

Publications Working Group

[Ayan Rajgarhia](#), Page Editor - Children's Mercy Hospital

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Christopher Rouse - The Elliot Hospital + USUHS

Jeffrey Shenberger - Brenner Children's Hospital/Wake Forest School of Medicine

Mark Weems - University of Tennessee Health Science Center

Ranjith Kamity - NYU Winthrop Hospital



Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – June 2020

[Erythropoietin prevents LPS-induced preterm birth and increases offspring survival](#)

Zhang J, Luo X, Huang C, et al. *Am J Reprod Immunol*.

Given that infections play a potentially preventable cause of premature birth, the authors chose to study the impact of erythropoietin (EPO) in a murine model of inflammation-associated preterm delivery. They found that EPO prevented preterm labor, increased offspring survival, blocked LPS-induced leukocyte infiltration into the placenta, and inhibited the expression of pro-inflammatory cytokines in maternal serum and amniotic fluid. These findings indicate that EPO may be a novel therapeutic to mitigate infection-related preterm labor.

[Impact of early-onset sepsis and antibiotic use on death or survival with neurodevelopmental impairment at 2 years of age among extremely preterm infants](#)

Mukhopadhyay S, Puopolo KM, Hansen NI, et al. *J Pediatr*.

Retrospective data from NICHD centers 2006-2014 was used to describe neurodevelopmental and survival outcomes for preterm infants born at 22-26 weeks and 401-1000g. The population was analyzed in 3 groups: culture-proven early-onset sepsis, prolonged antibiotics ≥ 5 days without positive culture, and no prolonged antibiotics. Maternal characteristics varied among the groups and were used to determine adjusted outcomes. Early-onset sepsis increased the risk of death or neurodevelopmental impairment (NDI); also increased with the risk of NDI among survivors. For propensity-matched culture-negative infants, prolonged antibiotic use did not increase the risk of death/NDI or other study outcomes. The authors state this suggests that culture-negative infants who received prolonged antibiotics most likely did not have bacterial infection and antibiotics offered no benefit to their outcomes.

[Fetal outcomes with detoxification from opioid drugs during pregnancy: a systematic review](#)

Towers CV, Terry P, Rackley B, et al. *Am J Perinatol*.

This is a systematic review of studies that reported fetal and pregnancy outcomes after opioid detoxification or tapering during pregnancy. A selection of 14 studies describe >1000 patients, most of whom were tapered with inpatient methadone. Overall preterm delivery rate was elevated at 15%. Tapering was not associated with increased risk of fetal loss or preterm delivery. The authors suggest a tapering or detoxification program should be offered to pregnant women who are stable in an opioid treatment program.

[Neonatal care bundles are associated with a reduction in the incidence of intraventricular haemorrhage in preterm infants: a multicentre cohort study](#)

Bijl-Marcus Kd, Brouwer AJ, De Vries LS, et al. Arch Dis Child Fetal Neonatal Ed.

In this multicenter cohort study conducted in two Dutch tertiary neonatal intensive care units, the authors compared the effect of a nursing intervention bundle in the first 72h, on the incidence of GMH-IVH in infants <30 weeks gestation. Components of this bundle included maintaining the head in the midline, tilting the head of the incubator and avoidance of flushing/rapid withdrawal of blood and sudden elevation of the legs. Primary composite outcome measured was incidence of GMH-IVH within 72 hours, cystic periventricular leukomalacia and/or in-hospital death. Infants in the intervention group had a reduced risk of developing a new/progressive (severe) GMH-IVH, cystic periventricular leukomalacia and/or mortality.

[Neurodevelopmental impairment in necrotising enterocolitis survivors: systematic review and meta-analysis](#)

Matei A, Montalva L, Goodbaum A, et al. Arch Dis Child Fetal Neonatal Ed.

In this systematic review evaluating the incidence of NDI in NEC, impact of severity on NDI and actual cerebral lesions in infants with NEC, the authors screened over 10000 abstracts and evaluated 31 studies with a total of 2403 infants with NEC. NDI was seen in 40% of infants with NEC and was higher with surgical NEC (43%) vs medical NEC (27%). Cerebral Palsy was the most common NDI and incidence of IVH (26%) and PVL (11%) in the NEC cohort was significantly higher compared to preterm infants. The authors conclude that NEC babies are at higher risk of developing IVH and/or PVL than babies with prematurity alone with degree of NDI being higher in surgical NEC.

[Levetiracetam versus phenobarbital for neonatal seizures: A randomized controlled trial](#) Gie AG, Salaets

Sharpe C, Reiner GE, Davis SL, et al. Pediatrics.

