

Who am I?

- ►MS and CNM since 1989
- ► Midwife in hospitals and birthcenters
- ► Waterbirth provider since 2006
- ► Believer in birth (the baby wants to survive)
- ► A practitioner who values research, not a researcher

Who are you?

- **▶**Doula
- ▶Nurse
- **►**Midwife
- ▶Physician

FAQ's about waterbirth

- ▶ Why waterbirth?
- ▶ Does in cause or reduce infections?
- ▶ What about tearing/cutting/repairing?
- ▶ Won't the baby drown?
- ▶ How do you check someone and doesn't it hurt the midwife?
- ▶ What if there is a short cord?
- ▶ How do you deliver the placenta?
- ► How can you tell if there is too much bleeding?

Why waterbirth?

- ▶ Labor can be painful and pain is made worse by fear and tension of the muscles
- ▶ Pain relief is achievable primarily by controlling the voluntary muscles (this is one of the reasons why controlled breathing, progressive relaxation and hypnosis also work to reduce
- ▶ Safety is paramount-reducing fear and pain increase control and cooperation if needed

Infection

- ▶ Bacterial load on skin when not in tub?
- ► Bacterial load of water?
- ▶ Water ascending vagina: doesn't happen (dye study related to ROM and bathing)
- ▶ Bacterial load reduction:
 - ► Testing (Hepatitis, HIV)
 - ► Removal of debris
 - ► Empty and refill tub
 - ► Continuous running water
 - ▶ GBS, testing, treatment, effect of water?

Skin tearing

- ► Water immersion reduces risk of tearing
- ▶ Takes away option of cutting
- ► Lacerations repaired in the bed

Drowning/Aspiration

- ► Bring baby to surface, baroreceptors stimulate breath
- ▶ Face out first
- ▶ Partner support slippery baby

Midwife needs

- ► Focus on the birthing woman's needs and very little physical stress will be required
- ► Listen, encourage and plan:
 - $\mbox{\ \ \ }$ "after the next contraction we are going to help you reposition"
 - "are you able to feel the baby's head?"
 - No need to "check" when mother has strong involuntary pushiness. Try not to ask "do you feel pressure? Do you have to push?" She will say "I'm pushing", "it's coming", "can I push?" and it will be time. Don't mistake "I feel so much pressure" with guttural and involuntary pushing.

Short cord

- Move slowly, get baby's face above water, do not resubmerge (baroreceptors)
- Cord avulsion from bringing baby up too quickly requires clamping to prevent baby's blood loss. Most blood is heading toward baby.

Placenta

- ►In birth centers they are commonly born into the tub
- ►In the hospital they are commonly born in the bed

Bleeding assessment

- ▶The darker the water...
- ► Later green coloration=blood, not meconium
- ► Assess mother's skin under water
- ► Flashlight under water helps
- ▶ Low threshold for bleeding

Environment

- ► Much more difficult to control for in the hospital setting. Quiet, low lighting, soft voices, no slamming
- Purpose of listening is to change plan, not to document.
- ► Technique for listening:
 - ▶ Off/on button
 - ► Mother's help
 - ▶ Between contractions
 - ► IA methodology-AWOHHN standard

Waterbirth study

- ► Multi-institutional (Allina, Fairview, HealthPartners, HealthEast, Sanford) led by Dr Saul but carried out by midwives at the institutions
- ▶4 questions

Research Question 1

► Among women who indicate an intention to complete a Waterbirth and who start hydrotherapy, what proportion do not finish delivery in the water and what are the reasons and timing for the change in delivery method.

Research Question 2

▶ Is water immersion during stage 2 of labor/waterbirth associated with increased risk of poor neonatal outcomes compared to conventional delivery among a similar group of women who would otherwise have been eligible for water immersion during stage 2? (NICU/SCN admissions)

Research Question 3

▶ Is water immersion during stage 2 of labor/waterbirth associated with different rates of maternal infection or perineal lacerations compared to conventional delivery among a similar group of women who would otherwise have been eligible for water immersion during stage 2?

Research Question 4

► Are newborn outcomes similar for shoulder dystocia cases identified in water immersion versus in a bed?

Study progress

- ► Data compilation begins soon now that almost one year of data has been collected. Many sites will be able to contribute.
- ► The cooperation of all facilities has been exceptional.

Discussion Discussion? Mother's hand, protection, position, how much to help....

Questions????????????????

- ▶ Follow the mother
- ▶ Learn to wait and listen
- ▶ Encourage getting in and out
- ▶ Bouyancy's advantage is movement
- ► Trust the pushing sounds
- Prevent injury: kneeling pads, partner's help, cooler water, hydration, low threshold
- ▶ Prebrief and debrief so everyone learns together
- ▶ Stay calm in "transfer situations"