Paediatric Nurse Education

Current Awareness Newsletter

March 2016
Outreach

Your Outreach Librarian can help facilitate evidence-based practise for all members of staff, as well as assisting with academic study and research. We can help with **literature searching, obtaining journal articles and books**, and setting up individual **current awareness alerts**.

**Literature Searching**

We provide a literature searching service for any library member. For those embarking on their own research it is advisable to book some time with one of the librarians for a 1 to 1 session where we can guide you through the process of creating a well-focused literature research and introduce you to the health databases access via NHS Evidence.

**Critical Appraisal Training**

We also offer **one-to-one or small group training** in literature searching, accessing electronic journals, and critical appraisal/Statistics. These are essential courses that teach how to interpret clinical papers.

For more information, email: katie.barnard@uhbristol.nhs.uk

**Books**

Books can be searched for using SWIMS our online catalogue at [www.swims.nhs.uk](http://www.swims.nhs.uk). Books and journals that are not available on site or electronically may be requested from other locations. Please email requests to: library@uhbristol.nhs.uk
Contents

1: Tables of Contents from March’s Paediatric Nurse Education journals

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3: Latest relevant Systematic Reviews from the Cochrane Library

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Tables of Contents from Nurse Education journals

The links below will take you to the full Tables of Contents.

If you require full articles please email: library@uhbristol.nhs.uk

Nurse Educator
March/April 2016, Volume 41, Issue 2

Nurse Education in Practice
March 2015, Volume 17 (in progress)

New NICE Guidance

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<th>Guidance Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>QS113</td>
<td>Healthcare-associated infections</td>
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<tr>
<td>DG20</td>
<td>Tests for rapidly identifying bloodstream bacteria and fungi (LightCycler SeptiFast Test MGRADE, SepsiTest and IRIDICA BAC BSI assay)</td>
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<tr>
<td>NG43</td>
<td>Transition from children’s to adults’ services for young people using health or social care services</td>
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<tr>
<td>CG137</td>
<td>Updated Epilepsies: diagnosis and management</td>
</tr>
<tr>
<td>CG72</td>
<td>Updated Attention deficit hyperactivity disorder: diagnosis and management</td>
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</table>
Latest relevant Systematic Reviews from the Cochrane Library

Amphetamines for attention deficit hyperactivity disorder (ADHD) in children and adolescents

Frequency of dressing changes for central venous access devices on catheter-related infections

NHS Behind the Headlines

Half of all childhood asthma cases are 'overdiagnosed'

Friday Feb 26 2016

"Half a million children who have been diagnosed with asthma may not actually have the condition," The Daily Telegraph reports. This is the finding of a Dutch study…

Paracetamol use in pregnancy and infancy linked to child asthma

Wednesday Feb 10 2016

"Babies given paracetamol are nearly a third more likely to develop asthma," the Mail Online reports. The study the news is based on also found a link between maternal use of the painkiller in pregnancy, and childhood asthma…

Young women with high-fibre diet may have lower breast cancer risk

Tuesday Feb 2 2016

"Teenage girls who get their five-a-day cut breast cancer risk by up to 25 per cent," the Daily Mirror reports. A US study suggests that a high-fibre diet based on eating plenty of fruit and vegetables reduces the risk of breast cancer in later life…
Quick Exercise

Match the study design with the timeframe it covers.

1. Randomised Controlled Trial
2. Cross-Sectional Study
3. Case-control Study
4. Cohort Study
5. Case Report

Find out more about study designs in one of our Understanding Articles training sessions. For more details, email library@uhbristol.nhs.uk.
**Title:** Theoretical knowledge and skill retention 4 months after a European Paediatric Life Support course.

