

# Lactation Support in Infants with Life Limiting conditions: Examining Health Disparities and Facilitators utilizing Family Centered Care Proxy Measures



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## Background

- Lactation support is one important measure of family centered care (FCC) quality in the neonatal intensive care unit (NICU).
- Life limiting conditions (LLC) raise complex ethical care issues for providers and parents in the NICU and represent a key and often overlooked population for whom FCC is particularly important.
- In a previous study done at CHoR, African American and Hispanic babies were seen to have significantly decreased MOM during hospitalization and at discharge compared to Caucasian babies.
- We plan to investigate if social determinants of health (SDoH) affect lactation support to LLC infants in the CHoR NICU.

## Hypothesis

We hypothesize that infants with LLCs have decreased access to early lactation support services than infants without LLCs

## Aims

- Evaluate the access to early lactation support services in LLC and non-LLC infants
- Further analyze to see if disparities exist based on demographic factors

## Methods and Analysis

- This was a single center retrospective chart review from 2015 to 2022 of infants with LLC as defined by Fraser et al. 2014 LLC.
- We included as part of LLC (lethal and nonlethal), patients with diagnosis of moderate/severe Hypoxic Ischemic Encephalopathy (HIE).
- Control group was non LLC infants
- Matched for maternal race/ethnicity, infant gestational age and year of birth
- Exclusion – infants who died by 7 days old or were transferred after 7 days to our unit, mothers with HIV or mastectomies

