Women and Children’s Current Awareness Bulletin
June 2021

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Title: Sleep practices in pediatric cancer patients: Indirect effects on sleep disturbances and symptom burden

Citation: Psycho - Oncology; Jun 2021; vol. 30 (no. 6); p. 910

Author(s): Daniel, Lauren C; Meltzer, Lisa J; J Yael Gross; Flannery, Jamie L; Forrest, Christopher B; Barakat, Lamia P

Objective: Sleep hygiene recommendations are commonly given to address patient-reported concerns about sleep, yet few studies have examined the relationship between sleep hygiene and sleep disturbances in the context of pediatric oncology. Because poor sleep may affect the patient's experience of cancer-related symptoms, understanding whether sleep hygiene practices influence sleep disturbances and symptoms may be important to improving symptom burden.

Methods: One hundred and two caregivers of children ages 5–17 and 59 patients ages 8–17 receiving treatment for cancer completed parallel measures of child sleep, sleep hygiene, pain, fatigue, and nausea. Sleep hygiene practices were described, correlates between measures were examined, and the indirect relationship of sleep hygiene on symptom burden through sleep disturbances was tested using PROCESS.

Results: Patients received adequate sleep for age but sleep timing was later than recommended for more than half of the sample and consistency in sleep times was poor. Sleep disturbances were moderately related to all symptoms, with the exception of patient-reported fatigue. Consistent sleep habits were indirectly related to fewer cancer-related symptoms of pain, fatigue, and nausea through sleep disturbances by caregiver report but not patient report.

Conclusion: Sleep disturbances are closely related to pain, fatigue, and nausea in pediatric cancer. Consistency in sleep/wake routines and schedules may be important to experiencing fewer sleep disturbances and lower symptom burden. Providing recommendations supporting consistent sleep habits broadly across pediatric oncology may be more effective than only presenting sleep hygiene recommendations to patients experiencing poor sleep.

Title: Comparison of malnutrition and malnutrition screening tools in pediatric oncology patients: A cross-sectional study

Citation: Nutrition; Jun 2021; vol. 86

Author(s): Bicakli, Derya Hopanci; Kantar, Mehmet

Objectives: The aim of this study was to determine the prevalence of malnutrition, to compare nutritional evaluation tools, and to highlight the importance of nutritional status in pediatric oncology patients.

Methods: This study evaluated the nutritional status, based on height, weight, and midupper arm circumference, of 170 patients ages 5 months to 18 years who were hospitalized at the Ege University Hospital Pediatric Oncology Clinic. The prevalence of malnutrition was determined using the malnutrition screening tools, STRONGkids (SK) and Pediatric Yorkhill Malnutrition Score (PYMS). Correlations, sensitivity, specificity, and the positive and negative predictive values between the screening tools were calculated.

Results: In all, 68.2% of the patients were diagnosed with a solid tumor. According to SK, 59.4% had a moderate risk of malnutrition, and 40.6% had a high risk. According to PYMS, 30.6% of patients had a low to moderate risk of malnutrition, and 69.4% had a high risk of malnutrition. Minimal agreement was noted between SK and PYMS (Kappa value: 0.40 and
The sensitivity of PYMS was higher than that of SK (92.68 and 78.05, respectively). In total, 22.9% of the patients had a body mass index of <5%, and 21.2% had a midupper arm circumference of <5.

**Conclusions:** The present findings show that, in general, pediatric oncology patients have a high risk of malnutrition. Although SK and PYMS do not differ significantly, PYMS has higher sensitivity for detecting malnutrition. The nutritional status of pediatric oncology patients should be monitored using appropriate screening techniques throughout their treatment.

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**Title:** When Reality and Research Collide: Guidelines Are Essential for Optimal Nutrition Care in Pediatric Oncology.

**Citation:** Journal of pediatric hematology/oncology; May 2021

**Author(s):** Ringwald-Smith, Karen; Hill, Rachel; Evanoff, Lisa; Martin, Jenna; Sacks, Nancy

**Abstract:** Nutritional problems are common in pediatric oncology due to the side effects of the disease and treatment. Nutrition intervention can be challenging, and little is known about the current clinical practice of registered dietitian nutritionists. An online questionnaire emailed to members of the pediatric, oncology nutrition, and clinical manager practice groups of the Academy of Nutrition and Dietetics, consisted of items related to current nutrition practice. Our questionnaire results suggest that the field of pediatric oncology is employed with relatively new dietitians (62% had <5 y of experience). Many registered dietitian nutritionists (60%) are providing care across the cancer care continuum (standard therapy, transplant, and survivorship) versus specializing in a particular area. Approximately half (52%) felt that their center had inadequate staffing, many reporting little in the outpatient setting. Barriers to providing optimal patient care included inadequate staffing, lack of time for research initiatives, and lack of evidence-based guidelines. Future studies should determine follow-up guidelines and appropriate staffing ratios for nutrition care in pediatric oncology. Approaches should be developed to support less experienced dietitians. Collaboration between dietitians at different facilities will likely be key in developing essential evidence-informed guidelines.

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**Title:** Compassion in pediatric oncology: a patient, parent and healthcare provider empirical model.

**Citation:** Psycho-oncology; May 2021

**Author(s):** Sinclair, Shane; Bouchal, Shelley Raffin; Schulte, Fiona; Guicher, Gregory M T; Kuhn, Susan; Rapoport, Adam; Punnett, Angela; Fernandez, Conrad V; Letourneau, Nicole; Chung, Joanna

**Objective:** Compassion has long been considered a cornerstone of quality pediatric healthcare by patients, parents, healthcare providers and systems leaders. However, little dedicated research on the nature, components and delivery of compassion in pediatric settings has been conducted. This study aimed to define and develop a patient, parent, and healthcare provider informed empirical model of compassion in pediatric oncology in order to begin to delineate the key qualities, skills and behaviours of compassion within pediatric healthcare.

**Methods:** Data was collected via semi-structured interviews with pediatric oncology patients (n=33), parents (n=16) and healthcare providers (n=17) from 4 Canadian academic medical centers and was analyzed in accordance with Straussian Grounded Theory.
Results: Four domains and 13 related themes were identified, generating the Pediatric Compassion Model, that depicts the dimensions of compassion and their relationship to one another. A collective definition of compassion was generated—a beneficent response that seeks to address the suffering and needs of a person and their family through relational understanding, shared humanity, and action.

Conclusions: A patient, parent, and healthcare provider informed empirical pediatric model of compassion was generated from this study providing insight into compassion from both those who experience it and those who express it. Future research on compassion in pediatric oncology and healthcare should focus on barriers and facilitators of compassion, measure development, and intervention research aimed at equipping healthcare providers and system leaders with tools and training aimed at improving it. This article is protected by copyright. All rights reserved.

Title: Identifying clinical practice guidelines for symptom control in pediatric oncology.

Citation: Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer; May 2021

Author(s): Robinson, Paula D; Tomlinson, Deborah; Beauchemin, Melissa; Gibson, Paul; Grimes, Allison; Dadzie, Grace; Safi, Maryam; Vettese, Emily; Dupuis, L Lee; Sung, Lillian

Background: Children with cancer commonly experience distressing symptoms such as pain, fatigue and nausea. Improvements in patient outcomes have been associated with implementation of clinical practice guideline-consistent care across several domains. The objective of this study was to develop a process to identify symptom management clinical practice guidelines (CPGs) applicable to children and adolescents receiving cancer treatments.

