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Women and Children's Current Awareness Bulletin

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Title: Association Between Intimate Partner Violence and Breastfeeding Duration: Results From the 2004-2014 Pregnancy Risk Assessment Monitoring System.

Citation: Journal of Human Lactation; May 2018; vol. 34 (no. 2); p. 233-241

Author(s): Wallenborn, Jordyn T.; Cha, Susan; Masho, Saba W.

Background: Intimate partner violence is a major public health problem that disproportionately affects women. Current literature investigating the relationship between intimate partner violence and breastfeeding is inconsistent.

Research aim: This study aims to investigate the relationship between physical intimate partner violence that occurs in the preconception or prenatal period and any breastfeeding duration.

Methods: Data from the retrospective, cross-sectional 2004-2014 Pregnancy Risk Assessment Monitoring System were analyzed (N = 195,264). The outcome, breastfeeding duration, was categorized as never breastfed, breastfed 8 weeks or less, and breastfeed more than 8 weeks. Multinomial logistic regression was used to obtain crude and adjusted odds ratios and 95% confidence intervals.

Results: Approximately 6% (n = 11,766) of survey respondents reported preconception and/or prenatal intimate partner violence, and 36.3% (n = 67,667) of women reported never breastfeeding. The odds of discontinuing breastfeeding before 8 weeks were 18% higher among women who reported experiencing abuse 12 months before pregnancy compared with women who did not report intimate partner violence (adjusted odds ratio = 1.18; 95% confidence interval [1.01, 1.37]). All other estimates showed an overlapping 95% confidence interval.

Conclusion: Breastfeeding is essential in improving maternal and child health; however, women in abusive relationships may face additional barriers to breastfeeding. Further research is needed to better understand the impact of violence on breastfeeding behaviors to inform healthcare practices and interventions.

Title: Use of Videoconferencing for Lactation Consultation: An Online Cross-Sectional Survey of Mothers' Acceptance in the United States.

Citation: Journal of Human Lactation; May 2018; vol. 34 (no. 2); p. 313-321

Author(s): Habibi, Mona F.; Springer, Cary M.; Spence, Marsha L.; Hansen-Petrik, Melissa B.; Kavanagh, Katherine F.

Background: Suboptimal breastfeeding duration and exclusivity rates are a public health concern. Therefore, there is a need for identifying effective tools for use in interventions targeting specific barriers to optimal breastfeeding outcomes.

Research aim: This study aimed to assess the relationship between acceptance of remote lactation consultation using videoconferencing and (a) maternal demographic factors, (b) technology acceptance subscales, (c) maternal learning style preferences, and (d) other potentially explanatory maternal factors.

Methods: This was a cross-sectional, online study. English-speaking mothers of at least 18 years of age, with an infant age 4 months or younger, and who reported initiating breastfeeding were eligible to participate. Mothers were recruited from 27 randomly selected states. One hundred one mothers completed the survey, resulting in a response rate of 71%. The main outcome was acceptance of videoconferencing use for lactation consultation.

Results: No significant differences were found in acceptance by maternal demographic factors or learning style preferences. Acceptance was significantly related to perceived ease of use ($r = .680$, $p < .001$), perceived usefulness/extrinsic motivation ($r = .774$, $p < .001$), intrinsic motivation ($r = .689$, $p < .001$), desire for control of privacy ($r = –.293$, $p < .01$), and mother's perception of the infant father's/maternal partner's acceptance of videoconferencing for lactation consultation ($r = .432$, $p < .001$). Only perceived usefulness/extrinsic motivation and maternal age remained in the final regression model ($R2 = .616$, $p < .001$). Although perceived usefulness/extrinsic motivation was positively associated with acceptance, maternal age was inversely related.

Conclusion: This sample of mothers indicated general acceptance of videoconferencing for lactation consultation, with younger mothers and those perceiving it to be more useful demonstrating greater acceptance.

Title: Infant formulae supplemented with prebiotics: Are they better than unsupplemented formulae? An updated systematic review.

