Publications Working Group
Ayan Rajgarhia, Page Editor - Children's Mercy Hospital
Jayasree Nair - University at Buffalo
Craig Nankervis - Nationwide Children's Hospital
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

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – August 2020

Factors behind decline of venovenous extracorporeal membrane oxygenation to support neonatal respiratory failure
Lillie J, Boot L, Speggiorin S, et al. Pediatr Crit Care Med.

In this article, via a survey of all 11 pediatric U.K. extracorporeal membrane oxygenation centers, the authors explored trends in and possible barriers to neonatal venovenous extracorporeal membrane oxygenation in the last 20 years. Mirroring international trends, they showed a decrease in VV ECMO from 58% to 16% over the last decade, with fewer units offering VV ECMO, especially in the neonatal age group. Lack of availability of a suitable dual lumen cannula with concerns of cardiac perforation and challenges of multisite cannulation due to small caliber femoral veins were commonly cited reasons.

Rates of maternal and perinatal mortality and vertical transmission in pregnancies complicated by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Co-V-2) infection: a systematic review
Huntley BJF, Huntley ES, Mascio DD, et al. Obstet Gynecol.

This systematic review aims to ascertain the frequency of maternal and neonatal complications, as well as maternal disease severity, in pregnancies affected by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. The authors identified 99 articles, and report outcomes on 435 deliveries. Critical maternal disease was noted in 1.4% with 3% of cases getting admitted to the ICU, without any reported maternal deaths. There was a high percentage of cesarean delivery at 84.7%. Preterm birth rate of 20.1% and neonatal death rate of 0.3% is reported, with no vertical transmission in this data set. The authors conclude from their review that a reassuring trend with low rates of maternal and neonatal mortality and vertical transmission with SARS-CoV-2 is noted.

Effects of liberal vs restrictive Transfusion Thresholds on survival and Neurocognitive Outcomes in extremely low-birth-weight infants: The ETTNO Randomized Clinical Trial
Franz AR, Engel C, Bassler D, et al. JAMA.

This is a randomized clinical trial including 1013 infants (birth weight 400g-999g, mean GA 26.3weeks) from 36 level III/IV European NICUs comparing liberal vs restrictive red blood cell transfusion strategies based on pre-defined trigger thresholds on death or disability. The primary outcome (death or disability at 24 months) occurred in 200/450 (44.4%) in liberal vs 205/478 (42.9%) in restrictive transfusion groups respectively (P = 0.72). Death, cognitive deficit and cerebral palsy were not significantly different between the groups. The authors conclude that liberal blood transfusions compared with restrictive transfusions in this population did not reduce the likelihood of death or disability at 24 months of corrected age.

Neonatal mortality in the United States is related to location of birth (hospital versus home) rather than the type of birth attendant
Grünebaum A, McCullough LB, Orosz B, et al. Am J Obstet

This is a retrospective study comparing the neonatal mortality outcomes of hospital birth and home birth in the United States, by type of attendants using the most recent CDC natality data (2010-2017). The neonatal mortality was 3.27 for hospital midwife-attended births, 13.66 for planned home births, and 27.98 per 10,000 live births for unintended/unplanned home births with an increased absolute and relative risk of neonatal mortality in planned home births compared with certified nurse-midwife-attended hospital births (P<.0001). The authors conclude that home births for all types of birth attendant were less safe compared to US hospital births attended by a certified nurse-midwife especially when stratified for recognized risk factors, with no difference from the type of midwife attending the planned home birth.

Caffeine restores background EEG activity independent of infarct reduction after neonatal hypoxic ischemic brain injury
Sun H, Gonzalez F, McQuillen PS, et al. Dev Neurosci.
https://www.ncbi.nlm.nih.gov/pubmed/31493775
The investigators studied the relationship between caffeine neuroprotection and brain activity after induced HIE injury using the Vannucci procedure of carotid ligation in newborn rats. Caffeine pretreatment reduced brain injury and improved aEEG and EEG burst duration and amplitude. Caffeine treatment after HI did not reduce infarct volume but was effective at restoring aEEG amplitude and EEG burst duration and amplitude. The authors conclude that caffeine supports brain background electrical activity independent of tissue neuroprotection.

Erythropoietin prevents necrotizing enterocolitis in very preterm infants: a randomized controlled Wang Y, Song J, Sun H, et al. J Transl Med.