Methods: We focused on identifying CPGs to manage 15 symptoms. The process defined three Tiers of CPGs based upon applicability to pediatric cancer patients and ease of identification: Tier 1: endorsed by the Children’s Oncology Group; Tier 2: housed in the Emergency Care Research Institute repository, or developed by the American Society of Clinical Oncology or National Institute for Health and Care Excellence; and Tier 3: identified by systematic review. We first searched for CPGs published 2015-2020 and identified Tiers 1 or 2 CPGs. If unavailable or scope was too narrow, we proceeded to Tier 3. If CPGs were not identified, we repeated these steps for CPGs published 2010-2014.

Results: There were six Tier 1 and 13 Tier 2 CPGs published 2015-2020 across the 15 symptoms. Four symptoms required progression to Tier 3 because CPGs were absent (anger) or because scope was too narrow (pain, anorexia/excessive hunger and diarrhea). The systematic review identified three CPGs for pain and none for the other three symptoms. In total, CPGs were identified for 14 of 15 symptoms. None were identified for anger.

Conclusion: We created a process to identify supportive care CPGs for pediatric cancer symptom management and were able to identify CPGs that addressed 14 of 15 symptoms. Future work should focus on evaluating implementation techniques for these CPGs and determining the impact of these CPGs on provider and patient outcomes.
Title: Implementing and Evaluating a Standardized New Diagnosis Education Checklist: A Report From the Children’s Oncology Group.

Citation: Journal of pediatric oncology nursing : official journal of the Association of Pediatric Oncology Nurses; May 2021 ; p. 10434542211011059
Author(s): Duffy, Elizabeth A; Herriage, Teresa; Ranney, Lori; Tena, Nancy

Abstract: When a child is newly diagnosed with cancer, parents report feeling overwhelmed with the amount of information that they must process in order to safely care for their child at home. The Children’s Oncology Group (COG) Nursing Discipline has focused on examining current practices for educating families of children newly diagnosed with cancer, and developing tools to enhance the process of patient/family education at the time of diagnosis, including development of a COG Standardized Education Checklist, which classifies education into primary, secondary, and tertiary topics. The COG Nursing Discipline awarded nursing fellowships to two doctorally prepared nurses practicing at two distinct COG institutions to evaluate the checklist implementation. This project addressed the primary topics on the checklist essential to safely care for the child at home following the first hospital discharge. Checklist feasibility was determined by the proportion of checklists completed. Checklist fidelity was determined by review of documentation on the checklist regarding educational topics covered, learner preferences, and methods used. Checklist acceptability was assessed through parent/caregiver and nurse feedback. Project implementation occurred over a 5-month period and involved 69 newly diagnosed families. Implementation of the checklist was feasible (81%), with moderate fidelity to checklist topics taught across the two sites. Verbal instruction and written documentation were the most prevalent form of education. The return rate for the parent/caregiver and nurse acceptability questionnaires was moderate to low (68% and 12%, respectively), parent/caregiver feedback was positive and acceptability among responding nurses was high, with 92% of nurses identifying the primary checklist as useful.

Title: Screen time and developmental and behavioral outcomes for preschool children.

Citation: Pediatric research; May 2021
Author(s): McArthur, Brae Anne; Tough, Suzanne; Madigan, Sheri

Background: One pressing question in the field of pediatrics is whether a dose-response relation is observed between hours of screen time and child outcomes. This study examined the association between hours of screen time (≤1 vs 2 vs ≥3 h/day) and children’s developmental and behavioral outcomes.

Methods: This study included data from 1994 mothers and children in Calgary, Canada, drawn from the All Our Families cohort. At 36 months, children's screen time (h/day), behavior problems, developmental milestones, and vocabulary acquisition were assessed via maternal report. Socio-demographic factors and baseline levels of performance at 24 months were included as covariates.

Results: Compared to ≤1 h/day (47%; n = 935), children using screens 2 h (36%; n = 725) or ≥3 h/day (17%; n = 333) had an increased likelihood of reported behavioral problems (adjusted odds ratio (AOR) 1.30-1.90), delayed achievement of developmental milestones (AOR 1.41-1.68), and poorer vocabulary acquisition (AOR 1.94).

Conclusions: At 36 months, an association was observed between screen time and children's developmental, language, and behavioral outcomes, suggesting that duration of
screen time is associated with poor child development outcomes. Findings provide support for screen time guidelines and emphasize the need for childcare professionals to discuss screen time guidelines with families.

**Impact:** International guidelines recommend that preschoolers spend no more than 1 h/day viewing screens. Research is needed to determine if there is a relation between screen time levels and child developmental and behavioral outcomes. Compared to ≤1 h/day, children viewing screens 2 or ≥3 h/day had an increased likelihood of behavioral problems, delayed achievement of developmental milestones, and poorer vocabulary acquisition. Findings highlight the association between duration of screen time and factors of child development.

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**Title:** Bacteremia in Febrile, Non-neutropenic, and Well-appearing Children With Cancer.

**Citation:** Journal of pediatric hematology/oncology; May 2021

**Author(s):** Beauchemin, Melissa; Marshall, Alison F; Ricci, Angela M; Lopez, Ibis D; Yao, Yujing; Lee, Alice; Jin, Zhezhen; Sulis, Maria L

**Abstract:** Fever in a neutropenic pediatric oncology patient requires prompt assessment due to the risk of infectious complications. The appropriate management of fever in non-neutropenic patients, however, is not well-established. We describe the rate of bacteremia in a cohort of non-neutropenic pediatric oncology patients with fever at a large institution. Patients were included if they presented to the emergency department or outpatient clinic between 2009 and 2014 with fever, had a central venous catheter (CVC), and were not neutropenic. Three hundred eighty-six episodes of fever occurring in 159 patients were included in the data analysis. Fifty-nine percent of patients were male, 41% had a diagnosis of acute lymphoblastic leukemia, and 90% had a port-a-cath as CVC. The rate of bacteremia was 3.4%; presence of a port-a-cath was protective against bacteremia whereas a white blood cell count >20,000/mm^3^ was associated with a higher likelihood of bacteremia. Gram-positive microorganisms were most commonly isolated (64.3%) and frequently resistant to cephalosporins. In summary, in our study, the rate of bacteremia was low among non-neutropenic, well-appearing pediatric cancer patients with a CVC and was not associated with any serious medical complications. Prospective research is needed to determine the most appropriate management of these patients.

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**Title:** Do allergic clinical manifestations increase the risk of behavioral problems in children? A cross-sectional study.

**Citation:** Pediatric allergy and immunology : official publication of the European Society of Pediatric Allergy and Immunology; May 2021

**Author(s):** Yamaguchi, Chikae; Ebara, Takeshi; Futamura, Masaki; Ohya, Yukihiro; Asano, Midori

**Background:** Children with allergic clinical manifestations tend to have behavioral or emotional problems such as hyperactivity or worse mental health. However, previous studies on this association did not adequately adjust for confounders like parenting stress, demographic characteristics, or allergy presentation. This study aimed to investigate the relationship between childhood allergic clinical manifestations and behavioral problems, adjusting for confounders like demographic characteristics, parenting stress, and allergy-related variables.
**Methods:** We conducted an online cross-sectional survey among caregivers of children aged 2-6 years (n=633). The Strengths and Difficulties Questionnaire (SDQ) was used to determine children's behavioral characteristics as the primary outcome. Allergic clinical manifestations, wheeze, rash, and nose symptoms were the exposure variables. Associations were estimated using logistic regression analyses with propensity scores to adjust for confounders.