Citation: British Journal of Nutrition; Apr 2018; vol. 119 (no. 7); p. 810-825

Author(s): Skórka, Agata; Pieścik-Lech, Małgorzata; Kołodziej, Maciej; Szajewska, Hania

Abstract: In 2011, the Committee on Nutrition of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition systematically reviewed published evidence related to the safety and health effects of the administration of formulae supplemented with pro- and/or prebiotics compared with unsupplemented formulae. We updated evidence on the effects of the administration of prebiotic-supplemented infant formulae (IF) compared with unsupplemented IF. Five databases were searched up to March 2017 for randomised controlled trials. In all, forty-one publications were identified, including twenty-five new publications. The administration of currently evaluated prebiotic-supplemented formulae to healthy infants does not raise safety concerns with regard to growth and adverse effects. Some favourable clinical effects are possible, primarily stool softening, which may be beneficial in some infants. Currently, there is no existing robust evidence to recommend the routine use of prebiotic-supplemented formulae. The latter conclusion may reflect the small amount of data on specific prebiotics and outcomes, rather than a genuine lack of an effect. The efficacy and safety should be considered for each prebiotic(s)-supplemented formula.

Title: Navigating the social complexities of breastfeeding: an interpretative phenomenological analysis of women's experiences.

Citation: Evidence Based Midwifery; Mar 2018; vol. 16 (no. 1); p. 21-28

Author(s): Charlick, Samantha J.; Pincombe, Jan; McKellar, Lois; Gordon, Andrea L.

Background: Exclusive breastfeeding provides complete nutrition for a baby's first six months of life. However, the majority of Australian infants are not exclusively breastfed for this length of time. Although numerous strategies have been implemented to increase rates of exclusive breastfeeding, Australian statistics remain low. Furthermore, most breastfeeding research has focused on why women cease breastfeeding in the early postnatal period (from birth to two months), yet limited research focuses on the experience of exclusive breastfeeding between two and six months, where the greatest decline occurs.

Aim: To provide an in-depth, idiographic interpretation of the experiences of first-time Australian mothers who intended to exclusively breastfeed for six months, but ceased between two and six months.

Methods: The study utilised interpretative phenomenological analysis (IPA) to understand how five new mothers understood their breastfeeding journeys. Data were collected through face-to-face semi-structured interviews. Data were transcribed in full and analysed using IPA's flexible seven-step approach. This research was approved by the women's and children's health network human research ethics committee (HREC) (HREC/MWCHN/008) and the University of South Australia HREC (0000031997) in early 2014.

Findings: Three higher-order themes were identified: 1) the exclusive breastfeeding journey, 2) the challenge of breastfeeding exclusively, 3) breastfeeding in the 21st century. The mothers intended to exclusively breastfeed for six months. While they overcame many physical difficulties associated with breastfeeding, it was ultimately social complexities that provided the greatest challenges and influenced their decisions to cease exclusive breastfeeding. These included the introduction of solid foods before the recommended time of six months, and the perceived disapproval of breastfeeding in public. Noticing many differences in opinions and recommendations regarding breastfeeding, the mothers began to desire autonomy in their mothering, describing public comments and opinions as unwanted and judgemental.

Conclusion: This qualitative reflection contributes a nuanced understanding of the breastfeeding journey between two and six months, deepening our understanding and enabling the development of appropriate strategies and support for increasing the duration of exclusive breastfeeding, as well as direction for continued research.

Title: Is there consensus across international evidence-based guidelines for the psychotropic drug management of bipolar disorder during the perinatal period?

Citation: Journal of Affective Disorders; Mar 2018; vol. 228 ; p. 216-221

Author(s): Graham, Rebecca K.; Tavella, Gabriela; Parker, Gordon B.

Background: Clinicians treating a patient with bipolar disorder who is pregnant or breastfeeding may seek advice from bipolar management guidelines that provide recommendations for perinatal treatment. We examine the consistency of such recommendations across several evidence-based guidelines.

Methods: A literature search in the National Guideline Clearinghouse, the Cochrane Database of Systematic Reviews, PsycInfo and PubMed was undertaken using the search terms "bipolar disorder" and "guidelines," which generated 11 sets of evidence-based guidelines published by professional organizations during the 2005-2015 period. Information relevant to management during the perinatal period was reviewed by two independent reviewers, with key themes qualitatively analysed.

