

Annual NAPNAP Conference, March 2014, Boston, MA

Background and Significance: Most inpatient pediatric arrests are preventable by early recognition/treatment of deterioration. Early warning scoring (EWS) systems provide early identification of children at arrest risk. In 2009, the Children's Hospital Early Warning Score (CHEWS) was developed and validated in a single center of pediatric cardiac patients.

Purpose: To further validate the Children's Hospital Early Warning Score tool and algorithm in inpatient pediatric non- cardiac patients.

Methods: Nurses assess and document patients' CHEWS scores during routine vital signs. An escalation of care algorithm directs either: routine care (score 0-2), increased assessment/intervention (3-4), or ICU consult/transfer (≥ 5). Sensitivity and specificity were estimated from a retrospective review of patients admitted to our inpatient units over 12 months who experienced arrest or unplanned ICU transfer (n=360) and a randomized comparison sample (n=776) of admissions. All patients in non-ICU or critical care areas that experienced an unplanned arrest or ICU transfer were included, patients at end of life with anticipated death were excluded from the case sample. All patients admitted to non-ICU or critical care were considered for inclusion for comparison control sample.

Analysis: The previously validated Pediatric Early Warning Score (PEWS) tool was used for comparison. Patients' highest CHEWS scores were compared to calculated PEWS scores. Area under the receiver operating characteristic (AUROC) curve was calculated for PEWS and CHEWS to measure discrimination.

Findings: CHEWS algorithm sensitivity was 97.8 (≥ 2), 84.2 (≥ 4) and 75.6 (≥ 5) versus PEWS of 82.8 (≥ 2), 54.4 (≥ 4), and 38.9 (≥ 5). CHEWS specificity was 52.5 (≥ 2), 80.9 (≥ 4), and 88.5 (≥ 5) versus PEWS of 63.7 (≥ 2), 85.3 (≥ 4) and 93.9 (≥ 5). The AUROC curve for CHEWS was 0.902 compared to PEWS 0.798.

Implications: In this single center examination, the CHEWS demonstrated a higher discrimination and

sensitivity than the PEWS in identifying deterioration in hospitalized children.

The Role of Advanced Practice Nursing in Child Maltreatment: A National Survey

**Gail Hornor, DNP, CPNP,
& Pam Herendeen, DNP, CPNP**

Emerging Knowledge for Clinical Practice Podium Presentations focusing on Research Agenda Priority of Safety presented at the 35th Annual NAPNAP Conference, March 2014, Boston, MA

Introduction: Although there have been studies describing the global PNP role as well as specific practice specialties such as in-patient, pre-operative, and early intervention settings no studies to date have described the role of the PNP and/or other advanced practice nurses in child maltreatment. PNP's have been working in child maltreatment for decades yet to date there has been no comprehensive assessment of their roles nor their clinical and academic contributions to the field. This study described the role of the APN in child maltreatment.

Methods: Children's Hospitals and Child Advocacy Centers across the United States (N=970) were contacted to determine the employment of child maltreatment APNs in their facility (N=312). Lead APNs were emailed a NP survey describing their APN team and practice.

Results: 136 lead APNs responded to the survey (response rate 42%). APNs working in the field of child maltreatment were PNP's (62%); held master's degrees (83%); had been practicing as an APN for >10 years (61%); and practicing in child maltreatment for > 10 years (41%). The majority worked in Child Advocacy Centers (58%) and provided both in-patient and out-patient care to victims of physical and sexual abuse.

Discussion: APNs are filling vital roles in the care of maltreated and neglected children not only in the

clinical setting but also in educating the public and other professionals as well as research.

The Effect of Maternal Beliefs and Behavior on the Body Weight Status of Preschool-aged Children

Nicole Boucher, PhD, RN, CPNP-PC

Emerging Knowledge for Clinical Practice Podium Presentations focusing on Research Agenda Priority of Healthy Promotion and Disease Prevention Presented at the 35th Annual NAPNAP Conference, March 2014, Boston, MA

Purpose: The purpose of this study was to determine the extent to which maternal beliefs and behavior regarding the child's body weight status influenced the child's actual weight beyond the known risk factors for childhood obesity.

Background: Childhood obesity has become one of the leading health concerns in the country. One group that is disproportionately affected by the obesity epidemic is low-income preschoolers. Around the age of three children stop eating from deprivation and start eating based on how they are socialized to the mealtime environment. Maternal behaviors are postulated to have a strong influence in the development of a child's eating habits, food choices, food preferences, and weight control behaviors. One of the specific behaviors believed to affect a child's body weight status is maternal feeding style. However, few studies have examined how maternal beliefs and concern about the child's weight status affect the development of maternal behaviors. In addition, limited studies have been conducted to evaluate the relationship between maternal behaviors, such as feeding style and a child's actual weight.

Specific Aims: (a) Determine which maternal beliefs (i.e., nutritional belief, perceptions and concerns regarding the child's weight) are most predictive of maternal behavior (b) Determine the extent to which maternal behaviors predict a child's body weight status. (c) Determine the combined effect of maternal beliefs and maternal behavior on a child's body weight status (d) Determine the extent to which the relationship between maternal behaviors and the body weight status of a preschool-aged child is moderated by either the

child's behavior and/or pregnancy and infancy factors known to affect a child's weight.

Methods: IRB approval was obtained prior to the start of data collection. A descriptive correlational design was utilized. One hundred and twenty-six low-income mother/child dyads were enrolled in the study. Mothers completed a research packet at home that included two feeding style questionnaires that evaluated the mother's mealtime feeding style and overall feeding style. The child's height and weight were obtained from the child's Head Start file. Chi-square, correlations, regression, and moderated regression were utilized using the latest version of SPSS.

Results: Mothers who utilized an authoritarian feeding style had children with a lower body weight status than mothers who utilized the other feeding styles. Additionally, the relationship between an indulgent maternal feeding style and the child's body weight status was moderated by the child's screen time. Lastly, the relationship between a prompting/encouraging feeding style and the body weight status of a preschool-aged child was moderated by the mother's weight at the time of pregnancy.

Clinical Implications: Maternal feeding styles influence the body weight status of preschool-aged children. It may also influence the food preferences and eating habits that the child develops during the preschool years. Primary care providers need to assess not only what a mother is feeding the child, but also how is the child being fed and how is the child being socialized to the eating and mealtime environment.

An Intervention to Address Bullying in 5th Grade Students

Elizabeth Sloand, PhD, CRNP, PNP-BC,
Chakra Budhathoki, PhD,
& Joan Kub, PhD, APHN

Emerging Knowledge for Clinical Practice Podium Presentations focusing on Research Agenda Priority of Healthy Promotion and Disease Prevention Presented at the 35th Annual NAPNAP Conference, March 2014, Boston, MA

Purpose: The purpose of this study was to measure the effectiveness of a comprehensive anti-bullying training program on child health outcomes, bullying behaviors,