**Results:** We analyzed 633 caregivers of children aged 2-6 years (valid rate, 61.5%). Univariate analyses showed that wheezing was associated with conduct problems (odds ratio [OR]=1.48, 95% confidence interval [CI]:1.01-2.16), a behavioral component of the SDQ. Rash was also associated with hyperactivity (OR=1.62, 95% CI: 1.02-2.57). Furthermore, nose symptoms were associated with conduct problems (OR=1.65, 95% CI:1.16-2.33) and emotional symptoms (OR=1.62, 95% CI:1.06-2.45). After adjusting for potential confounders, wheezing (adjusted OR=1.69, 95% CI:1.04-2.75) and nose symptoms (adjusted OR=1.56, 95% CI: 1.05-2.34) remained associated with conduct problems.

**Conclusions:** This study revealed that a history of wheezing and nose symptoms in children is associated with an increased risk of behavioral problems, in particular, conduct problems.

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**Title:** Women in a situation of homelessness and violence: a single-case study using the photo-elicitation technique.

**Citation:** BMC women's health; May 2021; vol. 21 (no. 1); p. 216

**Author(s):** Posada-Abadía, Clara Isabel; Marín-Martín, Carolina; Oter-Quintana, Cristina; González-Gil, María Teresa

**Background:** Violence against women places them in a vulnerable position with regard to homelessness. Although sometimes invisible, women's homelessness is a complex reality shrouded in dramatic biographies that should be sensitively addressed to avoid revictimization.

**Methods:** With the aim of understanding the chaotic discourse of homeless women's experiences of violence, a qualitative single-case study was conducted using the photo-elicitation technique. Data were analyzed in accordance with grounded theory.

**Results:** The participant's discourse could be summarized in the following categories: "Living in a spiral of violence", "Confronting vulnerability and violence", "Being a strong woman", "New family networks", "Re-building mother-child relationships", and "Nurturing spiritual wellbeing".

**Conclusions:** Supporting homelessness women requires an approach that focuses on the prevention of re-victimization and the consequences of violence in terms of physical and mental health. Shelters are spaces of care for recovery and represent referential elements for the re-construction of self.

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**Title:** The Impact of Adverse Childhood Events on the Sexual and Mental Health of Women Experiencing Intimate Partner Violence.

**Citation:** Journal of interpersonal violence; Jun 2021; vol. 36 (no. 11-12); p. 5145-5166

**Author(s):** Willie, Tiara C; Kershaw, Trace; Sullivan, Tami P

**Abstract:** Women experiencing intimate partner violence (IPV) are at an increased risk of engaging in sexual risk behaviors and experiencing depressive and posttraumatic stress.
symptoms. Adverse childhood events (ACEs) can put women at increased risk of poor sexual and mental health. Women experiencing IPV report ACEs, but few studies have examined the heterogeneity in women’s experiences of ACEs and its effects on sexual and mental health. Therefore, the current study used latent profile analysis to identify profiles of ACEs (i.e., witnessing maternal and paternal IPV victimization; childhood physical, sexual, and emotional abuse; and physical and emotional neglect) and their association with sexual risk behaviors and depressive and posttraumatic stress symptoms. Women experiencing IPV aged 18 to 58 years (N = 212) were recruited from community establishments and completed face-to-face, computer-assisted interviews. Three profiles were identified: Low ACEs class (n = 115), Moderate ACEs class (n = 62), and High ACEs class (n = 35). Path analyses revealed that profiles of ACEs directly predicted women’s IPV victimization severity and depressive and posttraumatic stress symptoms. Secondary and tertiary mental health interventions may be more effective if the heterogeneity in women’s ACEs is addressed by integrating intervention strategies specific to these ACE subgroups.

Title: Impact of Yoga on Mental Health and Sleep Quality Among Mothers of Children With Intellectual Disability.

Citation: Alternative therapies in health and medicine; Jun 2021; vol. 27; p. 128-132

Author(s): Ullas, Karpakam; Maharana, Satyapriya; Metri, Kashinath G; Gupta, Ashish; Nagendra, H R

Objectives: Caring for a child with Intellectual Disability Disorder (IDD) is a tremendously stressful task for any mother, leading to poor mental health and compromised quality of life. Anxiety, depression, stress, and poor sleep quality are frequently observed in mothers with Intellectual Disability Disorder child. This study assessed the impact of a 1-month yoga intervention on anxiety, depression, stress and sleep quality in mothers of children with intellectual disabilities.

Methods: We selected 53 mothers of children with intellectual disabilities between the age of 30 and 50 years (mean age, 40.2 ± 7.1 years). Of these mothers, 28 received 1.5 hours of integrated yoga practice consisting of physical postures, breathing techniques, relaxation techniques and meditation every other day for 1 month. The remaining 25 mothers, who served as the control group, participated in a group discussion session twice a week for 1 month.

Main Outcome Measures: All mothers were assessed for anxiety and depression with the Hospital Anxiety and Depression Scale (HADS), stress with the Perceived Stress Scale (PSS), and sleep quality with the Pittsburgh Sleep Quality Index (PSQI) at baseline and at 1 month.

Results: Significant improvements in anxiety (-24.8%; P < .001), depression (-15.9%; P < .001), sleep quality (-25.1%; P < .05) and stress (-11.4%; P < .001) were observed after 1 month compared with baseline in the yoga group. In a similar fashion, a significant decrease in anxiety (-12.3%; P < .001), depression (-8.6%; P < .001) and sleep quality (-5.6%; P < .001) was seen in the control group as well. The between-group comparison of post-intervention scores revealed a significantly better improvement in anxiety (P < .001), depression (P < .001), perceived stress (P < .001) and sleep quality (P = .012) in the yoga group compared with the control group.

Conclusions: Our study indicates that yoga can be used as an effective intervention to improve psychopathology and sleep quality in mothers of children with intellectual disabilities. We recommend future randomized controlled trials with larger sample sizes and of longer duration to study the long-term effects of yoga.
Title: Effect of the COVID-19 Pandemic on Patient Volumes, Acuity, and Outcomes in Pediatric Emergency Departments: A Nationwide Study.

Citation: Pediatric emergency care; Jun 2021

Author(s): Finkelstein, Yaron; Maguire, Bryan; Zemek, Roger; Osmanlliu, Esli; Kam, April J; Dixon, Andrew; Desai, Neil; Sawyer, Scott; Emsley, Jason; Lynch, Tim; Mater, Ahmed; Schuh, Suzanne; Ruman, Carrie; Freedman, Stephen B; Pediatric Emergency Research Canada (PERC)

Objectives: The aim of this study was to quantify the effect of the COVID-19 pandemic on pediatric emergency department (ED) utilization and outcomes.

