



Early Literacy Intervention for Infants with Congenital Heart Disease: A Pilot Study

Boyett-Anderson J, Mechler-Hickson A, Canada K, Loether T, Kiley A, Srinivasan S
 University of Wisconsin – Madison School of Medicine and Public Health, Department of Pediatrics

Background:

- *Many children with congenital heart disease (CHD) have neurodevelopmental challenges
- *Early literacy initiatives enhance neurodevelopment
- *We implemented a PICU-based early literacy program, Bonding with Book (BWB), for infants who need heart surgery

Objectives:

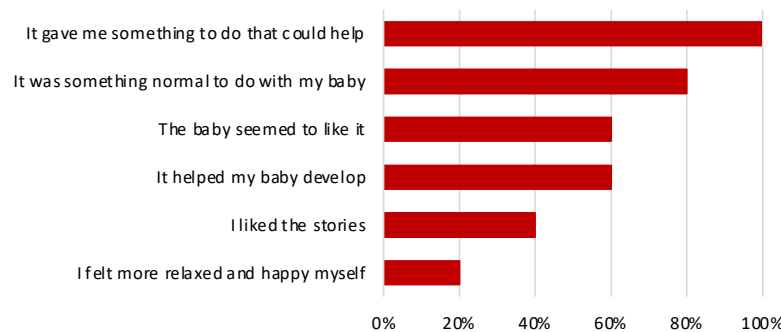
- *Facilitate parent-child interaction in the PICU and at home
- *Encourage early language input
- *Encourage neurodevelopmental focus

Demographics:

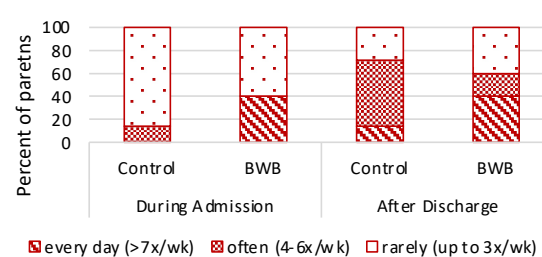
	Control	BWB
Number	7	5
Older siblings (%)	20%	100%
Age of parents (years)	28.4±3.6	34±5.8
Age of infant (months)	9.4±3.6	7.2±4.5
Parents completed college (%)	60%	100%

Results:

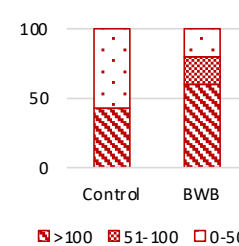
What did you like about reading to your baby in the hospital?



How often did you read to your child?



Number of Children's Books at Home



Thematic Analysis:

*When asked why they read to their child : BWB parents cited development (3/5) & interaction (1/5). No control parents mentioned these.

"Just encouraging development..."
"You cannot move her after a major surgery with the tubes, so reading could help a little bit..."
"General baby wellness...it also helps with developmental delays in language"

Conclusions:

Early literacy initiatives:

- Can be incorporated in the PICU
- May increase reading at home & in the PICU
- Emphasize neurodevelopment
- Facilitate parent-child interaction

Limitations/Next Steps:

- *Larger studies needed
- *Expand to other populations
- *Explore parental impact





Early Literacy Intervention for Infants with Congenital Heart Disease: A Pilot Study

Boyett-Anderson J, Mechler-Hickson A, Canada K, Loether T, Kiley A, Srinivasan S
University of Wisconsin – Madison School of Medicine and Public Health, Department of Pediatrics

	Control	BWB
Number	7	5
Older siblings (%)	20%	100%
Age of parents (years)	28.4±3.6	34±5.8
Age of infant (months)	9.4±3.6	7.2±4.5
Parents completed college (%)	60%	100%

On average, parents in the BWB group were older, more educated, and had more children at home than did control parents.

