

# The Effect Of Breastfeeding In Premenopausal Breast Cancer : A Review

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## **Abstract**

In this review, I describe the effect of breastfeeding in premenopausal breast cancer in Jordan. For the time being, breast cancer is considered to be the most frequent type of cancer among women in the world. Many studies explore the effect of breastfeeding to prevent of breast cancer, although studies have suggested that breastfeeding reduces the risk of breast cancer. In 2020, 2.3 million women diagnosed with breast cancer and 685 000 deaths in breast cancer in the world. In the end of 2020, there were 7.8 million women alive who were diagnosed with breast cancer in the past 5 years, making it the world's most prevalent cancer (WHO, 2021). mothers should be encouraged to breastfeed their babies because the clinical evidence has shown that there is a lower risk of breast cancer in women who breastfed their babies.

## **Design:**

In this review searched in the Scopus databases, bibliographies of pertinent articles and PubMed to identify relevant articles and used randomly search models to calculate summary odds ratios (ORs) and 95% confidence intervals (CIs).

## **Results:**

This review represents 10 distinct studies and statistic's with a total of 56088 cases breastfeeding have strong relationship with reduce from breast cancer and 6199 have result breastfeeding not effective to reduce breast cancer .

**Key word:** Breastfeeding, Breast cancer, Premenopausal.

## **Introduction:**

### **Breast cancer:**

Breast cancer is considered the most common malignancy and the third cause of cancer death after lung cancer and colorectal cancers, as well as the most common cancer affecting women in Jordan. According to the latest statistics from the Jordan National

Cancer Registry (JNCR), 2403 women and 15 males were diagnosed with breast cancer in 2020, accounting for 38.5 % of the total new cancer cases. Breast cancer ranked first among cancers in females, accounting for 20.8 % of all female cancer. The number of deaths in the disease according to the National Cancer Registry numbers have reached is 758 cases, and by up to 19.7% (JNCR,2020).

While studies investigative the relationship between breastfeeding and the risk of premenopausal breast cancer remain conflicting, the majority of studies have indicated that breastfeeding, particularly for long duration is associated with a reduce risk of premenopausal breast cancer. However, few studies have examined breast feeding is related with the risk of premenopausal breast cancer by hormone receptor status, and it remains unclear why breastfeeding decreases the risk of breast cancer at the biologic level. Breast cancer is the most prevalent among them, by 0.4% in Jordan the international agency for cancer research confirms that breast cancer rank is the second most common cancer in the worldwide and 11.9% after lung cancer (13%) of the total registered cases. Breast cancer has occupied the first place with 13.4% of the total cases in the western part of the continent of Asia, including the middle east and north African countries. Topped Lebanon infection rates in the countries of the middle east and north Africa region logged 78.68 cases per 100 thousand women, followed by Jordan 61.03 cases per 100 thousand women.

During pregnancy, parity breastfeed changes in breast anatomical and physiological. Breastfeed significant is related to reduce the risk of breast cancer compared with women nonpregnant and never breastfeed. (Atieh Akbari, et.al, 2010).

### **Breastfeeding:**

Many studies explore the effect of breastfeeding to prevent of breast cancer; however, the findings of these studies remain inconsistent. While some studies recommend the usage of breastfeeding to prevent and decrease in premenopausal breast cancer (Collaborative Group on Hormonal Factors in Breast Cancer, 2002), other studies suggested a potential factor of breast cancer may exist only in postmenopausal women (Zheng, et.al, 2000). On the other hand, several studies examined the relationship between the duration of breastfeeding and its effect on the prevention of breast cancer. The effect of breastfeeding to prevent of breast cancer among premenopausal women with gene mutations was the topic of investigation for other studies. (Collaborative Group on Hormonal Factors in Breast Cancer, 2002). It is found that the longer women breast feed the more they are protected against breast cancer. The methods in this studies of data collection, have been described data from 47 epidemiological studies in 30 countries that included data about breastfeeding patterns were collected, checked and analyzed centrally, for 50 302 women with breast cancer and 96 973 controls group. Also of the relative risk for breast cancer associated with breastfeeding in women were obtained after according by age, parity, and women's ages when their first child is born.