Results: There was a moderate level of agreement across guidelines regarding the potential teratogenic effects of lithium, sodium valproate and carbamazepine, with most highlighting caution in using these medications during the perinatal period. There was less agreement regarding the safety risks associated with lamotrigine, antipsychotics, and antidepressants, and little agreement regarding the risks and recommendations of medications during breastfeeding.

Limitations: Some differences in recommendations are likely due to varying publication dates, with recent guidelines having more up-to-date evidence available to use when formulating recommendations. Further, due to ethical issues surrounding pregnancy and infant research, the evidence used to formulate perinatal recommendations is largely based on retrospective reports and/or case studies. It is therefore unrealistic to expect such recommendations to be entirely consistent and based on rigorous evidence.

Conclusions: While there was some consistency across guidelines on key recommendations, there were also substantial inconsistencies, with the latter risking compromising clinical management.

Title: A critical review of a National Institute for Health and Care Excellence (NICE) guideline.

Citation: MIDIRS Midwifery Digest; Mar 2018; vol. 28 (no. 1); p. 87-91

Author(s): Bailey, Katharine

Abstract: The purpose of this paper is to critique the National Institute for Health and Care Excellence (NICE 2006) guideline Postnatal care up to 8 weeks after birth, recommendation 1.3.4: Healthcare professionals should have sufficient time, as a priority, to give support to a woman and baby during initiation and continuation of breastfeeding. The paper explores the benefits of a positive mother-midwife relationship, skin-to-skin contact between mother and baby immediately after birth, and a relaxed birth environment for breastfeeding. It also assesses the limitations of the recommendation, examining the negative impact that time pressures on midwives, limited resources, the experience of caesarean section and poor partner and family support have on breastfeeding. The recommendation is unrealistic in current maternity services as midwives are overstretched and unable to support women to breastfeed adequately.

Title: A systematic review of men's views and experiences of infant feeding: implications for midwifery practice.

Citation: MIDIRS Midwifery Digest; Mar 2018; vol. 28 (no. 1); p. 91-97

Author(s): Earle, Sarah; Hadley, Robin

Abstract: It is understood that men can perform an important role with respect to infant feeding, although questions remain as to how significant this role might be. In addition, much of the research on men and infant feeding is information gathered from women, rather than from the men themselves. In order to explore these issues further, a systematic review of the quahtative research in infant feeding has been carried out, focusing only on studies that have sought to elicit men's own views and experiences. Evidence was idendfied through a variety of search strategies including database searching and manual citation searches, as well as searching the grey literature for unpublished data. A total of 20 research papers were included in the review and each study was summarised and analysed thematically to produce a synthesis. Five major analytical themes were identified: men's knowledge of infant feeding; men's views of health promotion; men's role in infant feeding; men's positive views on breastfeeding; and men's negative views on breastfeeding. This paper explores these themes in the context of what the research implications might be for midwives and their practice.

Title: A View From the UK: The UK and Ireland Confidential Enquiry into Maternal Deaths and Morbidity.

Citation: Clinical Obstetrics & Gynecology; Jun 2018; vol. 61 (no. 2); p. 347-358

Author(s): Knight, Marian; Tuffnell, Derek

Abstract: The UK Confidential Enquiry into Maternal Deaths has been in operation for more than 60 years, during which time maternal mortality rates have fallen 10-fold. The program includes two aspects, surveillance and confidential case review, providing different information to aid quality improvement in maternity care. The enquiry now also reviews the care of women with specific severe morbidities. Recommendations have very clearly led to improved outcomes for women, most notably shown in the very low mortality rate due to hypertensive and related disorders of pregnancy. Maternal cardiac disease and mental health problems remain the major areas still to be addressed.

Title: Improvement capability and performance: a qualitative study of maternity services providers in the UK.