The authors describe a multicenter, randomized, blinded, controlled, phase IIb trial comparing the safety and efficacy of levetiracetam with phenobarbital as a first-line treatment for neonatal seizures using primary outcome of complete seizure freedom for 24 hours on EEG. Phenobarbital was effective in 80% (24 of 30) compared to 28% (15 of 53) cases using levetiracetam (p, 0.001). Also, upon increasing the dose of levetiracetam from 40 to 60mg/kg, a 7.5% improvement in efficacy was achieved. The authors conclude that Phenobarbital was more effective than levetiracetam, but with higher rates of adverse effects seen in the phenobarbital group.

[Long-term neuropathological and/or neurobehavioral effects of antenatal corticosteroid therapy in animal models: a systematic review](#)

van der Merwe JL, Sacco A, Toelen J, et al. Pediatr Res.

This is a systematic review summarizing the long-term neurodevelopmental outcomes after antenatal corticosteroid therapy in animal models. Of the 669 studies identified, 64 were included. Dexamethasone was used in majority of studies, and at relatively high dosages, primarily involving rodents. ACS administration varied significantly between studies and there was a high risk of bias. The authors concluded that ACSs consistently lead to deleterious long-term neurocognitive effects in animal models, possibly related to dexamethasone, or the repetitive or higher total dosing used.

[Assessment of an unplanned extubation bundle to reduce unplanned extubations in critically ill neonates, infants, and children](#)

Klugman D, Melton K, O'Neal Maynard P, et al. JAMA Pediatr.

Unplanned extubations (UEs) in children contribute to significant morbidity and mortality, with an arbitrary benchmark target of less than 1 UE per 100 ventilator days. The authors sought to determine if

a multicenter quality improvement initiative targeting all intubated neonatal and pediatric patients is associated with a reduction in UEs and morbidity associated with UE events. Participating children's hospitals implemented a quality improvement bundle to reduce UEs, which included standardized anatomic reference points and securement methods, protocol for high-risk situations, and multidisciplinary apparent cause analyses. Among the 43 children's hospitals, the quality improvement initiative was associated with an aggregate 24.1% reduction in UE events, from a baseline rate of 1.135 UEs per 100 ventilator days to 0.862 UEs per 100 ventilator days. This multicenter quality improvement initiative was associated with a reduction in UEs across different pediatric populations in diverse settings.

[Detection of SARS-CoV-2 in human breastmilk](#)

Groß R, Conzelmann C, Müller JA, et al. Lancet.

This study examined milk from two nursing mothers infected with SARS-CoV-2. Following admission and delivery (day 0), four samples from Mother 1 tested negative. By contrast, SARS-CoV-2 RNA was detected in milk from Mother 2 at days 10, 12, and 13. Detection of viral RNA in milk from Mother 2 coincided with mild COVID-19 symptoms and a SARS-CoV-2 positive diagnostic test of Newborn 2. Whether Newborn 2 was infected by breastfeeding or other modes of transmission remains unclear.

[The effects of oral feeding while on nasal continuous positive airway pressure \(NCPAP\) in preterm infants](#)

Dumpa V, Kamity R, Ferrara L, et al. J Perinatol.

This retrospective pre-post analysis examined two main groups of preterm infants (≤ 32 weeks gestation). Infants in Group 1 ($n=39$) were orally fed while on NCPAP (once they reached 34 weeks PMA and were demonstrating oral feeding cues), while infants in Group 2 ($n=60$) were only allowed oral feedings after ceasing NCPAP (and who were also at least 34 weeks PMA and demonstrating oral feeding cues). The authors found that infants in Group 1 took longer to achieve full feedings (16 vs 10 days, $p=0.02$) and that there was no significant difference in the PMA at which infants reached full oral feeds or in length of NICU stay.