The authors chose to determine in rhEPO could prevent NEC using a prospective randomized clinical trial at 4 NICU centers. A total of 1285 eligible infants < 32 weeks were randomized to the rhEPO or control group. At 36 weeks corrected age, rhEPO treatment significantly decreased the incidence of NEC (stage I-III), especially confirmed NEC (stage II - III), and reduced the number of red blood cells transfusion in the confirmed NEC cases. They conclude that repeated low-dose rhEPO treatment is beneficial against NEC.

Transmitted home oximetry and duration of home oxygen in premature infants
Rhein L, White H, Simoneau T, et al. Pediatrics.

This multicenter, unmasked trial of home oxygen therapy (HOT) randomized preterm infants (≤37 weeks birth gestation) who were being discharged on home oxygen to receive either recorded home oximetry (RHO) or standard monthly clinical assessments. The authors found that of the 166 infants who completed the trial, RHO was effective at decreasing HOT from 100.1 days (SE: 8.0) in the standard care group to 78.1 days (SE: 6.4) in the RHO group (p=0.03). There was no significant difference in parental satisfaction between groups (p=0.75).

Effect of nonintervention vs oral ibuprofen in patent ductus arteriosus in preterm infants: a randomized clinical trial
Sung SI, Lee MH, Ahn SY, et al. JAMA Pediatr.
This randomized, double-blind, placebo-controlled noninferiority trial included preterm infants, 23-30 weeks gestational age, with hemodynamically significant PDA (ductal size > 1.5mm plus respiratory

support) diagnosed between postnatal days 6 and 14. Infants were stratified by GA and randomly assigned (1:1) to receive either oral ibuprofen (initial dose of 10 mg/kg followed by a 5-mg/kg dose after 24 hours and a second 5-mg/kg dose after 48 hours)(n=70) or placebo (n=72). The authors found that for the primary outcomes, the nonintervention approach was noninferior to ibuprofen treatment in terms of BPD incidence or death (nonintervention, 44%; ibuprofen, 50%; 95% CI, -0.11 to 0.22; noninferiority margin -0.2; P = .51).

Glucose profiles in healthy term infants in the first 5 days: The Glucose in Well Babies (GLOW) Study
Harris DL, Weston PJ, Gamble GD, et al. J Pediatr.
Eight birthing hospitals in Wales, UK, prospectively collected complete data on 3593 births ≥34 weeks over 3 months. The population was managed following NICE guidelines for early onset sepsis. Data and decisions were compared to the Kiser Permanente Sepsis Risk Calculator (SRC). Following NICE guidelines, 16% of patients were started on antibiotics while SRC recommended antibiotics in only 4.3% of infants. 99.8% of infants who avoided antibiotics with NICE would have also avoided antibiotics with SRC. 54.5% of infants who received antibiotics with NICU would have been assigned to normal care with SRC. There were no positive blood cultures among patients who got antibiotics with NICE but would not have with SRC. The authors conclude that adoption of the SRC could safely reduce early antibiotic use among neonates in the UK.

Increase in brain volumes after implementation of a nutrition regimen in infants born extremely preterm
van Beek PE, Claessens NHP, Makropoulos A , et al. J Pediatr.

The authors sought to assess the effect of early life nutrition on structural brain development in 2 cohorts of extremely preterm infants, before and after the implementation of a nutrition regimen containing more protein and lipid. One hundred seventy-eight extremely preterm infants were studied: 99 received the old nutrition regimen and 79 the new nutrition regimen. Intake of protein, lipids, and calories was calculated for the first 28 postnatal days and brain MRI was performed at 30 weeks postmenstrual age and term-equivalent age. Mean protein and caloric intake was higher in the cohort who received the new nutrition regimen. An optimized nutrition protocol in the first 28 days of life was associated with temporarily improved early life brain volumes.