Figure 1. Study Population

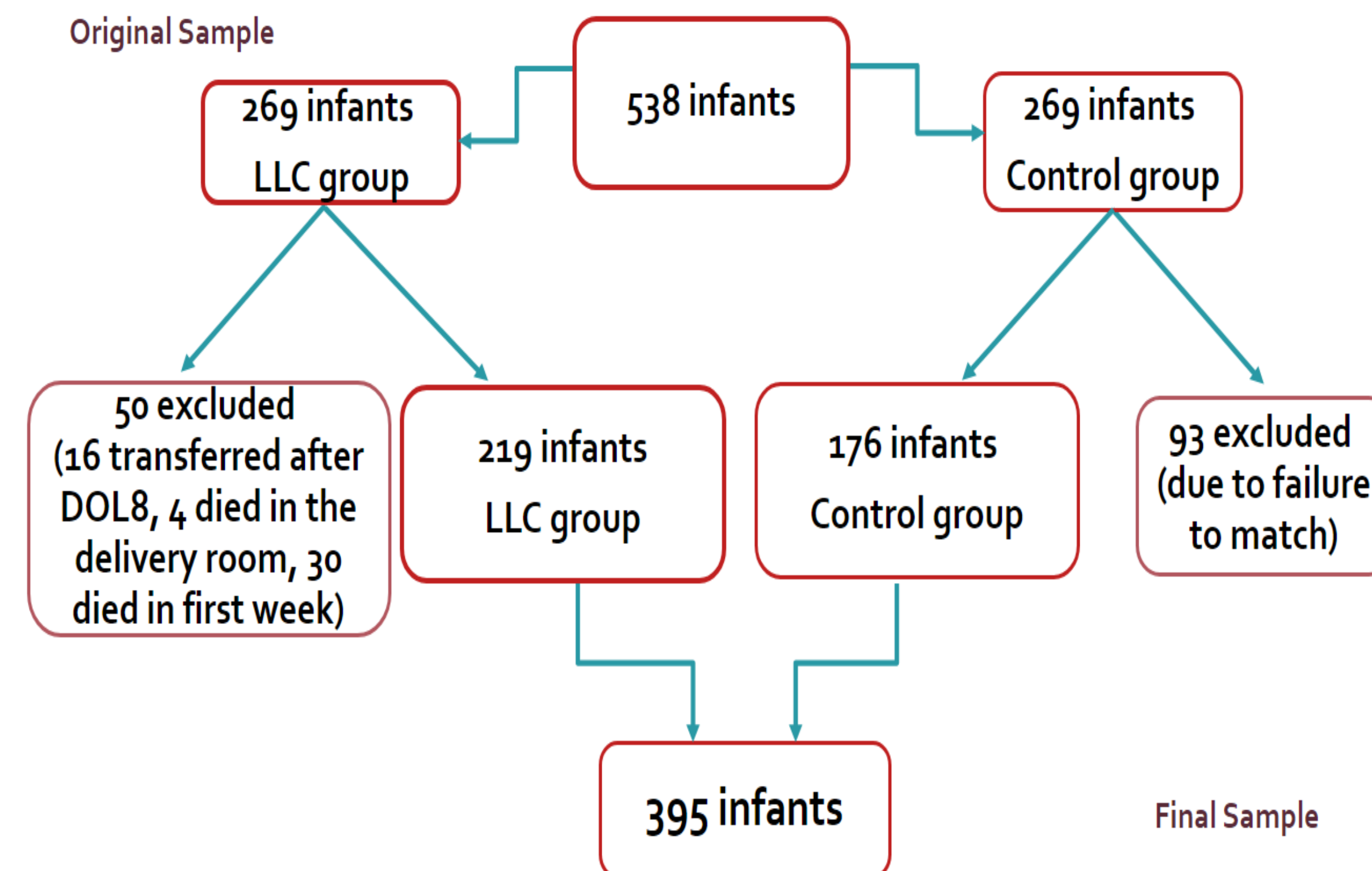


Figure 2. Infant milk services

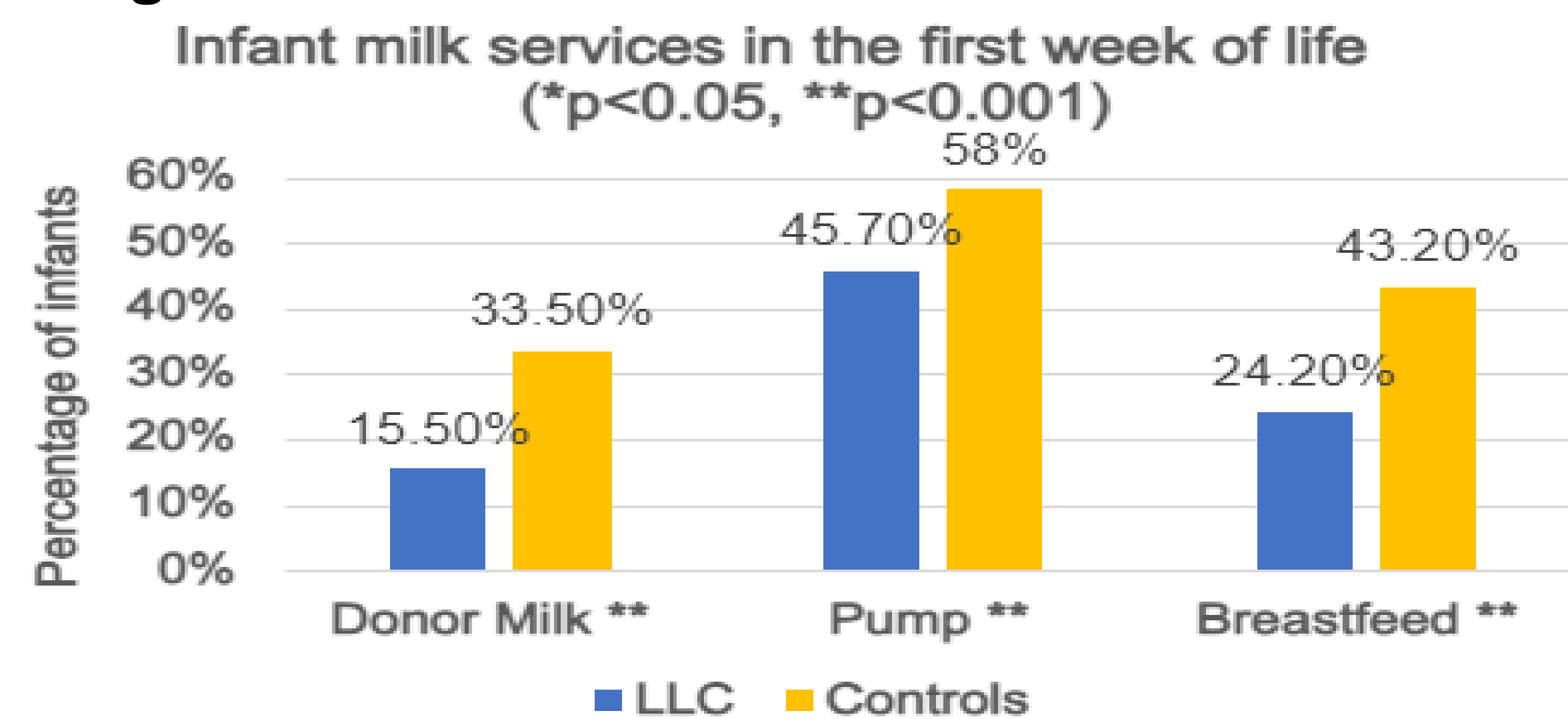


Figure 3. Maternal engagement

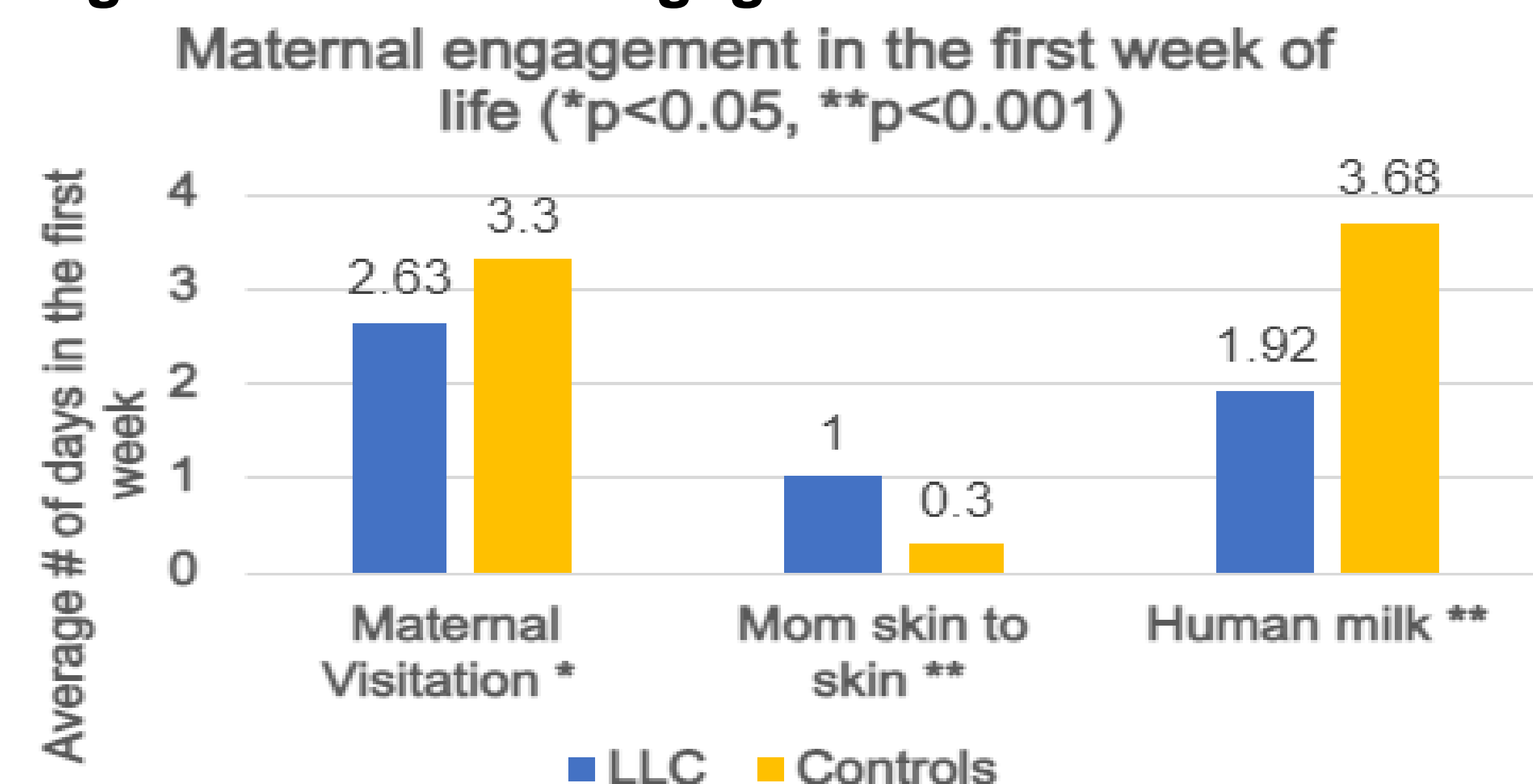


Figure 4. Barriers to lactation support

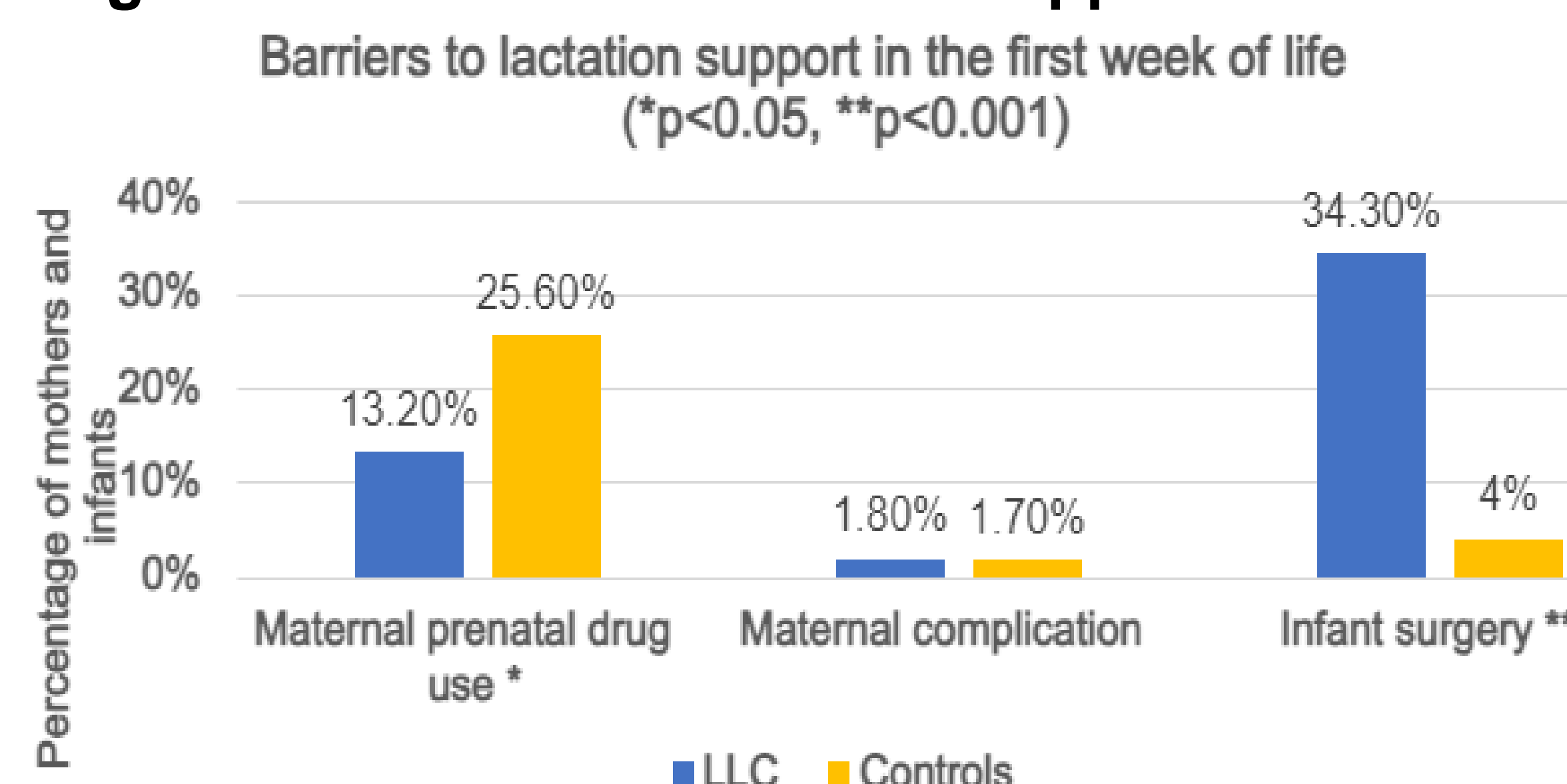


Table 1. LLC infant conditions

LLC Lethal	LLC nonlethal
