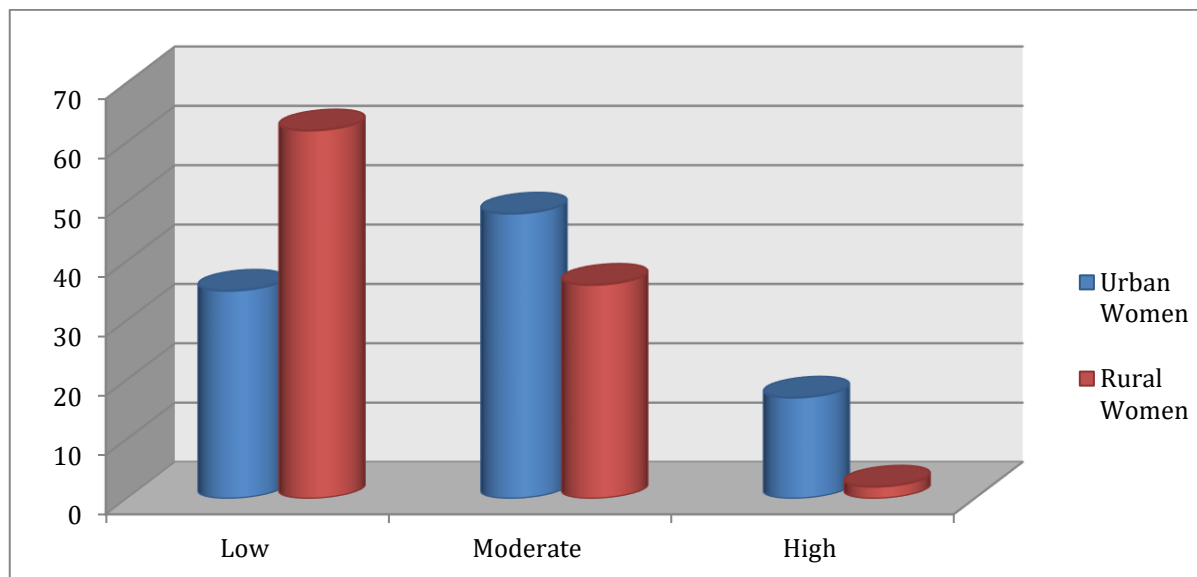


FIGURE 1: Levels of woman knowledge about breast cancer

TABLE 4: Woman's attitudes toward breast cancer

Attitudes	Urban Women				Rural Women %				Sig. (2-tailed)
	Yes %	Not Sure %	No %	M.s	Yes %	Not Sure %	No %	M.s	
1. At some point in my life, I think I'll develop breast cancer.	36	48	16	1.82	7	28	55	2.31	.000 S
2. Scared of breast cancer.	15	55	30		5	21	64		
3. Breast cancer would cause me a lot of long-term problems.	18	32	50		18	31	51		
4. Breast cancer would put my relationship with my boyfriend, husband, or partner in jeopardy.	24	26	50		19	33	48		
5. If I got breast cancer, I wouldn't live more than 5 years.	28	12	60		17	39	44		
6. Breast exams take far too long.	34	32	34		25	34	41		
7. Breast exams are excruciatingly painful.	17	53	30		18	44	38		
8. There is no health center nearby where I can get a breast exam.	19	20	61		17	21	62		
9. Breast exams won't stop cancer from developing if it is in my future.	22	48	30		32	29	39		

10. I have a good probability of developing breast cancer in the near future.	11	23	66		18	48	34		
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TABLE 5: Total attitudes of woman toward breast cancer

Assess Attitudes	Urban Women n=100				Rural Women n=100			
	Positive		Negative		Positive		Negative	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Attitudes toward breast cancer	42	42	58	58	28	28	72	72

