Volume 8, Number 2, June 2018

Website: jceps.utq.edu.iq

Email: jceps@eps.utq.edu.iq

Study on the prevalence of breast cancer in the Province OfThiQar

M. ZuhairKadhimFarhan

zoheralnasre@gmail.com

Biology Department - Directorate of Education ThiQar.

**Abstract** 

The current study was conducted to find out the causes of the spread of breast cancer in the province of ThiQar, especially in the city of AL-Nasiriyah and its surroundings compared with theother cities of the province of ThiQar. As it was based on data registered from April 2012 until May 2014 in the Department of Health of ThiQar.

The study found approximately (323) cases of breast cancer registered in the province of ThiQar and were distributed as follows:

)172 (cases in the city of AL-Nasiriyah and its surroundings, where the highest percentage recorded in the study followed by the city of Shatrah and its surroundings ranked second, with the number of registered (66), cases and then came the city of Suq al-Shuyukh and its surroundings ranked third, where the study (45), The city of Al-Rifa'i and its surroundings came in fourth place in terms of injury, where the study recorded (34) cases and then occupied the city of Chibayish and its surroundings, the lowest rank in the injury, where the study recorded(6)cases only.

Keywords: Breast Cancer, Cancer diseases, Cancer injuries, Breastfeeding.

## مجلة كلية التربية للعلوم الصرفة - جامعة ذي قار المجلد ٨، العدد ٢، حزيران ٢٠١٨

Website: <u>jceps.utq.edu.iq</u> Email: <u>jceps@eps.utq.edu.iq</u>

# Study on the prevalence of breast cancer in the Province OfThiQar M. ZuhairKadhimFarhan

zoheralnasre@gmail.com

Biology Department - Directorate of Education ThiQar

#### الخلاصة

اجريت الدراسة الحالية لمعرفة اسباب انتشار مرض سرطان الثدي في محافظة ذي قار وبالأخص مدينة الناصرية ونواحيها مقارنة مع مدن محافظة ذي قار الاخرى. اذ تم الاعتماد على البيانات المسجلة لدى دائرة صحة ذي قار ابتدأ من شهر نيسان ٢٠١٢ ولغاية شهر ايار ٢٠١٤.

حيث وجدت الدراسة ما يقارب (٣٢٣) حالة اصابة لسرطان الثدي مسجلة في محافظة ذي قار وكانت موزعة كالتالي:-

(۱۷۲) حالة اصابة في مدينة الناصرية ونواحيها حيث كانت اعلى نسبة مسجلة في الدراسة ثم تلتها مدينة الشطرة ونواحيها بالمرتبة الثانية اذ بلغت عدد الاصابات المسجلة (٢٦) حالة اصابة ومن ثم جاءت مدينة سوق الشيوخ ونواحيها بالمرتبة الثالثة حيث سجلت الدراسة (٤٥) حالة اصابة فيها ثم جاءت مدينة الرفاعي ونواحيها بالمرتبة الرابعة من حيث الاصابة حيث سجلت الدراسة (٣٤) حالة اصابة فقط.

