

NAPNAP 2009 ANNUAL CONFERENCE POSTER AWARD WINNERS AND PRESENTATION ABSTRACTS FROM THE 30TH ANNUAL NAPNAP CONFERENCE, MARCH, 2009, SAN DIEGO, CA

2009 POSTER AWARD WINNERS

Intranasal Midazolam Versus Rectal Diazepam for Acute Management of Prolonged Seizures Without Intravenous Access: A Synthesis of the Evidence-based Research

Melissa Whitesell, MS, CPNP-AC

Evidence-based Project Poster

Problem: The National Institute of Neurological Disorders and Stroke estimates that more than 2 million people in the United States—1 in 10—will have an unprovoked seizure, and 1 in 100 will be diagnosed with epilepsy.

Evidence: Status epilepticus is a potentially life-threatening condition in which a person has an abnormally prolonged seizure. Seizures that last longer than 5 minutes require treatment. About 195,000 people each year in the United States have prolonged seizures. Prolonged seizures need to be addressed quickly with appropriate medication management that is quick and easy to administer by medical and non-medical personnel.

Strategy: A literature search was conducted to locate evidence regarding medication management

of prolonged seizures with the use of rectal diazepam and/or intranasal midazolam as rescue medications administered to children and adults who had prolonged seizures lasting longer than 5 minutes. Analysis was conducted on randomized control trials, evidence summaries, reports of medical treatment, comparative studies, and safety and efficacy studies conducted between 2000 and 2008.

Practice Change: The evidence supports the use of intranasal midazolam as a rescue medication. The advantages are: (a) rapid and direct absorption into the systemic circulation; (b) non-invasive administration; (c) decreased risk of adverse side effects due to a short half life of 0.8 hours; and (d) faster cessation of seizures within 1 to 5 minutes compared with rectal diazepam, which stops seizures within 2 to 10 minutes. Research proves that intranasal midazolam is a safe and effective rescue medication for persons with prolonged seizures.

Evaluation: Rectal diazepam remains the current treatment of choice but has some significant drawbacks. Intranasal midazolam has been proved to be safe and effective for prehospital and hospital treatment of prolonged seizures with minimal adverse effects. A current practice change has been made for children with epilepsy and intractable epilepsy and has been found to be safe and effective in our practice.

Recommendations: Practitioners managing patients with seizures and epilepsy should consider reviewing and revising their practice according to a patient's specific needs with regard to rescue medication management for seizures. This needs to be a family-centered approach, weighing the risks and benefits for each patient.

Dietary Intake and Nutritional Education for Migrant Farm Worker Children

Jill F. Kilanowski, PhD, RN, CPNP

Research Poster

Self-management of healthy weight for a child requires a parent-child partnership. This study was the first of a three-phase project: Dietary Intake and Nutritional Education (DINE) intervention.

The purpose of phase 1 was to increase knowledge in social determinants of MFW families that will direct creation of the DINE intervention. Research questions were: (a) What is the nutritional status of these Midwest Latino migrant farm worker children? (b) What factors influence their healthy dietary intake? (c) What is the relationship of mothers' food security, acculturation, self-efficacy, and parent characteristics on these children's body mass index—for-age percentile? Instruments used included self-efficacy (GES); acculturation scale (SASH); U.S. Household Food Security Survey; a culture-specific pediatric dietary survey; body mass index; and a demographic questionnaire. In consideration of low levels of health literacy, data collection utilized PDAs, and all materials were in Spanish/English. Interview questions on behaviors influencing dietary intake provided a mixed-methods strategy. Institutional Review Board approval was received through Case Western Reserve University expedited review.

Parent-child dyads (n = 60) of cluster samplings from six Midwest MFW camps were participants; 95% were mothers, 60% were married, 69% had less than a ninth-grade education, and 83% had a family income of less than \$1000 per month.