

(867 [42.5%]), and pastes applied on the anterior fontanel (24 [1.18%]). Other less common but more traumatic therapies were foot roasting (18 [0.88%]), heat treatment of extremities (6 [0.29%]), and application of special preparations orifices (0.88%).

**CONCLUSIONS:** The high use of traditional methods of treatment and the harmfulness of some of them calls for health providers in any environment to evaluate these practices to use the information obtained as tools for health education, thereby discouraging harmful treatments and encouraging the practice of useful ones.

### MEASURING QUALITY OF LIFE IN GREEK CHILDREN: FIRST PSYCHOMETRIC RESULTS OF THE GREEK VERSION OF THE PEDIATRIC QUALITY OF LIFE INVENTORY (PEDSQL) 4.0 GENERIC CORE SCALES

**Submitted by Konstantina Gkoltsiou**

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**INTRODUCTION:** Health-related quality of life concerning children is a growing field of research. The Pediatric Quality of Life Inventory (PedsQL) is a promising instrument that is available in age-appropriate versions and parallel forms for both children and their parents.

**OBJECTIVE:** The purpose of this study was to evaluate the psychometric properties of the Greek translation of the PedsQL 4.0 generic core scales in a sample of healthy children.

**METHODS:** After a successful pilot test, the Greek PedsQL was used in a cross-sectional study of 645 healthy 8- to 12-year-old schoolchildren and 567 of their caregivers within the framework of the European project (KIDSCREEN). Reliability of the instrument was assessed by Cronbach's  $\alpha$ . Construct validity was assessed by exploring the intercorrelations between the 4 PedsQL subscales and between self- and proxy-report subscales. Impact of gender, health status, and socioeconomic class was detected.

**RESULTS:** All PedsQL scales showed satisfactory reliability ( $>.70$ ). Correlations among self-report subscales and between self- and proxy-report subscales were significant. Girls reported lower health-related quality of life than boys on the emotional-functioning subscale. There were significant differences in scores between low and high socioeconomic groups. Healthy children scored significantly higher on all self- and proxy-report scales.

**CONCLUSIONS:** The PedsQL Greek version for children 8 to 12 years old is a valid and reliable instrument, replicating some of the earlier findings of the original version. The Greek PedsQL 4.0 version will be a valuable tool that can be used effectively in quality-of-life measurement in Greek clinical trials and population-based exercises.

### MANAGEMENT OF CHILDREN WITH OTITIS MEDIA: A SURVEY OF AUSTRALIAN ABORIGINAL MEDICAL SERVICES

**Submitted by Hasantha Gunasekera**

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**INTRODUCTION:** Otitis media remains one of the most common reasons for childhood primary health care presentations. Indigenous children are at the highest risk, but there are scarce data on how they are managed.

**OBJECTIVE:** We sought to determine how Australian primary health care medical practitioners diagnose and manage otitis media in Indigenous and non-Indigenous children.

**METHODS:** We contacted all of Australia's Aboriginal Medical Services by using the national government's register to identify their medical practitioners. We mailed a pilot 5-page clinical vignette questionnaire instrument to these primary health care practitioners ( $N = 257$ ). Responses for Indigenous children were compared with those for non-Indigenous children.

**RESULTS:** Questionnaires were returned from 40.9% of medical practitioners (105 of 257) and 64.8% (57 of 88) of the nation's Aboriginal Medical Services. When examining children, practitioners used otoscopy (99.0% often/always) but not pneumatic otoscopy (67.0% never) or tympanometry (55.8% never). When practitioners diagnosed acute otitis media, they were more likely to use antibiotics (104 of 113 [92.0%]) when the child was Indigenous versus non-Indigenous (53 of 112 [47.3%]) (odds ratio: 12.9 [95% confidence interval: 5.9–27.9]). Amoxicillin was the most common antibiotic used (309 of 356 [86.8%]). The major factors that determined the practitioners' otitis media antibiotic use were Indigenous status (65.7%), wet perforations (63.7%), bulging tympanic membranes (58.3%), and fever (56.3%). The major factors for choosing no antibiotics were dry perforations (35.3%) and a well child (24.8%). Most practitioners were aware of the national

guidelines (97.1%) but not the guidelines for Indigenous children (47.0%).

