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Breastfeeding and incidence of breast cancers in the UK Women's Cohort Study

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Studies have found that longer breastfeeding duration is protective towards certain types of breast cancer and other hormonal related cancers(1). For each additional 12 months of breastfeeding the risk of breast cancer is reduced by 4 %, however evidence is still inconsistent(2) and a limited number of prospective studies have explored the relationship(1). Therefore, this study aimed to study the association between breastfeeding duration and the risks of breast cancer in a large prospective cohort of middle-aged women, the UK Women's Cohort Study (UKWCS).

The UKWCS contains approximately 35000 women participants followed up from 1995–1998 until now(3). Updated mortality and cancer information was obtained from Office of National Statistics (ONS). Cumulative months of breastfeeding were estimated from questionnaire data, ranging from 3 months to more than 12 months. Women with prevalent cancers were excluded. Survival analysis was undertaken to explore the relationship between breast feeding and risk of developing breast cancer.

The total number of incident breast cancer cases was 1762. Mean age at recruitment was 54 years. No association was found between ever breastfeeding and the risk of breast cancer after adjustment for confounders (HR: 1·00; CI: 0·99–1·01). Similarly, the hazard ratio shows no association between breastfeeding duration of less than 3

months (HR: 1·00; CI: 0·83–1·22), 3–6 months (HR: 1·07; CI: 0·85–1·34). 6–12 months (HR: 0·87; CI: 0·7–1·08) and more than 12 months (HR: 1·1; CI: 0·9–1·34) with the risk of breast cancer. Further analysis was done to stratify women according to parity status and menopausal status; this analysis also showed no differences in risk according to breastfeeding status.

In conclusion, there is no evidence of any association between breastfeeding and the risk of breast cancer in the UK Women's Cohort Study. These findings require further exploration because the biological mechanisms underlying these associations are uncertain. Further analysis on breast cancer subtypes may be appropriate to investigate the association.

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