Less invasive surfactant administration reduces incidence of severe intraventricular haemorrage in preterms with respiratory distress syndrome: a cohort study
Pérez-Iranzo A, Jarque A, Toledo JD, et al. J Perinatol.
In a single center, rates of severe IVH in preterm infants born 23 – 33 weeks (mean GA 29wks, BW 1.4kg) with RDS from 2013 – 2018 were compared to those born 2006 – 2013. Standard management 2006-13 (n=100) was to intubate for surfactant and mechanical ventilation. Management 2013-18 (n=109) was to provide CPAP and administer surfactant via a thin feeding tube inserted into the trachea with Magill's forceps. Gestational age, birthweight, and other prenatal/perinatal factors were similar between groups. The LISA group had 19.2% IVH and 2.8% severe IVH compared to 35% and 20% in the historical group. The LISA group also had less pneumothorax, improved survival, and fewer days of mechanical ventilation. Although 20% of the LISA group also received cord milking which may have influenced the rate of IVH, subgroup analysis found cord milking did not affect the results. The authors conclude that LISA seems effective in reducing severe IVH in VLBW and LBW infants with RDS.

COVID-19
Commentary: Caring for newborns born to mothers with COVID-19: More questions than answers
https://pubmed.ncbi.nlm.nih.gov/32409480
COVID-19 in pregnant women: case series from one large New York City obstetrical practice
https://pubmed.ncbi.nlm.nih.gov/32438425

The Impact of COVID-19 infection on labor and delivery, newborn nursery, and neonatal intensive care unit: prospective observational data from a single hospital system (PDF)
https://www.thieme-connect.com/products/ejournals/pdf/10.1055/s-0040-1713416.pdf
Preventing COVID-19 transmission on labor and delivery: a decision analysis (PDF)
https://www.thieme-connect.com/products/ejournals/pdf/10.1055/s-0040-1713647.pdf
Home birth in the era of COVID-19: counseling and preparation for pregnant persons living with HIV (PDF)
https://www.thieme-connect.com/products/ejournals/pdf/10.1055/s-0040-1712513.pdf
Vertical transmission of severe acute respiratory syndrome coronavirus 2: a systematic review (PDF)
https://www.thieme-connect.com/products/ejournals/pdf/10.1055/s-0040-1712161.pdf
Simulations of deliveries of sars-cov-2 positive pregnant women and their newborn babies: plan to implement a complex and ever-changing protocol (PDF)
https://www.thieme-connect.com/products/ejournals/pdf/10.1055/s-0040-1713602.pdf
Rates of maternal and perinatal mortality and vertical transmission in pregnancies complicated by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Co-V-2) infection: a systematic review
https://pubmed.ncbi.nlm.nih.gov/32516273
Feature: Breastfeeding in India is disrupted as mothers and babies are separated in the pandemic
https://www.bmj.com/content/bmj/370/bmj.m3316.full.pdf
Neonatal hyperoxia enhances age-dependent expression of SARS-CoV-2 receptors in mice
https://www.ncbi.nlm.nih.gov/pubmed/32743585
Histopathological evaluation of placentas after diagnosis of maternal SARS-CoV-2 infection
https://www.ncbi.nlm.nih.gov/pubmed/32838277

Pediatrics
The resource use inflection point for safe NICU discharge
https://pubmed.ncbi.nlm.nih.gov/32699067
Transmitted home oximetry and duration of home oxygen in premature infants
https://pubmed.ncbi.nlm.nih.gov/32665372
Variation in car seat tolerance screen performance in newborn nurseries
https://pubmed.ncbi.nlm.nih.gov/32641358
Commentary: Quantifying the where and how long of newborn care
https://pubmed.ncbi.nlm.nih.gov/32699068
Commentary: Recorded continuous oximetry improves post-discharge management of bronchopulmonary dysplasia
https://pubmed.ncbi.nlm.nih.gov/32665371
Early childhood health outcomes following in utero exposure to influenza vaccines: A systematic review
https://pubmed.ncbi.nlm.nih.gov/32719088
Review: Changes in the preterm heart from birth to young adulthood: A meta-analysis
https://pubmed.ncbi.nlm.nih.gov/32636236
Quality report: Reducing vancomycin use in a level IV NICU
https://pubmed.ncbi.nlm.nih.gov/32611807

Journal of Pediatrics
Skin to skin care: More than meets the eye (PDF)
https://www.jpeds.com/article/S0022-3476(20)30740-X/pdf
Neonatal Hypoglycemia: GLOW at the end of the tunnel? (PDF)
https://www.jpeds.com/article/S0022-3476(20)30435-2/pdf
Early neonatal oxygen exposure predicts pulmonary morbidity and functional deficits at 1 year
https://pubmed.ncbi.nlm.nih.gov/32711747
Relationships between early nutrition, illness, and later outcomes among infants born preterm with hyperglycemia
https://pubmed.ncbi.nlm.nih.gov/32532652