OTHER NOTEWORTHY PUBLICATIONS – June, 2020

COVID-19

Rates of maternal and perinatal mortality and vertical transmission in pregnancies complicated by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection: a systematic review

<https://www.ncbi.nlm.nih.gov/pubmed/32516273>

Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection in UK: national population-based cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/32513659>

COVID-19 in pregnancy was associated with maternal morbidity and preterm birth

<https://www.ncbi.nlm.nih.gov/pubmed/32553908>

Maternal and neonatal outcomes associated with COVID-19 infection: a systematic review

<https://www.ncbi.nlm.nih.gov/pubmed/32497090>

Detection of SARS-CoV-2 in human breastmilk

<https://pubmed.ncbi.nlm.nih.gov/32446324>

Covid-19 in neonates and infants: progression and recovery

<https://pubmed.ncbi.nlm.nih.gov/32384398>

Coronavirus disease 2019 in newborns and very young infants a series of six patients in France

<https://pubmed.ncbi.nlm.nih.gov/32404787>

National active surveillance to understand and inform neonatal care in COVID-19 (PDF)

<https://fn.bmj.com/content/fetalneonatal/105/4/346.full.pdf>

Pediatrics

Racial segregation and intraventricular hemorrhage in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/32381625>

Not crying after birth as a predictor of not breathing

<https://pubmed.ncbi.nlm.nih.gov/32398327>

Outcomes, resource use, and financial costs of unplanned extubations in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/32376726>

Levetiracetam versus phenobarbital for neonatal seizures: A randomized controlled trial

<https://pubmed.ncbi.nlm.nih.gov/32385134>

Helping parents cope in the NICU

<https://pubmed.ncbi.nlm.nih.gov/32471844>

Journal of Pediatrics

Maternal instruction on neonatal jaundice: what can we learn from the stop kernicterus in Nigeria (SKIN) experience? (PDF)

[https://www.jpeds.com/article/S0022-3476\(20\)30178-5/pdf](https://www.jpeds.com/article/S0022-3476(20)30178-5/pdf)

Method of blood pressure measurement in neonates and infants: a systematic review and analysis (PDF)

[https://www.jpeds.com/article/S0022-3476\(20\)30286-9/pdf](https://www.jpeds.com/article/S0022-3476(20)30286-9/pdf)

Cardiorespiratory events in infants born preterm during the transitional period

<https://www.ncbi.nlm.nih.gov/pubmed/32446489>

Impact of early-onset sepsis and antibiotic use on death or survival with neurodevelopmental impairment at 2 years of age among extremely preterm infants

<https://www.ncbi.nlm.nih.gov/pubmed/32446491>

Maternal instruction about jaundice and the incidence of acute bilirubin encephalopathy in Nigeria

<https://www.ncbi.nlm.nih.gov/pubmed/32145967>

Long-term healthcare utilization by medicaid enrolled children with neonatal abstinence syndrome

<https://www.ncbi.nlm.nih.gov/pubmed/32446493>

Associations between infant and parent characteristics and measures of family well-being in neonates with seizures: a cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/32446494>

What parents know matters: parental knowledge at birth predicts caregiving behaviors at 9 months

<https://www.ncbi.nlm.nih.gov/pubmed/31987656>

Early electroencephalogram background could guide tailored duration of monitoring for neonatal encephalopathy treated with therapeutic hypothermia

<https://www.ncbi.nlm.nih.gov/pubmed/32222256>

Heart rate determination in newborns at risk for resuscitation in a low-resource setting: a randomized controlled trial

<https://www.ncbi.nlm.nih.gov/pubmed/32222255>

50 years ago in the journal of pediatrics: convulsion score for neonatal tetanus: an obituary! (PDF)

[https://www.jpeds.com/article/S0022-3476\(19\)31607-5/pdf](https://www.jpeds.com/article/S0022-3476(19)31607-5/pdf)

50 years ago in the journal of pediatrics: the evolution of health-care associated infections in the neonatal intensive care unit (PDF)

[https://www.jpeds.com/article/S0022-3476\(19\)31636-1/pdf](https://www.jpeds.com/article/S0022-3476(19)31636-1/pdf)

Pediatric Research

Legal issues in neonatologist performed echocardiography. The Italian experience

<https://pubmed.ncbi.nlm.nih.gov/31837650>

Ventilator-associated pneumonia in the NICU: time to boost diagnostics?

<https://pubmed.ncbi.nlm.nih.gov/31711069>

Long-term neuropathological and/or neurobehavioral effects of antenatal corticosteroid therapy in animal models: a systematic review

<https://pubmed.ncbi.nlm.nih.gov/31822018>

Acetaminophen increases pulmonary and systemic vasomotor tone in the newborn rat

<https://pubmed.ncbi.nlm.nih.gov/31830759>

Hyaluronan 35 kDa enhances epithelial barrier function and protects against the development of murine necrotizing enterocolitis

<https://pubmed.ncbi.nlm.nih.gov/31499514>

Nephron loss detected by MRI following neonatal acute kidney injury in rabbits

<https://pubmed.ncbi.nlm.nih.gov/31805577>

Simvastatin attenuates lung functional and vascular effects of hyperoxia in preterm rabbits