Citation: International journal for quality in health care : journal of the International Society for Quality in Health Care; Apr 2018

Author(s): Darley, Sarah; Walshe, Kieran; Boaden, Ruth; Proudlove, Nathan; Goff, Mhorag

Objective: We explore variations in service performance and quality improvement across healthcare organisations using the concept of improvement capability. We draw upon a theoretically informed framework comprising eight dimensions of improvement capability, firstly to describe and compare quality improvement within healthcare organisations and, secondly to investigate the interactions between organisational performance and improvement capability.

Design: A multiple qualitative case study using semi-structured interviews guided by the improvement capability framework.

Setting: Five National Health Service maternity services sites across the UK. We focused on maternity services due to high levels of variation in quality and the availability of performance metrics which enabled us to select organisations from across the performance spectrum.

Participants: About 52 hospital staff members across the five case studies in positions relevant to the research questions, including midwives, obstetricians and clinical managers/leaders.

Main Outcome Measure: A qualitative analysis of narratives of quality improvement and performance in the five case studies, using the improvement capability framework as an analytic device to compare and contrast cases.

Results: The improvement capability framework has utility in analysing quality improvement within and across organisations. Qualitative differences in the configurations of improvement capability were identified across all providers but were particularly striking between higher and lower performing organisations.

Conclusions: The improvement capability framework is a useful tool for healthcare organisations to assess, manage and develop their own improvement capabilities. We identified an interaction between performance and improvement capability; higher performing organisations appeared to have more developed improvement capabilities, though the meaning of this relationship requires further research.

Title: Improving Postoperative Neonatal Nutritional Practices in an Intensive Care Unit Using the PDSA Cycle.

Citation: Journal of pediatric health care : official publication of National Association of Pediatric Nurse Associates & Practitioners; Apr 2018

Author(s): Newcombe, Jennifer; Fry-Bowers, Eileen

Abstract: Quality Improvement models offer a framework for health care professionals to follow in implementing process improvement changes. Use of these models promotes a systematic approach to problem solving, keeps providers from eliminating important steps, facilitates team work, and provides a clear plan for ongoing communication. This paper describes use of the Plan-Do-Study-Act model to implement a unit-based quality improvement project that focused on improving postoperative nutritional practices for neonates with critical congenital heart disease following complex cardiac surgery.

Title: FiO2 control by parents of preterm infants admitted to a neonatal intensive care unit: A pilot study.

Citation: Acta paediatrica (Oslo, Norway : 1992); Apr 2018

Author(s): Martín-Pelegrina, M D; Lorenzo-Rodríguez, A; Lora-Pablos, D; Muñóz-Amat, B; Morales-Betancourt, C; Pallás-Alonso, C R

Abstract: When newborns are admitted to the neonatal intensive care unit for prematurity or other reasons, parents do not take on the role that they were expecting to assume. That is, they do not become the main caregivers of their children. To address this issue, neonatal units are currently trying to involve parents in the care of their children as soon as possible. Interesting experiences regarding this issue have been published. Most of the experiences show that when parents assume part of the responsibility for caring for their children, breastfeeding is prolonged, hospital-stay lengths decrease, weight gain increases and the numbers of readmissions decrease (1-4).

Title: Effect of Reflexology on Infantile Colic.

Citation: Journal of alternative and complementary medicine (New York, N.Y.); Apr 2018

Author(s): Icke, Sibel; Genc, Rabia

Objective: The aim of this study was to explore the effect of reflexology on infantile colic.

Design: A total of 64 babies with colic were included in this study (n = 31: study group; n = 33: control group). Following a pediatrician's diagnosis, two groups (study and control) were created. Sociodemographic data (including mother's age, educational status, and smoking habits of parents) and medical history of the baby (including gender, birth weight, mode of delivery, time of the onset breastfeeding after birth, and nutrition style) were collected. The Infant Colic Scale (ICS) was used to measure the colic severity in the infants. Reflexology was applied to the study group by the researcher and their mother 2 days a week for 3 weeks. The babies in the control group did not receive reflexology. Assessments were performed before and after the intervention in both groups.

Results: The groups were similar regarding sociodemographic background and medical history. While there was no difference between the groups in ICS scores before application of reflexology ($p > 0.05$), the mean ICS score of the study group was significantly lower than that of control group at the end of the intervention ($p < 0.001$).

