Produced by the Clinical Librarian Service

The Clinical Librarian team are here to help with evidence searches, current awareness and training with information seeking skills, critical appraisal and referencing. We can assist you remotely, at your place of work or in the library at the QuAD Centre.

If you have any further enquiries please do not hesitate to get in touch.

You can contact us by email at Clinical.Librarian@porthosp.nhs.uk or call extension 6042.

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The Clinical Librarian team endeavours to find as much of the latest evidence in your clinical area as possible, however make no claim as to the exhaustive nature of the update.

For more specific areas of interest within NICU we would recommend a literature search or KnowledgeShare bulletin.

Would you like your own, tailored evidence updates? Email the Clinical Librarian team to receive bulletins every two weeks on the topics of your choice.

To access resources click on the blue hyperlinks, if you are unable to read the full text of any item please contact the Clinical Librarian team or make an article request using this form.
Most recent guidance published:
No new relevant guidelines produced.

Other Guidance/Reports

European Standards of Care for Newborn Health
Initiated and coordinated by the European Foundation for the Care of Newborn Infants

Systematic Reviews and Research Protocols

C-reactive protein for diagnosing late-onset infection in newborn infants

Maternal probiotic supplementation for prevention of morbidity and mortality in preterm infants

Systematic reviews from other sources

Cancer risk in children and young adults born preterm: A systematic review and meta-analysis. PloS One

Indicators for monitoring maternal and neonatal quality care: a systematic review. BMC Pregnancy and Health
Hospitalising preterm infants in single family rooms versus open bay units: a systematic review and meta-analysis.
The Lancet: Child & Adolescent Health

Using tocolysis in pregnant women with symptomatic placenta praevia does not significantly improve prenatal, perinatal, neonatal and maternal outcomes: a systematic review and meta-analysis.
Systematic Reviews

Maternal and neonatal outcomes after exposure to ADHD medication during pregnancy: A systematic review and meta-analysis.
Pharmacoeconomics and Drug Safety

Does the Helping Babies Breathe Program impact on neonatal resuscitation care practices? Results from systematic review & meta-analysis.
Acta Paediatrica

Sepsis prediction during outbreaks at neonatal intensive care units through body surface screening for Gram-negative bacteria: systematic review and meta-analysis.
BMC Research Notes

Room Air for Initiating Term Newborn Resuscitation: A Systematic Review With Meta-analysis.
Pediatrics

Journal of Clinical Pharmacy and Therapeutics

Therapeutic hypothermia for mild neonatal encephalopathy: a systematic review and meta-analysis.
Archives of Disease in Childhood: Fetal and Neonatal Edition

The effect of antenatal care follow-up on neonatal health outcomes: a systematic review and meta-analysis.
Public Health Reviews

Effects of family-centred care interventions on preterm infants and parents in neonatal intensive care units: A systematic review and meta-analysis of randomised controlled trials.
Australian Critical Care

Role of delayed cord clamping in prevention of necrotizing enterocolitis in preterm neonates: a systematic review.
Journal of Maternal-Fetal & Neonatal Medicine

Behavioral and Physiological Signs for Pain Assessment in Preterm and Term Neonates During a Nociception-Specific Response: A Systematic Review.
Pediatric Neurology

Role of kangaroo mother care in growth and breast feeding rates in very low birth weight (VLBW) neonates: a systematic review
Journal of Maternal-Fetal & Neonatal Medicine
This month’s clinical questions are…

How does videolaryngoscopy compare with direct laryngoscopy for neonatal tracheal intubation?

What are the benefits and harms of naloxone for opiate-exposed newborn infants?

