

Exploring Apparel Options for Working NICU Mothers: Development of a Breastfeeding Garment



Jim Moran College of Entrepreneurship: Retail Entrepreneurship

Abigail Golden & Rebecca Valentin, Veronica Dalton, Dr. Jessica Ridgway Clayton



Abstract

In a mother's postpartum journey with her newborn, kangaroo care and breastfeeding are influential factors for both their physical and mental health. Kangaroo care is skin-to-skin contact between mother and infant. Especially in the neonatal intensive care unit (NICU), this form of care is crucial as the NICU babies require additional medical support to become healthy. There are several barriers that mothers encounter in the NICU that make it difficult to perform kangaroo care and breastfeeding. For instance, there are very few garments that are available to mothers in the NICU that help them facilitate kangaroo care and breastfeeding. Since the majority of the infants in the NICU are low birth weight, they do not fit into the garments provided. In addition, the garments are uncomfortable for the mothers to wear after surgery or do not accommodate for the several wires attached to the infant. In order to find a garment that would best aid the mother and infant, mothers who have had their babies in the NICU, neonatal nurses, and lactation consultants were interviewed. The interviews were transcribed and coded to determine what the overlapping themes and desires of mothers were. It was discovered that many mothers wanted something that looked normal, breathable, and easy to remove. By understanding what mothers want, a breastfeeding garment that will provide comfort and support can be made.

Introduction

- The aim of the project is to create a series of garments that would help promote kangaroo care and initiate breastfeeding in the neonatal intensive care unit.
- In our project, we interviewed mothers to see what they would like in a garment while breastfeeding their baby to improve Kangaroo Care.
- Kangaroo Care is the skin-to-skin contact initiated when a parent holds their infant on their bare chest.
- Kangaroo Care helps the baby regulate their body temperature, improve their neurodevelopment, enhance their sleep, stabilize their vital signs, and increase the amount of maternal milk the mother produces (Campbell-Yeo et al., 2015).
- Kangaroo Care is beneficial for the physical and mental health of both the mother and infant. The advantages of Kangaroo Care are important for the bonding of the parent and newborn, especially those in the neonatal intensive care unit.
- From the evidence of our research, many mothers find it difficult to breastfeed in the NICU due to lack of privacy and because of the wires connected to the infant, but we hope to relieve that issue.