Glucose profiles in healthy term infants in the first 5 days: The Glucose in Well Babies (GLOW) Study
https://pubmed.ncbi.nlm.nih.gov/32381469
Effects of neonatal hyperglycemia on retinopathy of prematurity and visual outcomes at 7 years of age: a matched cohort study
https://pubmed.ncbi.nlm.nih.gov/32711750
Early cardiac and cerebral hemodynamics with umbilical cord milking compared with delayed cord clamping in infants born preterm
https://pubmed.ncbi.nlm.nih.gov/32482392
Increase in brain volumes after implementation of a nutrition regimen in infants born extremely preterm
https://pubmed.ncbi.nlm.nih.gov/32389719
Treatment discontinuation within 3 years of levothyroxine initiation among children diagnosed with congenital hypothyroidism
https://pubmed.ncbi.nlm.nih.gov/32437757
The challenge of risk stratification of infants born preterm in the setting of competing and disparate healthcare outcomes
https://pubmed.ncbi.nlm.nih.gov/32711746
Human herpesvirus 6 detection during the evaluation of sepsis in infants using the film-array meningitis/encephalitis panel
https://pubmed.ncbi.nlm.nih.gov/32417077
Revascularization of portal venous system after occlusion of congenital intrahepatic portosystemic shunt (PDF)
https://www.jpeds.com/article/S0022-3476(20)30491-1/pdf
Renal arterial doppler perfusion pattern with and without ductal steal (PDF)
https://www.jpeds.com/article/S0022-3476(20)30565-5/pdf
The importance of continuing breastfeeding during coronavirus disease-2019: in support of the world health organization statement on breastfeeding during the pandemic (PDF)
https://www.jpeds.com/article/S0022-3476(20)30583-7/pdf

Pediatric Research
The influence of pain, agitation, and their management on the immature brain
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7223850
Surfactant replacement therapy: from biological basis to current clinical practice
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7223236
Derivation of a metabolic signature associated with bacterial meningitis in infants
https://pubmed.ncbi.nlm.nih.gov/32120377
Effects of a potassium channel opener on brain injury and neurologic outcomes in an animal model of neonatal hypoxic–ischemic injury
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7329576
Indole-3-lactic acid, a metabolite of tryptophan, secreted by Bifidobacterium longum subspecies infantis is anti-inflammatory in the immature intestine
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7363505
Continuous glucose monitoring profile during therapeutic hypothermia in encephalopathic infants with unfavorable outcome
https://pubmed.ncbi.nlm.nih.gov/32120381
Fungal cutaneous microbiome and host determinants in preterm and term neonates
https://pubmed.ncbi.nlm.nih.gov/31816621
Asymmetry-index and orthodontic facial analysis of children with foetal alcohol syndrome using 3D-facial scans
https://pubmed.ncbi.nlm.nih.gov/31493772
Plasma ammonia concentrations in extremely low birthweight infants in the first week after birth: secondary analysis from the ProVIDe randomized clinical trial
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7384986

What drives change in neonatal intensive care units? A qualitative study with physicians and nurses in six European countries
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7223325
Brain temperature of infants with neonatal encephalopathy following perinatal asphyxia calculated using magnetic resonance spectroscopy
https://pubmed.ncbi.nlm.nih.gov/31896129
Non-invasive forced oscillometry to quantify respiratory mechanics in term neonates
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7358118
Electrocardiographic features at rest and during exercise in young adults born preterm below 30 weeks of gestation
https://pubmed.ncbi.nlm.nih.gov/32120379
Prevalence of alcohol use in late pregnancy
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7384987
Modification of the effects of prenatal manganese exposure on child neurodevelopment by maternal anemia and iron deficiency
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7351595