Methods: This study is an interrupted-time-series observational study of children presenting to 11 Canadian tertiary-care pediatric EDs. Data were grouped into weeks in 3 study periods: prepandemic (January 1, 2018-January 27, 2020), peripandemic (January 28, 2020-March 10, 2020), and early pandemic (March 11, 2020-April 30, 2020). These periods were compared with the same time intervals in the 2 preceding calendar years. Primary outcomes were number of ED visits per week. The secondary outcomes were triage acuity, hospitalization, intensive care unit (ICU) admission, mortality, length of hospital stay, ED revisits, and visits for trauma and mental health concerns.

Results: There were 577,807 ED visits (median age, 4.5 years; 52.9% male). Relative to the prepandemic period, there was a reduction [-58%; 95% confidence interval (CI), -63% to -51%] in the number of ED visits during the early-pandemic period, with concomitant higher acuity. There was a concurrent increase in the proportion of ward [odds ratio (OR), 1.39; 95% CI, 1.32-1.45] and intensive care unit (OR, 1.20; 95% CI, 1.01-1.42) admissions, and trauma-related ED visits among children less than 10 years (OR, 1.51; 95% CI, 1.45-1.56). Mental health-related visits in children declined in the early-pandemic period (in <10 years, -60%; 95% CI, -67% to -51%; in children ≥10 years: -56%; 95% CI, -63% to -47%) relative to the pre-COVID-19 period. There were no differences in mortality or length of stay; however, ED revisits within 72 hours were reduced during the early-pandemic period (percent change: -55%; 95% CI, -61% to -49%; P < 0.001).

Conclusions: After the declaration of the COVID-19 pandemic, dramatic reductions in pediatric ED visits occurred across Canada. Children seeking ED care were sicker, and there was an increase in trauma-related visits among children more than 10 years of age, whereas mental health visits declined during the early-pandemic period. When faced with a future pandemic, public health officials must consider the impact of the illness and the measures implemented on children’s health and acute care needs.

Title: Functional Outcomes of Talectomy in Pediatric Feet.

Citation: Foot & Ankle International; May 2021; vol. 42 (no. 5); p. 609-615

Author(s): Al-Mohrej ; Almarshad, Abdullah Y.; Alhusainan, Thamer S.

Background: Historically, talectomy has been predominantly performed to operatively treat severely rigid equinovarus feet. A limited number of investigators have studied functional outcomes in pediatric patients posttalectomy. We aimed to assess the outcomes of pediatric patients undergoing talectomy using the American Orthopaedic Foot & Ankle Society (AOFAS) score and a subjective survey of patients' and their caregivers' satisfaction.

Methods: We performed a retrospective cohort study that included 31 patients with nonidiopathic severely rigid talipes equinovarus, in a single center, using consecutive
sampling. All medical records of those patients were reviewed, and relative data were extracted. The AOFAS score was used to measure the outcomes during the last visit (April 2020). Satisfaction was evaluated in a binary manner by questioning the patients and their caregivers if they would undergo the same surgery again for the same result.

**Results:** Thirty-one patients were included. Myelomeningocele was the primary diagnosis in 13 patients (41.9%), and arthrogryposis was diagnosed in 11 patients (35.5%). Twenty-two patients had bilateral procedures. The mean age at the time of surgery was 6.0 ± 3.0 years, and the mean follow-up was 6.0 ± 1.0 years. Plantigrade feet following the primary surgery were achieved in 88.5% of cases. Postoperatively, braces were well tolerated in 86.5% of patients. Deformity recurrence was observed in 21.2% of patients, and 17.3% of patients required subsequent surgeries. Patients with arthrogryposis had significantly higher AOFAS scores than those with myelomeningocele and other diagnoses (P =.017). Further, patients who tolerated braces had higher AOFAS scores than those who did not tolerate braces (P =.006). However, patients who developed hindfoot varus and dorsal bunion postoperatively had lower AOFAS scores (P = .054 and P = .006, respectively). Patients who had recurrent deformities or required further surgeries also had lower AOFAS scores (P = .025 and P = .015, respectively). Although 17.3% of patients were not able to comment about their satisfaction due to their general medical condition, 63.5% of patients reported that they were satisfied. Furthermore, 75.0% of caregivers were satisfied with the outcomes and their children's functional status posttalectomy.

**Conclusion:** The observed outcomes of primary and salvage talectomies demonstrate the general overall effectiveness of this operative intervention as an end-stage treatment for pediatric patients with severely rigid talipes equinovarus. Level of Evidence: Level III; retrospective cohort study.

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**Title:** How not to miss infective causes of hip pain in children.

**Citation:** British Journal of Hospital Medicine (17508460); May 2021; vol. 82 (no. 5); p. 1-8

**Author(s):** Oliver ; Sinha, Pranab; Khwaja, Murtaza; Thilagarajah, Michael

**Abstract:** A referral from accident and emergency for a child with hip pain is a scenario commonly faced by orthopaedic juniors on call. The list of differentials is vast and can make assessment and diagnosis challenging, with severe consequences if diagnosis is delayed or missed. Three common causes of paediatric hip pain are septic arthritis, transient synovitis and osteomyelitis. These can all present as a child with atraumatic hip pain, irritability, fever and refusal to weight bear. Differentiating between them can be challenging. A thorough history and examination, combined with appropriate investigations and imaging, is essential. Early diagnosis and prompt treatment are key to reducing irreversible secondary sequelae of joint destruction and long-term functional impairment.

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**Title:** Orthoplastic management of open tibial fractures in children: a consecutive five-year series from a paediatric major trauma centre.

**Citation:** The bone & joint journal; Jun 2021; vol. 103

**Author(s):** Smith, James Richard Alexander; Fox, Clare E; Wright, Thomas C; Khan, Umraz; Clarke, Anna M; Monsell, Fergal P

**Aims:** Open tibial fractures are limb-threatening injuries. While limb loss is rare in children, deep infection and nonunion rates of up to 15% and 8% are reported, respectively. We
manage these injuries in a similar manner to those in adults, with a combined orthoplastic approach, often involving the use of vascularised free flaps. We report the orthopaedic and plastic surgical outcomes of a consecutive series of patients over a five-year period, which includes the largest cohort of free flaps for trauma in children to date.

**Methods:** Data were extracted from medical records and databases for patients with an open tibial fracture aged < 16 years who presented between 1 May 2014 and 30 April 2019. Patients who were transferred from elsewhere were excluded, yielding 44 open fractures in 43 patients, with a minimum follow-up of one year. Management was reviewed from the time of injury to discharge. Primary outcome measures were the rate of deep infection, time to union, and the Modified Enneking score.

**Results:** The mean age of the patients was 9.9 years (2.8 to 15.8), and 28 were male (64%). A total of 30 fractures (68%) involved a motor vehicle collision, and 34 (77%) were classified as Gustilo Anderson (GA) grade 3B. There were 17 (50%) GA grade 3B fractures, which were treated with a definitive hexapod fixator, and 33 fractures (75%) were treated with a free flap, of which 30 (91%) were scapular/parascapular or anterolateral thigh (ALT) flaps. All fractures united at a median of 12.3 weeks (interquartile range (IQR) 9.6 to 18.1), with increasing age being significantly associated with a longer time to union (p = 0.005). There were no deep infections, one superficial wound infection, and the use of 20 fixators (20%) was associated with a pin site infection. The median Enneking score was 90% (IQR 87.5% to 95%). Three patients had a bony complication requiring further surgery. There were no flap failures, and eight patients underwent further plastic surgery.