**Citation:** European journal of emergency medicine : official journal of the European Society for Emergency Medicine, Feb 2016, vol. 23, no. 1, p. 56-60, 1473-5695 (February 2016)

**Author(s):** Charalampopoulos, Dimitrios, Karlis, George, Barouxis, Dimitrios, Syggelou, Angeliki, Mikalli, Chryso, Kountouris, Demetris, Modestou, Naso, Van de Voorde, Patrick, Danou, Fotini, Iacovidou, Nicoletta, Xanthos, Theodoros

**Abstract:** The European Paediatric Life Support (EPLS) provider course aims at training doctors and nurses in the efficient and prompt management of cardiopulmonary arrest in children. EPLS is a 2-day European Resuscitation Council course, involving the teaching of theoretical knowledge and practical skills. The aim of the study was to evaluate the retention of theoretical knowledge and certain skills of EPLS providers 4 months after the course. In total, 80 doctors and nurses who attended three EPLS provider courses, from May 2012 to December 2012, were asked to participate in the study and only 50 responded positively. Demographic data (age, sex, occupation) of the participants were collected. The European Resuscitation Council-approved EPLS written test was used to assess theoretical knowledge right after the course and after 4 months. The retention of certain skills (airway opening, bag-mask ventilation, chest compressions) was also examined. The theoretical knowledge decreased significantly (P<0.001) 4 months after the course. Age, sex and occupational status (medical or nursing profession) had no effect in theoretical knowledge retention. Interestingly, certain skills such as the application of airway opening manoeuvres and effective bag-mask ventilation were retained 4 months after the course, whereas chest compression skill retention significantly declined (P=0.012). According to our findings, theoretical knowledge of the EPLS course uniformly declines, irrespective of the provider characteristics, whereas retention of certain skills is evident 4 months after the course.

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**Title:** Saving Time Under Pressure: Effectiveness of Standardizing Pediatric Resuscitation Carts.

**Citation:** Hospital pediatrics, Feb 2016, vol. 6, no. 2, p. 67-71, 2154-1663 (February 2016)

**Author(s):** Maul, Erich, Latham, Barbara, Westgate, Philip M

**Abstract:** Resuscitation situations are high risk and high stress, and delays in care can have significant influences on outcomes. Standardization of care protocols and equipment is postulated to decrease some of the stress and risk. The objective of this study was to document increased efficiency in finding resuscitation equipment in a standardized resuscitation cart. A new standardized resuscitation cart design was created, and a multimedia education program addressing the new design was launched. A goal was set to find required equipment in <15 seconds. Five cohorts of 10 nurses were timed at finding randomly chosen items 1, 12, 49, 152, and 351 days after new cart launch. t tests were used to compare estimated acquisition times of requested items using the new cart system to the old cart system (baseline), and a separate regression analysis was used to model
skill degradation. All pairwise comparisons showed significant decreases in mean acquisition time compared with baseline. One day after launch, the mean time to find items was reduced by 46%. Mean time to find requested items was below the goal of 15 seconds 12, 49, and 152 days after launch. This effect was lost by 351 days from launch. Regression analysis predicted the time to find items would exceed 15 seconds 287 days after launch. Standardizing the resuscitation cart design greatly reduced time to find items and was accomplished with reduced financial cost. Skill degradation did occur over time, and refresher training was required.

**Full Text:**
Available from Highwire Press in Hospital Pediatrics

**Title:** Hand-hygiene practices and observed barriers in pediatric long-term care facilities in the New York metropolitan area.

**Citation:** International journal for quality in health care : journal of the International Society for Quality in Health Care / ISQua, Feb 2016, vol. 28, no. 1, p. 74-80, 1464-3677 (February 2016)