Msolly et al (2009) conducted a quantitative study (a case-control design) to investigate if breastfeeding reduces breast cancer risk in Tunisia. Sample is 400 female

diagnosed with breast cancer from November 2006 to April 2009, and all of cases included in the analysis. The study findings showed a significant with a longer duration of breastfeeding and reduction risk of breast cancer. Although the risk inclined to be lower for premenopausal than for postmenopausal women.

Breastfeeding has a significant role in reducing breast cancer, and so health education, and communication activities and skills for the promotion of breastfeeding and creating awareness about this fatal disease are the need in this time. (Babita, et.al, 2012).

Stueba et al (2009) conducted a quantitative evaluation using case-control study (n=6075) in United State they found there was an association between women who had breastfeeding and incidence premenopausal breast cancer among women with a family history of breast cancer.

On other hand some studies show there is no significant between breastfeeding and premenopausal breast cancer among women.

Reema et al (2020), study was conducted from October 2016 to September 2017, total number in the study 400 Jordanian women, 200 diagnosed breast cancer patients were compared to 200 healthy women (20 – 65 years of age). Breast cancer patients were matched with inclusion criteria is ( age, income and marital status), found a significant negative effect of lactation in the risk of breast cancer.

Salma Butt et al (2004), conducted a quantitative study using A prospective cohort in Malmö, A total of 17 035 women in the study, 522 had been diagnosed with breast cancer inclusion in this study, to find out breastfeeding duration was not related with breast cancer and no strong results were seen with regard to breast cancer subgroups.

Keval (2003) conducted a quantitative study using A prospective cohort in Norway the sample size of participant 5074 women only seven cases occurred before age 40. No relationship was found between breastfeeding and premenopausal breast cancer risk among women.

Farahnaz (2016) case-control study was included on 98 women with breast cancer and 198 control cases who were selected through randomized method. Included variable is reproduction characteristics, demographic characteristics, breastfeeding pattern and duration of breastfeeding. Was found no relationship between breast cancer and reproduction characteristics, breastfeeding pattern and duration of breastfeeding.

Tessaro (2003) study was a case control in Southern Brazil was conducted a total of 250 cases of breast cancer compared with 1,020 controls group were identified in women from 20 to 60 years of age. The main study inclusion variables were duration of breastfeeding and occurrence of breastfeeding, was found according to the results, breastfeeding did not have a protective effect against breast cancer compared to no breastfeed women.

Overall, data from a few articles, several large randomized control studies, as well as numerous case-control studies suggest that breastfeeding approve protection against premenopausal breast cancer development. It is very important that understanding breastfeeding plays a best role and a significant role on decrease breast cancer risk. Consideration should be taken for encouraging breastfeeding when developing breast

cancer prevention programs, and clinicians should take into account breastfeeding history when outlining risk management strategies.

### **Conclusion:**

Women should be encouraged to breastfeed their babies for many reasons for example benefit of breast milk for babies in addition, breastfeeding is beneficial for mother health . Breastfeeding positive significant of reduce risk of developing breast cancer, breast cancer is the most common gynecological cancer in young women, the second most common cancer and the most diagnosed cancer among women in the worldwide. In this review showed there is a strong evidence that breastfeeding reduces the risk of breast cancer.

### **Recommendation:**

This review recommends the enhance by creating and carrying out educational programs and promotion health education to explain the nature and risk factors of the breast cancer. It also recommends to prevail females awareness of the disease showing how to reduce risk the dangerous disease and the stimulus breastfeeding among women at least six months .

### **Implication :**

This review has to provide additional data for behavioral modification by health promotion, health education and interventions for the additional benefit of breast health and examination. Health providers should also be aware of risk management strategies and aware into benefits of breastfeeding to reduce the risk of breast cancer. Although it will still be difficult to predict which patients will develop breast cancer, detect potential risk factors for breast cancer will allow to identify patients at risk to develop breast cancer.

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