Primary Research

A safety lancet for neonatal blood spot tests: a design that facilitates pain-free, atraumatic samples.
British Journal of Nursing

Adenovirus pseudo-outbreak in a large UK neonatal intensive care unit
American Journal of Infection Control

Assessing Neonatal Pain, Duration of Crying and Procedure Time following Use of Automatic or Manual Heel Lances: A Randomized Controlled Study
Journal of Tropical Pediatrics

Association of Nurse Workload With Missed Nursing Care in the Neonatal Intensive Care Unit
JAMA Pediatrics

Breast Milk Quality Improvement Bundle for Very Low Birth Weight Neonates
Neonatal Network

Joint Commission Journal on Quality & Patient Safety

Dried blood spot compared to plasma measurements of blood-based biomarkers of brain injury in neonatal encephalopathy.
Pediatric Research

Enteral lactoferrin supplementation for very preterm infants: a randomised placebo-controlled trial
The Lancet

Effect of Prophylaxis for Early Adrenal Insufficiency Using Low-Dose Hydrocortisone in Very Preterm Infants: An Individual Patient Data Meta-Analysis
The Journal of Pediatrics

Effects of Instruction on Parent Competency During Infant Handling in a Neonatal Intensive Care Unit
Pediatric Physical Therapy

Eliminating Risk of Intubation in Very Preterm Infants with Noninvasive Cardiorespiratory Support in the Delivery Room and Neonatal Intensive Care Unit.
BioMed Research International

Fathers in neonatal units: Improving infant health by supporting the baby-father bond and mother-father coparenting
Journal of Neonatal Nursing
Harbouring group B streptococci in a neonatal intensive care unit led to an outbreak among preterm infants
Acta Paediatrica

Impact of a dedicated nursing team on central line-related complications in neonatal intensive care unit
Journal of Maternal Fetal and Neonatal Medicine

In-hospital Neonatal Falls: An Unintended Consequence of Efforts to Improve Breastfeeding
Pediatrics

Legal and ethical considerations for midwives performing the neonatal infant physical examination
British Journal of Midwifery

Measurement of stress in stable neonates during ambulance transportation: A feasibility study
Australian Critical Care

Mupirocin for Staphylococcus aureus Decolonization of Infants in Neonatal Intensive Care Units
Pediatrics

Nasal high flow therapy for neonates: Current evidence and future directions
Journal of Paediatrics

Neonatal chest image quality addressed through training to enhance radiographer awareness
Health SA Gesondheid

Neonatal Intensive Care Unit discharge preparedness among families with limited English proficiency
Journal of Perinatology

Parental satisfaction with neonatal intensive care units: a quantitative cross-sectional study
BMC Health Services Research

Randomised controlled trial showed that neonates received better pain relief from a higher dose of sucrose during Venepuncture
Acta Paediatrica

Randomized Trial of Platelet-Transfusion Thresholds in Neonates
New England Journal of Medicine

Reduced fetal growth velocities and the association with neonatal outcome in appropriate-for-gestational-age neonates: a retrospective cohort study
BMC Pregnancy and Childbirth

Reflections on the early years of neonatology. William Oh: neonatal pioneer devoted his career to groundbreaking research, expanding patient care, and mentoring others
Journal of Perinatology

Questionnaire-based study showed that neonatal chest radiographs could be reliably interpreted using the WhatsApp messaging application
Acta Paediatrica

Seldinger vs modified Seldinger techniques for ultrasound-guided central venous catheterisation in neonates: a randomised controlled trial
British Journal of Anaesthesia
Signal: Premature babies have fewer complications if a lower platelet count is accepted
NIHR

Prophylactic administration of caffeine for apnea of prematurity in extremely preterm infants (January 2019)
In an earlier report of a retrospective cohort study of over 2100 extremely preterm (EPT) infants (gestational age <29 weeks) from the Canadian Neonatal Network, caffeine given within the first two days of life for prophylaxis of apnea of prematurity was associated with a lower risk of bronchopulmonary dysplasia and patent ductus arteriosus. On follow-up study of this cohort, early initiation of caffeine prophylaxis, compared with later administration, was associated with better neurodevelopmental outcomes at 18 to 24 months corrected age [12]. This finding provides further support for our suggestion for early initiation of caffeine to provide prophylaxis for apnea of prematurity in EPT infants. (See "Management of apnea of prematurity", section on 'Prophylactic use'.)