**Conclusion:** The timely and comprehensive orthoplastic care of open tibial fractures in this series of patients aged < 16 years resulted in 100% union and 0% deep infection, with excellent patient-reported functional outcomes. Cite this article: Bone Joint J 2021;103-B(6):1160-1167.

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**Title:** Preconception depression and anxiety symptoms and maternal-infant bonding: a 20-year intergenerational cohort study.

**Citation:** Archives of Women's Mental Health; Jun 2021; vol. 24 (no. 3); p. 513-523

**Author(s):** Olsson ; Spry, Elizabeth A.; Alway, Yvette; Moreno-Betancur, Margarita; Youssef, George; Greenwood, Christopher; Letcher, Primrose; Macdonald, Jacqui A.; McIntosh, Jennifer; Hutchinson, Delyse; Patton, George C.

**Abstract:** Early maternal-infant bonding problems are often forerunners of later emotional and behavioural difficulties. Interventions typically target the perinatal period but many risks may be established well before pregnancy. Here we examine the extent to which adolescent and young adult depression and anxiety symptoms predict perinatal maternal-infant bonding difficulties. The Victorian Intergenerational Health Cohort Study (VIHCS, est. 2006) is following offspring born to the Victorian Adolescent Health Cohort Study (VAHCS; est. 1992). VAHCS participants were assessed for depression and anxiety symptoms nine times during adolescence and young adulthood (age 14–29 years), and then contacted bi-annually (from age 29–35 years) to identify pregnancies. The Postpartum Bonding Questionnaire (PBQ) was administered to mothers at 2 and 12 months postpartum. A total of 395 women (606 infants) completed the 2-month and/or 12-month postpartum interviews. For most infants (64%), mothers had experienced depression and/or anxiety before pregnancy. Preconception depression and anxiety symptoms that persisted from adolescence into young adulthood predicted maternal-infant bonding problems at 2 months (β = 0.30, 95% CI 0.04, 0.55) and 12 months postpartum (β = 0.40, 95% CI 0.16, 0.63). Depression and anxiety symptoms occurring in young adulthood only, also predicted bonding problems at 12 months postpartum (β = 0.37, 95% CI 0.02, 0.71). Associations between preconception...
depression and anxiety symptoms and anxiety-related maternal-infant bonding problems at 12 months postpartum remained after adjustment for antenatal and concurrent postpartum depressive symptoms. This study puts forward a case for extending preconception health care beyond contraception and nutrition to a broader engagement in supporting the mental health of young women from adolescence.

Title: Mental health problems and fear of childbirth: A cohort study of women in an inner-city maternity service.

Citation: Birth: Issues in Perinatal Care; Jun 2021; vol. 48 (no. 2); p. 230-241
Author(s): Nath; Lewis, Lucy N.; Bick, Debra; Demilew, Jill; Howard, Louise M.

Objectives: To estimate the population prevalence of severe fear of childbirth (FOC) during pregnancy and investigate its association with: (a) antenatal common mental disorders (depression and anxiety disorder) and (b) elective cesarean birth.

Methods: 545 participants from an inner-city London maternity population were interviewed soon after their first antenatal appointment (mean gestation: 14 weeks). Current mental disorders were assessed using the Structured Clinical Interview DSM-IV. FOC was measured using the Wijma Delivery Expectancy/Experience Questionnaire (WDEQ-A) at approximately 28 weeks gestation (n = 377), with severe FOC defined using a cutoff of WDEQ-A ≥ 85. Birth mode information was collected at 3 months post-delivery using an adapted Adult Service Use Schedule. Linear regressions were used to model associations, adjusting for the effects of covariates (age, parity, relationship status, education, and planned pregnancy). Sampling weights were used to adjust for bias introduced by the stratified sampling. We also accounted for missing data within the analysis.

Results: The estimated population prevalence of severe FOC was 3% (95% CI: 2%-6%) (n = 377). Depression and anxiety were significantly associated with severe FOC after adjustment for covariates (45% vs 11%; coefficient: 15.75, 95% CI: 8.08-23.42, P <.001). There was a weak association between severe FOC and elective cesarean birth.

Conclusions: Severe FOC occurs in around 3% of the population. Depression and anxiety are associated with FOC. Pregnant people with depression and anxiety may be at increased risk of experiencing severe FOC. Attitudes toward childbirth should be assessed as part of routine clinical assessment of pregnant people in contact with mental health services.

Title: A Systematic Review of Social Maintenance Behavior Outcomes of Interactive Social Interventions for Children With Autism Spectrum Disorders.

Citation: Focus on Autism & Other Developmental Disabilities; Jun 2021; vol. 36 (no. 2); p. 108-120
Author(s): Short; Vital, Pedro

Abstract: A large and varied evidence base supporting the efficacy of social therapies to improve the social behaviors of children with autism spectrum disorders (ASD) does not permit a clear understanding of which specific types of social behavior are improved by specific social therapies. Social maintenance behaviors function to form and sustain relationships, which has been associated with a reduction in negative social experiences in children with ASD. The present systematic review investigates the effectiveness of interactive social therapy in increasing these specific behaviors in this population. A systematic search of PsycArticles, Medline, Education Resources Information Centre, Child
Development and Adolescent Studies, and Scopus databases identified 18 articles as relevant for inclusion. The extant evidence suggests that interactive social therapies are effective in increasing social maintenance behaviors in children with ASD. Explicit targeting of these behaviors and inclusion of reinforcement are highlighted as potentially active components in this regard.

Title: Internalizing and externalizing problems in preschool children: The role of mothers' and fathers' observed parenting behavior in a well-resourced sample.

Citation: Scandinavian Journal of Psychology; Jun 2021; vol. 62 (no. 3); p. 374-385

Author(s): Steenhoff; Tharner, Anne; Væver, Mette S.

Abstract: Empirical evidence links sensitive parenting behavior to positive developmental trajectories in children, whereas parental intrusiveness, in contrast, has been found to increase the risk of socio-emotional problems in children of various ages. However, most studies investigating the effect of parenting behavior have been conducted with mothers. Thus, little is yet known about fathers' role in child development and if mothers' and fathers' parenting behaviors are linked to child socio-emotional outcomes in similar or different ways. To date, findings are ambiguous, and this is why more studies are needed. The present study examined associations between mothers' and fathers' observed sensitivity and intrusiveness and children's internalizing and externalizing problems as reported by parents and by children themselves. The sample compromised 52 mothers, 41 fathers and their preschool children. Results from hierarchical regression analyses showed a negative association between fathers' intrusiveness, at low levels, and children's internalizing problems. This result was unexpected. However, in line with this finding, a number of recent studies suggest that when fathers challenge and push their children's limits, it buffers against emotional problems such as anxiety. The present study highlights the importance of a continuous investigation into fathers' potentially unique contribution to children's socio-emotional development. No other associations were identified between mothers' and fathers' parenting behaviors and children's internalizing and externalizing problems. Most likely, because this study was conducted with a low-risk sample, where children were in general well-functioning.

Title: Experiences and needs of parents of palliative paediatric oncology patients: A meta-synthesis.