Archives of Disease in Childhood - Fetal & Neonatal Edition
No new articles

Journal of Perinatology
Beractant and poractant alfa in premature neonates with respiratory distress syndrome: a systematic review of real-world evidence studies and randomized controlled trials (PDF)
https://www.nature.com/articles/s41372-020-0603-7.pdf
Respiratory syncytial virus hospitalizations in US preterm infants after the 2014 change in immunoprophylaxis guidance by the American Academy of Pediatrics (PDF)
https://www.nature.com/articles/s41372-020-0689-y.pdf
Time trends in pregnancy-related outcomes among women with type 1 diabetes mellitus, 2004–2017 (PDF)
https://www.nature.com/articles/s41372-020-0698-x.pdf
Prenatal consults with illustrated literature (PnCIL): a RCT studying visual aids during prenatal consults
https://pubmed.ncbi.nlm.nih.gov/32514007
“Your baby has Down syndrome”: what is the preferable way to inform parents?
https://pubmed.ncbi.nlm.nih.gov/32488038
Temperature instability in infants with trisomy 21 in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/32518384
Outcomes associated with surfactant in more mature and larger premature infants with respiratory distress syndrome
https://pubmed.ncbi.nlm.nih.gov/32080333
Cardiovascular response and sequelae after minimally invasive surfactant therapy in growth-restricted preterm infants
https://pubmed.ncbi.nlm.nih.gov/32377011
Less invasive surfactant administration reduces incidence of severe intraventricular haemorrage in preterms with respiratory distress syndrome: a cohort study
https://pubmed.ncbi.nlm.nih.gov/32546828
A trial comparing continuous positive airway pressure (CPAP) devices in preterm infants (PDF)
https://www.nature.com/articles/s41372-020-0690-5.pdf
Comparison of extubation success using noninvasive positive pressure ventilation (NIPPV) versus noninvasive neurally adjusted ventilatory assist (NI-NAVA)
https://pubmed.ncbi.nlm.nih.gov/31911641
Nasal continuous positive airway pressure versus noninvasive NAVA in preterm neonates with apnea of prematurity: a pilot study with a novel approach
https://pubmed.ncbi.nlm.nih.gov/32218494

Congenital cytomegalovirus infection and audiological follow-up: electrophysiological auditory threshold before 3 months of age as a predictor of hearing outcome at 3 years of age
https://pubmed.ncbi.nlm.nih.gov/32203179
Mother's own milk dose is associated with decreased time from initiation of feedings to discharge and length of stay in infants with gastroschisis (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7223788/pdf/41372_2020_Article_595.pdf
Gastrostomy tube placement in neonates undergoing tracheostomy: an opportunity to coordinate care?
https://pubmed.ncbi.nlm.nih.gov/3248314
Timing of milk expression following delivery in mothers delivering preterm very low birth weight infants: a randomized trial
https://pubmed.ncbi.nlm.nih.gov/32461626
Human milk feeding and physical growth in very low-birth-weight infants: a multicenter study
https://pubmed.ncbi.nlm.nih.gov/32507858
Global health training during neonatal fellowship: fellow and program director perspectives
https://pubmed.ncbi.nlm.nih.gov/32152489
California NICU disaster preparedness
https://pubmed.ncbi.nlm.nih.gov/32382117
Effect on metabolic bone disease markers in the neonatal intensive care unit with implementation of a practice guideline
https://pubmed.ncbi.nlm.nih.gov/32439955
Quality improvement initiative to improve mother's own milk usage till hospital discharge in very low birth weight infants from a tertiary care NICU
https://pubmed.ncbi.nlm.nih.gov/32514008

Neonatology
No new articles

American Journal of Perinatology
A framework for coordination between obstetric and pediatric providers in public health emergencies: lessons learned from the zika outbreak in the United States, 2015 to 2017
https://pubmed.ncbi.nlm.nih.gov/32438426

Journal of Neonatal-Perinatal Medicine
No new content

Maternal Health, Neonatology and Perinatology
No new content

Neoreviews
Historical perspectives: Reflections on infectious diseases in 2020
https://pubmed.ncbi.nlm.nih.gov/32737170
Suspected neonatal sepsis: Tenth clinical consensus of the Ibero-American Society of Neonatology (SIBEN)
https://pubmed.ncbi.nlm.nih.gov/32737171
Preventive strategies for respiratory syncytial virus infection in young infants
https://pubmed.ncbi.nlm.nih.gov/32737172
Prevention of health care–associated infections in the NICU
https://pubmed.ncbi.nlm.nih.gov/22451712
Abuse of antibiotics in perinatology: Negative impact for health and the economy
https://pubmed.ncbi.nlm.nih.gov/32737173
Case 1: A full-term neonate with trisomy 13 and pneumoperitoneum
https://pubmed.ncbi.nlm.nih.gov/32737174
Case 2: Multiple cranial nerve palsies in a neonate with a history of perinatal asphyxia

