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A Randomized Trial of Nurse Home Visits vs. Office-Based Care After Nursery/Maternity Discharge

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Background:

Postpartum and nursery stays are short and adherence to follow-up care guidelines is variable. To improve post-discharge care delivery and reduce morbidities for mothers and newborns, evaluations of alternatives to the office-based care (OBC) model are needed.

Objective:

To compare OBC with a model using a home nurse visit (HNV) as the initial post-discharge encounter for "well" breastfeeding newborns and mothers.

Design/Methods:

After delivery, 1154 mothers intending to breastfeed and their 1169 newborns ≥ 34 weeks gestation were randomly assigned to either the HNV or OBC group. HNVs were scheduled ≤ 2 days after discharge; OBC timing was physician-determined. Mothers completed phone surveys at 2 weeks, 2 months, and 6 months. The primary study outcome was healthcare utilization for mothers and newborns (readmission, ED, outpatient) in the first 2 weeks after delivery. Other newborn outcomes were proportion seen ≤ 2 days after discharge and breastfeeding duration. Maternal outcomes also included depression, anxiety, satisfaction with care, perceived social support, and parenting sense of competence. Analyses were conducted using an intent to treat paradigm.

Results:

92% of mothers completed the 2 week survey: readmissions and ED visits were uncommon for mothers (1%, 5%) and newborns (1%, 2%) with no study group differences. There were no differences in the frequency of maternal outpatient visits or use of lactation services. For newborns, mothers reported more outpatient visits in the first 2 weeks for the HNV group with 88% having ≥ 2 visits compared with 69% in the OBC group ($p < .001$). Newborns were more likely to be seen ≤ 2 days after discharge in the HNV group (86% vs. 79%; $p < .01$). HNV group newborns were more likely to be breastfeeding at 2 weeks (92% vs. 89%; $p = .03$) and 2 months (73% vs. 66%; $p = .03$), but not at 6 months. No group differences were detected for depression, state anxiety, perceived social support, or satisfaction with post-discharge care, but HNV group mothers had greater parenting sense of competence at 2 weeks and 2 months ($p < .01$ for both).

Conclusions:

Mothers and newborns had similar hospital and ED utilization in both care models. While HNV newborns had more outpatient visits, the initial encounter was more likely to be timely and there were modest benefits to breastfeeding duration and parenting sense of competence.