Keeping Mom and Baby Safe

St. Boniface Hospital,
Winnipeg, Canada

Transferring Vulnerable Preterm Infants to Kangaroo Mother Care (KMC)

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Background

- KMC is the holding of a diaper-clad infant, bare chest to bare chest, with mother

Benefits: Maternal

- Decreases anxiety, stress, and systolic BP
- Promotes attachment and satisfaction with care
- Improves maternal mental health
- Increases milk production and improves breastfeeding duration and exclusivity

Benefits: Newborn

- Stabilizes newborn temperature and oxygenation
- Facilitates a calm state for infants, via increased oxytocin levels
- Improves brain maturation, by increasing time in quiet sleep
- Provides analgesic effect for procedures such as phlebotomy

KMC for Vulnerable Preterms

- KMC is possible with almost all infants, including:
  - Infants requiring mechanical ventilation
  - Infants with peripheral, central, and arterial lines
  - Infants with colostomies
- Exclusions are:
  - Infants with chest tubes in place
  - Infants on Cooling Protocol
- Bedside nurse assesses infant prior to each KMC session

Reticence

Despite awareness of its benefits, at times KMC may not be fully implemented for vulnerable preterm infants as a result of:

- Fear of the unexpected
- Loss of control of patient and/or family
- Concern regarding accidental extubation, loss of central or arterial lines, and/or disconnection of monitoring leads
- Workload, as multiple lines and monitors require a 2 person transfer

Transfer to KMC

Preparation

- Confirm mom's consent for KMC
- Discuss transfer strategy i.e. Parent versus Nurse Transfer
- Place ventilator, infusion pumps, and monitoring devices near mom's chair
- Have second staff member assist with multiple cables, lines, or tubing
- Prepare mom and baby for bare skin-to-skin contact
- Place infant on warm receiving blanket:
  - SUPINE for Parent Transfer; PRONE for Nurse Transfer
- Wait up to 15 minutes for physiological adaptation (i.e. vital signs returning to baseline and remaining there for 3 minutes) before transferring infant

Parent Transfer

- This is less stressful, as movement is directly from bed to mom's chest
- Adjust infant bed to mom's waist level
- Direct mom to:
  - Slide hands under blanket: one under infant's head and one under diaper area
  - Bend over so that mom's chest is touching infant
  - Stand up, holding infant against mother's chest
  - Back up to chair, assisted by nurse, and sit down
- Nurses control cables, lines, and tubings during transfer

Nurse Transfer

- Nurse 1
  - Place infant in PRONE position on blanket
  - Slide one hand under infant's trunk and head
  - "Sandwich" infant with second hand
  - SLOWLY lift infant, and place on mom's chest, sliding hand out while maintaining infant in flexed position
- Nurse 2
  - Control cables, lines and tubing

Once Infant is in KMC

- Ensure infant is positioned so that:
  - ventral surface is in full skin-to-skin contact with mom
  - head is in slight sniffing position and extremities are flexed
  - all lines and tubings are secured with tape or Velcro straps
  - blanket and hat are in place
- Place mom's chair in reclining position, 30 – 40 ° from horizontal
- Observe infant position and condition a minimum of every 10 minutes during KMC
- Remind mom KMC is quiet time: no texting or excessive talking
- Document KMC start time, vital signs, and infant's tolerance of transfer

Recommendations

- Educate families and staff about benefits of KMC and transfer techniques
- Practice, using infant manikins, until nurses and parents are comfortable to transfer infant into KMC
- Complete individualized assessment for all mothers and infants prior to suggesting or implementing each KMC session
- Emphasize SLOW and SAFE transfer always
- Monitor infant position, ETT, lines and vital signs regularly during KMC