**CONCLUSIONS:** Aboriginal Medical Service practitioners rely on otoscopy alone to diagnose otitis media and are more likely to use antibiotics for Indigenous children despite not knowing the guidelines.

## HEALTH NEEDS OF CHILDREN LIVING IN OUT-OF-HOME CARE

**Submitted by Dimitra Tzioumi**

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**INTRODUCTION:** Children in out-of-home care have high, unrecognized, and unmet health needs. The combination of exposure to abuse and neglect and a background of social disadvantage place them at significant risk for poor health, which affects their physical, developmental, and emotional health.

**OBJECTIVE:** The aim of this study was to screen children in out-of-home care for unidentified health problems and recommend appropriate health interventions.

**METHODS:** A health screening clinic for children in out-of-home care was established in a tertiary children's hospital in 2005 in collaboration with social services. Working within a multidisciplinary framework, the children had a comprehensive physical, developmental, and behavioral health screen. Recommendations were made to social services for appropriate health care.

**RESULTS:** Of the 122 children screened, 24% had incomplete immunizations, 20% had visual problems, 30% had dental problems, and 26% had hearing loss, 45% of the children under 5 years of age had speech delay, 60% failed the developmental screen, and 54% had significant behavioral and emotional problems.

**CONCLUSIONS:** Children in out-of-home care are a vulnerable group of the child population who experience unacceptable levels of poor health. Comprehensive health screens are important for identifying previously undetected health problems and recommending appropriate health interventions.

## Critical Care

### PREDICTION OF CAPILLARY LEAKAGE IN PATIENTS WITH DENGUE VIRUS INFECTION: WHAT ELSE BESIDES HEMATOCRIT AND PLATELET COUNTS?

**Submitted by Apichai Khongphatthanayothin**

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**INTRODUCTION:** Besides clinical examination, hematocrit and platelet counts are often used to predict if a patient with suspected dengue virus infection had dengue hemorrhagic fever.

**OBJECTIVE:** In this study, we investigated the role of Doppler study of the portal vein as a predictor for capillary leakage in these patients.

**METHODS:** Doppler studies of the right portal vein blood flow velocity were performed for 61 patients (aged  $10.2 \pm 2.9$  years; 34 boys and 27 girls) with serologically confirmed dengue virus infection at defervescence. Presence of right pleural effusion was detected by ultrasound in 32 patients 24 to 48 hours later. Binary logistic regression analysis and receiver operating characteristic (ROC) curves were constructed for the following variables as predictors of pleural effusion 24 to 48 hours after defervescence: age, gender, maximum hematocrit level, lowest platelet count, and the velocity of blood flow in the right portal vein (PVDPL).

**RESULTS:** Hematocrit level and PVDPL were independent predictors of pleural effusion. The area under the ROC curve, sensitivity, and specificity for these variables as predictors for right pleural fluid 24 to 48 hours after defervescence are shown in Table 1.

TABLE 1. Variables as Predictors of Pleural Effusion

Variables	Area Under ROC Curve	Cutoff	Sensitivity, %	Specificity, %
Hematocrit, %	0.79	>43	72	83
PVDPL, cm/s	0.88	<15.3	72	79
Hematocrit/PVDPL, s/cm	0.93	>2.66	81	83

**CONCLUSIONS:** Doppler-derived portal venous blood flow velocity may be used to predict the clinical progression of patients with dengue virus infection.

### A DOUBLE-BLIND RANDOMIZED, CONTROLLED TRIAL OF PROTEIN ENERGY-ENRICHED FORMULA ADMINISTERED TO CRITICALLY ILL INFANTS

**Submitted by Dick Van Waardenburg**

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**INTRODUCTION:** Nutritional support is an important aspect of clinical management of critically ill infants, but the nutritional requirements of these infants are not well defined.

**OBJECTIVE:** Our goal was to compare tolerance, nutritional, and metabolic effects of 2 different infant formulas in critically ill infants in a double-blind, randomized way.

**METHODS:** Eighteen ventilated infants with respiratory insufficiency caused by respiratory syncytial virus

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