

The effect of combined contraceptives during breastfeeding on lactation, mothers, and infants- network meta-analysis

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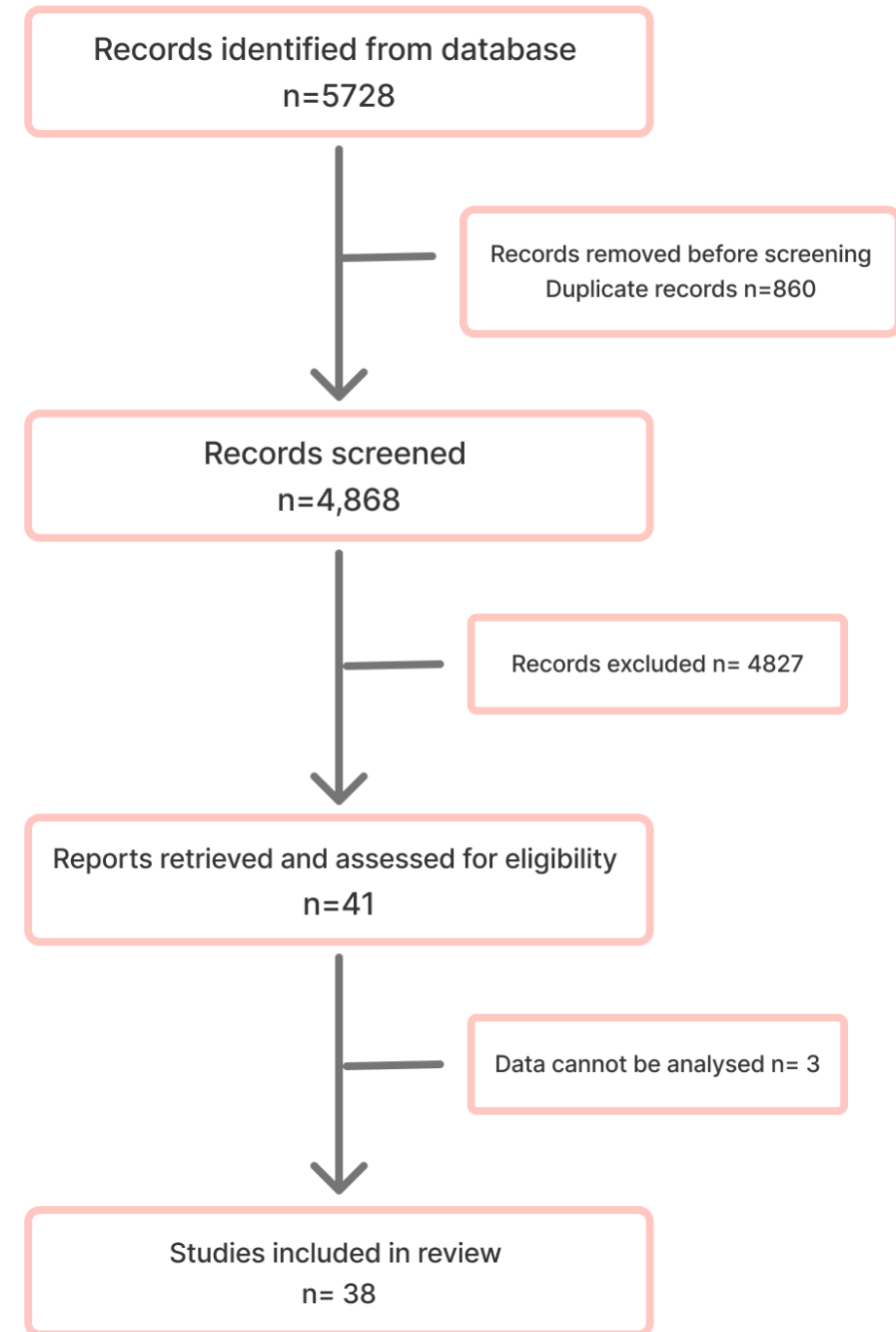
Introduction

The choice of contraception during breastfeeding is influenced by various factors, including its impact on milk production. While progesterone-based methods are commonly used, they are not suitable for everyone.

This study aims to assess the safety and efficacy of various contraceptive methods in breastfeeding women, focusing on estrogen-based options using network meta-analysis.

Methods

- Network meta-analysis
- Search Databases: MEDLINE, EMBASE, Cochrane, and ClinicalTrail.gov.
- Years: until April 2023.
- Included studies: 5 RCT and 33 observational studies.
- Women Included: 13,122
- Classification: progestin-only, combined progestin and estrogen, and non-hormonal
- Maternal outcomes: breastfeeding discontinuation, milk volume, and pregnancies.
- Infant outcomes: weight and height.



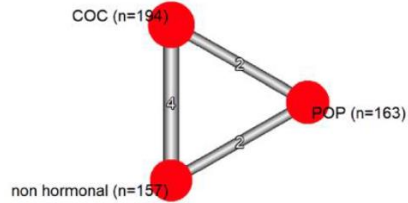
Results

Maternal outcome

Milk volume

COC-PO: [MD] 13.41ml, [95%CI] -29.5- 56.33
[p]0.54

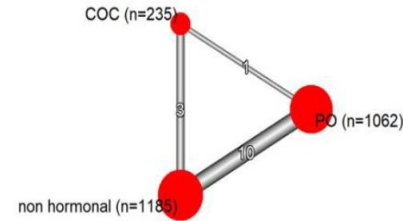
COC-Non hormonal : [MD] 24.5ml, [95%CI]
-18.95-67.95, [p] 0.27 **No effect**



Discontinuation of breastfeeding

COC-PO: [OR] 1.37, [95%CI] 0.67-2.81, [p] 0.4

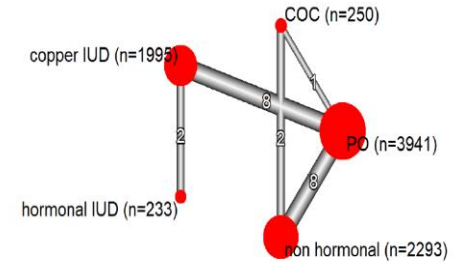
COC-Non hormonal: [OR] 1.13 ,95% CI 0.57-
2.24, [p]0.7 **No effect**



Pregnancy

PO-Non hormonal: [OR] 1.92, [95%CI] 1.06–3.48,
[p]0.0308

Cooper IUD-Non hormonal: [OR] 3.09, [95%CI]
0.95–10.06, [p]0.06 **Clinical effect**

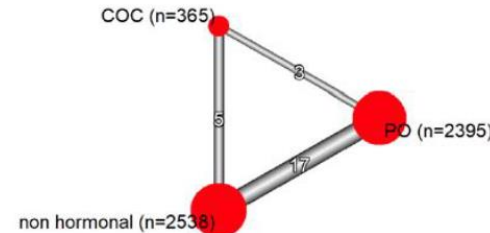


Infant outcome

Infant weight

COC-PO: [MD] 101.96gr, [95%CI] -211.08-425
[p]0.523

COC-Non hormonal :[MD] 210.35gr, [95%CI] -40.08-
460.77, [p]0.099 **No effect**



Conclusions

The use of estrogen-containing contraceptives is not expected to impact milk volume, infant growth or the breastfeeding discontinuation, compared to other contraceptive methods.

Pregnancy outcomes highlight the higher risk associated with mechanical barrier methods compared to hormonal and intrauterine options.

These findings underscore the importance of considering the individual preferences and needs of the breastfeeding mother when selecting contraception.