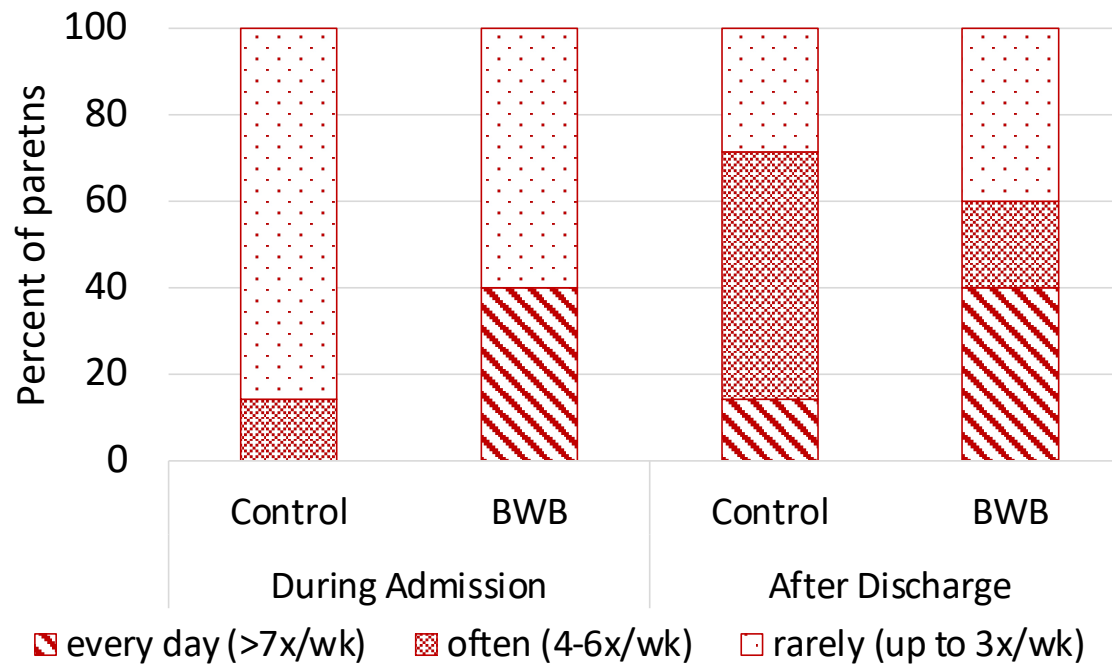




Early Literacy Intervention for Infants with Congenital Heart Disease: A Pilot Study

Boyett-Anderson J, Mechler-Hickson A, Canada K, Loether T, Kiley A, Srinivasan S
University of Wisconsin – Madison School of Medicine and Public Health, Department of Pediatrics

How often did you read to your child?

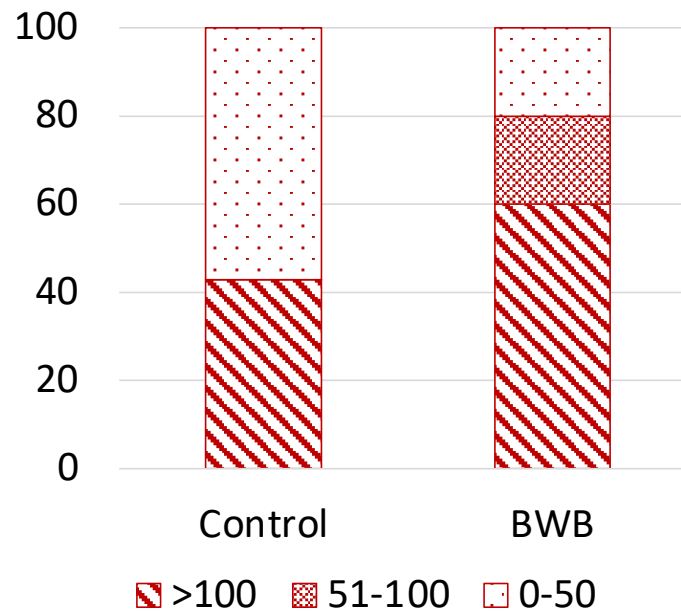




Early Literacy Intervention for Infants with Congenital Heart Disease: A Pilot Study

Boyett-Anderson J, Mechler-Hickson A, Canada K, Loether T, Kiley A, Srinivasan S
University of Wisconsin – Madison School of Medicine and Public Health, Department of Pediatrics

