Your second or later birth: weighing your options for CHOICE OF BIRTHPLACE
YOUR SECOND OR LATER BIRTH: WEIGHING YOUR OPTIONS FOR PLACE OF BIRTH

Birthplace research
For midwifery clients at low risk of complications*

- Overall rates of obstetric and neonatal interventions and negative health outcomes are low in all birth settings.
- Compared with hospital, planning birth at home or in a birth centre is associated with lower rates of obstetrical complications such as postpartum hemorrhage, perineal trauma (3rd and 4th degree tears) and episiotomy.
- Compared with hospital, planning birth at home or in a birth centre is associated with higher rates of spontaneous vaginal birth.
- Birth planned for home, birth centre and hospital are associated with similar rates of neonatal complications.

Discussion points
- For clients at low risk of complications and their babies, giving birth is generally very safe.
- For clients at low risk of complications who value low intervention birth, planning birth out-of-hospital is particularly suitable, because rates of obstetric intervention and negative health outcomes are lower and neonatal health outcomes are no different.

* VBAC was included in this category.
Of 1000 babies born, 999 are born alive and live past 28 days regardless of location.
RISK OF MORTALITY

Birthplace Research

- Researchers have found no difference in risk of mortality (intrapartum stillbirth or neonatal death) when comparing planned home births with midwives and planned hospital births with midwives.

- Findings from Canadian research are consistent with international research in settings where midwifery is well-integrated into the health care-care system, such as the UK and the Netherlands.

- The chance of the baby not surviving past 28 days is similarly low for a home birth or a hospital birth, at 0.8 and 0.4 deaths per 1000 births respectively.

Discussion Points

- A BC study showed that for low-risk pregnancies, the chance of a perinatal death with a doctor in a planned hospital birth is about the same as with a midwife in a planned hospital or home birth.¹

What does a 0.4 and 0.8 per 1000 risk really mean?
To help your client put risk into perspective, you could talk about other events that have a similar chance of taking place. Examples of other things that have about a 0.4 & 0.8 in 1000 chance of taking place:

- Needing emergency care in the next year for an injury from a bottle, can or jar (1 per 1000)
- Needing emergency care in the next year for an injury from a bed, mattress or pillow (0.5 per 1000)

Other sources: http://clinicalevidence.bmj.com/x/set/static/ebm/practice/807152.html
NEONATAL OUTCOMES
Second or later birth

Resuscitation with PPV and chest compressions
- Planned home birth: 1.1 in 1000
- Planned hospital birth: 1.2 in 1000

Apgar score (less than 7 at 5 minutes)
- Planned home birth: 3.7 in 1000
- Planned hospital birth: 7.4 in 1000

NICU stay longer than 4 days (all births)
- Planned home birth: 15 in 1000
- Planned hospital birth: 17 in 1000
NEONATAL OUTCOMES

**Birthplace Research**
- Researchers have found no difference in neonatal interventions and adverse health outcomes when comparing planned home and hospital births, including:
  - Neonatal resuscitation with positive pressure ventilation (PPV) and chest compressions.
  - Neonatal intensive care unit (NICU) stay longer than 4 days.
- Apgar scores below 7 at 5 minutes have been found to be less likely to happen in planned home births.

**Discussion Points**
- Rates of neonatal interventions and negative health outcomes for babies are low for all midwifery clients at low risk of complications in all birth settings.
LIKELIHOOD OF HAVING YOUR BABY WHERE YOU PLANNED
Second or later birth

86% of second or later births that were planned for home actually happened at home

97% of second or later births that were planned for hospital actually happened at hospital

95% of second or later births that were planned for birth centres actually happened in a birth centre*

* UK statistics
LIKELIHOOD OF HAVING YOUR BABY WHERE YOU PLANNED

Birthplace Research

• Most births occur where clients plan to give birth.

• Among multiparous clients who had planned to have their baby at home (at the onset of labour), 86% actually gave birth at home.

• Research conducted in the UK found that 95% of multiparous women planning for a birth centre birth actually took place there.

• Though infrequent, it is possible for planned hospital births to occur at home, especially in cases of precipitous birth.

Discussion Points

• Discuss the possibility of transport to a hospital equipped to manage emergencies and consultation and/or transfer of care to another health-care provider during labour, birth or immediate postpartum with all clients, regardless of where they plan to give birth.

• Most cases of transport to hospital are non-urgent and do not require emergency services.

Reasons for transfer to hospital

• The most frequently reported reasons for transport in labour from a home or birth centre to a hospital in Ontario include:
  » Prolonged labour.
  » Pain relief.
  » Fetal well-being concerns like meconium and abnormal fetal heart rate.

• The most frequently reported reasons for transport immediately after birth from home or birth centre to hospital in Ontario include:
  » Postpartum hemorrhage.
  » Repair of severe lacerations.
  » Neonatal health concerns (such as respiratory distress and small-for-gestational age).
LIKENESS OF TRANSPORT TO HOSPITAL BY EMS*

Second or later birth

(during or after the birth)

3.9% who planned home births were transferred to hospital by EMS

0.7% who planned hospital births were transferred by EMS

*Percentages include clients who were transferred by EMS for non-emergency reasons.
TRANSPORT BY EMS

Birthplace Research

• Research from Ontario shows that 3.9% of multiparous births planned for home involved transport to hospital by EMS (ambulance).

