The first post-partum bath presents an early challenge to the newborn’s ability to maintain body temperature:
- Occurs in first 24 hours
- Exposes the newborn to increased heat loss through evaporation, and conduction through the water

At EUHM, common practice is to re-warm newborns under a radiant warmer:
- Presently moms are not offered the choice of S2S
- May be missing benefits of early S2S contact

Research Question:
In a population of healthy, full-term newborns, is skin to skin (S2S) contact with mother as effective as radiant warming in restoring the newborn’s temperature after the first bath?

Method: Non randomized clinical trial

- Once newborn ready for bath: Moms choose rewarming method immediately prior to bath
- Newborn temperatures taken:
  - Prior to bath ($T_1$)
  - 30 min after bath ($T_2$)
  - 60 min after bath ($T_3$)
- Bath procedure standardized
- Skin to skin contact standardized:
  - Infant placed upright and prone on mother’s chest between her breasts, wearing only diaper and hat
  - Head is rotated to side in order to maximize skin to skin exposure

Sample Demographics

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>SKIN TO SKIN (N=96)</th>
<th>RADIANT WARMER (n=4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother’s age (mean, SD)</td>
<td>27.21 (6.06)</td>
<td>26.75 (8.38)</td>
</tr>
<tr>
<td>Birth weight</td>
<td>3210.9 (376.3)</td>
<td>3245 (369.4)</td>
</tr>
<tr>
<td>$T_1$ Temp</td>
<td>36.8 (.03)</td>
<td>36.9 (.3)</td>
</tr>
<tr>
<td>Gender (% Female)</td>
<td>54.2</td>
<td>100</td>
</tr>
<tr>
<td>RACE/ETHNICITY (%)</td>
<td>Black (65.5)</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>White (27.1)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Other (7.3)</td>
<td>25</td>
</tr>
</tbody>
</table>

Results:

- Rescued: Five of the newborns in the S2S group failed to re-warm successfully and were rescued. Upon careful review of each case it was found that the newborns’ positions or cover had been compromised, either because the mother fell asleep (n=3) or otherwise failed to strictly follow the procedures during the rewarming period.

Limitations:
- Non-randomized trial – perhaps those who agreed to enroll were more likely to prefer S2S
- Because of our decision to allow mothers to choose their rewarming method, we were unable to compare the effectiveness of two methods
- Fidelity to the S2S rewarming procedure was compromised at times

Safety of re-warming S2S:
- Position of newborn
- Re-check position at 15 minutes
- Recheck temp at 30 and 60 minutes

Clinical Significance:
- Patient and family centered care
- Breast feeding
- Baby friendly initiative
- Impact on rewarming

Research Grant received from STTI

CONCLUSIONS:
- Given a choice, moms’ clearly prefer S2S
- Relationships between Moms’ race, age and babies’ weights
- Gender differences and weight
- Breastfeeding outcomes
- 21% of babies breastfed during S2S
- A father requested to provide S2S when mom was too tired to participate
- Developed new procedures for rewarming newborns based on these study findings