

Postpartum Maternal and Newborn Discharge

This policy statement has been reviewed by the Clinical Practice Obstetrics Committee and approved by the Executive of the Society of Obstetricians and Gynaecologists of Canada

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INTRODUCTION

The length of stay in hospital postpartum has been steadily decreasing over the last 50 years.¹ Health Canada statistics show that the number of mother and newborn pairs discharged less than two days after childbirth increased from 1.6% in 1984-1985 to 24% in 1999.¹ In 2000, one-third of Nova Scotia's mother and newborn pairs were discharged at less than two days post-delivery.¹

A review of the literature on the effect of this decrease in length of postpartum hospital stay on mothers and newborns shows no detrimental effect on maternal morbidity but an increase in neonatal mortality and morbidity.^{2-4,8-10}

Mothers discharged from hospital at less than 48 hours postpartum are less likely to be readmitted to hospital than those discharged at more than 48 hours.² Maternal readmissions have stayed at 2.0% for vaginal births and have risen from 3.0% to 3.9% for Caesarean sections in the 15-year period from 1984 to 1999.¹ Mothers discharged home early are less likely to suffer from depression or anxiety than those who stay longer.³ These mothers are just as likely to breastfeed and to continue breastfeeding at three months as those who stay in hospital longer.⁴⁻⁶

The neonate who is discharged at less than 48 hours is at greater risk than the mother. The largest study of neonatal mortality was done in Washington.⁷ This retrospective study looked at 47 879 births between 1989 and 1990. During this period, 9101 newborns were discharged before 30 hours of age. This group of newborns was found to have a significantly higher mortality rate in the first month and first year of life than those newborns that stayed in hospital longer. This study looked at the causes of death in the following categories: heart related problems, infection, and other. Other causes included deaths attributed to accidents, nervous system conditions, respiratory conditions,

Abstract

Objective: To summarize the evidence available with regard to discharge planning for mothers and newborns.

Outcome: Assessment of maternal and neonatal morbidity and mortality as it relates to length of hospital stay.

Evidence: A Medline database search of articles from January 1995 to December 2004, using the key words early postpartum discharge.

Recommendations

1. Early discharge from hospital postnatally increases the risk of neonatal mortality and morbidity. Follow-up programs should take account of this. (II-2B)
2. The physical, psychological, and social wellbeing of the mother and newborn must be assessed when discharge planning takes place. Primiparous, young, single women are most likely to return to emergency departments with their neonates. (II-2A)
3. Programs in place for postpartum care in the community are well used and appreciated. Additional programs in the community may decrease neonatal mortality, morbidity, and readmissions. (II-2)

Key Words: Early postpartum discharge, maternal, neonatal, morbidity, mortality

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gastrointestinal conditions, and unknown. Infants in the early discharge group were more likely to die of cardiac causes, infection, and sudden infant death syndrome.

There are two Canadian studies looking at neonatal morbidity after early discharge: one reviews emergency room visits by neonates, and both look at the rate of neonatal readmission to hospital.^{8,9}

A retrospective study from Millar's group at the Children's Hospital of Western Ontario in London, Ontario,⁸ reviewed the emergency room visits by neonates under nine days of age. They found that the number of visits in 1995 was 245% higher than in 1990. Visits were significantly more common among those mother and newborn pairs discharged early, which was defined as at less than 36 hours. Women who presented to the emergency room with their neonates were more likely to be primiparous, young, and single. The readmission rate was 33% of those seen in the emergency room. Early discharge neonates were more likely to be admitted with feeding problems than neonates in the late discharge group. Two Toronto area physicians looking at neonatal readmission found that the rate was increased in a group of neonates whose average length of stay was 1.66 days compared with a cohort whose average length of stay was 1.88 days.⁹ The overall Canadian neonatal readmission rate has increased from 1.1/100 in 1990–1991 to 3.2/100 in 2001.¹

The Harvard University Department of Health Care Policy did a large review of the Medicaid population in Ohio to look at the impact of legislation mandating minimum postnatal hospital stays of 48 hours and early follow-up at less than four days. In the year after this legislation was introduced, the rate of readmission to hospital because of jaundice fell from 0.78% to 0.47%. Emergency department visits within 21 days of birth increased from 6% to 10.4% as hospital stays shortened, and fell to 8% after 48-hour hospital stays for mothers and newborns were mandated. Newborns seen in follow-up early were less likely to be readmitted to hospital than those who were not.¹⁰