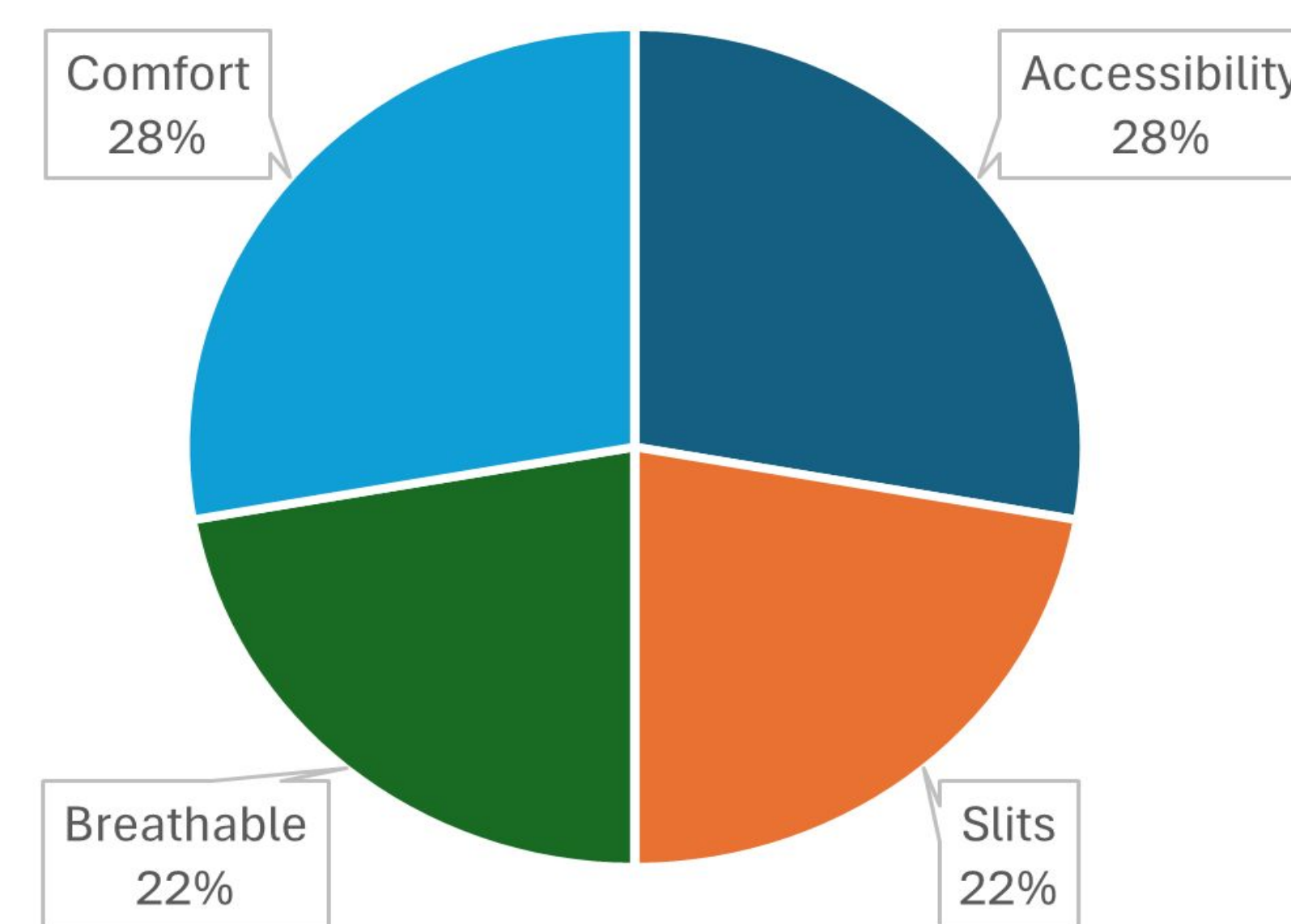
References

Campbell-Yeo, M., Disher, T., Benoit, B., & Johnston, C. (2015). Understanding kangaroo care and its benefits to preterm infants. *Pediatric Health, Medicine and Therapeutics*, 15.

<https://doi.org/10.2147/phmt.s51869>

Figure 1.1

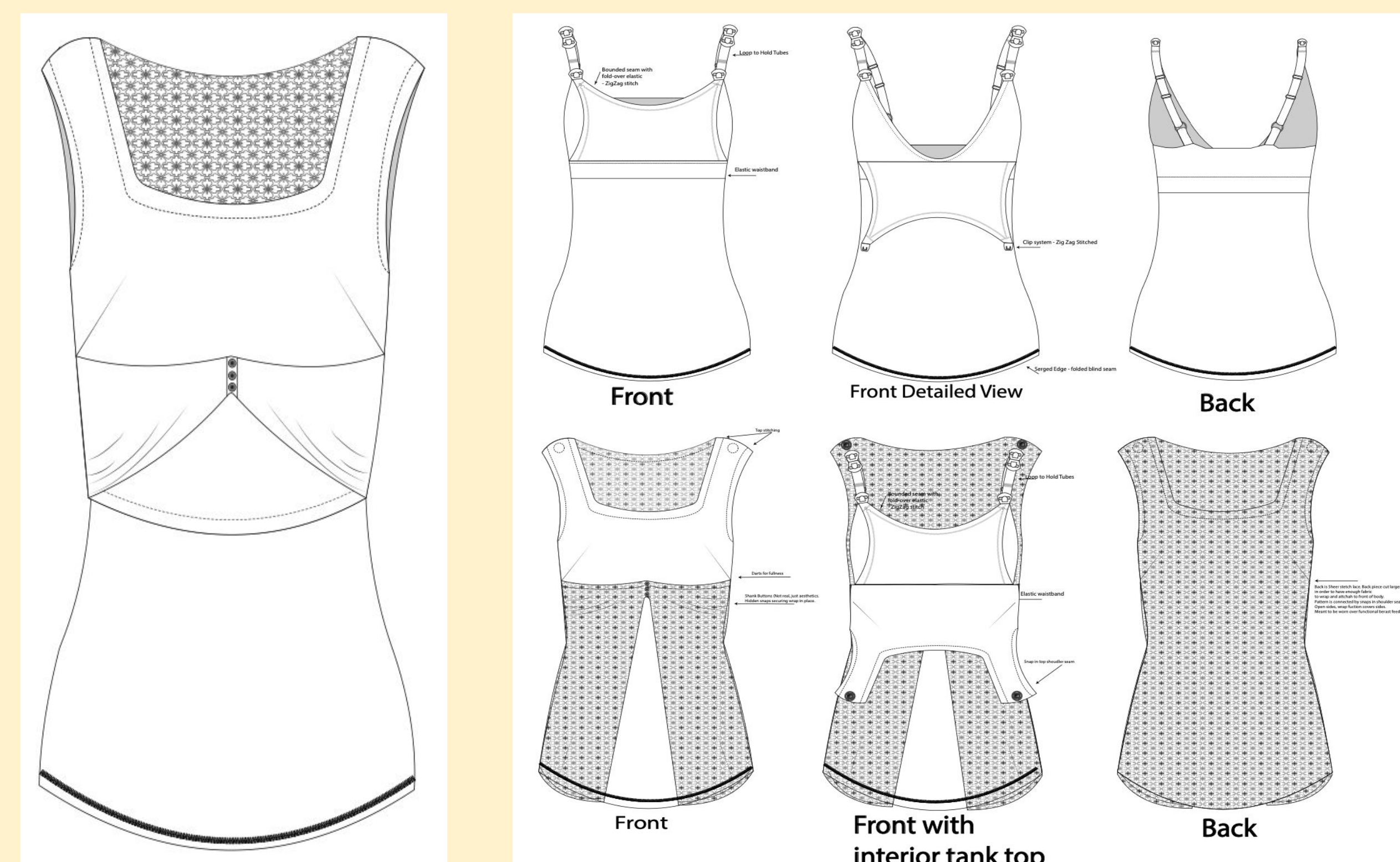
What Mothers Want in a Breastfeeding Garment