• A small number of multiparous births planned for hospital required transport to hospital by EMS (0.7%).

Discussion Points

• This pictogram refers to clients who were transported by emergency services (ambulance) from home to hospital either during or right after birth.

• Most cases of transport to hospital are non-urgent. Sometimes an ambulance is used because it is the fastest or most appropriate way to get to hospital; it is not a reliable marker of severity.

• Discuss travel time from clients’ chosen birth setting to a hospital equipped to manage emergencies. Take into account the most appropriate means of transportation and local circumstances that may impact timely transport to hospital – weather, traffic, etc.
EQUIPMENT FOR A HOME BIRTH
Same equipment available at a level I hospital

Midwives are trained to manage emergencies
EQUIPMENT & MIDWIFERY EXPERTISE IN EMERGENCIES

Birthplace Research
- Canadian research shows very little difference in neonatal outcomes between births planned at home and births planned in a hospital.

Discussion Points
- The equipment midwives bring to home births and that is available in birth centres is similar to the equipment in a level I community hospital. This equipment includes:
  » Sterile instruments.
  » Oxygen for mother and baby.
  » Neonatal resuscitation equipment.
  » Medications to treat postpartum hemorrhage.
- Midwives are trained to manage emergencies in all settings and undergo regular recertification in neonatal resuscitation (NRP) and managing emergency skills (ESW, ALARM).
- Discuss reasons that may necessitate consultation with and/or transfer of care to another health-care provider in accordance with regulatory body standards and local context.
PAIN RELIEF
Second or later birth

Other options for pain relief include water therapy, nerve stimulation, acupressure and massage, etc.

- Epidural/spinal: Planned hospital birth 16.4%
- Nitrous oxide: Planned hospital birth 15.8%
- Narcotic analgesia: Planned hospital birth 3.2%
- Birth centre: 42%* use immersion in water for pain relief

*UK statistics

Planed home birth: Planned home birth 4%
Planed hospital birth: Planned hospital birth 2.4%
Planed hospital birth: Planned hospital birth 0.5%
PAIN RELIEF

Birthplace Research

- Compared with planned hospital birth, planning birth at home or a birth centre is associated with lower rates of use of epidural or spinal analgesia, narcotics and nitrous oxide for pain relief.

- Water therapy (tub or bath) is an option available at Ontario birth centres (and some homes and hospitals). In studies from the UK, almost half of multiparous clients planning to give birth at a birth centre used immersion in water for pain relief.

Discussion Points

- Not all pain relief options are available in all settings.

- People who plan to give birth in hospital may choose that option knowing that they would like to have access to epidural/spinal or narcotics – this may partly explain the higher rates of pain relief use among clients who plan hospital birth.

- Desire for pain relief is one of the most frequent reasons clients who plan home birth end up transferring to hospital.
TYPE OF BIRTH
Second or later birth

<table>
<thead>
<tr>
<th>Type of Birth</th>
<th>Planned home birth</th>
<th>Planned hospital birth</th>
<th>Planned birth centre birth*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous vaginal birth</td>
<td>97%</td>
<td>94%</td>
<td>98%</td>
</tr>
<tr>
<td>Assisted vaginal birth</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>C-section</td>
<td>2%</td>
<td>4%</td>
<td>1%</td>
</tr>
</tbody>
</table>

*UK statistics
TYPE OF BIRTH

Birthplace Research

- Compared to planned hospital birth, planning a birth at home is associated with:
  - Higher rates of spontaneous vaginal birth.
  - Lower rates of caesarean section.
  - Lower rates of assisted vaginal birth (vacuum and/or forceps).
- Research from the UK comparing outcomes in birth centres and hospitals shows that birth centre birth is also associated with high rates of spontaneous vaginal birth and low rates of caesarean section.

Discussion Points

- One criticism that is sometimes leveled at studies that compare outcomes based on place of birth is that the studies have not compared appropriate groups -- clients who plan to give birth in hospital may have made that choice in part because they have conditions that put them at higher risk of adverse maternal or neonatal outcome, and that make caesarean section or assisted vaginal birth more likely to occur. The data above is based on studies that have carefully selected comparison groups of midwifery clients as equally low-risk as the clients who planned home birth.
INTerventions and outcomes
Second or later birth

- Labour augmentation with oxytocin
- Episiotomy
- Perineal trauma (3rd and 4th degree)
- Postpartum hemorrhage

Planned home birth: 2.5%, 1.2%, 0.3%, 2.1%
Planned hospital birth: 6.3%, 2.4%, 1%, 2.7%
Birthplace Research

- Planning birth at home compared with hospital is associated with lower rates of postpartum hemorrhage, significant perineal trauma (3rd and 4th degree perineal tears) and episiotomy.
- UK birth centre outcomes (when the same outcomes were reported) are similar.