Prolonged breastfeeding reduces risk of breast cancer in Sri Lankan women: a case-control study

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Abstract

Goal: To assess the association between duration of breastfeeding and the risk of breast cancer in Sri Lankan women. Methods: We conducted a case–control study in women aged 30–64 years in selected health care facilities in the Western province. A total of 100 recent cases of breast cancer (histologically confirmed) and 203 controls (age and parity matched) were included. Detailed information regarding breastfeeding, menstruation, reproductive factors, passive smoking and other confounders was collected using a structured questionnaire. Adjusted odds ratios and 95% confidence intervals were calculated using multiple logistic regressions. Principle results: Multivariate analysis found that those women who breastfed for ≥24 months during lifetime had significantly lower risk of breast cancer than those who breastfed for less than 24 months (OR = 0.40; 95%CI = 0.22, 0.73). Compared to 0–11 months of lifetime breastfeeding, there was a 66.3% reduction in breast cancer risk in women who breastfed for 12–23 months, 87.4% reduction in 24–35 months and 94% reduction in 36–47 months categories. The mean duration of breastfeeding per child for ≥12 months was also associated with reduced risk of breast cancer (OR = 0.52; 95%CI = 0.28, 0.94). The significant factors associated with increased risk of breast cancer were: post-menopausal women (OR = 1.74; 95%CI = 1.01, 3.01); having an abortion in the past (OR = 3.42; 95%CI = 1.75, 6.66) and exposure to passive smoking (OR = 2.96, 95%CI = 1.53, 5.75). Major conclusions: Prolonged breastfeeding significantly reduces the risk of breast cancer and this protective effect was supported by a dose–response relationship. Risk due to passive smoking should be emphasized in anti-smoking programmes.