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# Copper IUD as Emergency Contraception



Use of effective contraception six months after emergency contraception with a copper intrauterine device or ulipristal acetate – a prospective observational cohort study

## Study background

Cu-IUD is the most effective method and yet it remains very underutilized

Why?

- Women don't know about this option
- Pills are easy accessible and easy to hand out.
- Demands skilled health care providers
- Workload/not enough time
- Myths about IUDs for nulliparous



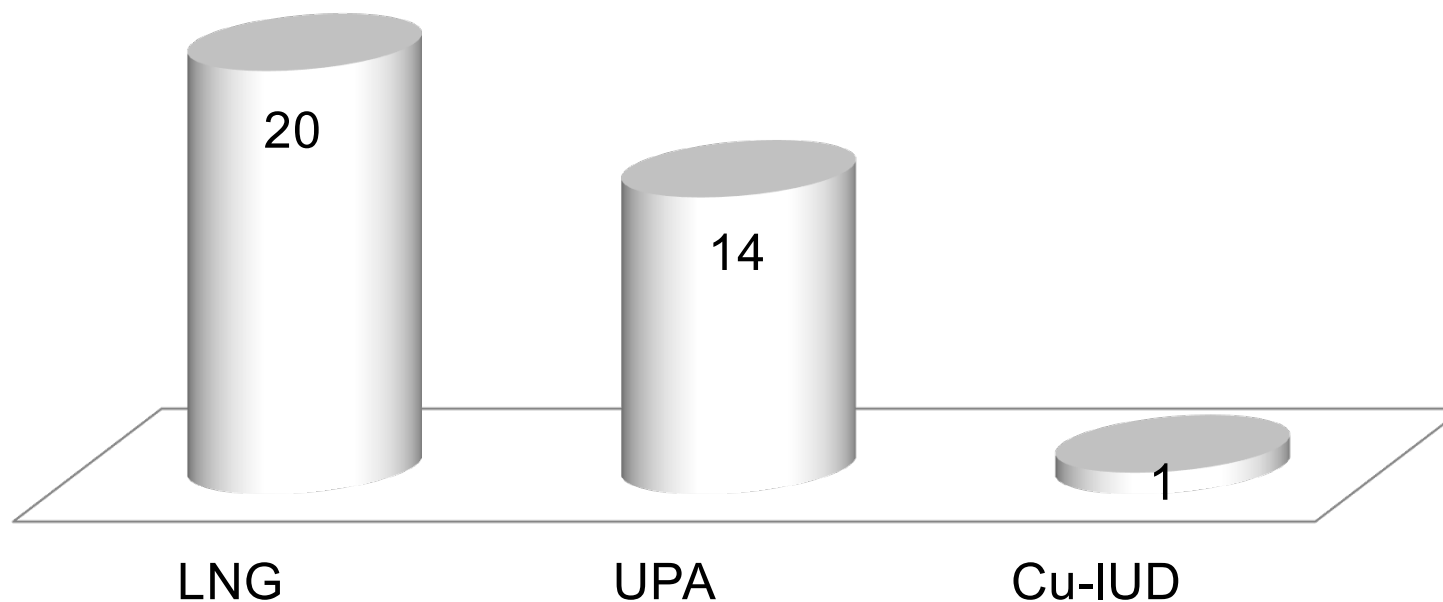
# Emergency contraception – EC

Today 4 different methods:

- Take a few of your regular pill at once and repeat it - "Yuzpe" method (1974) – started within 72 h
- Levonorgestrel (Norlevo®, Postinor®) – ASAP but within 72 h
- Ulipristal acetate - UPA (ellaOne®, ella®) – ASAP but within 120 h
- Cu-IUD – inserted within 120 h

# Efficacy of EC methods

**Pregnancies first month after EC  
/1000 users**





## Cu-IUD for EC – Main mechanism of action

- Toxic to sperms and egg  
inhibits fertilization
- Local inflammatory reaction in the endometrium  
inhibits nidation
- No effect on ovulation



## Advantages Cu-IUD vs ECP

- Can be used after LH-peak and ovulation
- No loss of efficacy over time. If inserted within 120 h there is a 0,01% risk of pregnancy
- User independent
- Provides a Long Acting Reversible Contraceptive (LARC) that can stay for 5 years or more
- Very few contraindications



## Materials and methods

- Conducted at the RFSU Clinic in Stockholm
- Women presenting with need for EC (n=101) was informed about the study and participants (n=79) gave written consent for participation
- Counselling about EC with emphasis on the efficacy of the Cu-IUD was given
- According to preference of method participants were included in either the Cu-IUD or the UPA group
- Follow up at 3 and 6 months



# Outcomes

## Primary

- Use of an effective contraceptive method at 6 months follow up (FU)

## Secondary

- Use of an effective contraceptive method at 3 months FU
- Acceptability of Cu-IUD
  - > use again for EC
  - > would or have recommended to friends





# Results

	Effective method	No effective method	Missing	p-value*
<b>3 months</b>				
Cu-IUD	35/36 (97.2%)	1/36 (2.8%)	4	<0.001
UPA	19/32 (59.4%)	13/32 (40,6%)	7	
<b>6 months</b>				
Cu-IUD	30/36 (83.3%)	6/36 (16.7%)	4	0.03
UPA	18/31 (58.1%)	13/31 (41,9%)	8	



## Results

- In the Cu-IUD group 28/36 (77.8%) were still using Cu-IUD at six months – good acceptability
- 31/36 (86%) stated that they would recommend the Cu-IUD to others as an EC method.

What about unprotected sex?

- 4/36 (11.1%) in the Cu-IUD group compared to 14/31 (45.2%) in the UPA group ( $p=0.02$ ).



## Results

### What about Pregnancies?

- 1 in the Cu-IUD group at 3 months FU - IUD removed due to suspected infection followed by oral contraceptive failure (Lost to 6 months FU)
- 3 in the UPA group. None because of EC failure – all had abortions
- 1 planned pregnancy in the UPA group within 3 months (Lost to 6 months FU)



## Summary

- If a Cu-IUD is inserted as EC, significantly more women use an effective contraceptive method after 6 months
- To actively offer Cu-IUD for EC and on site insertion is possible – we made it happen
- WE NEED TO IMPROVE COUNSELLING SKILLS – MOTIVATION – EMPHASISE EFFICACY
- Main reason for not choosing Cu-IUD is fear of pain – future studies on pain management needed



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Thanks for your attention  
Obrigado!

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