Volume 8, Number 2, June 2018

Website: jceps.utg.edu.ig

Email: jceps@eps.utq.edu.iq

#### Introduction

Cancer is the proliferation and growth of cells faster than normal so that you can avoid the mechanism of the body that controls the growth of cells. This leads to a cancerous mass, which grows larger and larger if not treated. The cells continue to fission and multiply, and are either in situ (that is, they break down nearby tissue) or may be transmitted by the metastasis by blood or lymph to other sites of the body. (2014مطعمة) Cancer also affects humans at all ages but the risk of infection in most species increases with age (Cancer research UK, 2007). Cancer accounts for about 3% Mortality in humans According to estimates by the American Cancer Society, about 7.6 million people worldwide are expected to have cancer deaths during 2007 (WHO, 2006). Breast cancer is the most common cancer in women. Every year, there are around 41,000 new breast cancer cases in the UK and more than 1 million worldwide. Although breast cancer is more common in women, it also affects men. In Britain, 300 men are diagnosed with breast cancer annually (2013). The rate of breast cancer mortality varies widely around the world, with little in developing countries and increasing in developed countries (Stewart and Kleihues, 2003). Breast cancer accounts for 22% of other cancers, and in 2000 the number of cases was estimated at 597 000 in developed countries and 471,000 (2011). The mortality rate from breast cancer in the United States is five times higher than in Japan, due to many factors including migration and dietary habits (Kumeret al., 2003). In Iraq, breast cancer is three times higher than in the past ten years (AL-Azzawi, 2006). This increase is due to the type of invasive cancer (Nunes and Harris, 2002). Kawajiriet al., (1986) noted that environmental and genetic factors play a role in the development of cancer. These environmental factors include X-ray or ultraviolet radiation or chemical agents produced from cellular metabolism (Jeonget al., 1999). Several factors related to breast cancer have been documented but no specific factors have been identified for many breast cancer cases. (Lacey et al., 2009).(2013) noted that experts have identified some factors that appear to increase the risk of breast cancer, including:.

- 1 female sex: Any female is more likely to develop breast cancer than men.
- 2 Age: The riskof developing breast cancer increases with age.
- 3 family history: the possibility that some women in the same family as a result of inheritance genetic anomaly.
- 4 Previous treatment for breast cancer: Any possibility that the other breast in women who have already been exposed to this cancer in one of herbreasts.

مجلة كلية التربية للعلوم الصرفة - جامعة ذي قار المجلد ٨، العدد ٢، حزيران ٢٠١٨

Website: jceps.utq.edu.iq

Email: jceps@eps.utq.edu.iq

5 - benign tumors in the breast: - the possibility of breast cancer due to the presence of some benign

tumors in it.

6 - menstrual cycle and reproduction: - The women who start their period of early menstruation and

those who break the menstrual period at a later age are more likely to develop breast cancer.

7 - taking pills: - It is possible to eat these pills impact on the increased riskof breast cancer.

cancer.

8 - the introduction of treatment and alternatives to hormones: - Increased risk of breast cancer in

women undergoing treatment with hormone alternatives such as estrogen and progesterone.

9 - Overweight: - Excessive weight overload contributes to an increased risk of breast cancer,

especially after menopause.

10. Country of birth: - the environment in which these women live and the nature of food in that

region have a role in the incidence of breast cancer.

11 - Pre-radiotherapy in the chest area: - Especially after the age of thirty.

12 - Drinking forbidden drinks: - Studies have shown that there is a relationship between breast

cancer and drink forbidden drinks.

13- Cancer-causing genes: - Women may inherit some abnormal genes from one of the parents are

vulnerable to breast cancer.

Research Problem

Due to the increase in cases of breast cancer and the increase in the number of deaths due to the

disease, especially in urban areas compared to rural areas and despite the larges the highest incidence

in cities.

Research importance

Trying to identify the causes that led to the spread of breast cancer in cities and decreased in rural

areas.

The aim of the research.

That man is the most precious assets created by God, and from this point of view, the search is keen

to try to raise awareness to avoid the reasons that would increase breast cancer and thus try to reduce

the incidence and then deaths resulting from the disease.

Materials and methods.

Datawere collected from the Department of Health of ThiQarduring April 2012 until May 2014. The

study then classified these data and compared them based on the rates of infection recorded in the

#### Volume 8, Number 2, June 2018

Website: jceps.utq.edu.iq

Email: jceps@eps.utq.edu.iq

city of Nasiriyah and its environs, Shatrah city and its environs, the city of Suq al-Shuyukh and its suburbs, The study therefore relied on the use of the EXCEL program for the purpose of illustrating these data and drawing them as graphs.