Number of Children's Books at Home

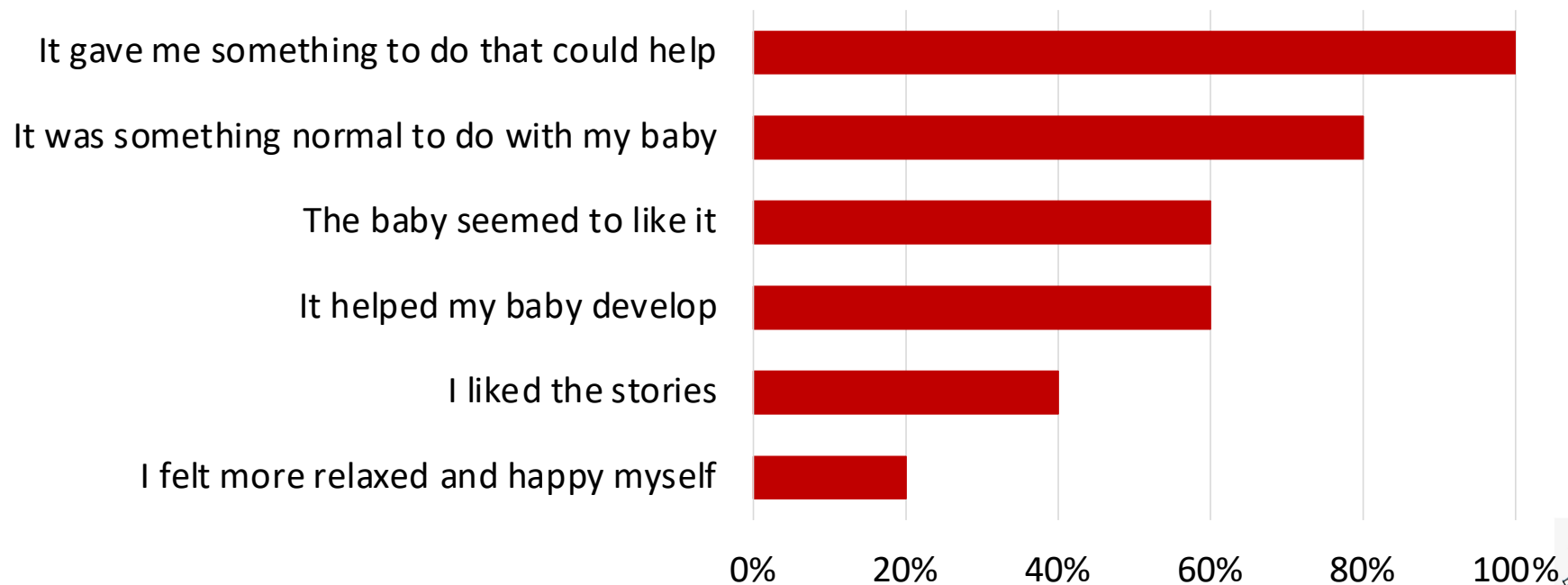




Early Literacy Intervention for Infants with Congenital Heart Disease: A Pilot Study

Boyett-Anderson J, Mechler-Hickson A, Canada K, Loether T, Kiley A, Srinivasan S
University of Wisconsin – Madison School of Medicine and Public Health, Department of Pediatrics

What did you like about reading to your baby in the hospital?





Early Literacy Intervention for Infants with Congenital Heart Disease: A Pilot Study

Boyett-Anderson J, Mechler-Hickson A, Canada K, Loether T, Kiley A, Srinivasan S
University of Wisconsin – Madison School of Medicine and Public Health, Department of Pediatrics

Conclusions:

Early literacy initiatives:

- Can be incorporated in the PICU
- May increase reading at home & in the PICU
- Emphasize neurodevelopment
- Facilitate parent-child interaction

Limitations/Next Steps:

- Larger studies needed
- Expand to other populations
- Explore parental impact



Thank You

Acknowledgements:

- Dipesh Navsaria, MD: Dept. of Pediatrics. UW Health
- Xiao Zhang, PhD: Associate Scientist, Cardiology, UW Health.
- PICU Nursing Staff at American Family Children's Hospital. UW Health.
- Allison Porter: Program Coordinator Reach out and Read, CS Mott Children's Hospital, Ann Arbor

- Email: boyettanders@wisc.edu