<https://pubmed.ncbi.nlm.nih.gov/31816623>

Pulmonary mechanics and structural lung development after neonatal hyperoxia in mice

<https://pubmed.ncbi.nlm.nih.gov/31835269>

Meningitis, urinary tract, and bloodstream infections in very low birth weight infants enrolled in a heart rate characteristics monitoring trial

<https://pubmed.ncbi.nlm.nih.gov/31801155>

Precise neonatal arterial ischemic stroke classification with a three-dimensional map of the arterial territories of the neonatal brain

<https://pubmed.ncbi.nlm.nih.gov/31835270>

Clinical validation of the neonatal infant stressor scale with preterm infant salivary cortisol

<https://pubmed.ncbi.nlm.nih.gov/31847006>

Comparison of INVOS 5100C and Nonin SenSmart X-100 oximeter performance in preterm infants with spontaneous apnea

<https://pubmed.ncbi.nlm.nih.gov/31935747>

Clinical features, genetic background, and outcome in infants with urinary tract infection and type IV renal tubular acidosis

<https://pubmed.ncbi.nlm.nih.gov/31852011>

Association between maternal acetaminophen use and adverse birth outcomes in a pregnancy and birth cohort

<https://pubmed.ncbi.nlm.nih.gov/31852009>

Family Reflections: harnessing the power of families to improve NEC outcomes

<https://pubmed.ncbi.nlm.nih.gov/31991444>

Archives of Disease in Childhood - Fetal & Neonatal Edition

How should neonatal clinicians act in the presence of moral distress? (PDF)

<https://fn.bmj.com/content/fetalneonatal/105/4/348.full.pdf>

EPICE cohort: two-year neurodevelopmental outcomes after very preterm birth (PDF)

<https://fn.bmj.com/content/fetalneonatal/105/4/350.full.pdf>

Asynchronous ventilation at 120 compared with 90 or 100 compressions per minute improves haemodynamic recovery in asphyxiated newborn piglets

<https://pubmed.ncbi.nlm.nih.gov/31123054>

Do commonly available round facemasks fit near-term and term infants?

<https://pubmed.ncbi.nlm.nih.gov/31542729>

Is faster better? A randomised crossover study comparing algorithms for closed-loop automatic oxygen control

<https://pubmed.ncbi.nlm.nih.gov/31527093>

Diagnostic values of the femoral pulse palpation test

<https://pubmed.ncbi.nlm.nih.gov/31597727>

Incidence of necrotising enterocolitis before and after introducing routine prophylactic Lactobacillus and Bifidobacterium probiotics

<https://pubmed.ncbi.nlm.nih.gov/31666311>

Phenotypic and genetic spectrum of alveolar capillary dysplasia: a retrospective cohort study

<https://pubmed.ncbi.nlm.nih.gov/31641027>

Influence of genetic variants for birth weight on fetal growth and placental haemodynamics

<https://pubmed.ncbi.nlm.nih.gov/31666310>

Individualising care in severe bronchopulmonary dysplasia: a series of N-of-1 trials comparing transpyloric and gastric feeding

<https://pubmed.ncbi.nlm.nih.gov/31685527>

Therapeutic hypothermia for neonatal hypoxic-ischaemic encephalopathy in India (THIN study): a randomised controlled trial

<https://pubmed.ncbi.nlm.nih.gov/31662328>

Thromboelastographic profiles of healthy very low birthweight infants serially during their first month

<https://pubmed.ncbi.nlm.nih.gov/31704736>

Neonatal care bundles are associated with a reduction in the incidence of intraventricular haemorrhage in preterm infants: a multicentre cohort study

<https://pubmed.ncbi.nlm.nih.gov/31732682>

Core outcomes in neonatology: development of a core outcome set for neonatal research

<https://pubmed.ncbi.nlm.nih.gov/31732683>

Neurodevelopmental impairment in necrotising enterocolitis survivors: systematic review and meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/31801792>

Paediatric exhaled CO₂ detector causes leaks

<https://pubmed.ncbi.nlm.nih.gov/31662329>

Extreme preterm birth in the right place: a quality improvement project

<https://pubmed.ncbi.nlm.nih.gov/31719143>

Perinatal stabilisation of infants born with congenital diaphragmatic hernia: a review of current concepts

<https://pubmed.ncbi.nlm.nih.gov/32170029>

Journal of Perinatology

Preterm birth and mortality in adulthood: a systematic review

<https://pubmed.ncbi.nlm.nih.gov/31767981>

Closer and closer? Maternal immunization: current promise, future horizons

<https://pubmed.ncbi.nlm.nih.gov/32341454>

Impact of an integrated mother-preterm infant intervention on birth hospitalization charges

<https://pubmed.ncbi.nlm.nih.gov/31913324>

Single-family room neonatal intensive care unit design: do patient outcomes actually change?