Citation: European Journal of Cancer Care; May 2021; vol. 30 (no. 3); p. 1-20

Author(s): Tan; Tiew, Lay Hua; Shorey, Shefaly

Introduction: Despite palliative care being offered to paediatric cancer patients, it has limited utilisation and often excludes parental support. Therefore, this review aims to consolidate evidence regarding experiences and needs of parents of end-of-life palliative paediatric oncology patients.

Methods: Six electronic databases were searched as follows: CINAHL, The Cochrane Library, Embase, PubMed, Scopus and PsycINFO. Included studies were appraised using the Critical Appraisal Skills Programme Checklist. They were then analysed using a two-step approach comprising firstly meta-summaries followed by meta-synthesis for generating fresh insights to the topic.
Results: Thirteen studies were included. Three themes emerged as follows: (1) normalising the pain; (2) failure as a parent; and (3) importance of communication and social support. Parental experiences included moving on despite the pain and harbouring hopes for their children. However, parents felt immense guilt and a sense of failure in carrying out their parental roles. Effective communication with healthcare providers, availability of family support and religion were necessary to help them cope.

Conclusions: Given the emotional challenges faced by parents, healthcare policies and practices should be revised to include parental support in paediatric palliative care services. Future healthcare communication trainings should consider parental need for sensitivity in communication, empathy and kindness from healthcare professionals.

Title: Depression, Anxiety, Resilience, and Coping: The Experience of Pregnant and New Mothers During the First Few Months of the COVID-19 Pandemic.

Citation: Journal of Women's Health (15409996); May 2021; vol. 30 (no. 5); p. 654-664

Author(s): Kinser; Jallo, Nancy; Amstadter, Ananda B.; Thacker, Leroy R.; Jones, Evelyn; Moyer, Sara; Rider, Amy; Karjane, Nicole; Salisbury, Amy L.

Background: It is well-documented that the mental health of pregnant and postpartum women is essential for maternal, child, and family well-being. Of major public health concern is the perinatal mental health impacts that may occur during the ongoing coronavirus disease 2019 (COVID-19) pandemic. It is essential to explore the symptom experience and predictors of mental health status, including the relationship between media use and mental health.

Materials and Methods: The purpose of this study is to evaluate the experiences of pregnant and postpartum women (n = 524) in the United States in the early phase of the COVID-19 pandemic. This cross-sectional online observational study collected psychosocial quantitative and qualitative survey data in adult pregnant and postpartum (up to 6 months postdelivery) women in April–June 2020.

Results: Multivariable linear regression models were used to evaluate predictors of depressive symptoms, anxiety, and post-traumatic stress disorder. The most common predictors were job insecurity, family concerns, eating comfort foods, resilience/adaptability score, sleep, and use of social and news media. Qualitative themes centered on pervasive uncertainty and anxiety; grief about losses; gratitude for shifting priorities; and use of self-care methods including changing media use.

Conclusions: This study provides information to identify risk for anxiety, depression, and PTSD symptoms in perinatal women during acute public health situations. Women with family and job concerns and low resilience/adaptability scores seem to be at high risk of psychological sequelae. Although use of social media is thought to improve social connectedness, our results indicate that increased media consumption is related to increased anxiety symptoms.

Title: Digital-driven service improvement during the COVID-19 pandemic.

Citation: Paediatrics & Child Health; May 2021; vol. 31 (no. 5); p. 220-222

Author(s): Reddy; Brumpton, Lucy

Abstract: COVID-19 brought a lot of children's routine clinical services in the UK to a complete halt in March 2020. The NHS had to radically change the way clinical services are
provided with the rapid introduction of telemedicine, virtual consultations, and video conferencing facilities to support team working. This paper describes how Peterborough Child Development Centre rapidly redesigned the services with digital tools to continue offering neurodevelopmental and neurodisability services more virtually. We demonstrate how we adapted our approaches to assess and manage complex long-term conditions with improved quality and outcomes by using digital tools. The changes to the clinical processes and systems are here to stay beyond the COVID-19 pandemic and have the potential to revolutionise the services.

Title: Enhanced Recovery After Cesarean Section: A case for adopting some ERAS principles for cesarean delivery.

Citation: Contemporary OB/GYN; May 2021; vol. 66 (no. 5); p. 16-19
Author(s): Ogunkua ; Duryea, Elaine L.

Abstract: The article offers information about the enhanced recovery after cesarean (ERAC) concept. Topics mentioned include a brief history of ERA surgery protocols, the important components of ERAC including the interventions during the pre- and postoperative stages, and its potential benefits including decreased length of hospital stay and improved outcomes like breastfeeding.

Title: Improving timeliness of newborn screens in the neonatal intensive care unit: a quality improvement initiative.

Citation: Journal of Perinatology; May 2021; vol. 41 (no. 5); p. 1166-1173
Author(s): Ikeri ; Quinones Cardona, Vilmaris; Menkiti, Ogechukwu R.

Background: Despite the established utility of newborn screening tests (NBS), achieving timely specimen transit is a challenge for neonatal intensive care units (NICU).

Methods: This project was conducted between September 2017 and July 2020 using the Plan-Do-Study-Act (PDSA) tool. Our primary aim was to increase the percent of NBS samples reaching the state laboratory within 1 day of collection by 20% by April 2020. Process, outcome, and balancing measures were monitored.

Results: Five hundred and eighty-five NBS were collected. There was special cause variation with improvement in the percent of samples received within 1 day of collection from 28 to 77%. Special cause variation was also observed in the process measures without an increase in the percent of unacceptable samples.

Conclusions: Standardizing the NBS collection processes by adopting a sample collection window and same day courier pickup ensures timely specimen transit without adversely affecting the quality of samples collected.

Title: Interventions to Improve Breastfeeding Outcomes from Six Weeks to Six Months: A Systematic Review.

Citation: Western Journal of Nursing Research; Jun 2021; vol. 43 (no. 6); p. 583-596
Author(s): Cordell ; Elverson, Cynthia
**Abstract:** In the United States, breastfeeding duration and exclusivity rates are not at ideal levels. The purpose of this systematic review was to examine the effects of education and support interventions during the third trimester, immediate postpartum, and the first six months of life on breastfeeding duration and exclusivity from six weeks to six months. Inclusion criteria were (a) randomized controlled trials or controlled clinical trials, (b) pregnant and/or postpartum women, (c) lactation education and support interventions, (d) measurement of breastfeeding outcomes during the first six months, and (e) published between 2008 and 2020. Twenty articles (21 studies) were reviewed. Fourteen studies employed interventions that resulted in significant differences in breastfeeding outcomes between groups. Common study weaknesses included limited use of a theoretical model, incomplete description of the intervention, and inconsistent outcome definitions and measurements. Based on these results recommendations for future breastfeeding interventions were derived.

**Title:** Effects of delayed cord clamping on neonatal jaundice, phototherapy and early hematological status in term cesarean section.

**Citation:** Italian Journal of Pediatrics; May 2021; vol. 47 (no. 1); p. 1-7

**Author(s):** Shao ; Gao, Shichu; Lu, Qiuqing; Zhao, Xiaomin; Hua, Ying; Wang, Xiaomei

**Background:** Delayed cord clamping in full-term neonates is widely recommended, while in practice, it is rarely implemented in cesarean section due to the fear of neonatal jaundice and excessive maternal blood loss. The optimal timing of cord clamping remains uncertain. This study was to fully evaluate the effects of delayed cord clamping on short-term hematological status and jaundice in term neonates delivered by cesarean section.