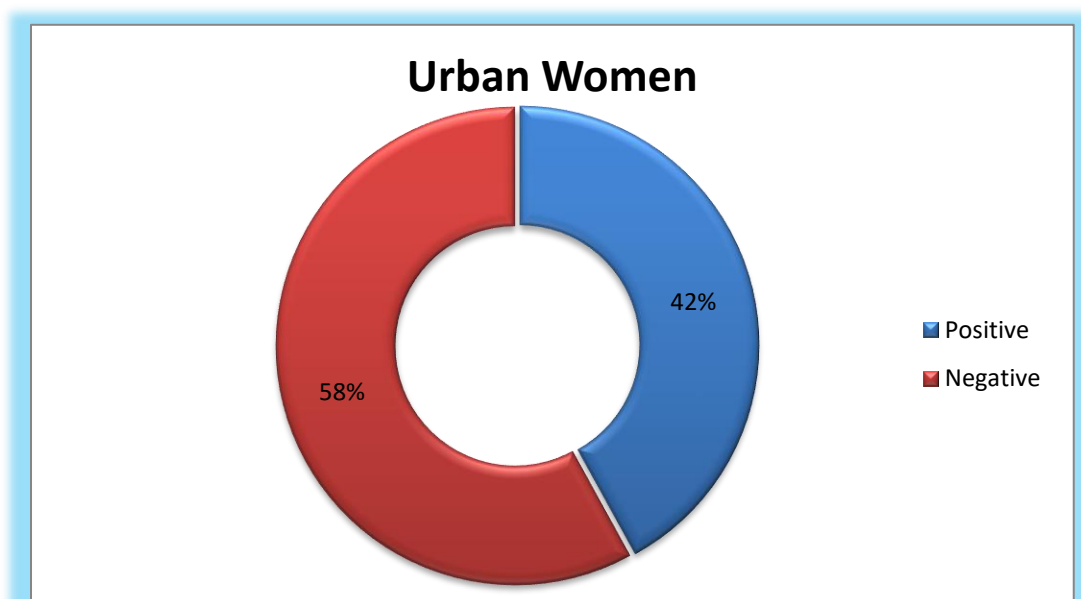


FIGURE 2: Urban woman’s attitudes toward breast cancer

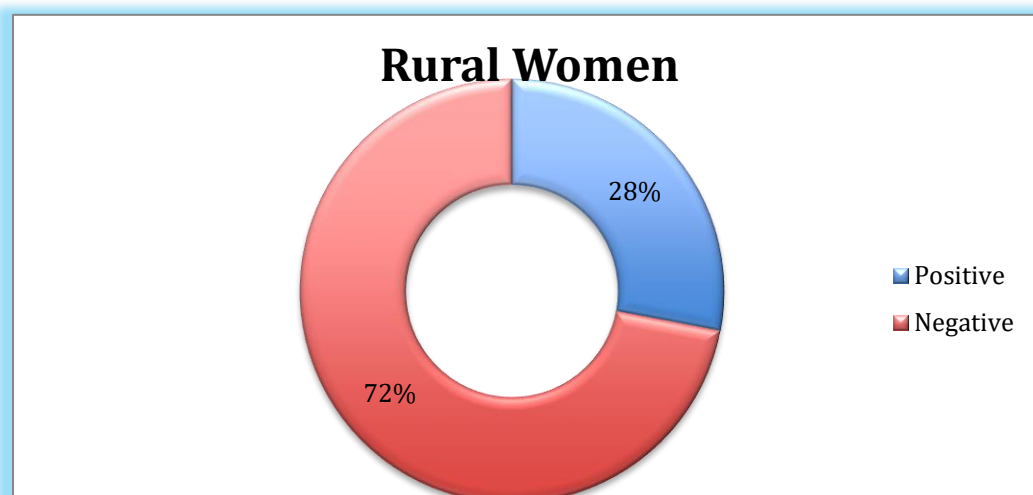


FIGURE 3: Rural woman’s attitudes toward breast cancer

DISCUSSION

Table (1) exposed that there is deference in socio demographic characteristics between urban and rural women. A 30 % of urban women who aged of 30-39 years, 45% of them was married, 59% of them was house wife, and 44% of them was had a secondary school as an education level, while 46 % of rural women who aged of 30-39 years, 68% of them was married, 78 of them was house wife, and 38% of them was had a primary school as an education level. These results were consistent with Sarwar et al., (2015), Douma et al., (2016), and Oladimeji et al., (2015).

According to table (2), there is a statistically significant difference between women's knowledge about breasts cancers according to site of life. The sample t test result between urban and rural women's knowledge of breast cancer was (.000), indicating that urban women's knowledge of the disease is superior to rural women's knowledge due to the latter's lower cultural status. These research results were coming along with Sarwar et al., (2015), Oladimeji et al., (2015), Tilaki, & Auladi (2015), and A similar situation has been reported in Northern Ghana (Asobayire, & Barley, 2015).

According to Table (3) only 35% of urban women and 62% in rural women have a high degree of awareness about breast cancer. This means that neither group of women (urban or rural) has a high knowledge about the diseas Regarding to the Levels of woman knowledge about breast cancer approximately half of our study samples had low level of knowledge and only 17% of Urban Women and 2% of rural had high level of knowledge, these results also were in accordance with those reported by Sarwar et al., (2015), Chaka, et al., (2018), Oladimeji et al., (2015), Tilaki, & Auladi (2015), and A similar situation has been reported in Northern Ghana (Asobayire, & Barley, 2015).

According to Table (4), there is a statistically significant difference in how women feel about breast cancer depending on where they live. Sample t test value between urban women's attitudes and rural women's attitudes about breast cancer was (.000), this means urban women's attitudes best than rural women's attitudes about breast cancer because low cultural level of rural women. Heena, et al., (2019), Sarwar et al., (2015), Douma et al., (2016), and Oladimeji et

al., (2015) These studies' findings were consistent in showing that women's knowledge about and attitudes toward breast cancer were below expectations, highlighting the need for effective measures to raise awareness.

Table (5) shows that the both (urban and rural) women have negative attitudes about breast cancer because only 42% urban women have positive attitudes and 28% of rural women have positive attitudes about breast cancer.

CONCLUSION

The study concluded that there is a difference in the social demographic characteristics between women in urban and rural areas. So that 30% of urban women between the ages of 30-39 years, 45% of them are married, 44% of them have a secondary education level, while 46% of them are rural women between the ages of 30-39 years, 68% of them are married, and 38 % of them had primary school as their level of education. There is a statistical significant deference between women's Knowledge about breast cancer according site of life that mean the both (urban and rural) women have not high level of knowledge about breast cancer and have negative attitudes about breast cancer.

RECOMMENDATIONS

Based on what the study concluded, we recommend holding educational seminars about the risks of breast cancer and how to do self-examination. We also suggest printing posters or making dramatic scenes on social media that teach and encourage rural women to do breast self-examination.

ACKNOWLEDGMENTS

I would like to express my heartfelt gratitude to the nurses who participated in this study for their cooperation, "as well as the Holy Karbala Health Directorate/Imam Hussein Medical City for your positive efforts and invaluable assistance".

Informed consent

Was collected from each participant in order for them to be included in this study. In addition, each participant has the option to withdraw from the study at any time.

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