<https://pubmed.ncbi.nlm.nih.gov/31911646>

Telemedicine, a tool for follow-up of infants discharged from the NICU? Experience from a pilot project

<https://pubmed.ncbi.nlm.nih.gov/31959907>

Intranasal fentanyl for pain management during screening for retinopathy of prematurity in preterm infants: a randomized controlled trial

<https://pubmed.ncbi.nlm.nih.gov/32054982>

Oral dextrose reduced procedural pain without altering cellular ATP metabolism in preterm neonates: a prospective randomized trial

<https://pubmed.ncbi.nlm.nih.gov/32103160>

Blinded randomized crossover trial: Skin-to-skin care vs. sucrose for preterm neonatal pain

<https://pubmed.ncbi.nlm.nih.gov/32152488>

Neonatal oxygen saturations and blood pressure at school-age in children born extremely preterm: a cohort study

<https://pubmed.ncbi.nlm.nih.gov/32111975>

The effects of oral feeding while on nasal continuous positive airway pressure (NCPAP) in preterm infants (PDF)

<https://www.nature.com/articles/s41372-020-0632-2.pdf>

Prolonging gavage feeds for reduction of gastroesophageal reflux in infants

<https://pubmed.ncbi.nlm.nih.gov/32086438>

The role of absolute monocyte counts in predicting severity of necrotizing enterocolitis

<https://pubmed.ncbi.nlm.nih.gov/32005918>

Neonatal necrotizing enterocolitis: a case series examining clinical diagnosis with discrepant versus concordant autopsy results

<https://pubmed.ncbi.nlm.nih.gov/32066842>

Left-sided congenital diaphragmatic hernia: can we improve survival while decreasing ECMO?

<https://pubmed.ncbi.nlm.nih.gov/32066841>

Survival of infants with congenital diaphragmatic hernia in California: impact of hospital, clinical, and sociodemographic factors

<https://pubmed.ncbi.nlm.nih.gov/32086437>

An OMIC approach to congenital diaphragmatic hernia: a pilot study of genomic, microRNA, and metabolomic profiling

<https://pubmed.ncbi.nlm.nih.gov/32080334>

Measurement for quality improvement: using data to drive change

<https://pubmed.ncbi.nlm.nih.gov/31915369>

The business case for quality improvement

<https://pubmed.ncbi.nlm.nih.gov/32231258>

Neurodevelopmental outcomes at 2 years in term and late preterm newborns enrolled in a trial of hydrocortisone for cardiovascular insufficiency

<https://pubmed.ncbi.nlm.nih.gov/32203176>

American Journal of Perinatology

The effect of intramuscular 17 α -hydroxyprogesterone in women screened for shortened cervical length

<https://www.ncbi.nlm.nih.gov/pubmed/31756763>

Coping with the unexpected: patient trust in physicians following delivery

<https://www.ncbi.nlm.nih.gov/pubmed/31891959>

Syphilis immunoassay signal strength correlates with active infection in pregnant women

<https://www.ncbi.nlm.nih.gov/pubmed/31910464>

Fetal outcomes with detoxification from opioid drugs during pregnancy: a systematic review

<https://www.ncbi.nlm.nih.gov/pubmed/31104311>

Risk factors for 30-day mortality in neonatal gram-negative bacilli sepsis

<https://www.ncbi.nlm.nih.gov/pubmed/31087314>

Outcomes of elective induction of labor versus expectant management among obese women at ≥ 39 weeks (PDF)

<https://www.ncbi.nlm.nih.gov/pmc/articles/pmc7191996/pdf/nihms-1568538.pdf>

Findings in stillbirths associated with placental disease (PDF)

<https://www.ncbi.nlm.nih.gov/pmc/articles/pmc6854286/pdf/nihms-1045838.pdf>

Role of oropharyngeal administration of colostrum in very low birth weight infants for reducing necrotizing enterocolitis: a randomized controlled trial

<https://www.ncbi.nlm.nih.gov/pubmed/31087313>

Effect of hypothermia and severity of hypoxic-ischemic encephalopathy in the levels of C-Reactive Protein during the first 120 hours of life