Results

- After our interview process, we analyzed the desires of the NICU mothers and determined the primary features that must be included in our garment. These features include:
 - A loose, stretchy material.
 - A professional appearing top that is acceptable to wear to work.
 - A snap or slit to make the pumping parts easily accessible.
 - An outfit that covers the mother, yet opens enough to feed the infant.
- By understanding the features that the mothers would like to see, we are able to create an ideal breastfeeding garment that will enhance mothers' experiences both inside and outside the NICU.

Initial Prototype Sketches



Methods

- For problem identification, we interviewed neonatal nurses, lactation consultants, and mothers who were in the neonatal intensive care unit to determine an ideal breastfeeding garment for them.
- The neonatal nurses, lactation consultants, and mothers that were interviewed went to hospitals in Florida.
- Each group had a specific set of questions that would cater to their experience in the NICU by the interview team.
 - Mothers were asked about their birthing experience, while the NICU nurses and lactation consultants were asked about their experiences working in the NICU.
 - All participants were asked about breastfeeding barriers, their ideal breastfeeding garment, and their ideal kangaroo care garment.
- Our project will focus on the data collected from the mothers'.
- Using the zoom transcription feature, the research team was able to translate and save the conversations to our computers.
- The interviews were transcribed and coded on various word documents to see recurring themes of what mothers' wanted in a garment and what challenges mothers' experienced while in the NICU. (See Figure 1.1)

Conclusion

- With the various parts of the breastfeeding garment, NICU mothers will have the ability to breastfeed their infant efficiently in between tasks, such as work and caring for other children. These garment factors include:
 - A breathable, loose material that will avoid rubbing against mothers' surgical areas and incisions.
 - Snaps that will allow the mothers to quickly access pumping parts.
 - A business appropriate appearance to accommodate mothers who are trying to balance working and nurturing their child.
- There are a few limitations to the breastfeeding garment:
 - Since every NICU experience is unique and mothers have varying requests for garment components, the breastfeeding garment will not be able to accommodate all of the mothers' desires.
 - Some mothers may want a lounge styled garment rather than a business appropriate top.
 - Also our sample size was 7 and the majority of the moms' had their baby at Tallahassee Memorial Hospital, so it might not accurately depict the mother population as a whole.

Acknowledgements

Thank you to Dr. Jessica Ridgway Clayton for guiding us through the project as our mentor. Also, thank you to Veronica Dalton and Emma Gassman for providing additional assistance to us throughout the interview and sewing process.