Conclusion: Reflexology application for babies suffering from infantile colic may be a promising method to alleviate colic severity.

Title: Reducing Electrolyte Testing in Hospitalized Children by Using Quality Improvement Methods.

Citation: Pediatrics; May 2018; vol. 141 (no. 5)

Author(s): Tchou, Michael J; Tang Girdwood, Sonya; Wormser, Benjamin; Poole, Meifawn; Davis-Rodriguez, Stephanie; Caldwell, J Timothy; Shannon, Lauren; Hagedorn, Philip A; Biondi, Eric; Simmons, Jeffrey; Anderson, Jeffrey; Brady, Patrick W

Background And Objectives: Despite studies indicating a high rate of overuse, electrolyte testing remains common in pediatric inpatient care. Frequently repeated electrolyte tests often return normal results and can lead to patient harm and increased cost. We aimed to reduce electrolyte testing within a hospital medicine service by >25% within 6 months.

Methods: We conducted an improvement project in which we targeted 6 hospital medicine teams at a large academic children's hospital system by using the Model for Improvement. Interventions included standardizing communication about the electrolyte testing plan and education about the costs and risks associated with overuse of electrolyte testing. Our primary outcome measure was the number of electrolyte tests per patient day. Secondary measures included testing charges and usage rates of specific high-charge panels. We tracked medical emergency team calls and readmission rates as balancing measures.

Results: The mean baseline rate of electrolyte testing was 2.0 laboratory draws per 10 patient days, and this rate decreased by 35% after 1 month of initial educational interventions to 1.3 electrolyte laboratory draws per 10 patient days. This change has been sustained for 9 months and could save an estimated $292 000 in patient-level charges over the course of a year. Use of our highest-charge electrolyte panel decreased from 67% to 22% of testing. No change in rates of medical emergency team calls or readmission were found.

Conclusions: Our improvement intervention was associated with significant and rapid reduction in electrolyte testing and has not been associated with unintended adverse events.

Title: Transitioning Pediatric Patients to Adult Health Care: A Quality Improvement Needs Assessment.

Citation: Journal of pediatric health care : official publication of National Association of Pediatric Nurse Associates & Practitioners; 2018; vol. 32 (no. 3); p. 216-222

Author(s): Benson, Nichole D; Cunningham, Craig; Braun, Lisa; Wallace, Jerrol; Stewart, Kathryn; Derouin, Anne

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Title: Mobilization Therapy in the Pediatric Intensive Care Unit: A Multidisciplinary Quality Improvement Initiative.

Citation: American journal of critical care : an official publication, American Association of Critical-Care Nurses; May 2018; vol. 27 (no. 3); p. 194-203

Author(s): Colwell, Blair R L; Williams, Cydni N; Kelly, Serena P; Ibsen, Laura M

Background: Mobilization is safe and associated with improved outcomes in critically ill adults, but little is known about mobilization of critically ill children.

Objective: To implement a standardized mobilization therapy protocol in a pediatric intensive care unit and improve mobilization of patients.

Methods: A goal-directed mobilization protocol was instituted as a quality improvement project in a 20-bed cardiac and medical-surgical pediatric intensive care unit within an academic tertiary care center. The mobilization goal was based on age and severity of illness. Data on severity of illness, ordered activity limitations, baseline functioning, mobilization level, complications of mobilization, and mobilization barriers were collected. Goal mobilization was defined as a ratio of mobilization level to severity of illness of 1 or greater.

Results: In 9 months, 567 patient encounters were analyzed, 294 (52%) of which achieved goal mobilization. The mean ratio of mobilization level to severity of illness improved slightly but nonsignificantly. Encounters that met mobilization goals were in younger (P = .04) and more ill (P < .001) patients and were less likely to have barriers (P < .001) than encounters not meeting the goals. Complication rate was 2.5%, with no difference between groups (P = .18). No serious adverse events occurred.