<https://www.ncbi.nlm.nih.gov/pubmed/31121634>

A single-center experience with a pregnant immigrant population and Zika virus serologic screening in New York City

<https://www.ncbi.nlm.nih.gov/pubmed/31146294>

Is delaying cord clamping until placenta delivery beneficial? Oxygen saturation and heart rate transition during the initial 5 minutes after delivery in Indian healthy newborns

<https://www.ncbi.nlm.nih.gov/pubmed/31146295>

Fetal myocardial function as assessed by N-terminal fragment brain natriuretic protein in premature fetuses exposed to intra-amniotic inflammation

<https://www.ncbi.nlm.nih.gov/pubmed/31121635>

Development and validation of early warning criteria to identify escalated care events in neonatal intensive care unit patients

<https://www.ncbi.nlm.nih.gov/pubmed/31121636>

Acidemia can occur despite category I tracing

<https://www.ncbi.nlm.nih.gov/pubmed/31121633>

Maternal Health, Neonatology and Perinatology

Retraction note: Application of 4% chlorhexidine to the umbilical cord stump of newborn infants in lower income countries: a systematic review and meta-analysis (PDF)

<https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-020-00118-y>

Helping Babies Breathe (2nd edition) implementation on a shoestring budget in Zanzibar, Tanzania (PDF)

<https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-020-00117-z>

Neoreviews

Short bowel syndrome in an infant

<https://neoreviews.aappublications.org/content/21/6/e370>

Abdominal wall defects

<https://neoreviews.aappublications.org/content/21/6/e383>

Inguinal hernia in premature infants

<https://neoreviews.aappublications.org/content/21/6/e392>

Case 1: Primary neonatal respiratory failure

<https://neoreviews.aappublications.org/content/21/6/e404>

Case 2: A newborn with a liver mass, coagulopathy, and high-output cardiac failure

<https://neoreviews.aappublications.org/content/21/6/e407>

Case 3: Abdominal distention in a preterm infant

<https://neoreviews.aappublications.org/content/21/6/e411>

Strip of the month: Pregnant woman with chronic hypertension and severe intrauterine growth restriction

<https://neoreviews.aappublications.org/content/21/6/e414>

Visual diagnosis: Incidental finding of hydrops fetalis in a full-term infant

<https://neoreviews.aappublications.org/content/21/6/e421>

Complex fetal care case: Amniotic fluid replacement in severe bladder outlet obstruction

<https://neoreviews.aappublications.org/content/21/6/e425>

JAMA Pediatrics

Assessment of an unplanned extubation bundle to reduce unplanned extubations in critically ill neonates, infants, and children

<https://www.ncbi.nlm.nih.gov/pubmed/32282029>

Assessment of evidence about common infant symptoms and cow's milk allergy

<https://www.ncbi.nlm.nih.gov/pubmed/32282040>

Inaccuracies regarding the joint commission newborn identification standard

<https://www.ncbi.nlm.nih.gov/pubmed/32202602>

Inaccuracies regarding the joint commission newborn identification standard—reply

<https://www.ncbi.nlm.nih.gov/pubmed/32202599>

The limitations of pain scales

<https://www.ncbi.nlm.nih.gov/pubmed/32227135>

The limitations of pain scales—reply

<https://www.ncbi.nlm.nih.gov/pubmed/32478854>

BMC Pediatrics

Influence of time under mechanical ventilation on bronchopulmonary dysplasia severity in extremely preterm infants: a pilot study (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02129-2>

Risk factors for readmission for phototherapy due to jaundice in healthy newborns: a retrospective, observational study (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02157-y>

Normative values for circulating intestinal fatty acid binding protein and calprotectin across gestational ages (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02142-5>

Enteroviral and herpes simplex virus central nervous system infections in infants < 90 days old: a Paediatric Investigators' Collaborative Network on Infections in Canada (PICNIC) study (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02151-4>

Utilization pattern of kangaroo mother care after introduction in eight selected neonatal intensive care units in China (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02153-2>

Late-onset neonatal sepsis in Suzhou, China (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02103-y>

Low gestational age is associated with less anastomotic complications after open primary repair of esophageal atresia with tracheoesophageal fistula (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02170-1>

Adverse fetal outcomes and its associated factors in Ethiopia: a systematic review and meta-analysis (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02176-9>

Exploration of facilitators of and barriers to the community-based service utilization for newborn possible serious bacterial infection management in Debre Libanos District, Ethiopia: descriptive qualitative study (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02211-9>

The relationship of prenatal antibiotic exposure and infant antibiotic administration with childhood allergies: a systematic review (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02042-8>

Pediatric Critical Care Medicine

Cell-cycle arrest biomarkers: Usefulness for cardiac surgery-related acute kidney injury in neonates and infants

<https://pubmed.ncbi.nlm.nih.gov/32195906>

New England Journal of Medicine

Down syndrome

<https://pubmed.ncbi.nlm.nih.gov/32521135>

Lancet

Article in COVID-19 section.

