Safety and acceptability of medical abortion by telemedicine above nine gestational weeks among women in Poland: a population-based cohort study.

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Context

- Legality, stigma and infrastructure barriers to safe abortion
- Emergence of telemedicine abortion services
- Gestational limits for home abortion are under revision

→ Is abortion by telemedicine >9gw safe and acceptable?
The status of abortion in Poland

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Study design

- Setting
  → Poland/Women on Web

- Cohort
  → 1220 women in Poland requesting abortion through Women on Web
  → June 1\textsuperscript{st} – December 31\textsuperscript{st} 2016

- Comparison groups (exposure)
  → Gestational age ≤ and >9 gw

- Outcomes
  → Safety
    - Heavy bleeding
    - Hospital visit for a complaint within 0-1 days
  → Acceptability
    - Low or very low satisfaction
    - Bleeding more than expected
    - Pain more than expected
Baseline and outcome data

Women on Web records

- Consultations
  - Follow-up Evaluations
  - Email communication
Safety

1. Heavy bleeding
   - "I was bleeding more than 2 maxi pads each hour for more than 2 hours"
   - Bleeding reported as reason for hospital visit in email

2. Hospital visit for a complaint within 0-1 days
   - Reported hospital/clinic visit on the same day as the abortion or the day after
     and
   - Report that the cause of the visit was “because I had complaints and was worried I
     might have a complication”
     and/or
   - Heavy bleeding
     and/or
   - Strong pain (“I had pain that continued several days after the abortion and did not go
     away”)
Study inclusion

All women requesting abortion through the telemedicine clinic Women in Web and sent abortion medication June 1st to December 31st 2016 (n = 1220)

Intake unconfirmed
Lost to follow-up (n= 427)

Did not take medication:
Not pregnant (n=5)
Abortion with other method (n=22)
Chose to continue pregnancy (n=27)
Misscarriage (n=37)
Took only Mifepristone (n=1)
Ectopic pregnancy (n=2)
Did not pick up package (n=10)
Could not pick up package (n=7)
Package not delivered (n=55)

Took medication (n=627)

No follow-up main outcomes (n=12)

Main analysis (n=615)
Follow-up through evaluation forms (n=419)
Follow-up through email communication (n=196)
### Results

Table 1

Background variables among 615 women in Poland having requested medical abortion through telemedicine at ≤ and > 9 gestational weeks respectively between 1st Jun and 31st Dec 2016.

<table>
<thead>
<tr>
<th></th>
<th>6 months gestational age (n=427)</th>
<th>6 months gestational age (n=188)</th>
<th>p-value^2/ OR 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age in years at consultation, median (range)</strong></td>
<td>28 (16-56)</td>
<td>26 (16-45)</td>
<td>p=0.13</td>
</tr>
<tr>
<td><strong>Gestational days at consultation, median (range)</strong></td>
<td>37 (13-53)</td>
<td>49 (23-79)</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td><strong>Gestational days at intake of abortion medication, median (range)</strong></td>
<td>53 (27-63)</td>
<td>70 (64-100)</td>
<td>p&lt;0.001</td>
</tr>
</tbody>
</table>

| ≤7 weeks (n, % of total) | 158 (25.7%) |  |
| 7w1d-9w0d (n, % of total) | 269 (43.7%) |  |
| 9w1d-11w0d (n, % of total) | 148 (24.1%) |  |
| 11w1d-14w2d (n, % of total) | 40 (6.5%) |  |

| Did not make donation for service, n (%) | 2.1% | 4.8% | 2.34 (0.91-5.98) |

| Difficulty paying donation^b | 165 (54.8%) | 56 (47.5%) | ref |
| No | 133 (44.2%) | 60 (50.8%) | 1.33 (0.87-2.04) |
| Missing | 3 (1.0%) | 2 (1.7%) |  |
## Results

Rates and risks of outcomes affecting patient safety and acceptability after medical abortion at ≤ and > 9 gestational weeks respectively among women in Poland having requested abortion through telemedicine between 1st Jun to 31st Dec 2016.

