Use of a Visual Aid to Improve Counseling at the Threshold of Viability

AUTHORS: Venkatakrishna Kakkilaya, MD,a Lynn J. Groome, MD,b Daci Platt, BA,a Dalibor Kurepa, MD,a Arun Pramanik, MD,a Gloria Caldito, PhD,c Lesley Conrad, MD,b Joseph A. Bocchini Jr, MD,a and Terry C. Davis, PhDa

Departments of aPediatrics, bObstetrics and Gynecology, and cBioinformatics and Computational Biology, Louisiana State University Health Sciences Center, Shreveport, Louisiana

KEY WORDS
decision aid, health literacy, extremely preterm

ABBREVIATION
REALM—Rapid Estimate of Adult Literacy in Medicine

www.pediatrics.org/cgi/doi/10.1542/peds.2011-0597
doi:10.1542/peds.2011-0597

Accepted for publication Aug 16, 2011

Address correspondence to Venkatakrishna Kakkilaya, MD, Division of Neonatal-Perinatal Medicine, University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Blvd, Dallas, TX 75390-9063. E-mail: venkat.kakkilaya@utsouthwestern.edu

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2011 by the American Academy of Pediatrics

FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

abstract

WHAT’S KNOWN ON THIS SUBJECT: Several guidelines emphasize the need to counsel pregnant women with impending delivery of an extremely preterm infant to involve them in decisions regarding delivery room resuscitation. The most effective way to counsel women in such circumstances is not known.

WHAT THIS STUDY ADDS: A visual decision aid improved parents’ knowledge of chances of survival and disability without influencing their views regarding resuscitation.

OBJECTIVES: To pilot-test a visual aid developed to help counsel pregnant women.

METHODS: After agreeing to participate, pregnant women at >28 weeks of gestation were assigned randomly to counseling with or without a visual aid. The visual aid contained pictures, graphics, and short messages about delivery room resuscitation, chances of survival, anticipated neonatal course, and long-term neurodevelopmental disabilities. A neonatal fellow performed counseling with a standardized script for an anticipated delivery at 23 weeks of gestation. In precounseling and postcounseling sessions, women were given a structured interview to assess their knowledge of chances of survival and disability and attitudes toward resuscitation.

RESULTS: Of the 89 women who participated, 76% were black and 59% read below a 9th-grade level. Compared with the no–visual aid group, women in the visual aid group recalled more disabilities and predicted longer neonatal stays (P = .01). For both groups, mothers’ perceptions of the chances of survival were lower after counseling; the decrease was greater in the visual aid group (P = .03). The majority of women in each group opted for resuscitation, which was not affected by counseling. In multivariate analyses, use of the visual aid was a significant independent factor in explaining before/after differences in survival chances and recall of a long NICU stay and number of disabilities; higher literacy levels also were significant for recalling the number of disabilities.

CONCLUSIONS: Use of a visual aid improved mothers’ knowledge and showed promise as a decision aid for counseling at the threshold of viability. Pediatrics 2011;128:e1511–e1519