JAMA

Effect of intraoperative dexamethasone on major complications and mortality among infants undergoing cardiac surgery: the DECISION randomized clinical trial

<https://pubmed.ncbi.nlm.nih.gov/32573670>

Feasibility of ultra-rapid exome sequencing in critically ill infants and children with suspected monogenic conditions in the Australian public health care system

<https://pubmed.ncbi.nlm.nih.gov/32573669>

Extracorporeal membrane oxygenation

<https://pubmed.ncbi.nlm.nih.gov/32463441>

BMJ

Hypospadias

<https://pubmed.ncbi.nlm.nih.gov/32554436>

Prenatal regenerative fetoscopic interventions for congenital anomalies (PDF)

<https://www.bmj.com/content/bmj/370/bmj.m1624.full.pdf>

Pediatric Infectious Disease Journal

Neonatal and neurodevelopmental outcomes following linezolid for coagulase-negative staphylococcal infection: real world evidence

<https://pubmed.ncbi.nlm.nih.gov/32091496>

Perinatal HIV-1 infection in an extremely low birth weight infant

<https://pubmed.ncbi.nlm.nih.gov/32282656>

Time to positivity of neonatal blood cultures for early-onset sepsis

<https://pubmed.ncbi.nlm.nih.gov/32379197>

Pediatric Neurology

Infantile spasms: outcome in clinical studies

<https://www.ncbi.nlm.nih.gov/pubmed/32305143>

Placental pathology, cerebral blood flow, and intraventricular hemorrhage in preterm infants: is there a link?

<https://www.ncbi.nlm.nih.gov/pubmed/32451157>

Congenital malformations in children with cerebral palsy: is prematurity protective?

<https://www.ncbi.nlm.nih.gov/pubmed/32386793>

Neonatal brain microstructure and machine-learning-based prediction of early language development in children born very preterm

<https://www.ncbi.nlm.nih.gov/pubmed/32279900>

Obstetrics and Gynecology

Fetal bradycardia in response to maternal hypothermia

<https://pubmed.ncbi.nlm.nih.gov/32459438>

Association of prior cesarean delivery with early term delivery and neonatal morbidity

<https://pubmed.ncbi.nlm.nih.gov/32459429>

Association of antenatal corticosteroids and magnesium sulfate therapy with neurodevelopmental outcome in extremely preterm children

<https://pubmed.ncbi.nlm.nih.gov/32459430/>

Antenatal corticosteroids and outcomes in preterm twins

<https://pubmed.ncbi.nlm.nih.gov/32459431>

Factors associated with maternal and neonatal interventions at the threshold of viability

<https://pubmed.ncbi.nlm.nih.gov/32459432>

Neonatal seizures among low-risk pregnancies at term: risk factors and adverse outcomes

<https://pubmed.ncbi.nlm.nih.gov/32459434>

American Journal of Obstetrics & Gynecology

Evolving ethical issues with advances in uterus transplantation

<https://pubmed.ncbi.nlm.nih.gov/31981513>

International gestational age-specific centiles for umbilical artery Doppler indices: a longitudinal prospective cohort study of the INTERGROWTH-21st Project

<https://pubmed.ncbi.nlm.nih.gov/31954701>

Zika virus detection in amniotic fluid and Zika-associated birth defects

<https://pubmed.ncbi.nlm.nih.gov/31954155>

Utility of follow-up standard sonography for fetal anomaly detection

<https://pubmed.ncbi.nlm.nih.gov/31930994>

Special statement: Proposed quality metrics to assess accuracy of prenatal detection of congenital heart defects

<https://pubmed.ncbi.nlm.nih.gov/32114082>

Hospital Pediatrics

Evaluation for neonatal HSV in infants undergoing workup for serious bacterial infection: A 5-year retrospective review

<https://pubmed.ncbi.nlm.nih.gov/32385054>

Clinical and sociodemographic factors associated with human donor milk supplementation in term newborns

<https://pubmed.ncbi.nlm.nih.gov/32358056>

Variation in management of cutaneous lumbosacral findings in newborns

<https://pubmed.ncbi.nlm.nih.gov/32404330>

Supporting breastfeeding in infants hospitalized for jaundice

<https://pubmed.ncbi.nlm.nih.gov/32376601>

The effect of circumcision on exclusive breastfeeding, phototherapy, and hospital length of stay in term breastfed newborns

<https://pubmed.ncbi.nlm.nih.gov/32434856>

BASIC SCIENCE SELECTIONS

Diet modulates the high sensitivity to systemic infection in newborn preterm pigs

Bæk O, Brunse A, Nguyen DN, et al. Front Immunol.