https://pubmed.ncbi.nlm.nih.gov/32737175
Case 3: Premature infant with bilateral choanal atresia and esophageal atresia/tracheoesophageal fistula
https://pubmed.ncbi.nlm.nih.gov/32737176
Strip of the month: Third-trimester vaginal bleeding
https://pubmed.ncbi.nlm.nih.gov/32737177
Visual diagnosis: A neonate with abnormal upper limbs and exposed bowel
https://pubmed.ncbi.nlm.nih.gov/32737178

JAMA Pediatrics
Contextualizing potential risks of medications in pregnancy for the newborn—the case of ondansetron
https://pubmed.ncbi.nlm.nih.gov/32478805
Early detection and prevention of intrauterine growth restriction and its consequences
https://pubmed.ncbi.nlm.nih.gov/32453430
Effect of nonintervention vs oral ibuprofen in patent ductus arteriosus in preterm infants: a randomized clinical trial
https://pubmed.ncbi.nlm.nih.gov/32539121
Association of intrauterine growth restriction and small for gestational age status with childhood cognitive outcomes: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/32453414
Association between fexofenadine use during pregnancy and fetal outcomes
https://pubmed.ncbi.nlm.nih.gov/32478810

BMC Pediatrics
The efficacy and safety of peripheral intravenous parenteral nutrition vs 10% glucose in preterm infants born 30 to 33 weeks' gestation: a randomised controlled trial (PDF)
https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02280-w
Colostrum oropharyngeal immunotherapy for very low birth weight preterm infants: protocol of an intervention study (PDF)
https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02266-8
Successful treatment of neonatal atrial flutter by synchronized cardioversion: case report and literature review (PDF)
https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02259-7
Using airway resistance measurement to determine when to switch ventilator modes in congenital diaphragmatic hernia: a case report (PDF)
https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02258-8

Pediatric Critical Care Medicine
Inhaled nitric oxide use in pediatric hypoxemic respiratory failure
https://pubmed.ncbi.nlm.nih.gov/32195895
Decreased brain volumes and infants with congenital heart disease undergoing venoarterial extracorporeal membrane oxygenation
https://pubmed.ncbi.nlm.nih.gov/32195905
Factors behind decline of venovenous extracorporeal membrane oxygenation to support neonatal respiratory failure
https://pubmed.ncbi.nlm.nih.gov/32195900
Extracorporeal membrane oxygenation for group b streptococcal sepsis in neonates: a retrospective study of the extracorporeal life support organization registry
https://pubmed.ncbi.nlm.nih.gov/32168303
Population pharmacokinetics of iv phenobarbital in neonates after congenital heart surgery
https://pubmed.ncbi.nlm.nih.gov/32224827

New England Journal of Medicine

Single-dose Nirsevimab for prevention of RSV in preterm infants
https://pubmed.ncbi.nlm.nih.gov/32726528

Zika Virus disease and pregnancy outcomes in Colombia
https://pubmed.ncbi.nlm.nih.gov/32757522

Correspondence: Outcomes of the neonatal trial of high-frequency oscillation at 16 to 19 years
https://pubmed.ncbi.nlm.nih.gov/32786197

Lancet

The Community-Level Interventions for Pre-eclampsia (CLIP) cluster randomised trials in Mozambique, Pakistan, and India: an individual participant-level meta-analysis
https://pubmed.ncbi.nlm.nih.gov/32828187

JAMA

Effects of liberal vs restrictive Transfusion Thresholds on survival and Neurocognitive Outcomes in extremely low-birth-weight infants: The ETTNO Randomized Clinical Trial
https://pubmed.ncbi.nlm.nih.gov/32780138

Change in the incidence of stillbirth and preterm delivery during the COVID-19 pandemic
https://pubmed.ncbi.nlm.nih.gov/32648892

BMJ

See COVID Section

Pediatric Infectious Disease Journal

Cost-analysis of withdrawing immunoprophylaxis for Respiratory Syncytial Virus in infants born at 33–35 weeks gestational age in Quebec: a multicenter retrospective study
https://pubmed.ncbi.nlm.nih.gov/32379195