<b>Neuro</b> <ul style="list-style-type: none"> <li>Anencephaly</li> <li>Holoprosencephaly</li> <li>Hydranencephaly</li> <li>Other CNS</li> </ul>	<b>Conjoined twins</b> <b>HIE</b> <ul style="list-style-type: none"> <li>Moderate HIE</li> <li>Severe HIE</li> </ul>
<b>Renal</b> <ul style="list-style-type: none"> <li>Bilateral MCKD/PCKD</li> <li>Bilateral Dysplasia/Agensis</li> <li>Other Renal</li> </ul>	<b>Obstructive uropathy</b>
<b>Cardiac</b> <ul style="list-style-type: none"> <li>Pulmonary valvular stenosis</li> <li>Other Cardiac</li> </ul>	<ul style="list-style-type: none"> <li>DORV</li> <li>AV Canal</li> <li>HLHS</li> <li>Ebstein's anomaly</li> </ul>
<b>Genetic</b> <ul style="list-style-type: none"> <li>T13/T18</li> <li>Other genetic syndromes</li> </ul>	<b>Chromosomal abnormality</b>
<b>Gastrointestinal</b> <ul style="list-style-type: none"> <li>Atresia/Agensis</li> </ul>	<ul style="list-style-type: none"> <li>Gastroschisis</li> <li>Omphalocele</li> <li>TEF</li> </ul>
<b>Pulmonary</b> <ul style="list-style-type: none"> <li>Alveolar capillary dysplasia</li> <li>Surfactant deficiency</li> <li>Hypoplasia</li> </ul>	<ul style="list-style-type: none"> <li>Hydrops</li> <li>Oligohydramnios</li> </ul>
<b>Other lethal</b> <ul style="list-style-type: none"> <li>Metabolic</li> </ul>	<b>Skeletal Dysplasia</b>

