



# The Effects of Creating an Online Resource to Enhance NICU Parent Mental Health

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## Introduction

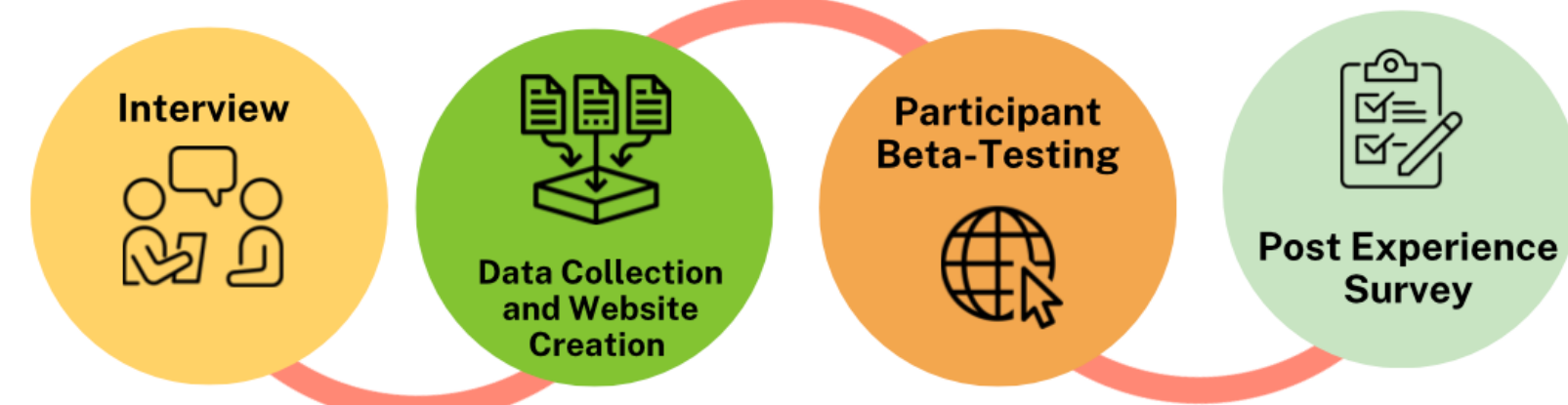
- Newborn Intensive Care Units (NICU) aim to care for babies in need of critical care. Literature suggests that parents of NICU children are more likely to experience increased anxiety, post-traumatic stress disorder, and overall declines in mental health (Bernardo et al., 2021).
- Online databases are relatively new, and for many patients, there is a lack of understanding of how to utilize them effectively.
- The purpose of this study is to examine the NICU experience from a caregiver's perspective and construct a website containing mental health resources based on identified needs.

## Methods

**Research Question:** Parents of children in the NICU often struggle with anxiety and mental health issues. Does the creation and use of an online mental health resource promote NICU parent's mental health and well-being?

**Eligibility:** 1. Any caregiver whose child resided in the NICU after birth 2. English is their primary language

Participants for this study were contacted through a non-probabilistic sampling technique. The invitation to participate included: Project overview, background information, primary investigator contact information, steps to schedule an interview, and confidentiality protection details



Interview data was analyzed and considered for inclusion in the website. After data collection and website construction, each interviewee was sent two links to the website and Qualtrics's post-experience survey. Data collection was analyzed using basic descriptive statistics.

## Results

Each caregiver was asked a series of eleven questions. 73% of the questions were asked using a Likert scale, and 18% of the interview questions were open-ended. The results from the Likert Scale questions are described in Figure 1. The open-ended questions focused on the NICU experience unique to each caregiver.

### Open-ended questions

- Describe your NICU experience; 69.2% mentioned feeling overwhelmed, stressed, and/or anxious.
- Describe your transition from hospital to home; 54% of caregivers did not respond to this question as they were still in the NICU on the interview date. 83.3% of participants recalled feeling overwhelmed, stressed, and/or emotional during the transition.
- Is there anything you would change about your experience? Responses here varied, but individuals commonly mentioned something to help them "get their bearings" or "know where things are" within the NICU space.

## Results

Q1: How long was your child in the NICU?	< 20 days 30.8%	< 40 days 30.8%	< 60 days 15.4%	< 100 days 7.6%	> 100 days 15.4%
Q2: Did you have any other children during that time?	0 46.2%	1 23.1%	2 23.1%	3+ 7.6%	
Q3: How much time do you spend in the NICU during your child's stay daily?	< 5 hours 15.4%	< 10 hours 30.8%	< 15 hours 7.6%	< 20 hours 23.1%	> 20 hours 23.1%
Q4: How would you describe your overall emotional well-being during this time?	Very Good 15.4%	Good 15.4%	Acceptable 46.1%	Poor 0%	Very Poor 23.1%
Q5: Do you or did you feel supported by NICU staff?	Always 53.7%	Often 38.5%	Sometimes 7.7%	Rarely 0%	Never 0%
Q6: Did you seek or consider seeking outside resources to support your emotional well-being during or after your child's NICU stay?	Yes 46.2%	No 53.8%			
Q7: Was there any parent education or outside resources offered to you while in the NICU?	Yes 76.9%	No 23.1%			
Q8: (If responded no to question above) How likely would you have used them if parent programming or outside resources were offered?	Very Likely 76.9%	Likely 0%	Neutral 15.4%	Unlikely 7.7%	Very Unlikely 0%

