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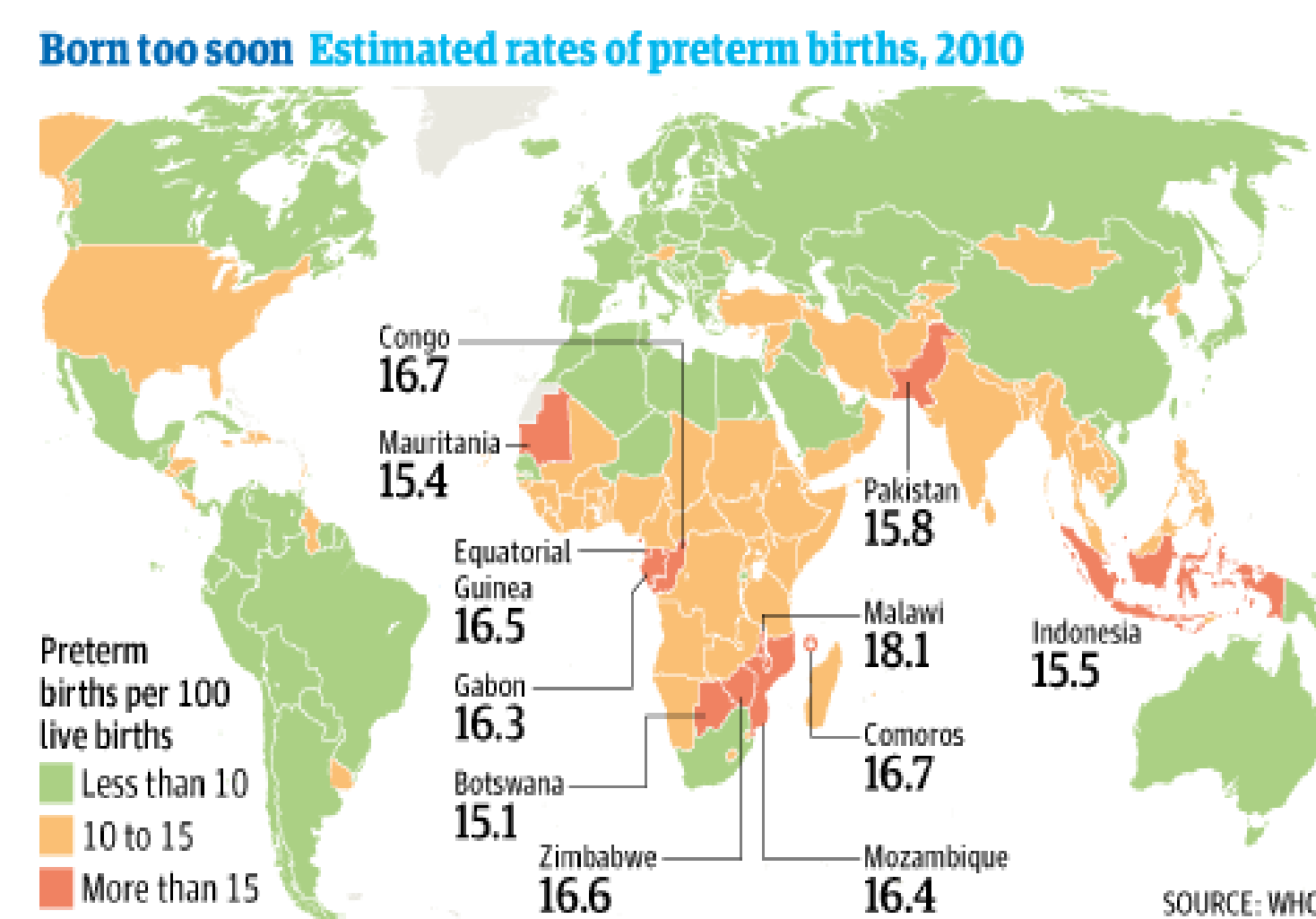
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Kangaroo Mother Care for Premature and Low Birthweight Infants

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PATIENT CARE ISSUE

- Millions of babies are born prematurely or at a low birth weight each year
- 60-80% of neonatal deaths occur because of this problem¹
- Traditional care requires expensive, high-tech equipment, and highly trained professionals¹
- Kangaroo Mother Care is a treatment for premature and LBW that includes prolonged skin to skin contact that supports thermal regulation, breastfeeding, and early intervention to complications^{3,6}



EVIDENCE-BASED PRACTICE QUESTION

- Is Kangaroo Mother Care more beneficial to the physiological and psychological health of mom and baby than conventional care?

P- Mothers and their premature and/or LBW infants

I- Kangaroo Mother Care

C- Conventional neonatal care – use of incubators and radiators

O- Decreased mortality, morbidity, cost, future health and behavioral problems
Increase in parental involvement, maternal health, growth, and breastfeeding

REGISTERED NURSE INTERVIEW

- Interviewed a NICU nurse at Dayton Children's Hospital
- KMC is not a mandatory policy, but highly encouraged
- She has personally witnessed many of the benefits of KMC
- Dayton Children's policy reports many of the observed advantages of KMC

METHODS

- Databases searched: PubMed and Canadian Paediatric Society
- Keywords used: Kangaroo Mother Care, Kangaroo Care, preterm infants, morbidity, mortality, and low-income settings
- Exclusion Criteria: Publication date 5+ years ago or had a focus too specific for our research
- Inclusion Criteria: Studied relationship of KMC to mother-child well-being.
- Total Articles Found: 286
- Articles Considered: 16
- Articles Used: 8

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RESULTS OF KMC INTERVENTION

Mortality: 51% decrease in neonatal deaths who weighed less than 2000g at birth³

Morbidity: Reduction of occurrence infection and hypothermia at discharge and upper respiratory tract infection at 6 months follow up¹

Parental Involvement: Home environment after discharge of KMC families is more optimal than that of conventional families⁴

Maternal Health: Increased competency of care needs, increased confidence in their role and reduction of postpartum depression and hemorrhage^{2,3,6,7}

Growth: Increases weight, length and head circumference measurements during neonatal period⁷

Breastfeeding: Babies have a better sucking reflex, breastfeed more exclusively and improved growth and neurological development^{2,3,7}

Finances: KMC decreases preterm neonatal care costs by 50%¹

Future Behavioral Effects: KMC infants scored better on the Mental Developmental Index and Psychomotor Development Index of the Bayley Scales of Infant Development at 6 and 12 months²



SYNTHESIS OF EVIDENCE

- Overall, KMC produced benefits among all concepts researched.
- Implementation setbacks: Time commitment of family and encouragement and support from nurses

EVIDENCE-BASED PRACTICE RECOMMENDATIONS

- Facilities should ensure nursing staff knowledge and encouragement to candidates of KMC⁷
- Nurses should work to offer a calming and welcoming environment for parents to provide care⁵
- Breastfeeding should be a main goal and nurses should be there to assist if needed⁵
- Parental education on proper technique and signs of distress to observe for⁵
- Based on these recommendations, Dayton Children's should keep their KMC policy as is but should increase patient awareness



LIMITATIONS

- Minor gaps were found in 5 of our articles
- None of the 8 articles used blind studies
- There were few articles on KMC published in the US

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7. Thukral, Anu, D. Chawla, R. Agarwal, A. Deorari, V. Paul (2008). Kangaroo Mother Care-an Alternative to Conventional Care. *Symposium on AIIMS Protocols in Neonatology-V*, Volume 75 (5):497-503.
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