

about Are women with an unintended pregnancy less likely to breastfeed? on page 431,  
 Factors associated with weaning in the first 3 months postpartum on page 439,  
 Maternal assessment of neonatal jaundice after hospital discharge on page 445,  
 Associations of pacifier use, digit sucking, and child care attendance  
 with cessation of breastfeeding on page 465, and  
 The impact of the maternal experience with a jaundiced newborn  
 on the breastfeeding relationship on page 465.

## Supporting women in the transition to motherhood

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As teachers and frequent consumers of medical literature, we subscribe to a simple approach to manuscript reviews—Is the topic important? Is the study well designed with appropriate methods and data analysis? What is the take-home message? In this issue of *JFP*, we are delighted to see 5 articles exploring issues of breastfeeding and/or neonatal jaundice.<sup>1-5</sup> The topics are related and clearly important. The well-recognized benefits of breastfeeding stand in sharp contrast to the low initiation rates, especially among women of minority race; rates are even lower for continuation of breastfeeding beyond 3 months. A better understanding of the barriers and facilitators of breastfeeding can help us as family physicians counsel our patients.

Inquiry into the issue of promoting breastfeeding begins by exploring risk factors for early weaning, as reported in 4 of the studies. These factors, including unintended pregnancy, breast pain and mastitis, pacifier use, and neonatal jaundice, clearly cannot be viewed in isolation. It is not until we ask the “why” questions, through qualitative or mixed methods research, that we begin to understand the complexity of the process through which these factors operate. Only through gaining this understanding will we achieve our goal as physicians of providing information and guidance that may lead to improved health.

In addition to their topical importance, 4 of these studies represent a continuation of a tradition of involvement of family physicians in research focusing on perinatal care. Beginning in the 1970s, family physicians began to establish our own literature base by asking questions that were important to our patients and to the way that we approach the care of pregnant women and their newborns. We have much to be proud of in the accomplishments of a small cadre of family medicine investigators in perinatal medicine. Prior studies have established the safety and importance of family physicians as providers of pregnancy care.<sup>6,7</sup> The style of pregnancy and intrapartum care offered by family physicians, characterized by fewer interventions, has resulted in

good obstetric outcomes and high satisfaction for many women. Landmark clinical trials by family physicians, investigating the appropriate use of technology in maternity care, have confirmed the lack of benefit of such routine procedures as episiotomy<sup>8</sup> and obstetric ultrasound.<sup>9</sup> Other investigators brought to light common postpartum concerns that had been largely ignored in the literature.<sup>10</sup> The 5 reports in this issue of *JFP* add to that literature base.

These papers also demonstrate advances in research design and analytic methodology for observational studies, a departure from early family practice studies that relied on surveys and case series with simple descriptive statistics. Madlon-Kay,<sup>1</sup> for example, assessed the diagnostic test characteristics, including likelihood ratios, for a simple and inexpensive tool to evaluate neonatal jaundice. She determined the tool's suitability for home use by parents. Taylor and Cabral<sup>2</sup> developed a logistic regression model, using the National Survey of Family Growth, to investigate the relationship between unintended pregnancy and breastfeeding. The stratified analysis on demographic variables allowed them to document racial differences for breastfeeding initiation and continuation in mistimed versus unwanted pregnancies. Schwartz and colleagues<sup>3</sup> documented associations between demographic and clinical variables and breastfeeding in a prospective cohort of women using life table analyses. Similarly, Levy and coworkers<sup>4</sup> made use of life table analysis to explore non-nutritive sucking and breastfeeding in relationship to childcare attendance. Unfortunately, without understanding the intent of women regarding weaning, we are left with more questions than answers. Willis and colleagues<sup>5</sup> used a qualitative approach to understand women's concerns about breastfeeding a jaundiced newborn. The interactions between new mothers and medical professionals emerged as the most

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important influence on feeding decisions. We are still left with uncertainty about how best to support mothers in this situation.

So what have we learned from these studies? Of the many factors that interfere with breastfeeding, some are potentially amenable to interventions. We have also learned that mothers can be trained to take a more active role in monitoring their newborns and, in doing so, feel more reassured about their infants' health. We now need to test approaches to prevention of unwanted pregnancies, optimal strategies for detecting and managing neonatal jaundice while maintaining breastfeeding, deferring the initiation of pacifiers, and supporting women with difficulties in the early days and weeks of breastfeeding.

In a time where we find ourselves exploring and perhaps redefining our role as family physicians, it is important to remember that we are unique as the only discipline that provides continuity care for both new mothers and their children. We therefore have special opportunities to identify and understand critical issues for new parents, and to help them prepare for their roles. We now have access to a perinatal database of literature, organizational structures (such as the Cochrane collaboration), and shared experience to enable the practice of evidence-based medicine as we strive toward optimizing pregnancy outcomes. A next step is to establish the research base to enable evidence-based patient choices toward health behaviors that create healthy families.<sup>11</sup> Family medicine investigators have the opportunity to make significant contributions in this area.

What these studies did not address is perhaps most important to the practicing clinician in our struggle to promote and sustain breastfeeding—how and when should we intervene? Can we, as suggested in the study by Willis and colleagues, make a difference in improving the dismal rates of initiation and sustained breastfeeding? What is the optimal timing of discussions about the use of pacifiers? What can we do to promote change?

Designing the necessary intervention studies will likely take the combined efforts of physicians, nurses, and behaviorists within our discipline joined by our many colleagues in obstetrics, pediatrics, public health, and epidemiology. As more of our investigators receive training and experience in the design and conduct of clinical trials, the use of survival analyses, logistic regression models including effect modification to explore large national databases, and qualitative analysis, our literature base will expand exponentially in complexity and richness. In addition, we will also improve our ability to successfully compete for funding to support our work. The opportunities for family physicians to receive training in research methodology continue to expand and include fellowships, part-time master's degree programs, and faculty development programs such as the Grant Generating Project. We encourage our investigators to pursue training and collaboration to enhance the types of research that will provide the next level of information that can be translated into practice.

As practicing family physicians, we can provide the laboratory for testing strategies to alter the timing of prenatal and postpartum visits, to tailor the messages delivered, or to involve office staff in effecting change. But ultimately it is our relationships with our patients that are deserving of study and will lead us to eventual solutions to the problems that we all face. We have seen how continuity of care can improve neonatal outcomes, but we need to understand more about how this works.<sup>12</sup> Our long-term relationships provide opportunities and perhaps the legitimacy to intervene at many critical junctures in the lives of our patients. Through these relationships we should be able to more effectively uncover important concerns and preferences and to participate with women as they make informed health care choices that are in keeping with their values and may lead to optimal health for themselves and their families.

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