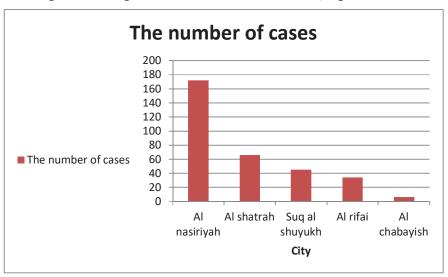
#### Results

The current study showed that the highest percentage was in the city of Nasiriyah and its surroundings (172) cases, followed by the city of Shatrah and its surroundings ranked second (66) cases, was the city of SuqAl-Shuyukh and its surroundings ranked third (45). The city of Al-Rifai and its surroundings came in fourth place with (34) cases, and then the city of Al-Chabayish and its surroundings recorded (6) cases only where it was the lowest percentage recorded in the study as shown in Table (1) and Figure (1).

Table (1) Number of cases of infection in ThiQar governorate.

City	The number of cases
Nasiriyah	172
Shatrah	66
SuqAl- Shuyukh	45
AL-Rifai	34
Al-Chabayish	6

Figure 1: Change in the number of cases in ThiQar governorate.



## مجلة كلية التربية للعلوم الصرفة - جامعة ذي قار المجلد ٨، العدد ٢، حزيران ٢٠١٨

Website: jceps.utq.edu.iq Email: jceps@eps.utq.edu.iq

#### Discussion

The rate of breast cancer varies among women depending on the environment in which they live, in terms of their place of living and food, as confirmed by many studies, including (2013) and (2011). Although the density of the population between Nasiriyah and Chabaish was taken into consideration.

It was noticed that the highest rate of infection recorded in this period was in the city of Nasiriyah and its surroundings (172) cases as shown in Table (1) and Figure (1). This may be due to the common culture among men and women of the city on reducing or delaying the procreation of women and to what is common in that most of the city's women do not rely on breastfeeding for the child, but on artificial breast feeding. It is no secret to us that breastfeeding has a role in reducing the injury process Breast cancer and this is confirmed by the study of (، الميكسون٢٠٠٨) and (2013) in his book and (Peto, 2001) .Or may be due to the suffering of women in the city of cases of depression and stress and daily stress at work as the study (2007وي) that there is a direct relationship between stress and depression on the part of breast cancer on the other. Or may be due to the lack of vitamin D in the city women because of their lack of exposure to sunlight that will release vitamin D under the skin, confirmed by the study (2015) on the inverse relationship between vitamin D and breast cancer due to the rule of their work in the city (as employees) This may be due to the nature of nutrition and the food systems used and the fast food contained in the meat and animal fats available in many markets, as studies have shown that dealing with a large number of possible causes of breast cancer and this is what he said (2011) in his book and (Peto, 2001). Or may be due to obesity and physical inactivity experienced by women: This is confirmed by (Danaeietal. 2005)in his study.

The study recorded the lowest registered infection rate was in the city of Chabaish and its surroundings (6) cases only as shown in the table and the figure above and this may return to what is Common among rural men and women about early marriage and childbearing is the increased incidence of women in procreation and their reluctance to take birth control pills and their reliance mainly on breast feeding. This would prevent them from breast cancer, as confirmed by the study (2008 منظمة الصحة العالمية) on the importance of breast-feeding in order to avoid breast cancer. This is supported by (2013 ميكسون) by writing what is useful for breast-feeding if the mother's age is small and continuous breast feeding for a long time helps to avoid breast cancer and to avoid taking oral contraceptives Of the effect in it. Owing to the lack of depression, stress and stress among rural women due to the nature of this environment and the lack of problems in social life and the simplicity of living in it, as confirmed by the study (2007) on the relationship

Volume 8, Number 2, June 2018

Website: jceps.utq.edu.iq

Email: jceps@eps.utq.edu.iq

between depression and psychological stress and cancer Breast by another. Or may be due to increased vitamin D in rural women because of exposure to sunlight that lead to the release of vitamin D under the skin, confirmed by the study (2015) on the inverse relationship between vitamin D and breast cancer, because it is the rule of their work in that environment of And this is what was observed in the field in that city. Or may be due to the pattern of traditional feeding in the countryside and the large intake of vegetables rich in fiber, as confirmed by (2011) in his book and according to the advice of the American Society for Cancer Control ACS, or the frequent eating of fish and cheese Which are rich in vitamin D, as the fish eat three times At least a week provides the body's need for this vitamin and that's what I mentioned (2008).