Dosing of antimicrobials in the neonatal intensive care unit: does clinical practice reflect pharmacokinetics-based recommendations?
https://pubmed.ncbi.nlm.nih.gov/32677811

Differences in growth of HIV-exposed uninfected infants in Ethiopia according to timing of in-utero antiretroviral therapy exposure
https://pubmed.ncbi.nlm.nih.gov/32516280

Screening-based and risk-based strategy for the prevention of early-onset group B Streptococcus/non-group B Streptococcus sepsis in the neonate: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/32404781

Clinical value of serum amyloid-A protein, high-density lipoprotein cholesterol and apolipoprotein-A1 in the diagnosis and follow-up of neonatal sepsis
https://pubmed.ncbi.nlm.nih.gov/32251257

Neonatal early-onset infection with SARS-CoV-2 in a newborn presenting with encephalitic symptoms
https://pubmed.ncbi.nlm.nih.gov/32404789

Letters to the Editor: False-positive Syphilis serology in a neonate due to maternal immunoglobulin treatment
https://pubmed.ncbi.nlm.nih.gov/32675760

Pediatric Cardiology

No relevant content

Pediatric Neurology

Brain damage and visuospatial impairments: exploring early structure-function associations in children born very preterm (PDF)

https://www.pedneur.com/article/S0887-8994(20)30029-1/pdf
Visual perceptual skills in very preterm children: developmental course and associations with neural activation
https://pubmed.ncbi.nlm.nih.gov/32466865

Obstetrics and Gynecology
Time of birth and the risk of severe unexpected complications in term singleton neonates
https://pubmed.ncbi.nlm.nih.gov/32649496

American Journal of Obstetrics & Gynecology
Metformin use in obese mothers is associated with improved cardiovascular profile in the offspring
https://pubmed.ncbi.nlm.nih.gov/32017923
Neonatal mortality in the United States is related to location of birth (hospital versus home) rather than the type of birth attendant
https://pubmed.ncbi.nlm.nih.gov/32044310
Severe and progressive neuronal loss in myelomeningocele begins before 16 weeks of pregnancy
https://pubmed.ncbi.nlm.nih.gov/32283072
Visualization of severe acute respiratory syndrome coronavirus 2 invading the human placenta using electron microscopy
https://pubmed.ncbi.nlm.nih.gov/32405074
Fetal interventions in the setting of the coronavirus disease 2019 pandemic: statement from the North American Fetal Therapy Network
https://pubmed.ncbi.nlm.nih.gov/32348742
Maternal deaths with coronavirus disease 2019: a different outcome from low- to middle-resource countries?
https://pubmed.ncbi.nlm.nih.gov/32348744

Hospital Pediatrics
Transitioning children with medical complexity from hospital to home health care: implications for hospital-based clinicians
https://pubmed.ncbi.nlm.nih.gov/32631842
Parent perceptions and experiences regarding medication education at time of hospital discharge for children with medical complexity
https://pubmed.ncbi.nlm.nih.gov/32737165

ADDITIONAL JOURNAL SELECTIONS
Hydrogen sulfide, oxygen, and calcium regulation in developing human airway smooth muscle
Bartman CM, Schiliro M, Helan M, et al. FASEB J.
https://www.ncbi.nlm.nih.gov/pubmed/32777143

Targeting bronchopulmonary dysplasia-associated pulmonary hypertension (BPD-PH): potential role of the FGF signaling pathway in the development of the pulmonary vascular system
Chao CM, Chong L, Chu X, et al. Cells.
https://www.ncbi.nlm.nih.gov/pubmed/32796770

Long non-coding RNA MALAT1 targeting STING transcription promotes bronchopulmonary dysplasia through regulation of CREB
Chen JH, Feng DD, Chen YF, et al. J Cell Mol Med.
https://www.ncbi.nlm.nih.gov/pubmed/32812343

Prevention of oxygen-induced inflammatory lung injury by caffeine in neonatal rats
Endesfelder S, Strauß E, Bendix I, et al. Oxid Med Cell Longev.

