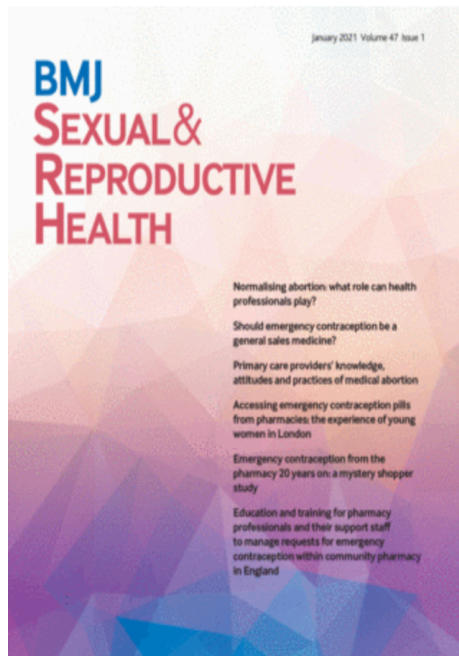




# Bridging contraception after emergency contraception

Professor Sharon Cameron



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# Bridging to effective contraception

- EC only delays ovulation
- **Quick-start** effective ongoing contraception
- Pharmacy cannot provide regular contraception
- Wait to get appointment at a clinic, risk of unintended preg
  
- What if pharmacy provide interim '**bridging**' supply of contraception ?
- POP safe, few contraindications - good option ?

# Pilot of 'Bridging' POP after EC

- Pilot cluster randomised pharmacies
- LNG-EC user > 150
- POP 1 month (n=56)
- Rapid access to SRH (n=58)
- Standard care (n=54)
- Tele Fu 6-8 wks
- Higher % effective contraception

POP                      56% vs 16% standard  
Rapid access            52% vs 16%

Promising strategies to prevent more unintended pregnancies but a robust trial required

*Michie et al Contra 2014*

# The Bridge-it study

- UK : Edinburgh, London, Dundee
- 29 pharmacies, cluster randomized, crossover
- N= 636 women oral LNG-EC
- **Intervention:** 3 months POP (desogestrel) & rapid access to SRH clinic (N=316)
- **Control:** standard care (N=320)
- Dec 2017- June 2019

Determine if the intervention results in greater use of effective contraception than EC and advice alone

## Use of effective contraception following provision of the progestogen-only pill for women presenting to community pharmacies for emergency contraception (Bridge-It): a pragmatic cluster-randomised crossover trial



Sharon T Cameron, Anna Glasier, Lisa McDaid, Andrew Radley, Paula Baraitser, Judith Stephenson, Richard Gilson, Claire Battison, Kathleen Cowle, Mark Forrest, Beatriz Goulay, Anne Johnstone, Alessandra Morelli, Susan Patterson, Alison McDonald, Tharmalar Vadiveloo, John Norrie



### Summary

**Background** Unless women start effective contraception after oral emergency contraception, they remain at risk of unintended pregnancy. Most women in the UK obtain emergency contraception from community pharmacies. We hypothesised that pharmacist provision of the progestogen-only pill as a bridging interim method of contraception with emergency contraception plus an invitation to a sexual and reproductive health clinic, in which all methods of contraception are available, would result in increased subsequent use of effective contraception.

**Methods** We did a pragmatic cluster-randomised crossover trial in 29 UK pharmacies among women receiving levonorgestrel emergency contraception. Women aged 16 years or older, not already using hormonal contraception, not on medication that could interfere with the progestogen-only pill, and willing to give contact details for follow-up were invited to participate. In the intervention group, women received a 3-month supply of the progestogen-only pill (75 µg desogestrel) plus a rapid access card to a participating sexual and reproductive health clinic. In the control group, pharmacists advised women to attend their usual contraceptive provider. The order in which each pharmacy provided the intervention or control was randomly assigned using a computer software algorithm. The primary outcome was the use of effective contraception (hormonal or intrauterine) at 4 months. This study is registered, ISRCTN70616901 (complete).