References

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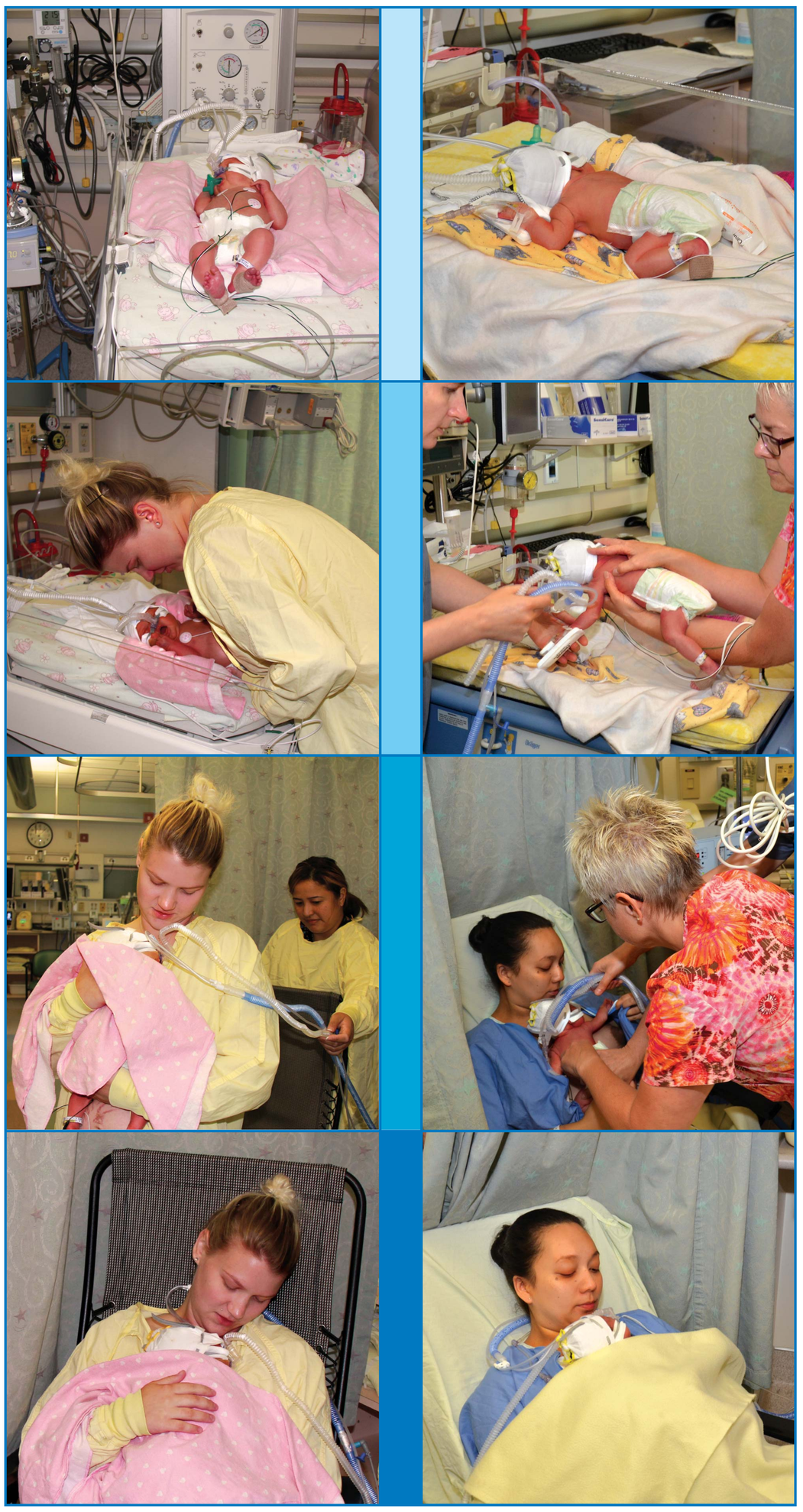
- Ludington-Hoe, S.M. (2013). Kangaroo care as a neonatal therapy. *Newborn & Infant Nursing Reviews 13*, 73 – 75.

Parent Transfer

Nurse Transfer



I knew the best way
I could actively help my daughter,
born at 26 weeks and 1 lb 13 oz,
was to hold her.
We did KMC in the first 24 hours.

Hôpital St-Boniface Hospital