Early intervention for high-risk infantile hemangiomas (January 2019)
Specialist referral and/or treatment is warranted for infantile hemangiomas at high risk of complications (eg, functional impairment, ulceration, permanent disfigurement). However, the best timing for starting intervention is often difficult to determine. According to the American Academy of Pediatrics' Clinical Practice Guideline for the Management of Infantile Hemangiomas, infants with high-risk hemangiomas should start treatment or be referred to a specialist at an early age, ideally by four weeks of age [13]. We agree with this guideline, the rationale being that the most rapid growth of hemangiomas occurs before eight weeks of age, and treatment before the completion of this proliferative phase may prevent poor outcomes. (See "Infantile hemangiomas: Management", section on 'When to start treatment'.)

Outcomes of preterm triplets and matched singletons (December 2018)
Although some studies have reported poorer outcomes for preterm infants of multiple births, increasing evidence suggests mortality and risk of major morbidity are similar to singleton births, after adjustment for confounders. In a cohort study based on databases from nine countries, the rate of "death or severe morbidity" (severe neurologic injury, treated retinopathy of prematurity, bronchopulmonary dysplasia) was similar for nonanomalous preterm triplets and singletons matched for gestational age, sex, and country of birth [14]. However, triplets overall are at higher risk of death than singletons because they are more likely to be born preterm and have congenital anomalies. (See "Neonatal complications, outcome, and management of multiple births", section on 'Mortality and major morbidity'.)

DynaMed Plus®
Athens is required for off-site access to DynamedPlus

**Topic:** Prognosis of premature infants
**Summary:** lower cerebral oxygen tissue saturation at 8-10 minutes of life assessed by near-infrared spectroscopy (NIRS) associated with increased risk of grade 3-4 intraventricular
hemorrhage (IVH) or death within 72 hours in infants born at < 32 weeks gestation (J Pediatr 2018 Jul)

**Topic:** Cleft lip and palate  
**Summary:** first-trimester maternal ondansetron use associated with increased risk of oral cleft in offspring (JAMA 2018 Dec 18)

**Topic:** Diffuse intrinsic pontine glioma  
**Summary:** 10% of children with diffuse intrinsic pontine glioma survive ≥ 2 years (J Clin Oncol 2018 Jul 1)

**Topic:** Congenital diaphragmatic hernia, Persistent pulmonary hypertension of the newborn (PPHN)  
**Summary:** treprostinil reported to reduce B-type natriuretic peptide (BNP) levels and severe pulmonary hypertension in infants with congenital diaphragmatic hernia-associated pulmonary hypertension (J Pediatr 2018 Sep)

**Topic:** Gastroesophageal reflux disease (GERD) in infants  
**Summary:** perinatal exposure to tobacco smoke may increase number and frequency of reflux events in neonates with suspected GER (J Pediatr 2018 Oct)

**Topic:** Respiratory distress syndrome (RDS) of the newborn  
**Summary:** inhaled nitric oxide might decrease in hospital mortality in extremely preterm infants with pulmonary hypoplasia and persistent pulmonary hypertension (JAMA Pediatr 2018 Jul 2)

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### Neonatology in the News

Two premature babies die after Staphylococcus aureus blood stream infection found at Glasgow hospital neonatal unit  
ITV News report

New Video System Helping Parents to Keep in Touch  
Premature Babies website

Ray Of Hope - Knitting patterns for premature babies  
Stoke and Staffordshire BBC News

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### Online Resources

- **BestBETs** - BETs bring the evidence one step closer to the bedside, by providing answers to very specific clinical problems, using the best available evidence.
- British National Formulary (BNF) and BNF for Children
- British Association of General Paediatrics
- Cochrane Child Health Evidence
- Royal College of Paediatrics and Child Health
## Journals & table of contents alerts

The Clinical Librarian team can help set up table of content alerts to the journal of your choice.

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<th>Archives of Disease in Childhood – Fetal and Neonatal Edition</th>
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<td>Infant Journal</td>
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