

G222 DOES THE IMPLEMENTATION OF A VENTILATOR ASSOCIATED PNEUMONIA (VAP) CARE BUNDLE REDUCE INCIDENCE OF VAP IN PICU?

CL Hill. *Paediatric Intensive Care, Oxford Universities NHS Trust, Oxford, UK*

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Ventilator associated pneumonia (VAP) is pneumonia that develops 48 h after intubation. VAP is the second most common nosocomial infection in PICU patients and is associated with increased duration of ventilation, ICU stay, hospital stay, and cost. VAP is a preventable healthcare acquired infection and a Department of Health (1999) Saving Lives initiative. This poster aims to discover whether the introduction of a VAP care bundle (VCB) is effective at reducing VAP rates in PICU.

A search of various databases was undertaken, including MedLine, Pubmed, CINAHL, EBSCO, using relevant PICO key words. 3 paediatric research studies were found and 4 published presentations of data. Due to the limited amount of paediatric data the search was extended to include adult studies, producing 12 valid studies.

Results conclusively showed a decrease in VAP following the introduction of a VAP care bundle. Paediatric studies showed a reduction ranged from 76%–100% (91% average), with 210 days – 3 years VAP free with associated decreases in length of stay and cost. Adult studies found a 62% average decrease in VAP, with higher reduction in VAP associated with increased compliance.

Due to limitations of the observational designs used, various implementation strategies, and lack of consistency in VCB elements, it is difficult to determine what is responsible for the measured outcomes. However the weight of evidence showing VAP reduction with VCB use suggests a strong relationship. And although the evidence is not at the highest experimental level, it is at the highest ethically acceptable level. It should also be taking into consideration that each individual bundle component is supported by its own breadth of high level experimental evidence. Routine use of VCB is widespread in adult ICUs, and the adult and paediatric literature agree that care bundles are an effective method for reducing the incidence of ventilator associated pneumonia. Therefore in absence of any contradictory data, care bundles should be adopted in paediatric intensive care practice. Further research is required to examine individual elements of the paediatric VCB; but with a synchronised team approach, VCB can result in continued reductions in VAP, length of stay, and costs.

G223 IMPLEMENTING AND EVALUATING MODELS OF FAMILY CENTRED CARE OR CHILDREN WITH LONG TERM CONDITIONS – WHERE NEXT?

¹J Smith, ²G Fenton, ³I Coyne, ⁴V Swallow. ¹*School of Human and Health Sciences, University of Huddersfield, Huddersfield, UK;* ²*School of Nursing, Midwifery and Social Work, University of Salford, Salford, UK;* ³*School of Nursing and Midwifery, Trinity College Dublin, Dublin, Ireland;* ⁴*School of Nursing, Midwifery and Social Work, University of Manchester, Manchester, UK*

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Background and purpose Effective collaboration between nurses and families is fundamental to supporting children with long-term conditions and their families. The family-centred care model is widely espoused as an effective framework that facilitates parents' involvement in their child's care (Smith *et al*,

2015). The implementation and evaluation of this model deserves further scrutiny. This paper presents two complementary critical evaluations of family-centred care research, particularly in the context of childhood long-term conditions.

Methods A scoping review of MEDLINE, CINAHL, PSYCINFO databases from 2000 to 2014 was undertaken to identify instruments that measure family family-centred care. A complementary systematic literature search of Scopus, CINAHL, BNI databases was undertaken to identify research on the implementation family-centred care in practice.

Results Fifteen studies were identified that had used measures to evaluate family-centred care but measures were often poorly defined and generally measured satisfaction rather than collaborative practice associated with family-centred care. A lack of clarity surrounds the reliability and validity of some instruments used to measure family centred care. The validated Measure of Processes of Care (MPOC) was the most frequently measure used to evaluate family-centred care.

Twenty studies were reviewed to identify the key antecedents of family-centred care which included: 'unclear roles and boundaries'; 'entrenched professional practices and attitudes towards working with families'; 'lack of organisational or managerial guidelines or policies specifically aimed at supporting the implementation of family-centred care'. The key attributes associated with family centred care were: 'valuing parents knowledge and experiences', 'supporting parents in their role as care giver'; 'incorporating parents' expertise into clinical and psychosocial care', are particularly salient when empowering and supporting children, young people and families in the management of long-term conditions in children.

Conclusion Parents develop considerable expertise in managing their child's long-term condition but they perceive their expertise is not always valued and the quality of parent-professional interactions was variable (Smith, *et al*. 2013). Promoting and facilitating the child, young people and family's involvement in the care of children with long-term conditions requires nurses to practice family centred care (Shields *et al* 2012), yet tools to measure implementation and evaluation studies are limited.

G224 A SYSTEMATIC REVIEW TO DETERMINE IF UNDERNUTRITION IS PROGNOSTIC OF INFECTION COMPLICATIONS IN CHILDREN FOLLOWING SURGERY

^{1,2}R Hill, ³S Paulus, ⁴MP Dey, ²MA Hurley, ²B Carter. ¹*Department of Cardiac Surgery, Alder Hey Children's NHS Trust, Liverpool, UK;* ²*School of Health, University of Central Lancashire, Preston, UK;* ³*Department of Immunology and Infectious Disease, Alder Hey Children's NHS Trust, Liverpool, UK;* ⁴*School of Medicine and Dentistry, University of Central Lancashire, Preston, UK*

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Background Hospitalisation has a major impact on the nutritional status of children¹. Although incidence of undernutrition has been reported, fewer studies have investigated its effect on patient outcome following paediatric surgery.

Review methods

Key electronic bibliographic and research databases were searched. Inclusion criteria were studies in children <18 years evaluating preoperative nutritional status and reporting postoperative infection complications. Quality assessment was performed using Newcastle-Ottawa Scale² for cohort and case-control studies. Appraisal and data extraction were performed independently by two reviewers. Effect estimates and 95% confidence intervals