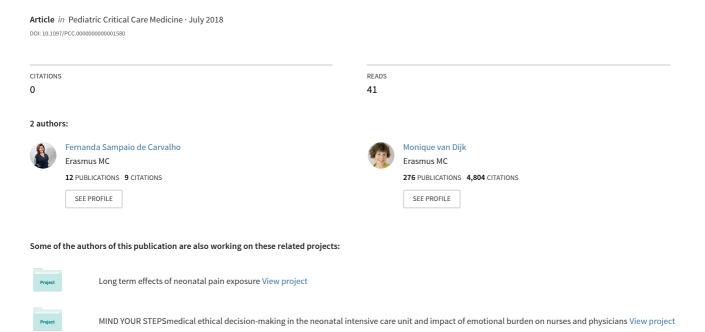
Parents' Soothing of Critically Ill Children: Does One Size Fit All?*



- Hopkins RO, Choong K, Zebuhr CA, et al: Transforming PICU culture to facilitate early rehabilitation. J Pediatr Intensive Care 2015; 4:204–211
- Choong K, Al-Harbi S, Siu K, et al; Canadian Critical Care Trials Group: Functional recovery following critical illness in children: The "wee-cover" pilot study. *Pediatr Crit Care Med* 2015; 16:310–318
- Cui LR, LaPorte M, Civitello M, et al: Physical and occupational therapy utilization in a pediatric intensive care unit. J Crit Care 2017; 40:15–20
- Wieczorek B, Ascenzi J, Kim Y, et al: PICU up!: Impact of a quality improvement intervention to promote early mobilization in critically ill children. Pediatr Crit Care Med 2016; 17:e559–e566
- 13. Choong K, Koo KK, Clark H, et al: Early mobilization in critically ill children: A survey of Canadian practice. *Crit Care Med* 2013; 41:1745–1753

- Betters KA, Hebbar KB, Farthing D, et al: Development and implementation of an early mobility program for mechanically ventilated pediatric patients. J Crit Care 2017; 41:303–308
- Rubin HJ, Rubin IS: Qualitative Interviewing: The Art of Hearing Data. Third Edition. Thousand Oaks, CA, SAGE Publications, 2011
- Patton MQ: Qualitative Research & Evaluation Methods. Fourth Edition. Thousand Oaks, CA, SAGE Publications, 2002
- Ulin PR, Robinson ET: Qualitative Methods in Public Health: A Field Guide for Applied Research. First Edition. San Francisco, CA, Family Health International. 2005
- Snyder CF, Jensen RE, Segal JB, et al: Patient-reported outcomes (PROs): Putting the patient perspective in patient-centered outcomes research. Med Care 2013; 51(8 Suppl 3):S73-S79

Parents' Soothing of Critically III Children: Does One Size Fit All?*

Fernanda Sampaio de Carvalho, MSc

Division of Obstetrics and Neonatology Department of Pediatrics Erasmus MC-Sophia Children's Hospital Rotterdam, The Netherlands

Monique van Dijk, PhD

Department of Pediatric Surgery Erasmus MC -Sophia Children's Hospital Rotterdam, The Netherlands

n this issue of *Pediatric Critical Care Medicine*, Rennick et al (1) introduce a multicomponent intervention to pro-⚠ mote the well-being of critically ill children, 2–14 years old, admitted to a Canadian PICU. The intervention is named PICU soothing intervention and involves soothing through touch and reading by parents and music listening. The authors are to be commended for focusing on the parent-child relationship during PICU admission. From the perspectives of patient- and family-centered care, developmental care, and infant mental health, the intervention is particularly powerful in that the parent and child are stimulated to connect physically and psychologically (2–6). This helps parents to sustain their parental role, to feel close to their child, and to feel competent. This is very important because oftentimes parents feel helpless, disoriented, stressed, and overwhelmed by the child's critical medical situation (7). The soothing interventions therefore also help to calm the parents and focus their attention on the child (8). Or in psychologic terminology: the parent and the child are helped to regulate their affects.

*See also p. e358.

Key Words: nonpharmacologic; pediatric intensive care unit; soothing

The authors have disclosed that they do not have any potential conflicts of interest.

Copyright © 2018 by the Society of Critical Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies

DOI: 10.1097/PCC.0000000000001580

Feasibility and acceptability were tested in this pilot randomized controlled trial (RCT) with 10 children each in the intervention and control groups. Outcomes were children's distress, parent and children's anxiety levels, and the children's sleep quality. Parents also kept a sleep diary on their child in the PICU, general ward, and for five nights, 3 months after discharge home. The children also wore an actiwatch in the ward and at home. The standardized mean differences of outcomes between the two groups were minor to moderate with the exception of the Revised Children's Manifest Anxiety Scale scores with a large difference suggesting a positive effect of the intervention. However, the focus in the pilot study by Rennick et al (1) was on feasibility and acceptability of the intervention. The authors concluded that the PICU soothing intervention was indeed acceptable and feasible.