https://www.ncbi.nlm.nih.gov/pubmed/32831996

Inhaled vitamin A is more effective than intramuscular dosing in mitigating hyperoxia-induced lung injury in a neonatal rat model of bronchopulmonary dysplasia
Gelfand CA, Sakurai R, Wang Y et al. Am J Physiol Lung Cell Mol Physiol.
https://www.ncbi.nlm.nih.gov/pubmed/32755324

Maternal progesterone treatment reduces maternal inflammation-induced fetal brain injury in a mouse model of preterm birth
Ginsberg Y, Gutziet O, Hadad S, et al. Reprod Sci.
https://www.ncbi.nlm.nih.gov/pubmed/32833191

Improving lung aeration in ventilated newborn preterm rabbits with a partially aerated lung
Pryor EJ, Kitchen MJ, Croughan MK, et al. J Appl Physiol (1985).
https://www.ncbi.nlm.nih.gov/pubmed/32816641

Melatonin for prevention of fetal lung injury associated with intrauterine inflammation and for improvement of lung maturation
Lee JY, Na Q, Shin NE, et al. J Pineal Res.
https://www.ncbi.nlm.nih.gov/pubmed/32737901

*Maternal administration of probiotics promotes gut development in mouse offspring's maturation and prevent prematurity-associated neonatal disorders.
Yu Y, Lu J, Oliphant K, et al. PLoS One.
https://www.ncbi.nlm.nih.gov/pubmed/32764797

Caffeine restores background EEG activity independent of infarct reduction after neonatal hypoxic ischemic brain injury
Sun H, Gonzalez F and McQuillen PS. Dev Neurosci.
https://www.ncbi.nlm.nih.gov/pubmed/32810862

Clinical
Respiratory and cardiopulmonary limitations to aerobic exercise capacity in adults born preterm
Duke JW and Lovering AT. J Appl Physiol (1985).
https://www.ncbi.nlm.nih.gov/pubmed/32790592

Oxidative stress markers and the retinopathy of prematurity
Graziosi A, Perrotta M, Russo D, et al. J Clin Med.
https://www.ncbi.nlm.nih.gov/pubmed/32825796

Appropriate phosphorus intake by parenteral nutrition prevents metabolic bone disease of prematurity in extremely low birth weight infants
Motokura K, Tomotaki S, Hanaoka S, et al. JPEN J Parenter Enteral Nutr.
https://www.ncbi.nlm.nih.gov/pubmed/32789876

Maternal diabetes mellitus as an independent risk factor for clinically significant retinopathy of prematurity severity in neonates less than 1500g
Opara CN, Akintorin M, Byrd A, et al. PLoS One.
https://www.ncbi.nlm.nih.gov/pubmed/32745146

Changes in parental smoking during pregnancy and risks of adverse birth outcomes and childhood overweight in Europe and North America: An individual participant data meta-analysis of 229,000 singleton births

Philips EM, Santos S, Trasande L, et al. PLoS Med.
https://www.ncbi.nlm.nih.gov/pubmed/32810184

Efficacy of noninvasive respiratory support modes as postextubation respiratory support in preterm neonates: A systematic review and network meta-analysis
Ramaswamy VV, Bandyopadhyay T, Nanda D, et al. Pediatr Pulmonol.
https://www.ncbi.nlm.nih.gov/pubmed/32757365

The relationship between oxidative stress, intermittent hypoxemia, and hospital duration in moderate preterm infants
Shah VP, Raffay TM, Martin RJ, et al. Neonatology.
https://www.ncbi.nlm.nih.gov/pubmed/32799210

The efficacy and safety of peripheral intravenous parenteral nutrition vs 10% glucose in preterm infants born 30 to 33 weeks' gestation: a randomised controlled trial
Suganuma H, Bonney D, Andersen CC, et al. BMC Pediatr.
https://www.ncbi.nlm.nih.gov/pubmed/32799841

Clinical characteristics, prognostic factors, and maternal and neonatal outcomes of SARS-CoV-2 infection among hospitalized pregnant women: a systematic review
Turan O, Hakim A, Dashraath P, et al. Int J Gynaecol Obstet.
https://www.ncbi.nlm.nih.gov/pubmed/32816307

Erythropoietin prevents necrotizing enterocolitis in very preterm infants: a randomized controlled trial
Wang Y, Song J, Sun H, et al. J Transl Med.
https://www.ncbi.nlm.nih.gov/pubmed/32771013