<https://www.ncbi.nlm.nih.gov/pubmed/32536925>

Perinatal hypoxia-inducible factor stabilization preserves lung alveolar and vascular growth in experimental BPD

Hirsch K, Taglauer E, Seedorf G, et al. Am J Respir Crit Care Med.

<https://www.ncbi.nlm.nih.gov/pubmed/32551816>

Synthetic preimplantation factor (sPIF) reduces inflammation and prevents preterm birth

Spinelli M, Boucard C, Nicuolo FD, et al. PLoS One.

<https://www.ncbi.nlm.nih.gov/pubmed/32511256>

Lung and eye disease develop concurrently in supplemental oxygen-exposed neonatal mice

Wickramasinghe LC, Lau M, Deliyanti D, et al. Am J Pathol.

<https://www.ncbi.nlm.nih.gov/pubmed/32526165>

Erythropoietin prevents LPS-induced preterm birth and increases offspring survival

Zhang J, Luo X, Huang C, et al. Am J Reprod Immunol.

<https://www.ncbi.nlm.nih.gov/pubmed/32506750>

Prophylactic antenatal N-Acetyl Cysteine administration combined with postnatal administration can decrease mortality and injury markers associated with necrotizing enterocolitis in a rat model

Zmora O, Gutzeit O, Segal L, et al. PLoS One.

<https://www.ncbi.nlm.nih.gov/pubmed/32479520>

Feasibility of neonatal hemoglobin A1c as a biomarker for retinopathy of prematurity

Movsas TZ and Muthusamy A. Biomarkers.

<https://www.ncbi.nlm.nih.gov/pubmed/32552079>

Whole blood transcriptional responses of very preterm infants during late-onset sepsis

Ng S, Strunk T, Lee AH, et al. PLoS One.

<https://www.ncbi.nlm.nih.gov/pubmed/32479514>

ADDITIONAL JOURNAL SELECTIONS

Prevalence of acute kidney injury (AKI) in extremely low gestational age neonates (ELGAN)

Askenazi DJ, Heagerty PJ, Schmicker RH, et al. *Pediatr Nephrol*.

<https://www.ncbi.nlm.nih.gov/pubmed/32488672>

Time to full enteral feeding after necrotizing enterocolitis in preterm-born children is related to neurodevelopment at 2-3 years of age

Kuik SJ, den Heijer AE, Mebius MJ, et al. *Early Hum Dev*.

<https://www.ncbi.nlm.nih.gov/pubmed/32492527>

The cerebral hemodynamic response to pain in preterm infants with fetal growth restriction

Dix LM, Shepherd K, Polglase GR, et al. *Front Pediatr*.

<https://www.ncbi.nlm.nih.gov/pubmed/32537447>

Renal tissue oxygenation monitoring-an opportunity to improve kidney outcomes in the vulnerable neonatal population

Harer MW and Chock VY. *Front Pediatr*.

<https://www.ncbi.nlm.nih.gov/pubmed/32528917>

Nasal mask vs binasal prongs for nasal continuous positive airway pressure in preterm infants: a systematic review and meta-analysis

Razak A and Patel W. *Pediatr Pulmonol*.

<https://www.ncbi.nlm.nih.gov/pubmed/32478923>

Albuminuria, hypertension, and reduced kidney volumes in adolescents born extremely premature

Sanderson KR, Chang E, Bjornstad E, et al. *Front Pediatr*.

<https://www.ncbi.nlm.nih.gov/pubmed/32528916>

Effect of red blood cell transfusion on the development of retinopathy of prematurity: a systematic review and meta-analysis

Zhu Z, Hua X, Yu Y, et al. *PLoS One*.

<https://www.ncbi.nlm.nih.gov/pubmed/32512582>

Neurodevelopmental and growth outcomes of extremely preterm infants with necrotizing enterocolitis or spontaneous intestinal perforation

Zozaya C, Shah J, Pierro A, et al. *J Pediatr Surg*.

<https://www.ncbi.nlm.nih.gov/pubmed/32553453>