#### Recommendations

- 1 Periodic examination of the breast to avoid breast cancer.
- 2 Try to reduce the use of pills containing high levels of estrogen and resort to other alternatives.
- 3. Dependence on breastfeeding does not reduce the risk of breast cancer.
- 4 Try to create a good atmosphere away from stress and depression and psychological pressure, such as entertainment.
- 5. Exposure to solar radiation for an adequate period ensures the release of vitamin D.
- 6 Stay away from junk food rich in animal fats and concentrate on eating vegetables.
- 7 Avoid obesity and lethargy where you must exercise and maintain a proper weight of the body.

#### References

الصغير، ناجي سعيد. (2011). الجمعية اللبنانية لمكافحة سرطان الثدى ((تو عية)) كتاب ٢٦ص ٥-٩.

العبودي , شريفة محمد العبودي . (2008). تناول الاسماك ثلاث مرات اسبوعيا يوفر حاجة الجسم من فيتامين د .مقال جريدة الرياض , ١٤٧٥٠ , ص ٢.

العنزي , جميلة عبد الله . (2008) الرضاعة الطبيعية .قسم السجلات الطبية , كلية الدراسات التطبيقية , , جامعة الملك سعود .ص

الهندوان, زينب علوان. (2007). علاقة الضغط النفسي والهرمونات بسرطان الثدي. رسالة ماجستير, كلية العلوم, جامعة الملك عبد العزيز, المملكة العربية السعودية.

ديكسون، مايك . (2013), سرطان الثدي ؛ ترجمة هنادي مزبودي. كتاب المجلة العربية ٨٦ ص, ١-١٥.

طعمة, نظر عكاش. (2014). التعدد الوراثي للجين CYP1A1 وعلاقته في حدوث سرطان الثدي في محافظة ذي قار. مجلة دراسات تربوية , (۲۸) , ۱۷۰.

منظمة الصحة العالمية. (2017) سرطان الثدي الوقاية منه ومكافحته.

## مجلة كلية التربية للعلوم الصرفة - جامعة ذي قار المجلد ٨، العدد ٢، حزيران ٢٠١٨

Website: jceps.utq.edu.iq Email: jceps@eps.utq.edu.iq

يونس, نادين . (2015). دراسة القيمة الانذارية لنقصفيتامين D عند مرضى سرطان الثدي . رسالة ماجستير , كلية الطب البشري . جامعة تشرين سوريا .

AL-Azzawi, S. N. (2006) . Depleted uranium radioactive contamination In Iraq :An overview .Global research Vol. 1.August 31,.p.4.

Cancer research UK.(2007). UK Canser incidence statistics by age. Retrieved:6-25.

Danaei, G.VanderHoom S, Lopez AD, Murray CJ. (2005). Causes of cancer in the world: comparative risk assessment of nine behavioral and environmental risk factors. Lancet, 366(9499): 1784–93.

Jeong, K.; Wogan, N.; Lau, S. and Monks, T. (1999). Quinol- Glutathion conjugate-induced mutation spectra in the supfgenereplicatied in human AD29 cell and bacterial MBL 50 cells. Cancer research, 59:3641-3645.

Kumer, V.I.; Cotran, R.A and Robbins, S.t. (2003) . Robbins

Basic Pathology (7th Edition), Saunders, Philadelphia,

Pennsylvania.;p:716.

Lacey, JV. Jr. kreimer AR, Buys SS. (2009). Breast cancer epidemiology according to recognized breast cancer risk factors in the Prostate, Lung, Colorectal and Ovarian (PLCO) Cancer Screening Trial Cohort. BMC Cancer, 9, 84.

Nunes, R.A. and Harris, L.N.(2002). The HER2 extracellular domain as a prognostic and predictive factor in breast cancer Clin Breast Cancer;3:125-135.

Peto , J. (2001). Cancer epidemiology in the last century and the next decade. Nature, 411, 390–5 . Stewart, B. W. and Kleihues , P.(2003). World Cancer Report. IARC Press, Lyons, 232-236 WHO.(2006). World Health Organization. Retrieved 06-25.