<table>
<thead>
<tr>
<th>Safety outcomes(^{a})</th>
<th>(\leq 9\text{gw} (n=427))</th>
<th>(&gt;9\text{gw} (n=188))</th>
<th>Unadjusted OR, 95%CI</th>
<th>Adjusted(^{d}) OR, 95%CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heavy bleeding(^{b})</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>382 (89.5%)</td>
<td>164 (88.8%)</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Yes</td>
<td>29 (6.8%)</td>
<td>19 (10.1%)</td>
<td>1.55 (0.88-2.99)</td>
<td>1.65 (0.90-3.04)</td>
</tr>
<tr>
<td>Missing</td>
<td>2 (0.5%)</td>
<td>2 (1.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hospital visit for complaints within 0-1 days(^{c})</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>391 (91.6%)</td>
<td>161 (85.6%)</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Yes</td>
<td>14 (3.3%)</td>
<td>22 (12.2%)</td>
<td>3.82 (1.91-7.65)</td>
<td>3.82 (1.90-7.69)</td>
</tr>
<tr>
<td>Missing</td>
<td>22 (5.2%)</td>
<td>5 (2.7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acceptability outcomes(^{e})</strong></td>
<td>(\leq 9\text{gw} (n=295))</td>
<td>(&gt;9\text{gw} (n=124))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain &gt; expected(^{f})</td>
<td>107 (36.3%)</td>
<td>49 (39.5%)</td>
<td>1.15 (0.75-1.77)</td>
<td>1.11 (0.71-1.71)</td>
</tr>
<tr>
<td>Bleeding &gt; expected(^{g})</td>
<td>69 (23.4%)</td>
<td>35 (28.2%)</td>
<td>1.29 (0.80-2.07)</td>
<td>1.26 (0.78-2.02)</td>
</tr>
<tr>
<td>Dissatisfaction(^{h})</td>
<td>7 (2.4%)</td>
<td>2 (1.6%)</td>
<td>0.67 (0.14-3.29)</td>
<td>0.69 (0.14-3.36)</td>
</tr>
<tr>
<td><strong>Secondary Outcomes(^{e})</strong></td>
<td>(\leq 9\text{gw} (n=295))</td>
<td>(&gt;9\text{gw} (n=124))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical intervention(^{i})</td>
<td>37 (12.5%)</td>
<td>28 (22.6%)</td>
<td>2.03 (1.18-3.50)</td>
<td>2.04 (1.18-3.32)</td>
</tr>
<tr>
<td>Any treatment(^{l})</td>
<td>54 (18.3%)</td>
<td>36 (29.0%)</td>
<td>1.83 (1.12-2.97)</td>
<td>1.84 (1.13-3.00)</td>
</tr>
</tbody>
</table>
## Results

Table 3

Sub-analysis of the rate and risk of a hospital visit for complaints within 0-1 days of the abortion stratified by gestational age among 615 women in Poland having requested abortion through telemedicine between 1st Jun and 31st Dec 2016.

<table>
<thead>
<tr>
<th>Gestational age</th>
<th>Hospital visit for complaints within 0-1 days</th>
<th>no, n(%)</th>
<th>yes, n(%)</th>
<th>missing, n(%)</th>
<th>OR(^c), 95% CI</th>
<th>AOR(^b), 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤9w, n(%)</td>
<td></td>
<td>391 (91.6%)</td>
<td>14 (3.3%)</td>
<td>22 (5.2%)</td>
<td>ref</td>
<td>ref</td>
</tr>
<tr>
<td>9w1d-10w6d, n(%)</td>
<td></td>
<td>132 (89.2%)</td>
<td>13 (8.8%)</td>
<td>3 (2.0%)</td>
<td>2.75 (1.26-6.00)</td>
<td>2.76 (1.26-6.02)</td>
</tr>
<tr>
<td>11w0d-14w2d, n(%)</td>
<td></td>
<td>29 (72.5%)</td>
<td>9 (22.50%)</td>
<td>2 (5.0%)</td>
<td>8.67 (3.46-21.72)</td>
<td>9.20 (3.58-23.60)</td>
</tr>
</tbody>
</table>
Interpretation

Medical abortion through telemedicine at >9gw compared to \( \leq 9\text{gw} \) is associated with:

- A higher rate of hospital visits for complaints in the immediate days following the abortion. This rate increases with gestational age.

- An increased risk of post-abortion treatment and intervention

- Not with a higher risk rate of heavy bleeding or other complaints that might indicate a complication to the abortion.

- Not with a lower rate of satisfaction or met expectations.
Conclusion

Abortion through telemedicine seems to be safe and acceptable to women above nine gestational weeks but may necessitate adjustments to online information and support.