**Author(s):** Løyland, Borghild, Wilmont, Sibyl, Cohen, Bevin, Larson, Elaine

**Abstract:** To describe hand-hygiene practices in pediatric long-term care (pLTC) facilities and to identify observed barriers to, and potential solutions for, improved infection prevention. Observational study using (i) the World Health Organization's '5 Moments for Hand Hygiene' validated observation tool to record indications for hand hygiene and adherence; and (ii) individual logs of subjective impressions of behavioral and/or systemic barriers witnessed during direct observation. Staff in three pLTC facilities (284 beds total) were observed by two trained nurses 1 day a week for 3 weeks in February and March 2015. Direct providers of health, therapeutic and rehabilitative care, and other staff responsible for social and academic activities for children with complex, chronic medical conditions. Hand-hygiene indications, adherence and barriers. Hand hygiene was performed for 40% of the 847 indications observed and recorded. Adherence increased at one site and decreased in the other two sites during the study period. Adherence appeared to be influenced by individuals' knowledge, attitudes, beliefs and work setting. Poor hand-hygiene adherence was observed overall. Specific barriers were identified, which suggest a contextual approach to the interpretation of results indicated in this uniquely challenging setting. We offer some practical suggestions for overcoming those barriers or mitigating their effect. Ultimately, an adaptation of the '5 Moments for Hand Hygiene' may be necessary to improve infection prevention in pLTC.

**Full Text:**
Available from Highwire Press in International Journal for Quality in Health Care

**Title:** Development of a Formalized Pediatric Visitation Program in the PACU Through Evidence-Based Practice.

**Citation:** Journal of perianesthesia nursing : official journal of the American Society of PeriAnesthesia Nurses / American Society of PeriAnesthesia Nurses, Feb 2016, vol. 31, no. 1, p. 73-82, 1532-8473 (February 2016)

**Author(s):** Nadeau, Sheila, Larson, Sandy, Bennick, Virginia, Bergan, Tammy, Martin, Lisa, Senst, Kim, Griffith, Sarah, Wait, Roxanne
Abstract: The national trend and 2003 American Society of PeriAnesthesia Nurses position statement supports visitation during Phase I care. Nurses at our institution had an inconsistent practice of rejoining families with their child during this period. The purpose of this project was to investigate nurses' attitudes and beliefs toward family-centered care. A formalized pediatric visitation program was also created. A survey was used to evaluate nurses' attitudes and beliefs regarding family-centered care. Education was provided for the nurses and patient and/or families. The formalized visitation program included updated policies, use of technological support to improve communication with families, and development of an educational pamphlet. A pediatric visitation program that reunites the family and child while supporting nurses was developed and implemented. This visitation program may be explored for replication in perianesthesia or other applicable settings. Copyright © 2016 American Society of PeriAnesthesia Nurses.

Title: Evolving role of pediatric nurse practitioners.

Citation: Journal of the American Association of Nurse Practitioners, Feb 2016, vol. 28, no. 2, p. 68-74, 2327-6924 (February 2016)

Author(s): Aruda, Mary M, Griffin, Valerie J, Schartz, Kathryn, Geist, Melissa

Abstract: To report and interpret findings from national pediatric nurse practitioner (PNP) job analysis surveys reflecting the changes in the knowledge and skills required for advanced practice. National role delineation studies (RDS) conducted by American Nurses Credentialing Center (ANCC) in 2003, 2008, and 2011. Since the first nurse practitioner (NP) program was established in 1965 to train pediatric nurses for advanced practice, the role of the PNP has continued to develop. The RDS results demonstrate the increased autonomy of PNP’s prescription of medication as the top work activity category identified, followed by the reporting of suspected abuse, exploitation, and/or neglect and immunizing based on current recommendations. Analysis of the changes in role or work activities, tied to the knowledge and skills required to perform those activities, can provide content for educators updating curriculum, for clinicians to remain current in their practice and impact healthcare policy. The current PNP role has evolved to meet the workforce demands of providing primary care to the pediatric population with increasing complex social and healthcare needs. Role analysis is important as NPs move forward to practice to the full extent of their education and training. ©2015 American Association of Nurse Practitioners.

Title: Development of a simulation evaluation tool for assessing nursing students’ clinical judgment in caring for children with dehydration.