**Findings** Between Dec 19, 2017, and June 26, 2019, 636 women were recruited to the intervention group (316 [49.6%], mean age 22.7 years [SD 5.7]) or the control group (320 [50.3%], 22.6 years [5.1]). Three women (one in the intervention group and two in the control group) were excluded after randomisation. 4-month follow-up data were available for 406 (64%) participants, 25 were lost to follow-up, and two participants no longer wanted to participate in the study. The proportion of women using effective contraception was 20.1% greater (95% CI 5.2–35.0) in the intervention group (mean 58.4%, 48.6–68.2), than in the control group (mean 40.5%, 29.7–51.3 [adjusted for recruitment period, treatment group, and centre];  $p=0.011$ ). The difference remained significant after adjusting for age, current sexual relationship, and history of effective contraception use, and was robust to the effect of missing data (assuming missingness at random). No serious adverse events occurred.

**Interpretation** Provision of a supply of the progestogen-only pill with emergency contraception from a community pharmacist, along with an invitation to a sexual and reproductive health clinic, results in a clinically meaningful increase in subsequent use of effective contraception. Widely implemented, this practice could prevent unintended pregnancies after use of emergency contraception.

**Funding** National Institute for Health Research (Health Technology Assessment Programme project 15/113/01).

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### Introduction

Emergency contraception prevents unintended pregnancy after unprotected sex or contraceptive failure,<sup>1</sup> but unless

Current UK and US guidelines recommend initiating regular hormonal contraception immediately after emergency contraception (known as quick-starting).<sup>4,5</sup>

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See Comment page 1536

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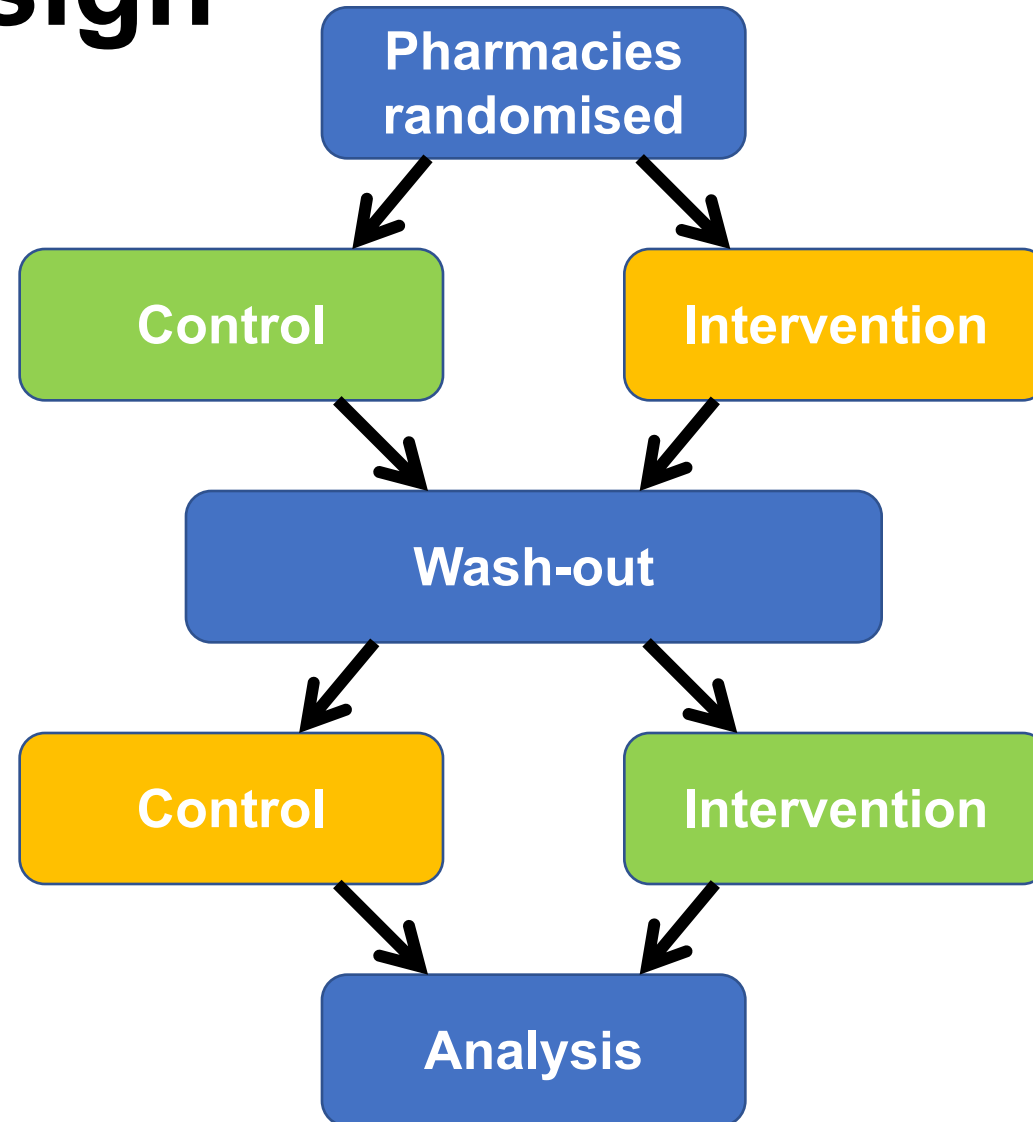
University of Aberdeens