Conclusions: A multidisciplinary, multiprofessional, goal-directed mobilization protocol achieved goal mobilization in more than 50% of patients in this pediatric intensive care unit. Undermobilized patients were older, less ill, and more likely to have mobilization barriers at the patient and provider level.

Title: Facilitating the Timely Discharge of Well Newborns by Using Quality Improvement Methods.

Citation: Pediatrics; May 2018; vol. 141 (no. 5)

Author(s): Rochester, Nicole T; Banach, Laurie P; Hoffner, Wendy; Zeltser, Deena; Lewis, Phyllis; Seelbach, Elizabeth; Cuzzi, Sandra

Background And Objectives: Discharges are a key driver of hospital throughput. Our pediatric hospitalist team sought to improve newborn nursery throughput by increasing the percentage of newborns on our service with a discharge order by 11 am. We hypothesized that implementing a discharge checklist would result in earlier discharge times for newborns who met discharge criteria.

Methods: We identified barriers to timely discharge through focus groups with key stakeholders, chart reviews, and brainstorming sessions. We subsequently created and implemented a discharge checklist to identify and address barriers before daily rounds. We tracked mean monthly discharge order times. Finally, we performed chart reviews to determine causes for significantly delayed discharge orders and used this information to modify rounding practices during a second plan-do-study-act cycle.

Results: During the 2-year period before the intervention, 24% of 3224 newborns had a discharge order entered by 11 am. In the 20 months after the intervention, 39% of 2739 newborns had a discharge order by 11 am, a 63% increase compared with the baseline. Observation for group B Streptococcus exposure was the most frequent reason for a late discharge order.

Conclusions: There are many factors that affect the timely discharge of well newborns. The development and implementation of a discharge checklist improved our ability to discharge newborns on our pediatric hospitalist service by 11 am. Future studies to identify nonphysician barriers to timely newborn discharges may lead to further improvements in throughput between the labor and delivery and maternity suites units.

Title: Virtual Telemedicine Visits in Pediatric Home Parenteral Nutrition Patients: A Quality Improvement Initiative.

Citation: Telemedicine journal and e-health : the official journal of the American Telemedicine Association; May 2018

Author(s): Raphael, Bram P; Schumann, Caitlin; Garrity-Gentille, Sara; McClelland, Jennifer; Rosa, Carolyn; Tascione, Christina; Gallotto, Mary; Takvorian-Bené, Melissa; Carey, Alexandra N; McCarthy, Patrick; Duggan, Christopher; Ozonoff, Al

Background: Despite being less costly than prolonged hospitalization, home parenteral nutrition (HPN) is associated with high rates of post-discharge complications, including frequent readmissions and central line-associated bloodstream infections (CLABSIs). Telemedicine has been associated with improved outcomes and reduced healthcare utilization in other high-risk populations, but no studies to date have supported effectiveness of telemedicine in pediatric HPN.

Methods: We prospectively collected data on pediatric patients managed at a single HPN program who participated in postdischarge telemedicine visits from March 1, 2014 to March 30, 2016. We excluded patients with a history of HPN and strictly palliative care goals. Univariate analysis was performed for primary outcomes: Community-acquired CLABSI and 30-day readmission rate.

Results: Twenty-six families participated in the pilot initiative with median (interquartile range) patient age 1.5 (5.7) years old, diagnosis of short bowel syndrome in 16 (62%), and in-state residence in 17 (55%). Ishikawa (fishbone) diagram identified causes of post-discharge HPN complications. Areas of focus during telemedicine visit included central venous catheter care methods, materials, clinical concerns, and equipment. Compared to historical comparison group, the telemedicine group experienced CLABSI rates of 1.0 versus 2.7 per 1,000 line days and readmission rates of 38% versus 17% ($p = 0.03$, 0.02, respectively).

Conclusions: Telemedicine visits identified opportunities for improvement for families newly discharged on HPN. In a small cohort of patients who experienced telemedicine visits, we found lower CLABSI rates alongside higher readmission rates compared with a historical comparison group. Further studies are needed to optimize telemedicine in delivering care to this high-risk population.

Sources Used:

The following databases are used in the creation of this bulletin: Amed, British Nursing Index, Cinahl & Medline.

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