Citation: Nurse education today, Feb 2016, vol. 37, p. 45-52, 1532-2793 (February 2016)

Author(s): Kim, Shin-Jeong, Kim, Sunghee, Kang, Kyung-Ah, Oh, Jina, Lee, Myung-Nam

Abstract: The lack of reliable and valid tools to evaluate learning outcomes during simulations has limited the adoption and progress of simulation-based nursing education. This study had two aims: (a) to develop a simulation evaluation tool (SET(c-dehydration)) to assess students’ clinical judgment in caring for children with dehydration based on the Lasater Clinical Judgment Rubric (LCJR) and (b) to examine its reliability and validity. Undergraduate nursing students from two nursing schools in South Korea participated in this study from March 3 through June 10, 2014. The SET(c-dehydration) was developed, and 120 nursing students’ clinical judgment was evaluated. Descriptive statistics, Cronbach's alpha, Cohen's kappa coefficient, and confirmatory factor analysis (CFA) were used to
analyze the data. A 41-item version of the SET(c-dehydration) with three subscales was developed. Cohen’s kappa (measuring inter-observer reliability) of the sessions ranged from .73 to .95, and Cronbach’s alpha was .87. The mean total rating of the SET(c-dehydration) by the instructors was 1.92 (±.25), and the mean scores for the four LCJR dimensions of clinical judgment were as follows: noticing (1.74±.27), interpreting (1.85±.43), responding (2.17±.32), and reflecting (1.79±.35). CFA, which was performed to test construct validity, showed that the four dimensions of the SET(c-dehydration) was an appropriate framework. The SET(c-dehydration) provides a means to evaluate clinical judgment in simulation education. Its reliability and validity should be examined further.

Title: A Survey of the First-Hour Basic Care Tasks of Severe Sepsis and Septic Shock in Pediatric Patients and an Evaluation of Medical Simulation on Improving the Compliance of the Tasks.

Citation: The Journal of emergency medicine, Feb 2016, vol. 50, no. 2, p. 239-245, 0736-4679 (February 2016)

Author(s): Qian, Juan, Wang, Ying, Zhang, Yucai, Zhu, Xiaodong, Rong, Qunfang, Wei, Hongxia

Abstract: Application of the sepsis resuscitation bundle is limited by clinician knowledge, skills, and experience. We used the adjusted first-hour basic care tasks in pediatric patients in three tertiary hospitals in Shanghai, China. The aim of this study is to survey the compliance of the adjusted tasks and to evaluate in situ simulation team training on improving the compliance. A prospective observational study was performed with the survey checklists from May 2011 to January 2012 in three pediatric intensive care units. A simulated case scenario was administered to the practitioners in one hospital. Seventy-three patients were enrolled, including 47 patients in one simulation hospital (SH) and 26 patients in two nonsimulation hospitals (NSH). The total compliance of the tasks was 47.9% (35/73). The compliance in the SH was significantly higher compared to that in the NSHs (61.7% [29/47] vs. 23.1% [6/26], p < 0.01). Compared to the SH, the main problems in the NSH were giving intravenous or intraosseous fluid resuscitation in a longer time (35.3 min vs. 19.9 min, p = 0.000), a smaller percentage of measurement of accurate urine output (38.5% vs. 68.1%, p = 0.027), delivering high-flow oxygen (73.1% vs. 93.6%, p = 0.028), and measurement of lactate (69.2% vs. 100%, p = 0.000). In situ simulation team training is an effective method of teaching the tasks of septic shock care to clinicians and nurses on the front line and of improving the compliance of the tasks.

Upcoming Lunchtime Drop-in Sessions

The Library and Information Service provides free specialist information skills training for all UH Bristol staff and students. To book a place, email: library@uhbristol.nhs.uk

If you’re unable to attend we also provide one-to-one or small group sessions. Contact library@uhbristol.nhs.uk or katie.barnard@uhbristol.nhs.uk to arrange a session.

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The Library
Level 5
Education Centre
University Hospitals Bristol

Staffed: 8.00 am—17.00 pm, Monday to Friday
Swipe Access: 7.00 am—23.00pm, 7 days a week

Contact the Paediatrics Outreach Librarian:

katie.barnard@uhbristol.nhs.uk

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