Figure 5. Lactation support services

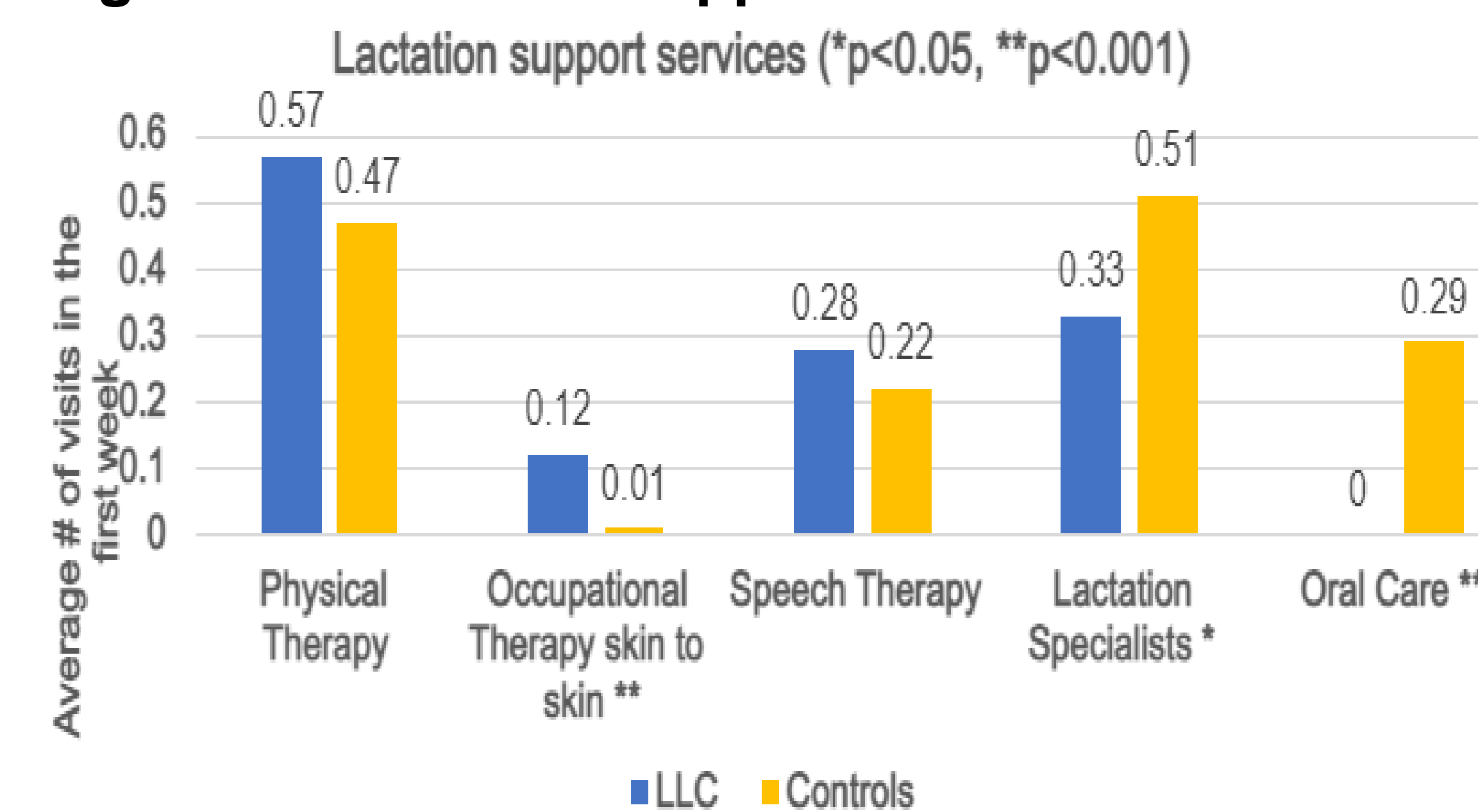
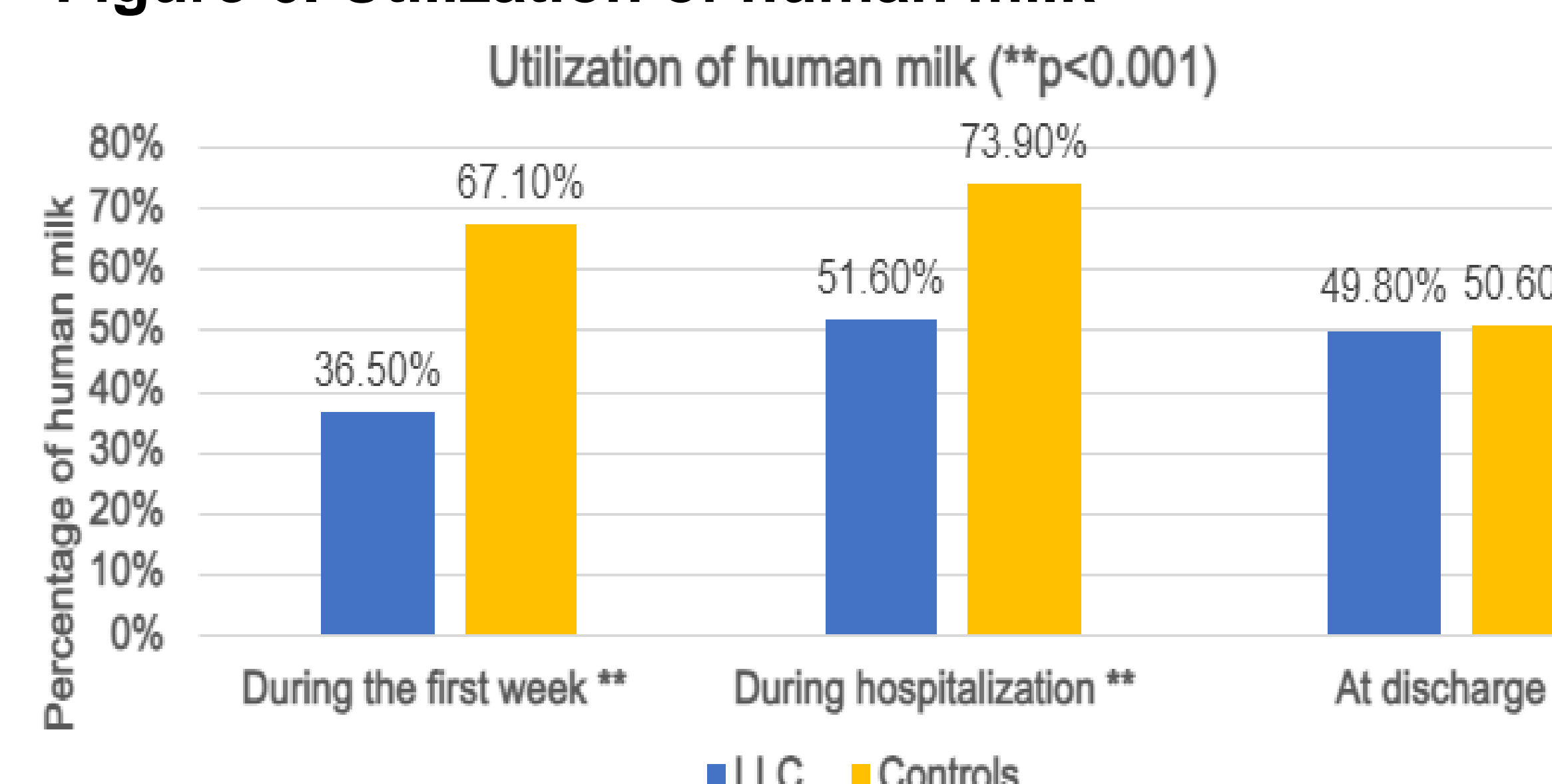


Figure 6. Utilization of human milk



## Conclusions

- LLC infants were more likely to have more skin-to-skin for maternal and Occupational Therapist involvement
- LLC Physical & Speech Therapist was equal
- LLC mothers experienced less visitation
- LLC infants experience less milk oral care
- LLC mothers were less likely to have prenatal preference for breastmilk but similar postnatal breastmilk preference
- LLC lactation specialist provision was decreased with less breast pumps provided
- LLC infants were provided less breastmilk at admission that was increased during hospitalization and similar at discharge
- Comparing within the LLC group –there was no difference in SoDH race/ethnicity or income related to use of donor milk, breast pumps, provider supports or breastmilk at discharge
- LLC English speaking mothers provided more breastmilk at discharge compared to LLC Spanish speaking mothers

## References

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## Acknowledgements

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