Effect of a mobile phone-based intervention on post-abortion contraception in Cambodia

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Introduction

- Post-abortion family planning (PAFP) is important to reduce subsequent unintended pregnancies
- The objective of the MOBILE Technology for Improved Family Planning (MOTIF) trial was to assess the effect of a mHealth intervention on PAFP in Cambodia

Methods

- 500 women seeking safe abortion services at 4 Marie Stopes Cambodia clinics that reported not wanting to be pregnant were randomly allocated to the intervention or to a control group
- The primary outcome was self-reported use of effective contraception (pill, intra-uterine device, implant, or injectable) at 4 and 12 months post-abortion
- Effect measures were risk ratios and hazard ratios
- We assessed contraceptive discontinuation using Kaplan-Meier survival analysis techniques

Results

- Follow up was 86% at 4 months and 66% at 12 months
- Increased self-reported effective contraception use at 4 months but not at 12 months
- Increased long-acting contraception use at 4 and 12 months
- Some evidence of reduced discontinuation at 4 months but not at 12 months
- No significant difference in repeat pregnancies or abortions at 4 or 12 months

Conclusions

- Adding a mobile phone-based intervention to abortion care services in Cambodia had a short-term effect on the overall use of effective contraception
- Increased use of long-acting contraception methods lasted throughout the study period

Primary and secondary outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>4 month follow up</th>
<th>12 month follow up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intervention n(%)</td>
<td>Control n(%)</td>
</tr>
<tr>
<td>Primary outcome</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective contraceptive use</td>
<td>135 (64%)</td>
<td>101 (46%)</td>
</tr>
<tr>
<td>Secondary outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-acting contraception use</td>
<td>61 (29%)</td>
<td>19 (8.6%)</td>
</tr>
<tr>
<td>Contraceptive discontinuation</td>
<td>9 (7%)</td>
<td>16 (15.8%)</td>
</tr>
<tr>
<td>Repeat pregnancy</td>
<td>6 (3%)</td>
<td>5 (2%)</td>
</tr>
<tr>
<td>Repeat abortion</td>
<td>2 (1%)</td>
<td>1 (0.5%)</td>
</tr>
</tbody>
</table>

*Hazard ratio for contraceptive discontinuation

MOTIF intervention

Six automated voice-messages (using the open-source programme ‘Verboice’) to participants’ mobile phones over the three-month post-abortion period in the Khmer (Cambodian) language, as follows:

‘Hello, this is a voice message from a Marie Stopes counsellor. I hope you are doing fine. Contraceptive methods are an effective and safe way to prevent unplanned pregnancy. I am waiting to provide free and confidential contraceptive support to you. Press ‘1’ if you would like me to call you back to discuss contraception. Press ‘2’ if you are comfortable with using contraception and you do not need me to call you back this time. Press ‘3’ if you would prefer not to receive any messages again’

Clients who pressed ‘1’, or who did not respond, received a phone call from a counsellor to provide support for post-abortion contraception

Participant information card

Counsellors

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