Emergency contraception
Impact on abortion rates

Dr Sharon Cameron
Consultant Gynaecologist
Dean Terrace Centre and Royal Infirmary of Edinburgh
Scotland
Effectiveness of ‘hormonal’ EC

• Efficacy – RCT EC vs. placebo
• Estimates – risk on day of cycle
• Combined E/P 47- 74% < 72 hrs (Trussell et al 1999, 2003)
• Levonorgestrel 59-94% (Lancet 1998)
Use of EC

- Used by minority abortion
- Lack knowledge, unaware
at risk, stigma, accessibility
- Within 72 hrs (120 hrs)
- Difficulty obtaining prescription, clinic
- Modelling cut induced abortions by 50%
EC – Improved accessibility ?

- Pharmacist
- Pharmacy EC Britain (2001) :
  - *Marston et al BMJ 2005*
  - Cross sectional surveys for UK office National statistics
  - 2000-2002 (yr before & 2 yrs after)
  - Interviewer administered questionnaire
  - Questions on contraceptive use and EC use
  - ~ 2000 women 16-49 yrs
Impact of EC at pharmacy

- EC Pharmacy 33% in 2002 cf. nil
- EC use/yr unchanged (6% one, 2% more)
- Predictors of use same - younger, single
- No change in % regular contraceptive

- Concl- changed where obtain EC only
Abortion rates

15-44yrs:

- England and Wales
  - 16.9 per 1000 in 2000 cf.
  - 18.6 per 1000 in 2007

- Scotland
  - 11 per 1000 in 2000 cf.
  - 13 per 1000 in 2007

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1. Refers to therapeutic abortions notified in accordance with the Abortion Act 1967.
2. Provisional.

Source: Notifications (to the Chief Medical Officer for Scotland) of abortions performed under the Abortion Act 1967 (ISD Scotland)
Advance Provision of EC
Meta- analysis 2007 (Polis et al)

- Meta analysis
- 8 RCT = 6,389 participants, 4 countries
- Control varied
- Most levonorgestrel (1 mifepristone, 3 Yuzpe)
- Self reported use EC
- Pooled outcomes
<table>
<thead>
<tr>
<th>Outcome</th>
<th>No.</th>
<th>No. Participants</th>
<th>OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy at 12 months</td>
<td>4</td>
<td>4690</td>
<td>1.0 (0.78-1.29)</td>
</tr>
<tr>
<td>Pregnancy at 6 months</td>
<td>7</td>
<td>6035</td>
<td>0.91 (0.69-1.19)</td>
</tr>
<tr>
<td>Pregnancy for levonorgestrel</td>
<td>4</td>
<td>3674</td>
<td>0.87 (0.67-1.13)</td>
</tr>
<tr>
<td>STI</td>
<td>3</td>
<td>2829</td>
<td>0.99 (0.73-1.34)</td>
</tr>
</tbody>
</table>
## Advance Provision of EC
*(Polis et al 2007)*

<table>
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<tr>
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<tr>
<td>Ever use EC</td>
<td>7</td>
<td>6327</td>
<td>2.52 (1.72-3.7)</td>
</tr>
<tr>
<td>Mean time UPSI and EC</td>
<td>1</td>
<td>986</td>
<td>-14.07 (-16.77, -12.43)</td>
</tr>
</tbody>
</table>
Advance EC vs Control

- No sig difference in pregnancy rates
- No difference in regimen
- No difference STI
- More use EC
- Quicker Use EC
Conclusion

- Pharmacy provision EC does not reduce abortion
- Advance provision EC does not reduce unintended pregnancy
- EC not be solution reduce abortion rates
- Promote more effective methods contraception