Quick starting hormonal contraception after emergency contraception- a systematic review

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Introduction

What is Quick Starting?

- Initiating hormonal contraception (HC) immediately after oral emergency contraception (EC)
- EC: ulipristal acetate or levonorgestrel

Potential Advantages

1. Reduce unintended pregnancy- Cochrane review found women 2-3x more likely to become pregnant in the same cycle as EC use if continuing to have sexual intercourse (Cheng *et al.*, 2012)
2. Improve HC use- motivated/ educated about contraceptive method- 55% of women who could quick start HC after EC do not re-attend (Simpson *et al.*, 2014)

Potential Disadvantages:

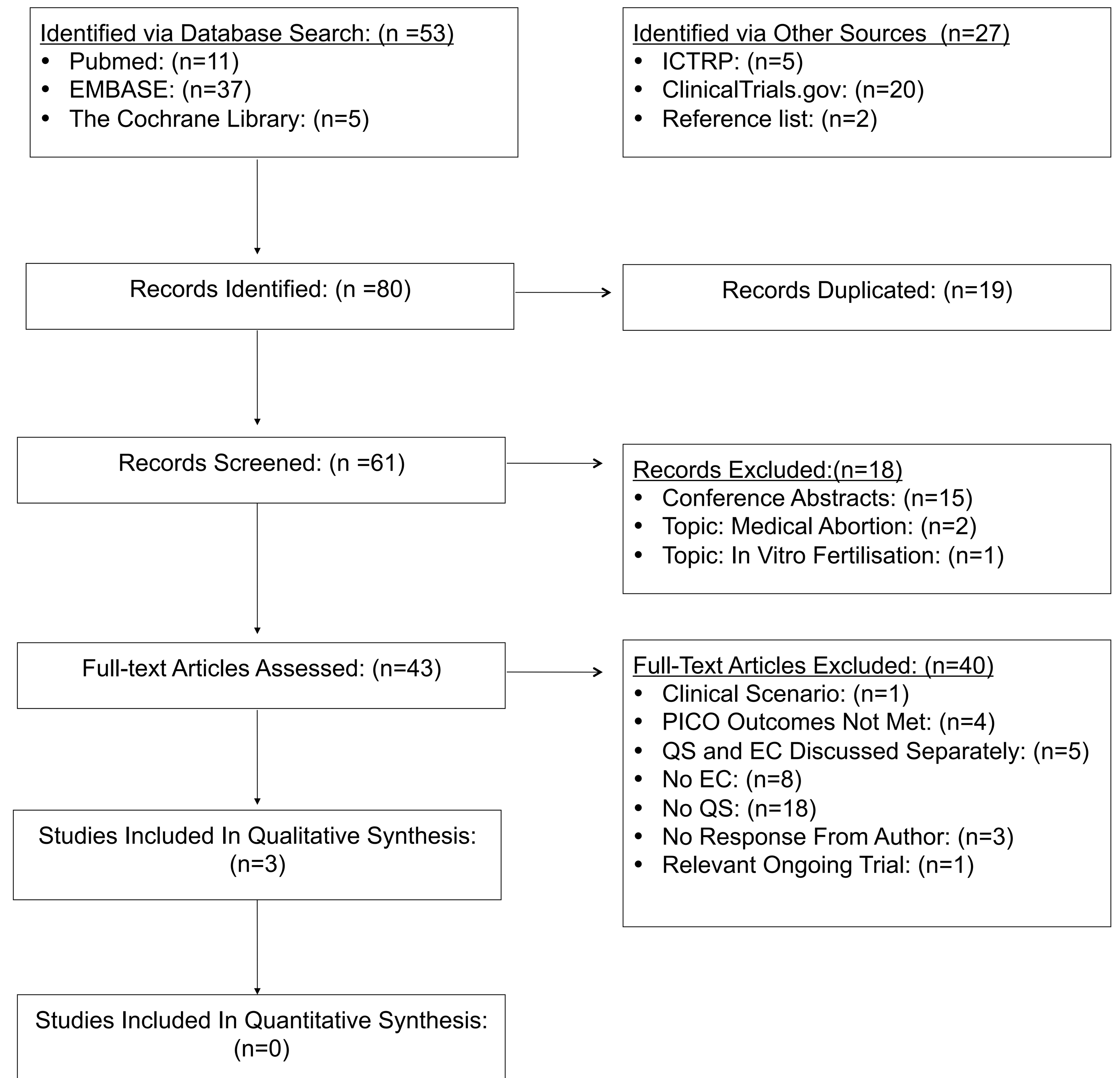
- Ulipristal acetate (UPA) is a progesterone receptor modulator
- Potentially counteracts the action of progestogen containing contraceptives
- May alter EC &/or HC effectiveness and cause side effects
- Effectiveness and side effects are major influences on contraceptive choice (Lessard *et al.*, 2012)

Aims:

Assess the impact of quick starting HC after oral EC on:

1. HC effectiveness
2. EC effectiveness
3. Side effects
4. Ongoing contraceptive use

Methods



Results

1. Hormonal Contraceptive Effectiveness

- Two biomedical studies (Brache *et al.*, 2015, Cameron *et al.*, 2015)
- Day 0: UPA vs. placebo
- Day 1: start HC
- None measured pregnancy rates

Cameron et al., 2015

HC: 21 days of microgynon® 30 (COC)
Outcome measure: ovarian quiescence at day 7
OR: 1.27; 95% CI 0.51 to 3.18 – no significant difference

Brache et al., 2015

HC: 20 days of Cerazette® (POP)
Outcome measure: cervical mucus impenetrability at day 2
OR: 0.76; 95% CI 0.27 to 2.13 – no significant difference

2. Emergency Contraceptive Effectiveness

- One biomedical study (Brache *et al.*, 2015)
- Day 0: UPA
- Day 1: start Cerazette® vs. placebo for 20 days
- Pregnancy rate not measured

- UPA normally delays ovulation by 5 days
- In this study, women significantly more likely to ovulate before day 5 when quick starting HC after EC (OR: 0.04; 95% CI 0.01 to 0.37)
- However only one study and a small sample size (n=29 cycles, aimed for 33)

3. Side Effects

- One biomedical study (Cameron *et al.*, 2015)
- Day 0: UPA vs. placebo
- Day 1: start microgynon® 30 for 21 days

- Side effects (OR: 1.22; 95% CI 0.48 to 3.12)
- Unscheduled bleeding (OR: 0.53; 95% CI 0.16 to 1.81)
- No significant difference

4. Contraceptive Use

- One study (Michie *et al.*, 2014)
- Women presenting to pharmacy for EC
- Day 0: EC LNG
- AND either advanced prescription of norgeston® (POP) vs. verbal advice on where to access HC
- 6-8 weeks: followed up via telephone

- Women given POP significantly more likely to be on effective HC (OR: 6.73; 95% CI 2.14 to 21.20)
- But sample size small (n=70, aimed for 120)

Conclusions- Recommendations

1. HC effectiveness: no impact when quick starting HC after EC use
2. EC effectiveness: wait 5 days after EC use before starting HC
3. Side effects: no impact when quick starting HC after EC use
4. Contraceptive use: quick starting HC after EC use improves HC use at 6-8 weeks

FSRH 2017 recommend:

- If LNG-EC is taken suitable HC can be quick started immediately
- Quick starting of suitable HC should be delayed for 5 days after UPA-EC
- Women should use additional contraception (barrier or abstinence) until the chosen method becomes effective

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