**Methods:** This retrospective study enrolled 796 women, who were allocated into the early cord clamping group (n = 377) and the delayed cord clamping group (n = 419). The latter group was further divided into two subgroups (30–60 s, 61–120 s). The outcomes were neonatal transcutaneous bilirubin levels on 0 to 5 days of life and the rate of phototherapy. For neonates who had blood tests on the first three days of life, their hemoglobin and hematocrit were compared among groups.

**Results:** Compared with the early cord clamping group, delayed cord clamping merely increased the transcutaneous bilirubin level of neonates on the day of birth rather than that on the following five days. The heel peripheral blood sample size of 1–3 days in the early cord clamping group was 61, 25 and 33, and in the delayed cord clamping group was 53, 46 and 32, respectively. Delayed cord clamping at 30–60 s resulted in the higher neonatal hemoglobin level on day 3 and an increased rate of neonatal polycythemia, without a higher rate of phototherapy. Delayed cord clamping beyond 60 s did not further improve hematological status in term neonates born by cesarean section.

**Conclusion:** In cesarean section, delayed cord clamping for 30–60 s improved the early hematological status of term neonates without the enhanced requirement of phototherapy for neonatal jaundice.

**Title:** Social Marketing And Breastfeeding Rates.

**Citation:** Community Practitioner; May 2021; vol. 94 (no. 3); p. 44-47

**Author(s):** Levi-Brown ; Pontin, David
Abstract: The article discusses a literature review aimed to evaluate a social marketing campaign that aimed to break down social barriers and raise breastfeeding rates. Topics covered include how the campaign could support health visitors to increase local breastfeeding rates, similar campaigns that are emerging in Scotland and Wales, and the social marketing benchmark criteria used in the campaign.

Title: Complementary Feeding and Overweight in European Preschoolers: The ToyBox-Study.

Citation: Nutrients; Apr 2021; vol. 13 (no. 4); p. 1199-1199

Author(s): Usheva; Galcheva, Sonya; Cardon, Greet; De Craemer, Marieke; Androutsos, Odysseas; Kotowska, Aneta; Socha, Piotr; Koletzko, Berthold V.; Moreno, Luis A.; Iotova, Violeta; Manios, Yannis; Fernandez, Maria Luz; Smilowitz, Jennifer T.

Abstract: Complementary feeding (CF) should start between 4–6 months of age to ensure infants' growth but is also linked to childhood obesity. This study aimed to investigate the association of the timing of CF, breastfeeding and overweight in preschool children. Infant-feeding practices were self-reported in 2012 via a validated questionnaire by >7500 parents from six European countries participating in the ToyBox-study. The proportion of children who received breast milk and CF at 4–6 months was 51.2%. There was a positive association between timing of solid food (SF) introduction and duration of breastfeeding, as well as socioeconomic status and a negative association with smoking throughout pregnancy (p < 0.005). No significant risk to become overweight was observed among preschoolers who were introduced to SF at 1–3 months of age compared to those introduced at 4–6 months regardless of the type of milk feeding. Similarly, no significant association was observed between the early introduction of SF and risk for overweight in preschoolers who were breastfed for ≥4 months or were formula-fed. The study did not identify any significant association between the timing of introducing SF and obesity in childhood. It is likely that other factors than timing of SF introduction may have impact on childhood obesity.

Title: Patient Experience of Telephone Consultations in Gynaecology: A Service Evaluation.

Citation: BJOG : an international journal of obstetrics and gynaecology; May 2021

Author(s): Khan, Zarnigar; Kershaw, Victoria; Madhuvrata, Priya; Radley, Tephen; Connor, Mary

Objective: To investigate patient perspective of telephone consultations (TCs) in gynaecology and identify which patients benefit most from a telemedicine system.

Design: Service evaluation.

Setting: Gynaecology outpatient services at a tertiary referral hospital.

Population: Patients who received a TC during May and June 2020.METHODSPostal questionnaire combining 3 validated tools: QQ-10, Patient Enablement Index (PEI) and NHS Friends and Family Test (NHS-FFT). Quantitative data and free text responses were analysed.

Main Outcome Measures: Responses to QQ-10, PEI and NHS-FFT.

Results: In total, 1307 patients were contacted and 504 patients responded (39%). Most (89%) described their experience as 'Very good' or 'Good' (NHS-FFT). Positive themes from
responses included 'convenience', 'effectiveness' and 'equivalent care'. QQ-10 responses demonstrated a high Value score of 79 (0-100) and a low Burden score of 15. PEI scores suggested that most patients felt better or much better able to understand and cope with their condition following TC. The majority of patients (77%) would 'Strongly' or 'Mostly agree' to a repeat TC. Regarding patient outcomes, 21% were discharged and 71% required follow-up. Menopause, fertility, and endometriosis follow-up clinic patients benefited most from TC. Gynaecology-oncology patients found TC least acceptable.

**Conclusion:** We report a large questionnaire survey of patient experience of TC in Gynaecology. Telemedicine is convenient, acceptable, and effective for conducting care in selected groups. TC can support patients in communicating intimate symptoms.

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**Title:** Quality metrics in minimally invasive gynecologic surgery.

**Citation:** Current opinion in obstetrics & gynecology; May 2021

**Author(s):** Khalil, Susan; Kossel, Kelsey; Pasik, Sara; Brodman, Michael; Ascher-Walsh, Charles

**Purpose Of Review:** Quality improvement and patient safety are relevant to the advancement of clinical care, particularly in the field of minimally invasive gynecologic surgery (MIGS). Although safety and feasibility of MIGS have been established, identification of quality metrics in this field is also necessary.

**Recent Findings:** Surgical quality improvement has focused on national overarching measures to reduce mortality, surgical site infections (SSIs), and complications. Quality improvement in minimally invasive surgery has additionally led to advancements in postoperative patient recovery and long-term outcomes. Process measures in minimally invasive surgery include use of bundles and enhanced recovery after surgery (ERAS) programs. However, procedure-specific quality metrics for MIGS outcomes are poorly defined at this time.

**Summary:** Quality metrics in minimally invasive gynecology are well defined for structural measures and select process measures. Creation of relevant benchmarks for outcome measures in minimally invasive gynecologic surgery are needed.

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**Title:** A diagnostic time-out to improve differential diagnosis in pediatric abdominal pain.