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# Study design



# Participants

- $\geq 16$  yrs
- Not using hormonal contraception
- No medications interact with POP
  
- FU 4 months telephone survey
- **Contraceptive use**
- Use of rapid access, SAE
- SRH databases for participant attendance



# Results: effective contraception at 4 months

- 636 women, mean age 23 yrs
- FU 4 month N = 406 (64%)
- Effective contraception (hormonal or intrauterine)
- 58.4% (48.6–68.2) intervention vs. 40.5% (29.7–51.3) control
- **20.1% greater** (95% CI 5.2–35.0) **intervention vs.** control group; p=0.011
- Remained **significant even with adjustment** for range factors\*

(\*age, current sexual relationship, history of effective contraception use, ethnicity, previous birth, missingness data)

# Methods of contraception at 4 months

	Intervention	Control	Effect size
	N=198	N=208	
Combined hormonal	14%	23%	<i>p=0.028</i>
Progestogen only pill	36%	7%	<i>p&lt;0.001</i>
Male condom	16%	30%	<i>p&lt;0.001</i>
Injectable	2%	2%	
Implant	1.5%	5%	<i>p=0.037</i>
Copper IUD	1.5%	2%	
Levonorgestrel IUD	1.5%	2%	
(LARC)	(7%)	(11%)	
No method	29%	30%	

LARC not significantly different  
(7 % intervention vs 11% control)



# Other important outcomes

## Repeat use of EC:

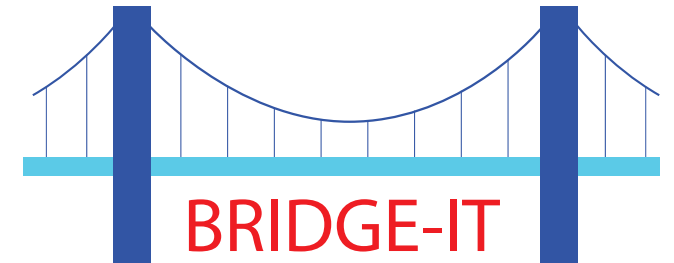
10 % intervention vs 18% control;  $p=0.018$

Rapid access card (intervention):  $n=2 < 1$  month

## Same % attend SRH clinic:

17% intervention vs 14% control

No serious adverse events



# Interpretation

- Bridging POP from pharmacy after EC
- Safe & effective
- Clinically meaningful increase effective contraception
- Reduced use further EC
- LNG-EC but should be applicable to UPA (& wait 5 days)
- **Implemented should lead to fewer unintended pregnancies after EC**
- Rolled out across Scotland & other parts UK



# Acknowledgements

- BRIDGE-IT team & PPI
- ECTU & CHart
- Pharmacists
- Participants
- NIHR HTA 15/113/01

Articles

## Use of effective contraception following provision of the progestogen-only pill for women presenting to community pharmacies for emergency contraception (Bridge-It): a pragmatic cluster-randomised crossover trial



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Current UK and US guidelines recommend initiating regular hormonal contraception immediately after emergency contraception (known as quick-starting).<sup>2,3</sup> In the UK, as in many other countries, most women

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