Figure 1 – Likert Scale Interview Results

- Two to five weeks following participant interviews, each caregiver received a link to the NICU Caregiver Resource and Qualtrics survey.
- Once the participant completed this process, each individual completed an anonymous brief five-question post-survey.
- The survey was multiple choice using a Likert scale format and results of the post-survey questions are described in Figure 2.

Q1: This website was user friendly and easy to navigate.	Strongly Agree 43%	Agree 42.8%	Neutral 14.2%	Disagree 0%	Strongly disagree 0%
Q2: If needed, I would have used this website before, during, or after my NICU stay.	Strongly Agree 43%	Agree 42.8%	Neutral 14.2%	Disagree 0%	Strongly disagree 0%
Q3: This website offered programming and supports that I hadn't considered.	Strongly Agree 43%	Agree 42.8%	Neutral 14.2%	Disagree 0%	Strongly disagree 0%
Q4: This website made me feel more in control and supported by the healthcare system.	Strongly Agree 28.6%	Agree 57.2%	Neutral 14.2%	Disagree 0%	Strongly disagree 0%
Q5: I would recommend this website to other NICU parents/caregivers if needed.	Strongly Agree 57.2%	Agree 28.6%	Neutral 14.2%	Disagree 0%	Strongly disagree 0%

Figure 2 – NICU Caregiver Post-Experience Survey Results

## Discussion

This study exhibited favorable findings and responses from each initial interview guided the content chosen for the NICU caregiver online resource.

### Major themes included:

- Parents who are currently in the NICU reported significantly higher scores when asked about their emotional well-being when compared to veteran NICU parents
- Of the individuals who responded "yes" when asked if they sought out resources during or after their NICU stay, the majority of participants specifically detailed seeking out counseling, psychiatry, or support groups.
- 69.2% of parents used words such as emotional, tiring, depression, overwhelming, stress, and anxiety when asked to describe their NICU experience. Of those participants, 89% reported less than acceptable emotional well-being

## Discussion

	Connecting support groups	NICU Care package	Parent educational resources	Mental health work sheets, tools, and screening materials	Informational podcast, blog, or forum	Assistive hotline services	Connections to outside resources, transportation, and other support	Resources and services available in multiple languages
Birmingham Crisis Hotline						X	X	X
988 Suicide and Crisis Lifeline						X	X	X
Project Street, Pass		X	X	X	X			
NAMI Alabama	X		X	X				
UAB Community Counseling Clinic	X						X	
United Way of Central Alabama						X	X	
Craig Crisis Care Center	X					X		
Wings Across Alabama	X		X	X		X		
The 1920 Club	X						X	
Family Guidance Center of Alabama	X		X	X				
Kid One							X	

Figure 3 – Local Resources

Following NICU parent interviews, further research was conducted to identify resources that would best fit the needs of this population. Figure 3 and 4 details all local and national resources listed on the site and further entails the types of services each resource provides.

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Project NICU	X	X	X	X	X		X	
Empowering NICU Parents			X	X	X			
March of Dimes		X	X	X	X		X	
National Perinatal Association			X	X				
Today is a Good Day	X		X	X	X			
To Write Love on Her Arms			X	X	X			
Mental Health America	X		X	X	X			X
NICU Connection		X	X	X	X			X
Hand To Hold	X		X		X		X	
Perinatal Alliance			X	X	X		X	

Figure 4 – National Resources

## Conclusion

The results of this study revealed the adverse effects the NICU environment can have on a parent's mental health and overall well-being. The study presents practical implications to address the mental health needs of this population—the incorporation of mental health screenings, exit counseling, and increasing accessibility to resources will further promote NICU parent mental health. Continuation of advocacy for resources and support is essential to serve this population best.



To visit the website, scan the QR code here!

## Acknowledgement & Contact information

A special thank you to Dr. Peralta-Carelen, UAB Newborn Follow-up Clinic, and UAB Women and Infant's Center for allowing me to learn and connect with NICU parents. A huge thank you to Vivian Williams and Rachel Decker for allowing me to observe occupational therapy within the NICU. Another special thanks to Valley McCurry for providing me with exceptional guidance and mentorship throughout the capstone experience.

For more information or further questions please email [Eleesea2@gmail.com](mailto:Eleesea2@gmail.com)

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