Several issues with respect to the study by Rennick et al (1) deserve mention however. More than half of the 46 approached families (56%) did not participate although the intervention seems acceptable and not invasive. The authors indicate that parents refused primarily because they felt overwhelmed or were afraid to overstimulate their child. The authors also hypothesize that the burden of completing questionnaires and sleep diaries and actigraphs in hospital and at home might have played a role. However, we suggest it might be useful to further explore the reasons for refusal. Perhaps these parents would be better helped with a different approach. For instance, they may need more time to adapt to the situation as was also suggested by the authors. Would some of these parents have agreed to participate if they were asked a day or 2 later when they are more accustomed to the PICU routines and the child's medical situation? Also, exploring a replacement activity for reading to their child could be helpful. If reading to their child is not part of their routine at home, parents may not feel comfortable in reading. Singing, telling stories, or simply talking to the child could perhaps be replacement activities (9). As also seven of nine families of adolescents did not participate, we recommend to further explore the reasons of refusal and replacement activities. Perhaps involvement of peers or siblings can somehow be helpful.

Therefore, we suggest that any study that encompasses parental involvement as intervention should be discussed with a parent panel and a child and/or adolescent panel of ex-PICU patients to select tailored interventions and appropriate outcome measures.

Furthermore, it is not clear if both mothers and fathers participated in the study by Rennick et al (1). As a child's critical illness is such a distressing period in family life, it seems pivotal that all family members are included in this kind of interventions.

In this intervention, the preselection of books as well as music is made by a professional. However, stimulating parents to bring books and music from home could increase the sense of continuity in parental role and parent-child routines at home.

Perhaps it would also be a good idea to have parents listen simultaneously to the same music as their child is hearing. One could say that parents communicate through the music with their child when they chose the specific music they think their child wants to hear. Shared experience in listening to the same music might help the feeling of intimacy and closeness and furthermore soothe parent and child together. The authors explored a large number of instruments to measure psychologic well-being. We wondered if the chosen instruments were adequate to measure the impact of the intervention on psychologic well-being. Future studies should perhaps also use instruments with a focus on perceived parenthood as the intervention may have an impact on feelings of competency. The question arises if the RCT is the correct study design to evaluate nonpharmacologic interventions? In our own studies, we encountered a number of drawbacks which seem universal (10, 11). A major drawback of a RCT is: 1) standardization of the intervention. Will parents be stimulated to read more or stroke their child more often, or do they feel that they should stick to the proposed intervention? 2) nonpharmacologic intervention may not be tailored to the needs of the child and the parent. Tailoring means we can adapt our intervention to the family's

cultural background. For these reasons, we propose to consider a PICU soothing implementation study that takes into account the different needs and heterogeneity of the families. In conclusion, the high refusal rate in the present study by Rennick et al (1) suggests PICU soothing should be individualized because one size does not fit all.

REFERENCES

- Rennick JE, Stremler R, Horwood L, et al: A Pilot Randomized Controlled Trial of an Intervention to Promote Psychological Well-Being in Critically III Children: Soothing Through Touch, Reading, and Music. Pediatr Crit Care Med 2018; 19:e358–e366
- Als H: A synactive model of neonatal behavioral organization. Phys Occup Ther Pediatr 1986; 6:3–53
- Baird J, Davies B, Hinds PS, et al: What impact do hospital and unitbased rules have upon patient and family-centered care in the pediatric intensive care unit? J Pediatr Nurs 2015; 30:133–142
- Mastro KA, Johnson JE, McElvery N, et al: The benefits of a nursedriven, patient- and family-centered pediatric palliative care program. J Nurs Adm 2015; 45:423–428
- Papoušek M: Resilience, strengths, and regulatory capacities: Hidden resources in developmental disorders of infant mental health. *Infant Ment Health J* 2011; 32:29–46
- Zeanah PD, Bailey LO, Berry S: Infant mental health and the "real world" – opportunities for interface and impact. Child Adolesc Psychiatr Clin N Am 2009; 18:773–787
- Colville GA, Gracey D: Mothers' recollections of the paediatric intensive care unit: Associations with psychopathology and views on follow up. *Intensive Crit Care Nurs* 2006; 22:49–55
- Harris J: Critically ill babies in hospital Considering the experience of mothers. *Infant Observation* 2005; 8:247–258
- Rennick JE, Lambert S, Childerhose J, et al: Mothers' experiences of a Touch and Talk nursing intervention to optimise pain management in the PICU: A qualitative descriptive study. *Intensive Crit Care Nurs* 2011; 27:151–157
- van Dijk M, O'Flaherty LA, Hoedemaker T, et al: Massage has no observable effect on distress in children with burns: A randomized, observer-blinded trial. Burns 2018; 44:99–107
- van der Heijden MJE, Jeekel J, Rode H, et al: Can live music therapy reduce distress and pain in children with burns after wound care procedures? A randomized controlled trial. *Burns* 2018; 44:823–833