The Behavioral Impact of the Goslings-II Early Literacy Program on Parent-Infant Interaction in the NICU

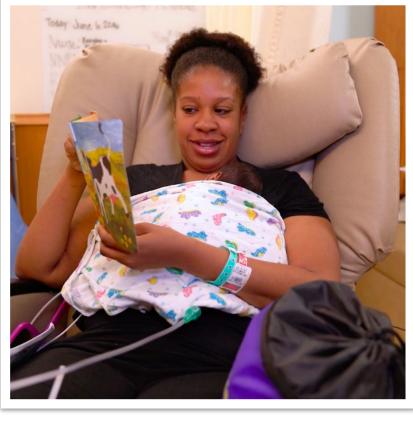
UNIVERSITY of MARYLAND SCHOOL OF MEDICINE

BACKGROUND

Goslings-II is a shorter and less expensive version of Mother Goose on the Loose: Goslings (Shanty et al., 2019). Goslings-II is a NICU education program that teaches parents how to talk, sing, rhyme and play with their infant using a provided Goslings Kit, while responding to infant signals, in accordance with medical readiness as communicated through a traffic light system (i.e., red: voice only, yellow: voice and touch, green: voice, touch and show). A recent Goslings-II study yielded positive results similar to Goslings (i.e., increased parent intention to engage in more early language and literacy practices, increased parent-reported knowledge of how and when to interact with their infants), at a more affordable price (Cao et al., 2023). However, we did not know if parents actually engaged in these practices after attending Goslings-II.







OBJECTIVES

To understand if and how parents engaged in early language and literacy practices 1 to 2 weeks after attending Goslings-II.

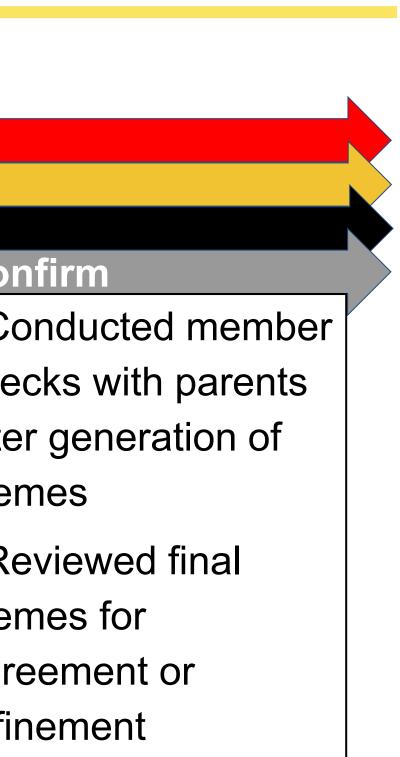
METHODS

Interview			
- Conducted semi-	Code		
structured interviews 1-2 weeks after attending Goslings - Discussed type and frequency of activities with infant, and potential impact of Goslings	 Transcribed audio recordings Manually coded using Atlas.ti Discussed and resolved coding discrepancies 	Analyze - Derived themes from categories that emerged during data coding - Continued enrollment until saturation of themes	Con - Co chec after ther - Re ther agre refin

RESULTS

Table 1. Participant Demographics (N=7)				
Variable		Percent (N)		
Relation to Infant	Mother	100 (7)		
Race/Ethnicity	Black	43 (3)		
	White	43 (3)		
	Other	14 (1)		
Marital Status	Married	29 (2)		
	Single	71 (5)		
Highest Education	High School or GED	14 (1)		
	Some College / Trade	14 (1)		
	Associate's Degree	14 (1)		
	Bachelor's Degree	57 (4)		

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RESULTS

Theoretical saturation was reached after seven parents were interviewed (see Table 1). Five themes emerged: increased interactions, parent wisdom, infant not ready, program strengths, and barriers to program implementation (see Table 2). After attending Goslings-II, parents engaged in more interactions with their infant using Goslings-II and other materials. They reported being more confident when interacting with their infant and indicated increased intention for engaging in more activities when their infant is ready. Self awareness and knowledge also increased, as parents expressed understanding of their infant's signals and could note when they were not ready for interaction. In addition, there was an overwhelming positive response in terms of the program facilitator, content, and opportunity for bonding with other parents. Barriers to program implementation included parent schedule, parent preference, and traffic light implementation. Lastly, 4 of 7 parents were successfully contacted for member checks and all agreed with the final themes.