A number of smaller prospective and retrospective American studies show conflicting results with respect to neonatal readmission rate. All of these studies had a structured follow-up, with postpartum visits in the first week after discharge.^{2,11–13}

In Canada, unfortunately, as postpartum length of stay has decreased, many postpartum home care programs have been cut. When home visits are provided, studies show mothers in early discharge programs feel they are cared for as well as or better than those who stayed in hospital longer.^{12,13}

OPTIONS FOR CARE AFTER DISCHARGE

Home Visits

Studies show that home visits are highly valued by mothers. In most Canadian provinces, public health nurses provide limited home visits. They will usually see most first time mothers once. The midwifery model of care offers home visits routinely on day one, day three, and day five postpartum.

Outpatient Breastfeeding Clinics

Breastfeeding clinics are a relatively new outpatient support for mother and infant pairs. Many hospitals have found that the demand for this service is great; in one centre, demand for this service rapidly overwhelmed capacity, and access has had to be limited.

Early Physician Visits

In some areas, there are not enough physicians available to guarantee early postpartum visits for all women. As well, it may be an effort for the mother and newborn to see a physician early in the postpartum period because of the mother's fatigue or disability related to the delivery.

Recommendations

1. Early discharge from hospital postnatally increases the risk of neonatal mortality and morbidity. Follow-up programs should take account of this. (II-2B)
2. The physical, psychological, and social wellbeing of the mother and newborn must be assessed when discharge planning takes place. Primiparous young single women are most likely to return to emergency departments with their neonates. (II-2A)
3. Programs in place for postpartum care in the community are well used and appreciated. Additional programs in the community may decrease neonatal mortality, morbidity, and readmissions. (II-2)

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Appendix¹⁴ Criteria for discharge less than 48 hours after birth

Maternal	Newborn
<p>Purpose To ensure postpartum women are safely discharged following the birth of their babies. Prior to discharge, mothers should have appropriate arrangements for ongoing care. The following criteria should be met.</p> <p>Vaginal delivery</p> <ul style="list-style-type: none"> Care for the perineum will be ensured No intrapartum or postpartum complications that require ongoing medical treatment or observation Mother is mobile with adequate pain control Bladder and bowel functions are adequate Receipt of Rh immune globulin, if eligible Demonstrated ability to feed the baby properly; if breast-feeding, the baby has achieved adequate “latch” Advice regarding contraception is provided Care provider who will provide ongoing care is identified and, where necessary, notified Family is accessible for follow-up, and the mother understands necessity for, and is aware of the timing of, any health checks for newborn or herself If home environment (safety, shelter, support, communication) is not adequate, measures have been taken to provide help (e.g., homemaking help, social services) Mother is aware of, understands the need for, and will be able to access community and hospital support resources. Mother should receive rubella immunization if not immune. <p>Mothers should NOT be discharged until stable, if they have had:</p> <ul style="list-style-type: none"> Preeclampsia Postpartum hemorrhage Fever Unstable medical conditions 	<p>Purpose To ensure newborn infants are safely discharged. The baby should be healthy in the clinical judgement of the care provider, and the mother should have demonstrated a reasonable ability to care for the child and should have appropriate arrangements for ongoing care. The following criteria should be met.</p> <ul style="list-style-type: none"> Full-term infant (37–42 weeks) with size appropriate for gestational age Normal cardio respiratory adaptation to extra uterine life No evidence of sepsis Temperature stable (axillary temperature of 36.1°C to 37°C) No apparent feeding problems (at least two successful feedings documented) Physical examination of the baby by care provider within 12 hours prior to discharge indicates no need for additional observation and/or therapy in hospital Baby has urinated No bleeding ≥ 2 hours after the circumcision, if this procedure has been performed Receipt of necessary medications and immunization (e.g., hepatitis B) Metabolic screen completed (at > 24 hours of age) or satisfactory arrangements made Mother is able to provide routine infant care (e.g., of the cord) and recognizes signs of illness and other infant problems Arrangements are made for the mother and newborn to be evaluated within 48 hours of discharge Care provider responsible for continuing care is identified with arrangements made for follow-up within one week of discharge Infants requiring intubation or assisted ventilation, or infants at increased risk for sepsis should be observed in hospital for at least 24 hours