**Citation:** Diagnosis (Berlin, Germany); May 2021; vol. 8 (no. 2); p. 209-217

**Author(s):** Kasick, Rena T; Melvin, Jennifer E; Perera, Sajithya T; Perry, Michael F; Black, Joshua D; Bode, Ryan S; Groner, Jonathan I; Kersey, Kelly E; Klamer, Brett G; Bai, Shasha; McClead, Richard E

**Background:** Pediatric abdominal pain is challenging to diagnose and often results in unscheduled return visits to the emergency department. External pressures and diagnostic momentum can impair physicians from thoughtful reflection on the differential diagnosis (DDx). We implemented a diagnostic time-out intervention and created a scoring tool to improve the quality and documentation rates of DDx. The specific aim of this quality improvement (QI) project was to increase the frequency of resident and attending physician documentation of DDx in pediatric patients admitted with abdominal pain by 25% over 6 months.
**Methods:** We reviewed a total of 165 patients admitted to the general pediatrics service at one institution. Sixty-four history and physical (H&P) notes were reviewed during the baseline period, July-December 2017; 101 charts were reviewed post-intervention, January-June 2018. Medical teams were tasked to perform a diagnostic time-out on all patients during the study period. Metrics tracked monthly included percentage of H&Ps with a 'complete' DDx and quality scores (Qs) using our Differential Diagnosis Scoring Rubric.

**Results:** At baseline, 43 (67%) resident notes and 49 (77%) attending notes documented a 'complete' DDx. Post-intervention, 59 (58%) resident notes and 69 (68%) attending notes met this criteria. Mean Qs, pre- to post-intervention, for resident-documented differential diagnoses increased slightly (2.41-2.47, p = 0.73), but attending-documented DDx did not improve (2.85-2.82, p = 0.88).

**Conclusions:** We demonstrated a marginal improvement in the quality of resident-documented DDx. Expansion of diagnoses considered within a DDx may contribute to higher diagnostic accuracy.

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**Title:** Observational study using video recordings to explore the first hour after admission to a neonatal intensive care unit.

**Citation:** Journal of paediatrics and child health; May 2021

**Author(s):** Aydon, Laurene; Gill, Andrew; Zimmer, Margo; Sharp, Mary; Woods, Patricia; Seeber, Carly; Mooney, Deb; Murdoch, Jamee

**Aim:** To explore the admission process to our neonatal intensive care unit.

**Methods:** A first phase quality improvement initiative was conducted. We utilised observational video recording of a convenience sample of inborn admissions. Two remote GoPro cameras were placed, one giving an overview of activity and the other focussed on the infant. Recordings captured the first hour after admission including transfer to the neonatal intensive care unit by the birthing team. The video footage of each case study was reviewed by a multidisciplinary panel using an agreed semi-quantitative analysis of events.

**Results:** Ten admissions to the neonatal intensive care unit were video recorded between June and October 2018. Gestational age 282-401. A focus on maintaining airway support was inconsistent as was the ability to provide continuous monitoring of vital signs. Overall leadership of the process was lacking and handover often appeared fragmented. Median temperature on admission was 36.2 (35.4-37.3) °C. Vascular access and fluid management occurred at a median of 36 (13-67) minutes.

**Conclusions:** Planning and approval for this study were protracted, particularly negotiating the use of video recording. Anecdotally, this delay is thought to have contributed to an improvement in managing admissions, particularly when maintaining airway support and monitoring. However, our baseline data have highlighted a lack of leadership, fragmented handover, low admission temperatures and broad time frames to achieve vascular access. A guideline to streamline handover and nursery transition is currently being implemented; a subsequent evaluation cycle is planned.

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**Title:** Maternal and perinatal outcomes of pregnant women with SARS-CoV-2 infection at the time of birth in England: national cohort study.

**Citation:** American journal of obstetrics and gynecology; May 2021
Objective: The aim of this study was to determine the association between SARS-CoV-2 infection at the time of birth and maternal and perinatal outcomes.

Methods: This is a population-based cohort study in England. The inclusion criteria were women with a recorded singleton birth between 29th May 2020 and 31st January 2021 in a national database of hospital admissions. Maternal and perinatal outcomes were compared between pregnant women with a laboratory-confirmed SARS-CoV-2 infection recorded in the birth episode and those without. Study outcomes were fetal death at or beyond 24 weeks' gestation (stillbirth), preterm birth (<37 weeks gestation), small for gestational age infant (SGA; birthweight <10th centile), preeclampsia/eclampsia, induction of labor, mode of birth, specialist neonatal care, composite neonatal adverse outcome indicator, maternal and neonatal length of hospital stay following birth (3 days or more), 28-day neonatal and 42-day maternal hospital readmission. Adjusted odds ratios (aOR) and their 95% confidence interval (CI) for the association between SARS-CoV-2 infection status and outcomes were calculated using logistic regression, adjusting for maternal age, ethnicity, parity, pre-existing diabetes, pre-existing hypertension and socioeconomic deprivation measured using Index of Multiple Deprivation 2019. Models were fitted with robust standard errors to account for hospital-level clustering. The analysis of the neonatal outcomes was repeated for those born at term (≥ 37 weeks' gestation) since preterm birth has been reported to be more common in pregnant women with SARS-CoV-2 infection.

Results: The analysis included 342,080 women, of whom 3,527 had laboratory-confirmed SARS-CoV-2 infection. Laboratory-confirmed SARS-CoV-2 infection was more common in women who were younger, of non-white ethnicity, primiparous, residing in the most deprived areas, or had comorbidities. Fetal death (aOR 2.21, 95% CI 1.58-3.11; P<0.001) and preterm birth (aOR 2.17, 95% CI 1.96-2.42; P<0.001) occurred more frequently in women with SARS-CoV-2 infection than those without. Risk of preeclampsia/eclampsia (aOR 1.55, 95% CI 1.29-1.85; P<0.001), birth by emergency Cesarean delivery (aOR 1.63, 95% CI 1.51-1.76; P<0.001) and prolonged admission following birth (aOR 1.57, 95%CI 1.44-1.72; P<0.001) were significantly higher for women with SARS-CoV-2 infection than those without. There were no significant differences in the rate of other maternal outcomes. Risk of neonatal adverse outcome (aOR 1.45, 95% CI 1.27-1.66; P<0.001), need for specialist neonatal care (aOR 1.24, 95% CI 1.02-1.51; P=0.03), and prolonged neonatal admission following birth (aOR 1.61, 95% CI 1.49-1.75; P<0.001) were all significantly higher for infants with mothers with laboratory-confirmed SARS-CoV-2 infection. When the analysis was restricted to pregnancies delivered at term (≥37 weeks), there were no significant differences in neonatal adverse outcome (P=0.78), need for specialist neonatal care after birth (P=0.22) or neonatal readmission within four weeks of birth (P=0.05). Neonates born at term to mothers with laboratory-confirmed SARS-CoV-2 infection were more likely to have prolonged admission following birth (21.1% compared to 14.6%, aOR 1.61, 95% CI 1.49-1.75; P<0.001).

Conclusions: SARS-CoV-2 infection at the time of birth is associated with higher rates of fetal death, preterm birth, preeclampsia and emergency Cesarean delivery. There were no additional adverse neonatal outcomes, other than those related to preterm delivery. Pregnant women should be counseled regarding risks of SARS-2021 infection and should be considered a priority for vaccination.

Sources Used: The following databases are used in the creation of this bulletin: Amed, British Nursing Index, Cinahl & Medline.
Disclaimer: The results of your literature search are based on the request that you made, and consist of a list of references, some with abstracts. Royal United Hospital Bath Healthcare Library will endeavour to use the best, most appropriate and most recent sources available to it, but accepts no liability for the information retrieved, which is subject to the content and accuracy of databases, and the limitations of the search process. The library assumes no liability for the interpretation or application of these results, which are not intended to provide advice or recommendations on patient care.