	Coding Scheme for Parent Inte		
Theme	Category	Code	
Increased	Materials used	Songs	"now that I have the little booklet with different
interactions	Activity type	Reading	"before I wasn't reading to her at all, so I did st
	Activity frequency	Singing – daily	"[I sing] every dayI think I was more bashful not" – 050422
	Increased confidence	Courage	"Before I attended the class, I don't even know courage to" – 082622
	Intent to increase activity	Reading more	"I plan to still use what I learned in Goslings to re
Parent wisdom	Knowledge of infant signals	Avoidance signals	"Now I [realize] this, what he just did with his arr he's telling me he doesn't want something right i
	Generalizability	Knowledge transfer	"With his hands in front of his face [during care want to be bothered but you've got to get chang
	Self awareness	Overstimulation	"It taught me how to [sing]slow it down, not [before]." - 050522
Infant not ready	Lack of alertness	Reading	"[Reading] is definitely something I want to do m
	Isolette	Kit	"I just feel with the isolette, I can't really get in th
	Developmental stage	Wiggle March	"The other book [with] the color picturesI have they can and can't see right now." - 050522
	Feeding	Focus on Feeds	"The time I'm able to spend with him is usually ri
Program strengths	Facilitator	Role model	"I'm very shybut since I attended Goslings, a [sing in public]So I was like, OK, if she can do
	Program content	Information	"They gave us different tools to use with the nust stuff like that. It was very knowledgeable." - 050622
	Parent-parent bonding	Mom bonding	"It got other mothers to talk to each other there the time." – 050422
Barriers to program	Traffic light	Traffic light display	"No, they haven't brought it up or anythingWe
implementation	Time	Not enough time	"So I hold him for a little and then put him bac so tight." – 081022
	Parent preference	Not used – rhymes	"I haven't done any nursery rhymesI think our
Note: For ease of readab	ility, filler words (like, um) were remov	red.	

CONCLUSIONS

Goslings-II resulted in self-reported positive behavioral changes in parent-infant interactions, increased implementation of early language and literacy activities, and enhanced confidence. Additional program improvement may include provision of a traffic light symbol in NICU rooms to facilitate communication about an infant's medical readiness for interaction.

REFERENCES

Cao T, Shanty L, Diamant-Cohen B, Henschel B, Hussey-Gardner B. Can a streamlined and less expensive version of a successful NICU parent education program yield similar results? Poster presented at the Society of Pediatric Research meeting, Washington, DC, April 2023.

Shanty L, Dowling R, Sonnenschein S, Hussey-Gardner B. Evaluation of an early language and literacy program for parents of infants in the NICU. Neonatal Network. 2019;38(4):206-216.



Quote				
t songs, it's helped [me sing more expressively]." – 082222				
start after I went to that meeting. I started reading to her more." - 050622				
al about [singing] before[now] I don't care if the nurses hear me or				
v if I can sing or anything like that soGoslings, for me, gave me the				
read to him more often" – 033022				
rm, that's telling me this or thatif he puts it up in front of his eyes. So, now." – 081022				
res], like he doesn't want to be bothered. Like I realize, oh you don't ged sir." – 082622				
ot so fast which I didn't even realize that would overstimulate them				
nore often but…he's a heavy sleeper." – 033022				
here to have it be like so far in front of them and stuff" – 050422				
aven't used that yet just because they were talking about what colors				
right around caresso we're busy trying tofeed him." – 081022				
and the lady was like, well I was once like you guys, I don't want to be it then definitely I can also do it, so let me just try from there." – 082622				
ursery rhymes and how to deal with the red day, green day cues and				
learn about their story so that you don't feel like you're alone here all				
ell, maybe [it would help], even if it was posted somewhere." – 050422				
ck and then I have to pump and head backso I feel like my days are				

ir favorite is just the singing portion right now." – 050522

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